BREV152034

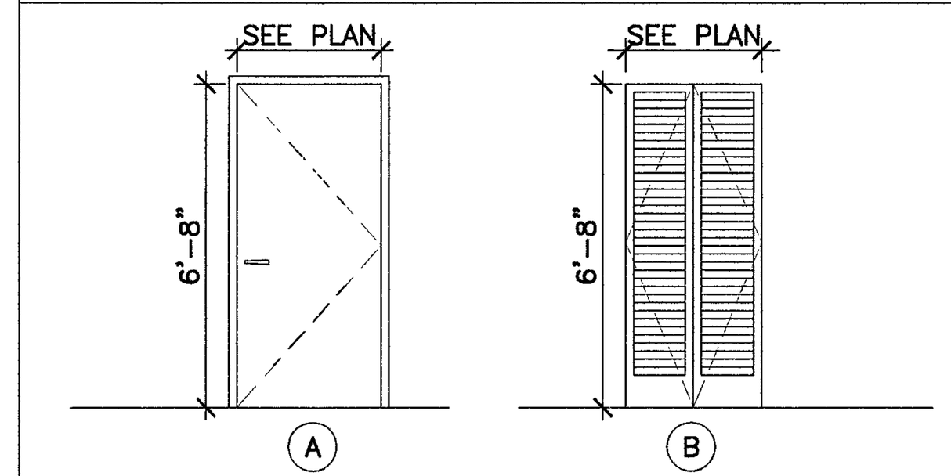
NEW DOOR SCHEDULE

DOOR NO.	DIMENSIONS WIDTH	HEIGHT	THICK.	TYPE	MATERIAL	DOOR FIN	HARDWARE SET NO	FRAME MATERIAL	FINISH	JAMB DET.	HEAD DET.	REMARKS
N1	3'-0" X	6'-8" X	1 3/8"	A	SOLID CORE WOOD	PAINT GRADE	SET #1	HOLLOW METAL	–	06/A2.10	06/A2.10	
N2	2'-10" X	6'-8" X	1 1/2"	B	SOLID CORE WOOD	PAINT GRADE	–	–	–			BI-FOLD WITH TRACK ON TOP
N3	3'-0" X	4'-10" X	1"		SOLID POLYMER PLASTIC	WHITE	SET #2					
N4	2'-0" X	4'-10" X	1"		SOLID POLYMER PLASTIC	WHITE	SET #3					
N5	2'-6" X	4'-10" X	1"		SOLID POLYMER PLASTIC	WHITE	SET #3					

HARDWARE SET:

- SET #1 (1) CLOSER, (3) BUTT HINGES, (1) PRIVACY SET, (1) WALL STOP
- SET #2 (2) CONTINUOUS HINGE (1) ADA CONCEAL LATCH SET , (1) ADA DOOR PULL (1)BUMPER HOOK, (1) OUTSWING STRIKE & KEEPER (1) SELF-CLOSER
- SET #3 (2) PARTITION HINGE TOP & BOTTOM, (1) CONCEAL LATCH SET, (1) BUMPER HOOK, (1) INSWING STRIKE & KEEPER

DOOR TYPES



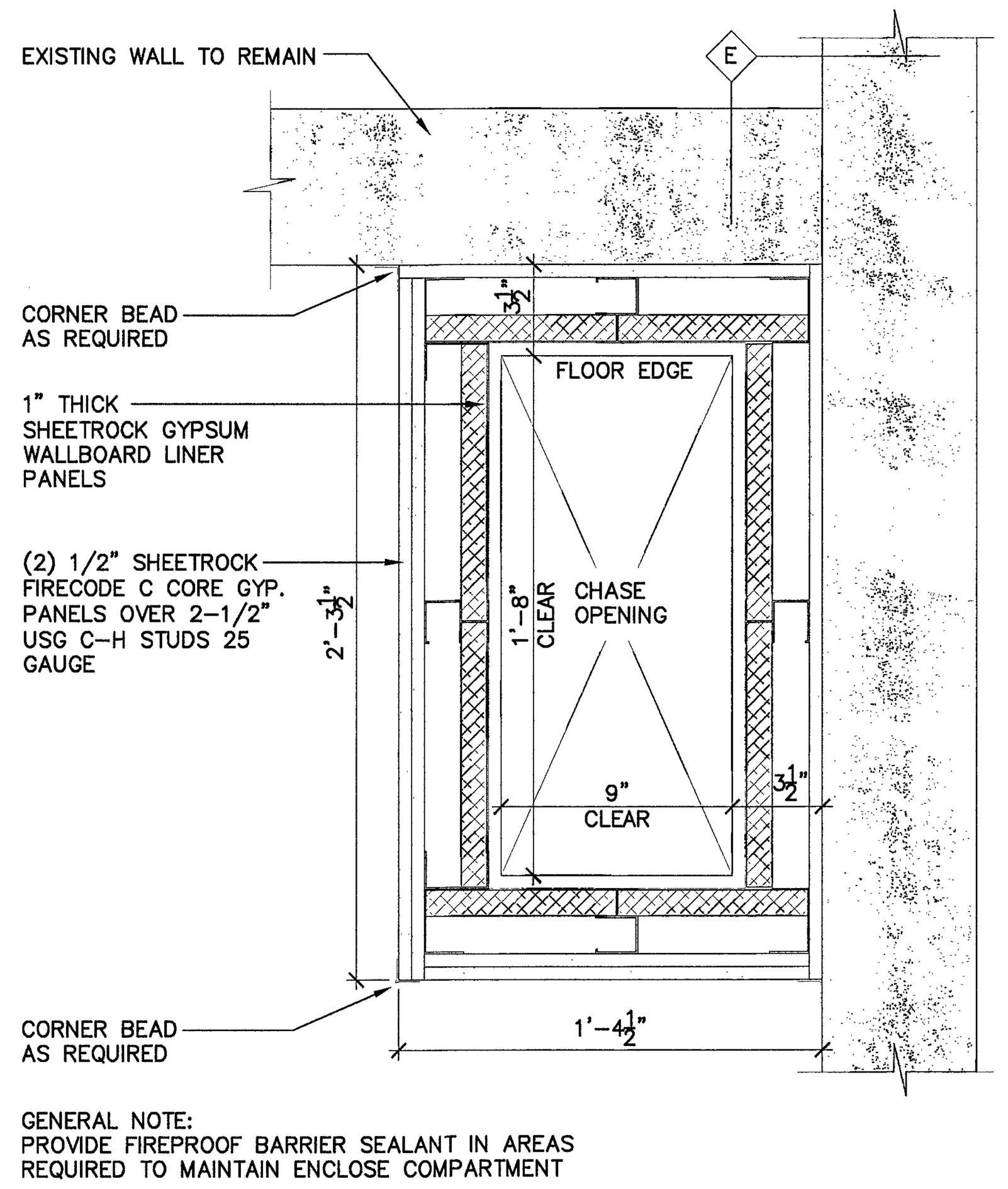
DOOR NOTES

GENERAL NOTE:

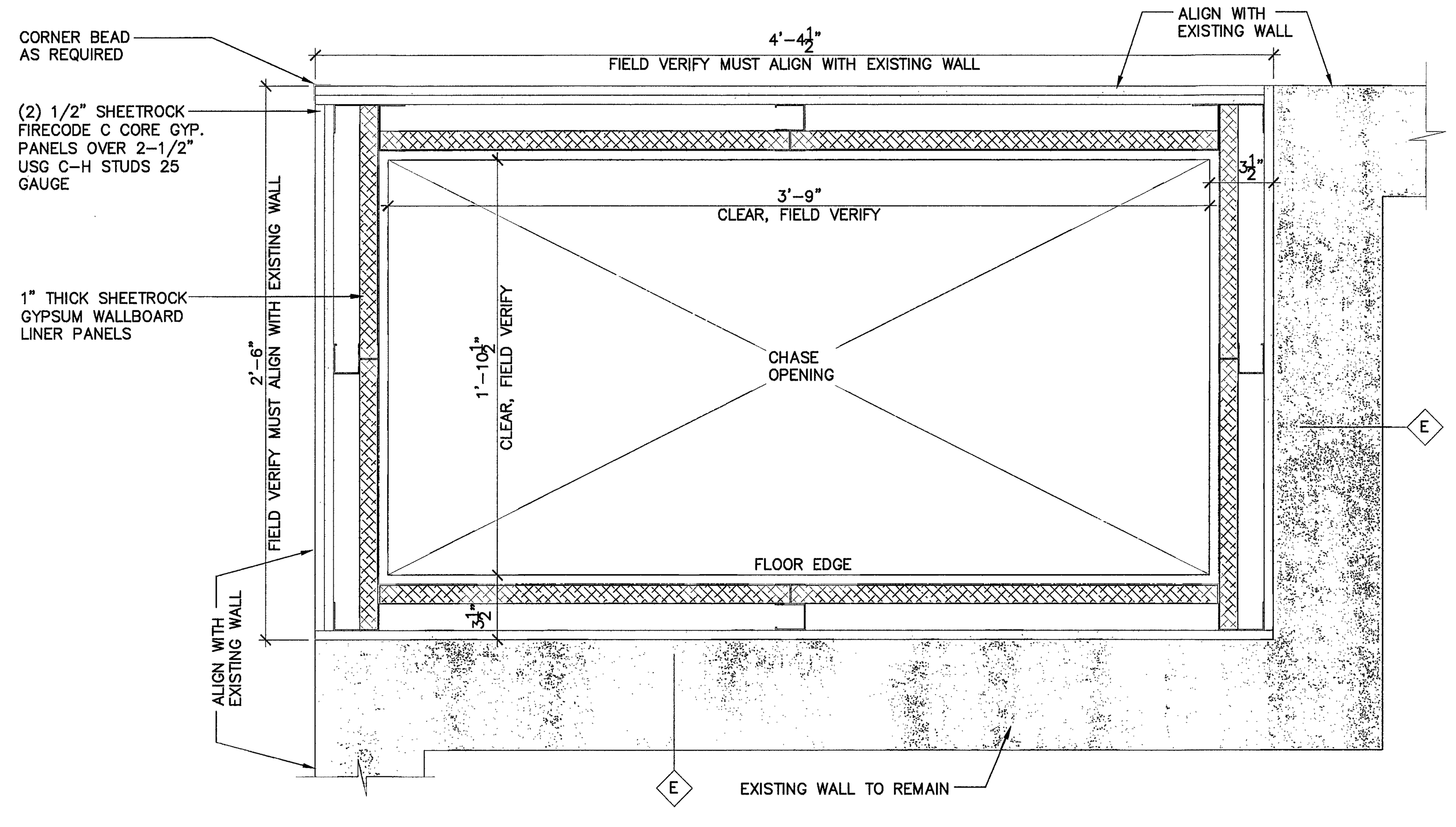
- –ALL EGRESS DOORS SHALL NOT REQUIRE A KEY OR SPECIAL KNOWLEDGE TO OPEN FOR EGRESS.
- –ALL DOORS ALONG THE CORRIDOR TO HAVE SELF-CLOSING & LATCHING HARDWARE PER FFPC 2010 29.3.6.2.3.
- –DOOR HANDLES,PULLS, LATCHES LOCKS & OTHER OPENING DEVICE SHOULD HAVE A SHAPE THAT IS EASY TO OPERATEWITH ONE HAND, WITHOUT GRASPING, PINCHING OR TWISTING OF THE WRIST, THEY SHOULD BE MOUNTED NO HIGHER THAN 48" ABOVE FINISH FLOOR.

LEGEND:

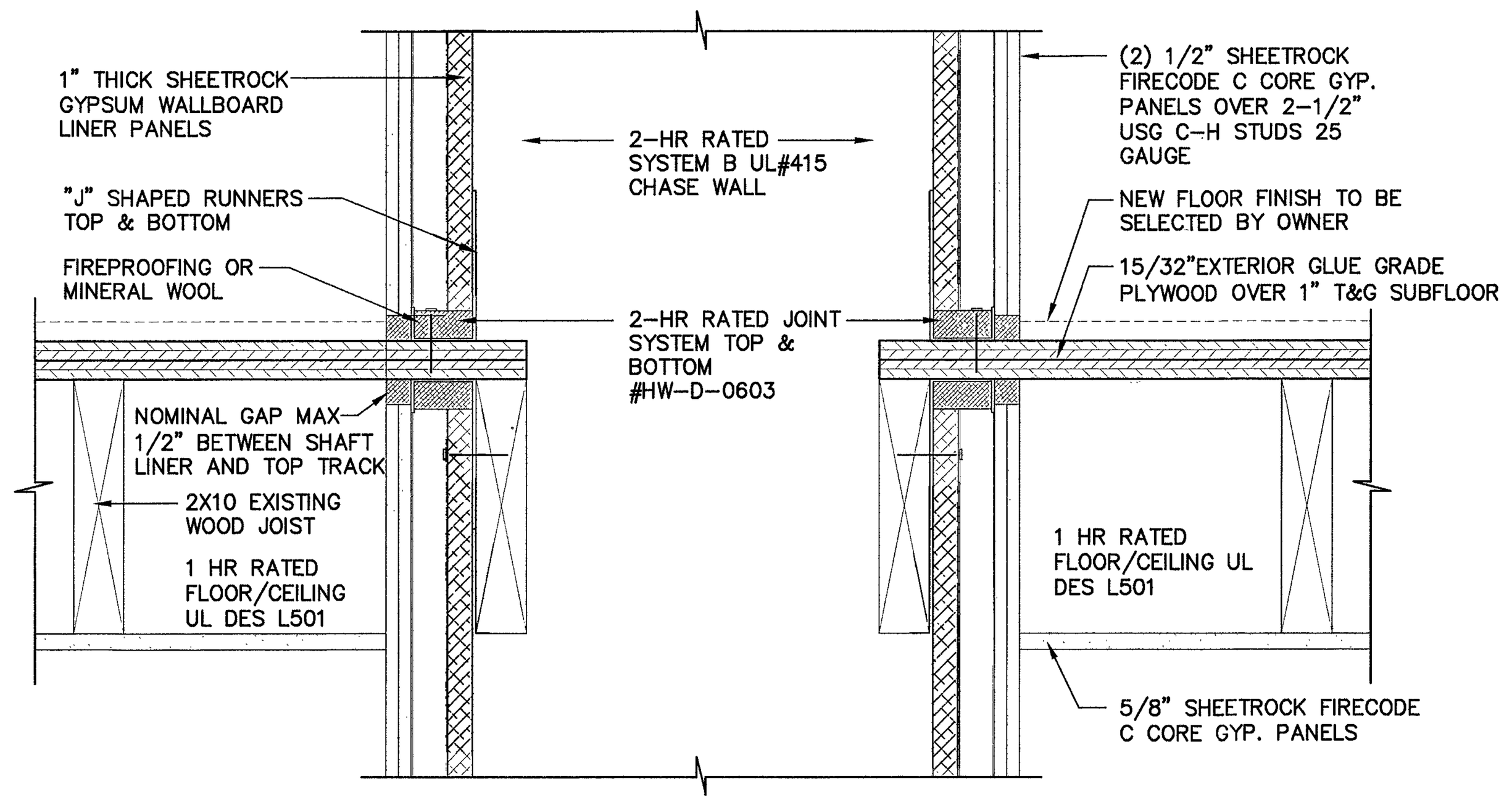
- (E) GC TO VERIFY EXISTING DOORS TO BE 90 MIN. FIRE RATED. IF NOT REPLACE WITH 90 MIN. RATED DOORS, PER PHASING PLAN A1.03
- ⬡E EXISTING WINDOWS TO REMAIN
- ◇E EXISTING WALLS TO REMAIN



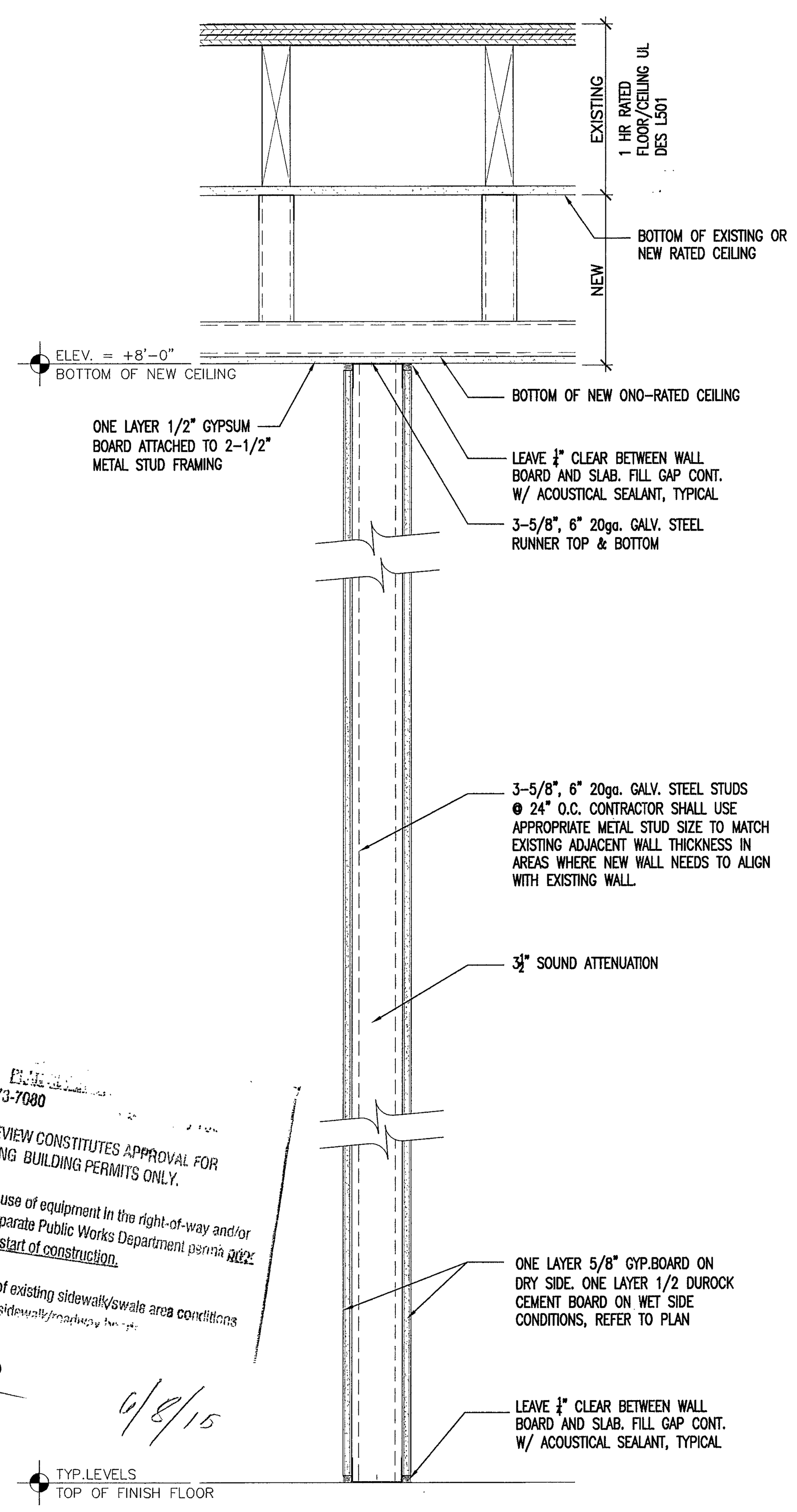
02 CHASE WALL
2 HR RATED SYSTEM B UL#U415
SCALE: N.T.S



03 CHASE WALL
2 HR RATED SYSTEM B UL#415
SCALE: N.T.S



04 CHASE WALL SECTION
2 HR RATED RATED SYSTEM B UL#415
SCALE: N.T.S

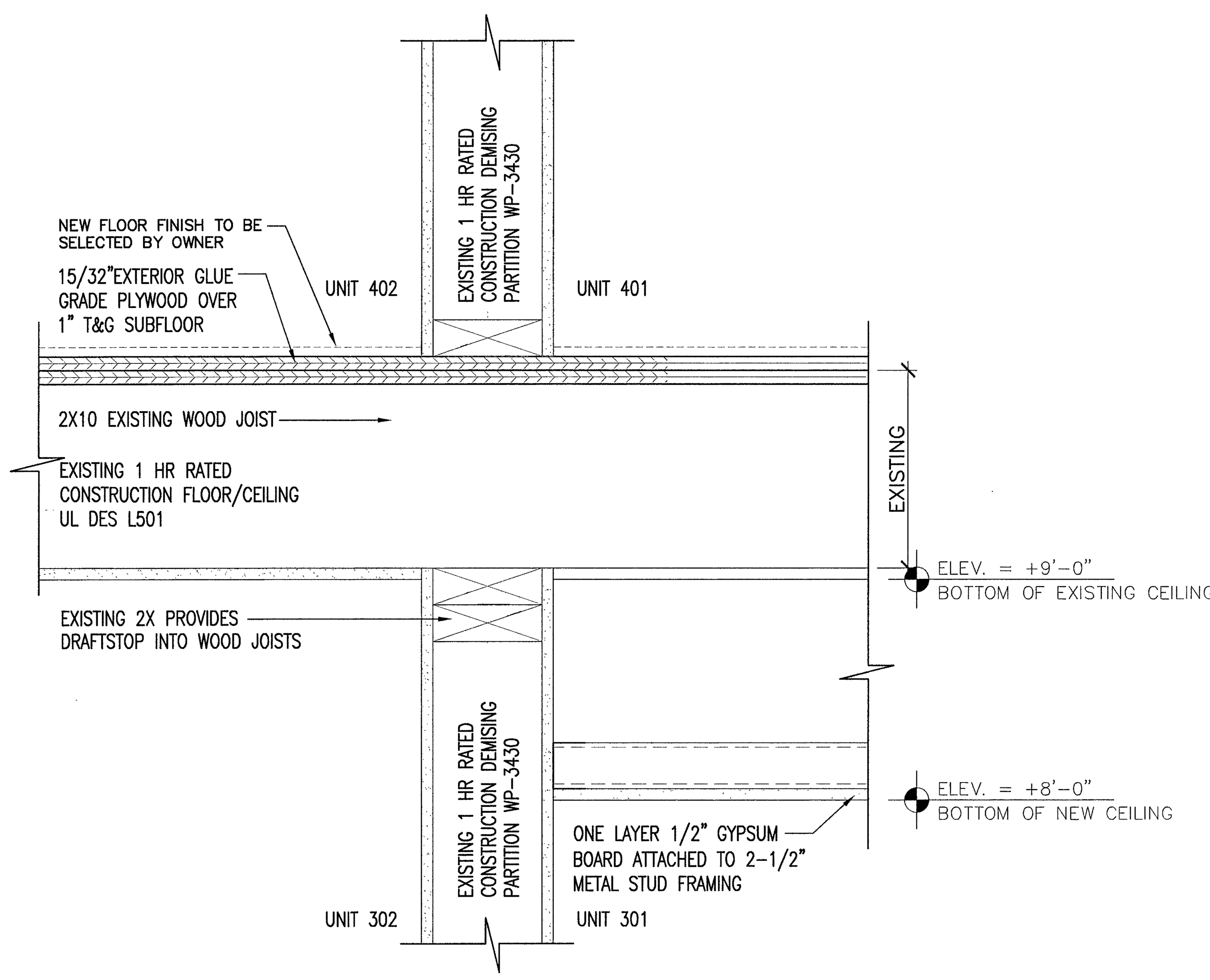


Phone 305-673-7080
THIS PLAN REVIEW CONSTITUTES APPROVAL FOR OBTAINING BUILDING PERMITS ONLY.
All construction and/or use of equipment in the right-of-way and/or easements, requires a separate Public Works Department permit prior to start of construction.
Permit Requirements: Proof of existing sidewalk/swale area conditions (pictures) and/or posting of sidewalk/swale bond ...
6/8/15

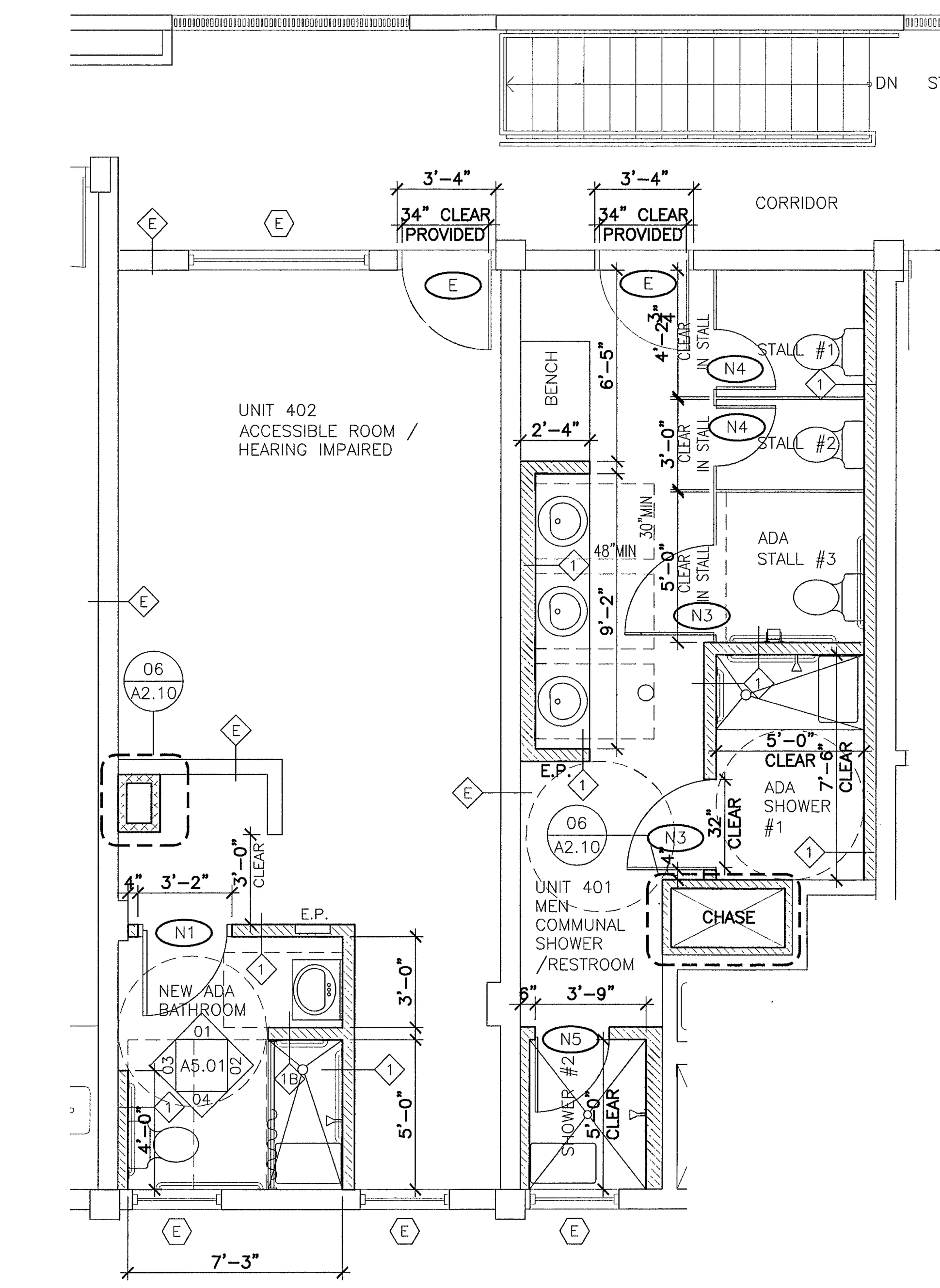
1 WALL TYPE 3-5/8
SCALE: 1-1/2"=1'-0"
NON-RATED

1A WALL TYPE 6"
SCALE: 1-1/2"=1'-0"
NON-RATED

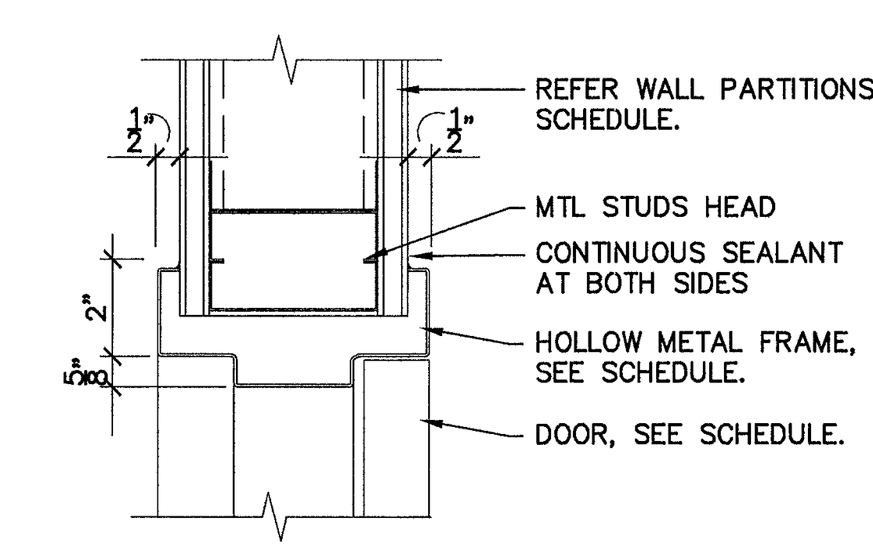
1B WALL TYPE 3-5/8"
SCALE: 3"=1'-0"
DO NOT PROVIDE SOUND ATTENUATION.



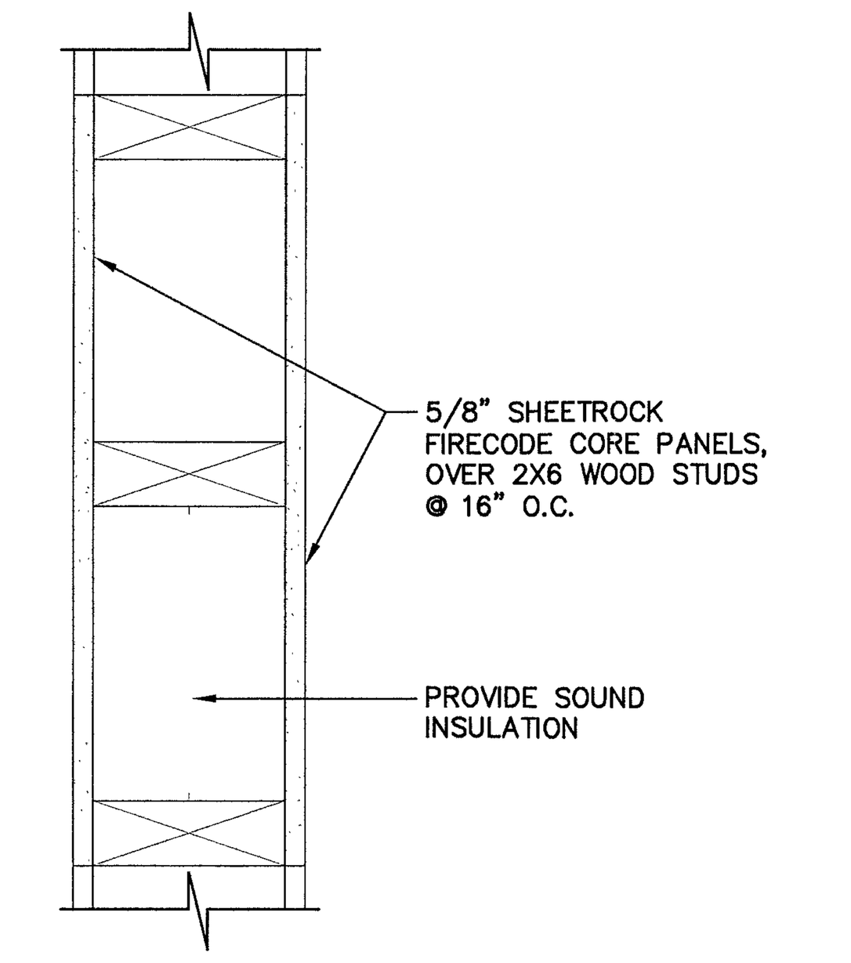
05 EXISTING 1 HR RATED
DEMISING WALL UL DESIGN L501
SCALE: N.T.S



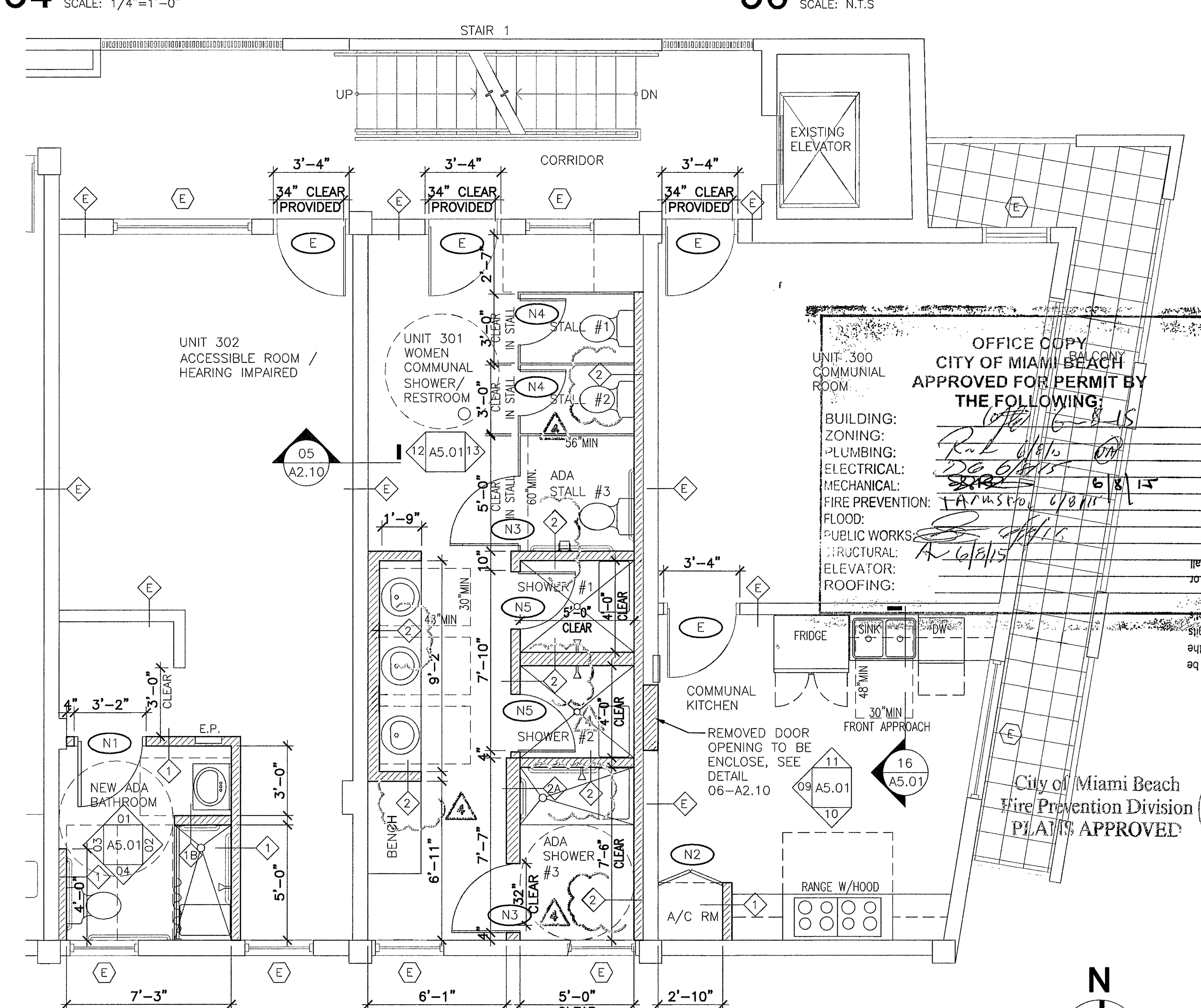
04 UNIT 401, UNIT 402
ENLARGE 4TH LEVEL FLOOR PLAN
SCALE: 1/4"=1'-0"



07 JAMB / HEAD DETAIL
SCALE: 3"=1'-0"



06 ENCLOSED WALL PLAN
1 HR RATED RATED UL#305
SCALE: N.T.S



01 COMMUNAL ROOM 300, UNIT 301, UNIT 302
ENLARGED FLOOR PLAN
SCALE: 1/4"=1'-0"

N

BEAME
ARCHITECTURAL
PARTNERSHIP

3059 GRAND AVENUE, SUITE 440
COCONUT GROVE, FLORIDA 33133
E-mail : bap@bapdesign.com
Florida Corp AA0002364
PH 305.444.7100 FX 305.444.9803

OWNER:
J3 VENTURES LLC
1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

LAWRENCE BEAME, R.A.
REGISTRATION # 7871

NUMBER:	DATE:	ITEM:
4	05-21-15	FIELD COORDINATION
3	01-19-15	BUILDING COMMENTS
2	11-19-14	BUILDING COMMENTS
1	10-06-14	CITY COMMENTS/ CHANGE OF SCOPE
	05-23-14	ISSUED FOR PERMIT

REVISIONS

HOTEL EVA INTERIOR IMPROVEMENTS

1506 COLLINS AVENUE
MIAMI BEACH,
FLORIDA 33139

PRIJ. MNGR.	DRAWING BY	SCALE
C.D.	VS	AS SHOWN

SHEET TITLE

ENLARGE FLOOR PLANS

JOB NUMBER	SHEET NUMBER
14010.00	A2.10
DATE 05-23-14	

UL ONLINE CERTIFICATIONS DIRECTORY — Home Quick Guide Contact Us UL.com

Design No. L526

BXUV.L526
Fire Resistance Ratings - ANSI/UL 263

Page Bottom

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263

BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

See General Information for Fire-resistance Ratings - ANSI/UL 263

See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

Design No. L526

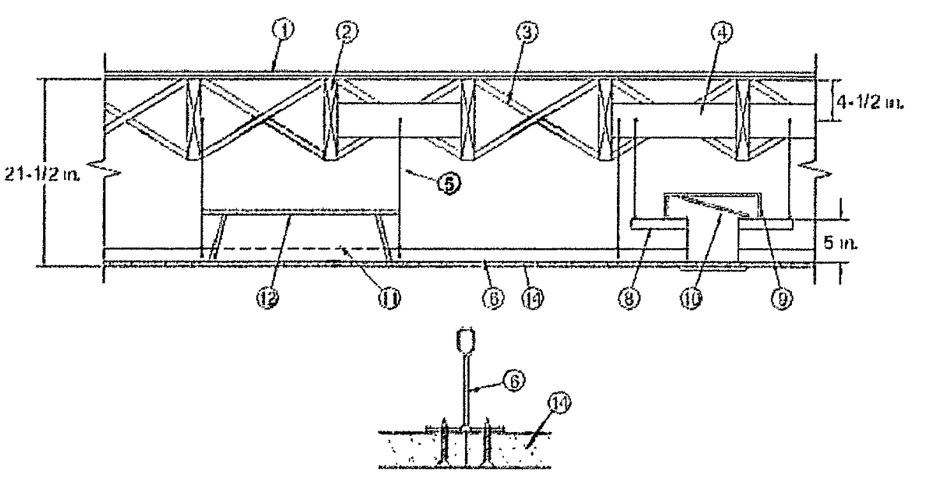
February 12, 2015

Unrestrained Assembly Rating — 1 Hr.

Finish Rating — 22 Min.

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



1. **Flooring System** — The flooring system shall consist of one of the following:

System No. 1

Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick plywood or 7/16 in. thick orientated strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

Vapor Barrier — (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring — Min 1 by 4 in. T&G lumber installed perpendicular to trusses, or min 19/32 in. thick wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

System No. 2

Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

Vapor Barrier — (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring - Floor Topping Mixture* — Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.4 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water.

ELASTIZELL CORP OF AMERICA — Type FF

System No. 3

Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

Vapor Barrier — (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring - Floor Topping Mixture* — Min 1 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.4 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 62.5 lbs of Pea Gravel, 312.5 lbs of sand with 5-1/2 gal of water.

LITE-CRETE INC — Type I

System No. 4

System No. 14

Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

Vapor Barrier — (Optional) — Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

DEPENDABLE LLC — GSL M3.4, GSL K2.6 and GSL RH

Floor Mat Materials* — (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. ¼ in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

2. **Wood Joists** — Min 2 by 10, spaced 16 in. OC and effectively fireblocked in accordance with local codes.

3. **Cross Bridging** — Min 1 by 3 in., or min 2 by 10 solid blocking.

4. **Wood Hanger Block** — Nom 2 by 4 in. installed between and perpendicular to wood joists, and centered 5 in. below subflooring. Secured to wood joists with two 16d nails at each end. Located as required to provide attachment provisions for hanger wire (Item 5).

5. **Hanger Wire** — No. 12 SWG galv steel wire, located 48 in. OC along main runners with additional hanger wires to occur at all four corners of light fixtures, at the midspan of cross tees adjacent to light fixtures, and at the cut end of cross tees longer than 23 in. which abut walls. Hanger wires supported from 16d nails driven through wood joists 4-1/2 in. below subflooring and bent upward at both ends for positive support. Where hanger wire locations occur between joists, hanger wires shall be supported from wood hanger blocks.

6. **Steel Framing Members*** — Nom 12 ft long main runners spaced 48 in. OC. Nom 4 ft long cross tees installed perpendicular to main runners and spaced 24 in. OC. Additional cross tees located 8 in. from and on both sides of each gypsum board end joint and each recessed light fixture. The main runner ends may be riveted to the wall molding along one wall and the cross tee ends may be riveted to the wall molding along both adjacent walls. The rivets are intended to facilitate the ceiling installation, not to replace hanger wires.

CHICAGO METALLIC CORP — Types 650, 650C, 670, 670C

and DWA1.5-1.5

7. **Wall Molding** — (Not Shown) - Min 0.019 in. thick painted or galv steel channel, 1-11/16 in. deep with 15/16 in. flanges, nailed to walls along perimeter of ceiling with 8d nails spaced 16 in OC.

8. **Cold-Rolled Channels** — Min 0.053 in. thick (16 gauge) painted cold-rolled steel channels, 1-1/2 in. deep with 9/16 in. flanges.

9. **Air Duct** — Min 0.029 in. thick (22 gauge) galv steel air duct. Total area of duct openings not to exceed 114 sq in. per each 100 sq ft of ceiling area. Area of individual duct opening not to exceed 144 sq in. Max dimensions of opening is 12 in. Duct supported by cold-rolled steel channels suspended by 12 SWG galv steel wire. Cold-rolled channels located 6 in. from and on each side of duct drop and max 48 in. OC away from duct drop.

10. **Damper** — Damper - Min 0.070 in. thick (14 gauge) galv steel damper, sized to overlap duct opening min 2 in. Damper protected on both sides with 1/16 in. thick ceramic fiber paper laminated to the steel and held open with a **Fusible Link** (Bearing the UL Listing Mark). In lieu of the damper described above, Duct Outlet Protection System B, as described in the Design Information Section, may be used with steel ducts.

11. **Fixtures, Recessed Light** — (Bearing the UL Listing Mark) - Nom 2 by 4 ft fluorescent lamp with steel housing, provided with detachable spring-loaded trim flange or with adjustable mounting brackets. Fixtures spaced so their area does not exceed 24 sq ft per 100 sq ft of ceiling area. Fixture wired in conformance with the National Electric Code. Fixtures and ballasts must be considered for these ambient temperature conditions before installation.

11A. **Alternate Fixtures, Recessed Light** — For Use with Steel Framing Members, Item 6B, 6C, 6D, 6E, or 6F - (Bearing the UL Listing Mark). Fluorescent lamp type, NEMA Type F steel housing, 1 by 2 ft, 1 by 4 ft, 2 by 2 ft or 2 by 4 ft size. Fixtures provided with swing-out steel support hooks near each corner designed to engage the bulb of the steel framing member cross tees. Size of steel framing member module to be nominally 2 in. wider and longer than the nominal fixture size. Fixtures to be additionally screw-attached to the web of the cross tees near the center of each long side and at both ends using No. 6 by 2-5/8 in. long (sides) and No. 6 by 1-5/8 in. long (ends) steel drywall screws. Fixtures spaced so their area does not exceed 24 sq ft per each 100 sq ft of ceiling area. Wired in conformance with the National Electrical Code.

11B. **Alternate Fixtures, Recessed Light** — For Use with Steel Framing Members, Item 6A- (Bearing the UL Listing Mark). Fluorescent lamp type, NEMA Type F steel housing, 1 by 2 ft, 1 by 4 ft, 2 by 2 ft or 2 by 4 ft size. Fixtures provided with swing-out steel support hooks near each corner designed to engage the bulb of the steel framing member cross tees. Fixtures to be additionally screw-attached to the cross tees near the center of each long side and at both ends using 2 in. long Type S-12 (sides) and 3 in. long Type S-12 (ends) steel screws. Fixtures spaced so their area does not exceed 24 sq ft per each 100 sq ft of ceiling area. Wired in conformance with the National Electrical Code.

12. **Fixture Protection — Gypsum Board*** — Nom 5/8 in. thick, cut from the same gypsum board used in the remainder of the ceiling membrane. The five sided enclosure consists of a 24 by 48 in. top piece, two 4-1/2 (or wider) by 48 in. side pieces, two 6 (or wider) by 24 in. end pieces, and two 6 by 6 in. spacers to maintain a 5/8 in. clearance between the light fixture housing and the top piece. The spacers are placed on top of the fixture housing, with care taken not to locate the spacers over the light fixture ballasts. The top and side pieces are laid in place, and the end pieces are secured to the edges of the side and top pieces with 6d nails at each corner. When fixtures are installed end to end, no end pieces are used where the fixtures abut. Instead, a 6 by 24 in. piece is placed on top of and centered over the gap between the top pieces.

12A. **Fixture Protection — Gypsum Board*** — For Use with Steel Framing Members, Item 6B, 6C, 6D, 6E, or 6F - 5/8 in. thick, same as Item 14, 14A, 14B, or 14C. Cut to form a five sided enclosure, rectangular in cross-section, at least 1-1/4 in. higher than the NEMA Type F light fixture housing (Item 11A). The fixture protection enclosure is to be installed in the grid module prior to installation of the NEMA Type F light fixture. The fixture protection side pieces are to be provided with nominal 1-1/4 in. wide by 3-1/2 in. long cutouts to accommodate the swing-out steel support hooks near each corner of the fixture. The fixture protection side and end pieces rest on the flanges of the primary cross tees and are screw-attached to the web of the cross tee with No. 6 by 1-5/8 in. long steel drywall screws. The top piece rests on the top edges of the side and end pieces without mechanical attachment. The dimensions of the fixture protection pieces for the various sizes of NEMA Type F fixtures are tabulated below:

NEMA Type F Fixture Size	1 by 2 ft	1 by 4 ft	2 by 2 ft	2 by 4 ft
Top Piece, in.	13-1/2 x 25-1/2	13-1/2 x 49-1/2	25-1/2 x 25-1/2	25-1/2 x 49-1/2
Side Piece, in.	7 x 25-1/2	7 x 49-1/2	7 x 25-1/2	7 x 49-1/2
End Piece, in.	7 x 12-1/4	7 x 12-1/4	7 x 24-1/4	7 x 24-1/4

12B. **Fixture Protection — Gypsum Board*** — For Use with Steel Framing Members, Item 6A - 5/8 in. thick,

same as Item 14, 14A or 14B. Cut to form a five sided enclosure, rectangular in cross section, for the NEMA Type F light fixture (Item 11B). The fixture protection enclosure is installed around the grid module prior to installation of the NEMA Type F light fixture. The end pieces of the light fixture protection rest upon the flanges additional nom 4 ft long cross tees placed at each end of light fixture opening. The pieces of gypsum board are secured to both cross tees with three 1 in. long Type S screws, one at the center of the cross tee and the remaining two screws spaced 12 in. O.C. in both directions. The end clips of the two additional cross tees are removed and the cross tee/gypsum board combinations are placed at each end of the module facing the light fixture opening with the ends of the cross tees resting on the flanges of the main runner. Two side pieces of the gypsum board protection are notched at the bottom with three 1/4 in. wide by 1-9/16 in. long notches to accommodate the cross tee bulbs. On each side the pieces are installed vertically, resting on the three cross tees intersecting the 50 in. long cross tees and placed 1-1/4 in from the edge of the 50 in. cross tees. The four side pieces of the light fixture protection box are secured together with 6d nails, one at mid-height, and one at each of the four corners. The top piece of gypsum board is loosely-laid on top of the four sided box and secured at each of the four corners with 6d nails. Holes are drilled through the top piece of gypsum board for the attachment of the hanger wires specified in Item 5. Two 4 ft long cross tees are placed on top of the fixture protection box, equally spaced and secured from the underside of the fixture protection box with three 1 in. long Type S screws equally spaced. The dimensions of the fixture protection pieces for the various sizes of NEMA Type F fixtures are listed below:

NEMA Type F Fixture Size	1 by 2 ft	1 by 4 ft	2 by 2 ft	2 by 4 ft
Top piece, in.	19 x 31	19 x 55	31 x 31	31 x 55
Side pieces, in	6 x 30	6 x 54	6 x 30	6 x 54
End pieces, in	6 x 19	6 x 19	6 x 31	6 x 31

13. **Batts and Blankets*** — (Optional, Not Shown) - For use with **Steel Framing Members*** (Item 6A) and **Gypsum Board*** (Item 14B). Any thickness mineral wool or glass fiber insulation bearing the UL Classification Marking for Surface Burning Characteristics, having a flame spread index of 25 or less and a smoke spread index of 50 or less. Insulation fitted in the concealed space, draped over steel framing members/gypsum board ceiling membrane.

13A. **Batts and Blankets*** — (Optional, Not Shown) - For use with **Steel Framing Members*** (specifically Item 6F) and **Gypsum Board*** (specifically Item 14C) - min. 3-1/2 in. thick, min. density 0.9 lb/ft^3 unfaced fiberglass batt insulation bearing the UL Classification Marking for Surface Burning Characteristics, having a flame spread value of 25 or less and a smoke spread value of 50 or less. Insulation fitted in the concealed space, draped over steel framing members/gypsum board ceiling membrane and light fixture protection.

14. **Gypsum Board*** — (For use with **Steel Framing Members*** described in Items 6) - Nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to cross tees with side joints centered along main runners. Gypsum board fastened to each cross tee with five 1 in. long No. 6 Type S bugle head screws with one screw located at the midspan of the cross tee, one screw located 12 in. from and on each side of the cross tee midspan, and one screw located 1-1/2 in. from each gypsum board side joint. Except at gypsum board end joints, screws shall be located on alternating sides of cross tee flange. At gypsum board end joints, screws shall be located 1/2 in. from the joint. Gypsum board fastened to main runners with 1 in. long No. 6 Type S bugle head screws, 1/2 in. from side joints, midway between intersections with cross tees (24 in. OC). End joints of adjacent gypsum board sheets shall be staggered not less than 4 ft OC. Gypsum board also screw attached to leg of wall angle with 1 in. long No. 6 Type S bugle head screws spaced 12 in. OC.

AMERICAN GYPSUM CO — Type AG-C

CERTAINTEED GYPSUM INC — Types FRPC, Type C

CGC INC — Types C, IP-X2, IPC-AR, WRC

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC-C/A

GEORGIA-PACIFIC GYPSUM L L C — Types 5, C, DAPC, TG-C

NATIONAL GYPSUM CO — Types eXP-C, FSK-C, FSW-C, FSW-G

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type C or PG-C

THAI GYPSUM PRODUCTS PCL — Type C

UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR, WRC

USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR, WRC

14A. **Gypsum Board*** — (For use with **Steel Framing Members*** described in Items 6A and 6B) - Nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to cross channels with side joints centered along main runners. Gypsum board fastened to cross channels with 1 in. long No. 6 Type S bugle head screws located 1/2 in. from end joints and 1-3/4 in. from each side joint and spaced 12 in. OC along the end joints and in the field. End joints of adjacent gypsum board sheets shall be staggered not less than 4 ft OC. Gypsum board sheets screw-attached to leg of wall angle with gypsum board screws spaced 12 in. OC. Joints to be covered with paper tape and joint compound.

When alternate **Steel Framing Members*** (Item 6C) are used, nom 5/8 in. thick, 4 ft wide gypsum board sheets installed with long dimension (side joints) perpendicular to the grid runners with the end joints staggered min 4 ft and centered between grid runners which are spaced 8 in. OC. Prior to installation of the gypsum board sheets, backer strips consisting of nom 7-3/4 in. wide by 48 in. long pieces of gypsum board are to be laid atop the grid runner flanges and centered over each butted end joint location. The backer strips are to be secured to the flanges of the grid runners at opposite corners of the backer strip to prevent the backer strips from being uplifted during screw-attachment of the gypsum board sheets. Gypsum board fastened to grid runners with drywall screws spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board. The butted end joints are to be secured to the backer strip with No. 10 by 1-1/2 in. long Type G laminating screws located 1 in. from each side of the butted end joint and spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board. Joints to be covered with paper tape and joint compound.

When alternate **Steel Framing Members*** (Item 6D) are used, gypsum board sheets installed with long dimension (side joints) perpendicular to the 6 ft long cross tees with the end joints staggered min 4 ft and centered between cross tees which are spaced 8 in. OC. Gypsum board side joints may occur beneath or between main runners. Prior to installation of the gypsum board sheets, backer strips consisting of nom 7-3/4 in. wide pieces of gypsum board are to be laid atop the cross tee flanges and centered over each butted end joint location. The backer strips are to be secured to the flanges of the cross tees at opposite corners of the backer strip to prevent the backer strips from being uplifted during screw-attachment of the gypsum board sheets. Gypsum board fastened to cross tees with drywall screws spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board. The butted end joints are to be secured to the backer strip with No. 10 by 1-1/2 in. long Type G laminating screws located 1 in. from each side of the butted end joint and spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board. Joints to be covered with paper tape and joint compound.

When alternate **Steel Framing Members*** (Item 6E) are used, gypsum board sheets installed with long dimension (side joints) perpendicular to the 6 ft long cross tees with the end joints staggered min 4 ft and centered between cross tees which are spaced 8 in. OC. Gypsum board side joints may occur beneath or between main runners. Prior to installation of the gypsum board sheets, backer strips consisting of nom 7-3/4 in. wide pieces of gypsum board are to be laid atop the cross tee flanges and centered over each butted end joint location. The backer strips are to be secured to the flanges of the cross tees at opposite corners of the backer strip with hold down clips to prevent the backer strips from being uplifted during screw-attachment of the gypsum board sheets. Gypsum board fastened to cross tees with 1 in. drywall screws spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board. The butted end joints are to be secured to the backer strip with No. 10 by 1-1/2 in. long Type G laminating screws located 1 in. from each side of the butted end joint and spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board. Joints to be covered with paper tape and joint compound.

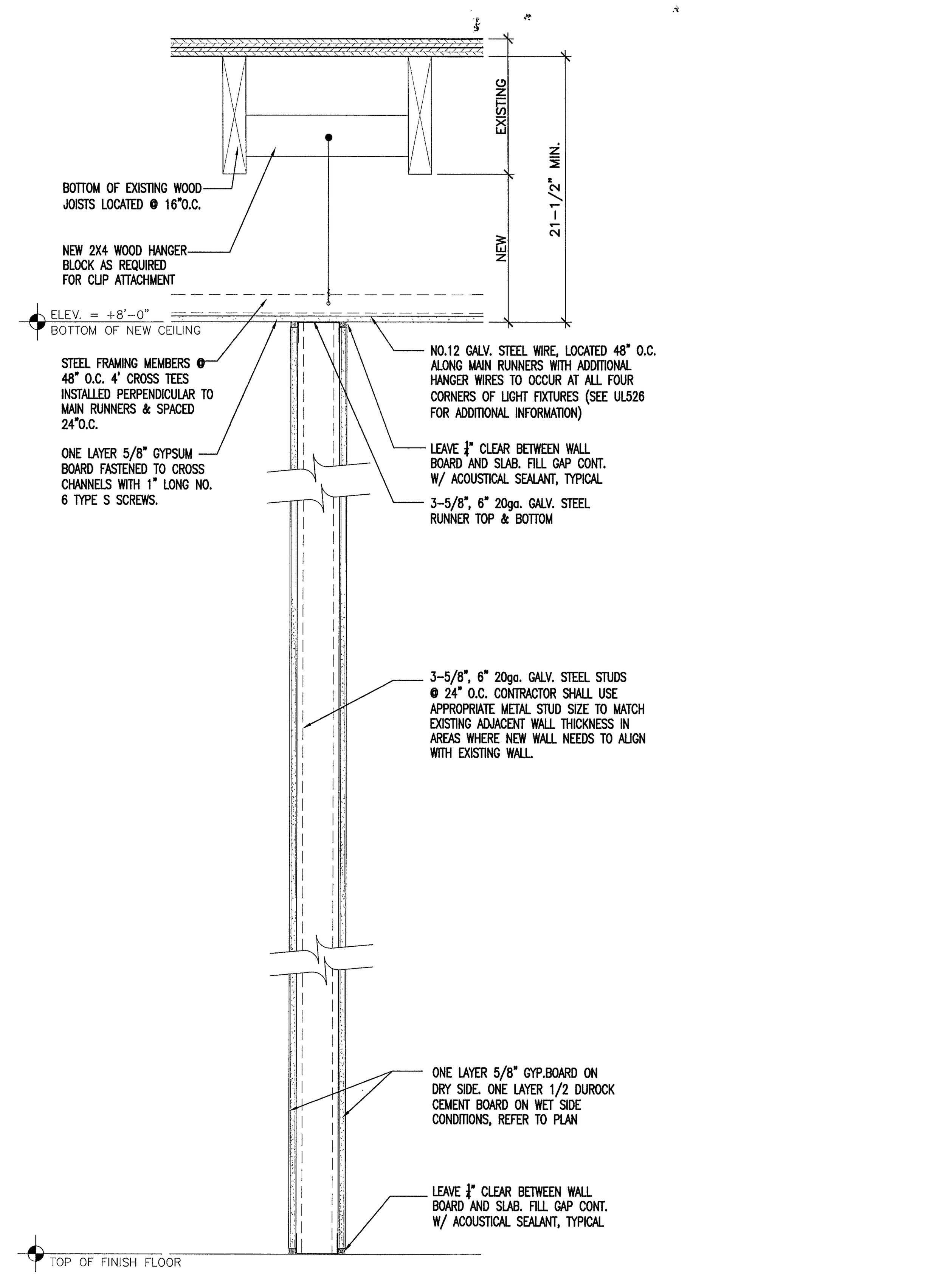
AMERICAN GYPSUM CO — Type AG-C

CERTAINTEED GYPSUM INC — Type FRPC, SF3, Type C

CGC INC — Types C, IP-X2, IPC-AR, WRC

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC-C/A

GEORGIA-PACIFIC GYPSUM L L C — Types 5, C, DAPC, TG-C



2 RATED CEILING ASSEMBLY RATING W/ WALL TYPE

SCALE: 1-1/2"=1'-0"
RATED CEILING ASSEMBLY DESIGN NO. L526
UNIT 301

2A RATED CEILING ASSEMBLY RATING W/ WALL TYPE

SCALE: 1-1/2"=1'-0"
RATED CEILING ASSEMBLY DESIGN NO. L526
PROVIDE 6" WALL STUD

OFFICE COPY
CITY OF MIAMI BEACH
APPROVED FOR PERMIT BY THE FOLLOWING:
BUILDING: / ZONING: / PLUMBING: / ELECTRICAL: / MECHANICAL: / FIRE PREVENTION: / FLOOD: / PUBLIC WORKS: / STRUCTURAL: / ELEVATOR: / ROOFING:

City of Miami Beach
Fire Prevention Division
PLANS APPROVED

BEAME ARCHITECTURAL PARTNERSHIP
3059 GRAND AVENUE, SUITE 440
COCONUT GROVE, FLORIDA 33133
E-mail : bap@bapdesign.com
Florida Corp AA0002364
PH 305.444.7100 FX 305.444.9803

OWNER:
J3 VENTURES LLC
1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

LAWRENCE BEAME, R.A.
REGISTRATION # 7871

NUMBER:	DATE:	ITEM:
4	03-16-15	FIELD COORDINATION
3	01-19-15	BUILDING COMMENTS
2	11-19-14	BUILDING COMMENTS
1	10-06-14	CITY COMMENTS/ CHANGE OF SCOPE
	05-23-14	ISSUED FOR PERMIT

REVISIONS

HOTEL EVA INTERIOR IMPROVEMENTS

1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

PRJ. MNGR.	DRAWING BY	SCALE
C.D.	VS	AS SHOWN

SHEET TITLE

DETAILS

JOB NUMBER: 14010.00
DATE: 05-23-14
SHEET NUMBER: A2.11

STRUCTURAL NOTES

GENERAL NOTES:

1. The Governing Code for this project is the Florida Building Code, 2010 Edition. This Code prescribes which Edition of each referenced standard applies to this project.
2. To the best of our knowledge, the Structural drawings and specifications comply with the applicable requirements of the Governing Building Code.
3. Construction is to comply with the requirements of the Governing Building Code and all other applicable Federal, State, and local Codes, Standards, Regulations and Laws.
4. The Structural documents are to be used in conjunction with the Architectural documents. Use these notes in conjunction with the project specifications. If a conflict exist, notify the Architect.
5. Details labeled "Typical" apply to all situations that are the same or similar to those specifically referenced, whether or not they are keyed in at each location. Questions regarding the applicability of typical details shall be resolved by the Architect.
6. Openings shown on Structural drawings are only pictorial. See the Architectural and M.E.P. drawings for the size and location of openings in the structure.
7. Contractors who discover discrepancies, omissions or variations in the contract documents during bidding shall immediately notify the Architect. The Architect will resolve the condition and issue a written clarification.
8. The General Contractor shall coordinate all contract documents with field conditions and dimensions and project shop drawings prior to construction. Do not scale drawings; use only printed dimensions. Report any discrepancies in writing to the Architect prior to proceeding with work. Do not change size or location of Structural members without written instructions from the Structural Engineer of record.
9. The contractor shall protect adjacent property, his own work and the public from harm. The contractor is solely responsible for construction means and methods, and jobsite safety including all OSHA requirements.
10. The Structure is designed to be structurally sound when completed. Prior to completion, the Contractor is responsible for stability and temporary bracing, including, but not limited to, masonry walls. Wherever the Contractor is unsure of these requirements, the Contractor shall retain a Florida Licensed Engineer to design and inspect the temporary bracing and stability of the Structure.
11. DESIGN SUPERIMPOSED LOADS:

Occupancy	LIVE LOAD	DEAD LOAD
Roof	30 PSF	20 PSF

12. DESIGN WIND LOADS :

Governing Code	ASCE 7-10
Basic Wind Speed	Vult= 176 MPH/Vasd= 136 MPH
Risk Category	II
Building Enclosure	Enclosed
Directionality Factor	Kd = 0.85
Exposure	D
Mean Roof Height	42 FEET

SHOP DRAWINGS AND OTHER SUBMITTALS:

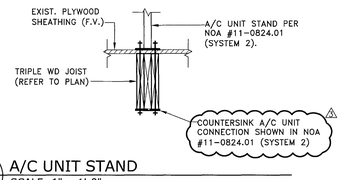
1. Submit specific components, such as columns, footings, etc., in a single package. Submit similar floors together.
2. On first submittal, clearly flag and cloud all differences from the contract documents. On resubmittals, flag and cloud all changes and additions to previous submittal; only clouded items will be reviewed.
3. Submittals for special structural, load-carrying items that are required by Codes or Standards to resist forces must be prepared by, or under the direct supervision of, a Delegated Engineer. Examples include precast concrete, prefabricated wood components, open web steel joists and joist girders, post-tensioning systems, Tilt-Up panels, structural steel connections, structural light gage steel framing, exterior enclosure systems and shoring and reshoring.
4. A Delegated Engineer is defined as a Florida Licensed Engineer who specializes in and undertakes the design of Structural Components or Structural Systems included in a specific submittal prepared for this project and is an employee or officer of, or Consultant to, the Contractor or fabricator responsible for the submittal. The Delegated Engineer shall sign, seal and date the submittal, including calculations and drawings.
5. The trade Contractor is responsible for confirming and correlating dimensions at the job sites, for tolerances, clearances, quantities, fabrication processes and techniques of construction, coordination of the work with other trades and full compliance with the contract documents.

WOOD CONSTRUCTION:

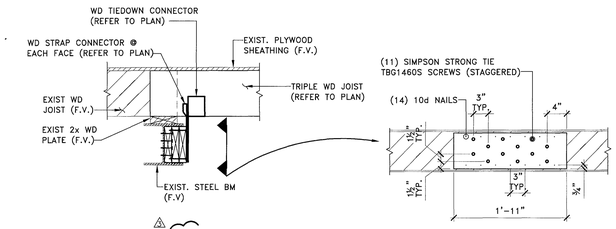
1. All wood construction and connections shall conform to AITC "American Institute of Timber Construction" manual, and the "National Design Specification for Wood Construction", 2005 edition, and Florida Building Code, chapter 23.
2. All member sizes are to be as shown on drawing and provide the following minimum properties:

Member	Species	Fb (psi)	E (psi)
Joists	So. Pine No. 2	1,500	1,400,000

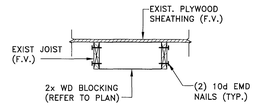
3. All wood in contact with concrete or masonry shall be pressure treated.
4. All metal wood connectors shall be galvanized and shall be manufactured by Simpson Strong Tie Co., or approved equivalent.
5. All joists shall be laterally supported at ends by solid blocking.



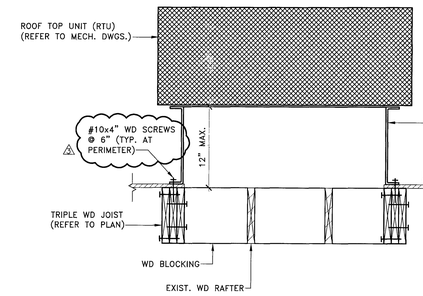
4 A/C UNIT STAND
SCALE: 1" = 1'-0"



3 TRIPLE JOST/EXIST BEAM CONN.
SCALE: 1" = 1'-0"



2 TYPICAL WD BLOCKING DETAIL
SCALE: 3/4" = 1'-0"



1 CURB FOR R.T.U. SUPPORT
N.T.S.

WOOD CONNECTOR SCHEDULE							
MARK	DESCRIPTION	NOA #/FL #	CONNECTOR ALLOWABLE LOAD VALUES (LBS)				NAIL SIZE & QUANTITY
			UPLIFT (LB.)	DOWN (LB.)	LATERAL LOAD PARALLEL (LB.)	LATERAL LOAD PERP. (LB.)	
1	MTS12	10456.33	1,000	–	–	–	(14) 10d NAILS INTO RAFTER
2	LGT2	11470.6	2,050	–	–	–	(14) 16d SINKER NAILS INTO RAFTER

*CONNECTORS SPECIFIED ARE BY SIMPSON STRONG-TIE U.N.O.

ROOF PLAN NOTES:

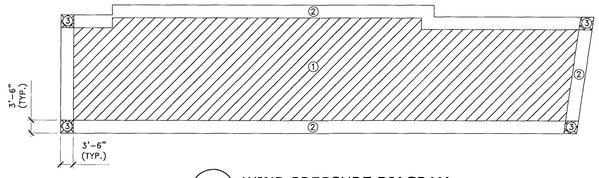
1. [X] INDICATES WOOD CONNECTOR. REFER TO SCHEDULE.

JOISTS FORMED BY TWO OR MORE MEMBERS SHALL BE FASTENED BY 10d NAILS SPACED @ 24" @ FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES PER FBC 2304.9.1

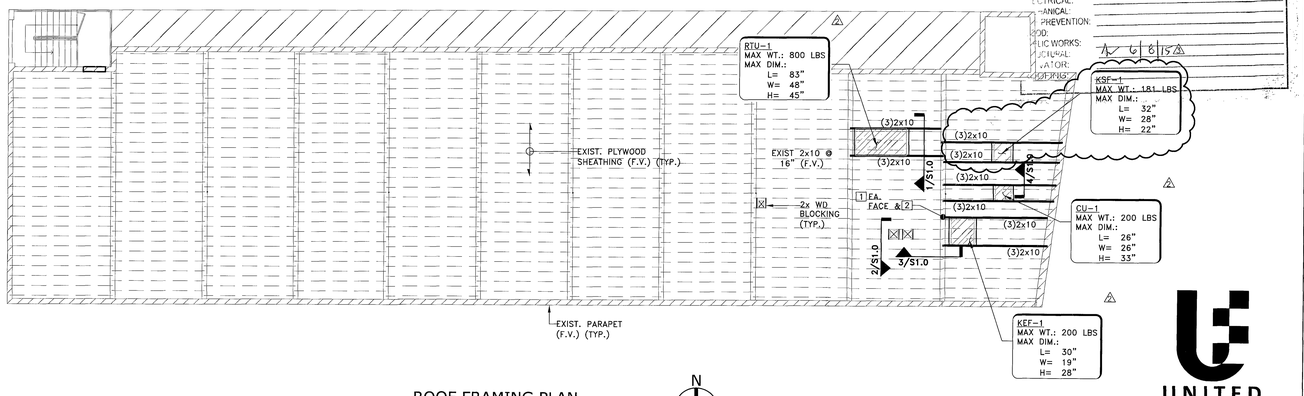
ASD WIND LOAD ROOF PRESSURES Kd=0.85					
ROOF ZONE	PRESSURE (PSF)				
	< 19 sf	20 sf to 49 sf	50 sf to 79 sf	80 sf to 100 sf	ROOFING
1	-58.1	-56.6	-54.7	-53.7	-49.3
2	-97.6	-87.2	-73.4	-66.5	-88.7
3	-97.6	-87.2	-73.4	-66.5	-88.7

NOTES:

1. FOR Kd = 1.0, MULTIPLY VALUES BY 1.18.
2. THE FIGURES SHOWN REPRESENT GROSS VALUES. TO OBTAIN NET UPLIFT VALUES ONLY 10 PSF OF DEAD LOAD SHALL BE DEDUCTED FROM THEM.
3. FOR ULTIMATE VALUES, MULTIPLY VALUES IN TABLE BY 1.67.



WIND PRESSURE DIAGRAM
ROOF



ROOF FRAMING PLAN
SCALE: 1/8" = 1'-0"

OFFICE COPY
CITY OF MIAMI BEACH
APPROVED FOR PERMIT BY
THE FOLLOWING:
BUILDING:
PLUMBING:
ELECTRICAL:
MECHANICAL:
FIRE PREVENTION:
PUBLIC WORKS:
PLANNING:
ZONING:
6/8/15

UNITED Engineering, Inc.
STRUCTURAL ENGINEERS
12595 SW 137 Avenue, Suite 132
Miami, Florida 33186
Tel.: 786.347.5250
Email: info@unitedeng.pro
Certificate of Authorization No. 29691
UNITED Project No.: 0213-01

BEAME ARCHITECTURAL PARTNERSHIP
3059 GRAND AVENUE, SUITE 440
COCONUT GROVE, FLORIDA 33133
E-mail : bap@bapdesign.com
Florida Corp AA0002364
PH 305.444.7100 FX 305.444.9803

OWNER:
J3 VENTURES LLC
1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

JUAN JOSE FUENTES LICENSE 62426 STATE OF FLORIDA PROFESSIONAL ENGINEER
JUAN J. FUENTES, P.E., S.E.
STRUCTURAL ENGINEER
FLORIDA LICENSE NO: 62426

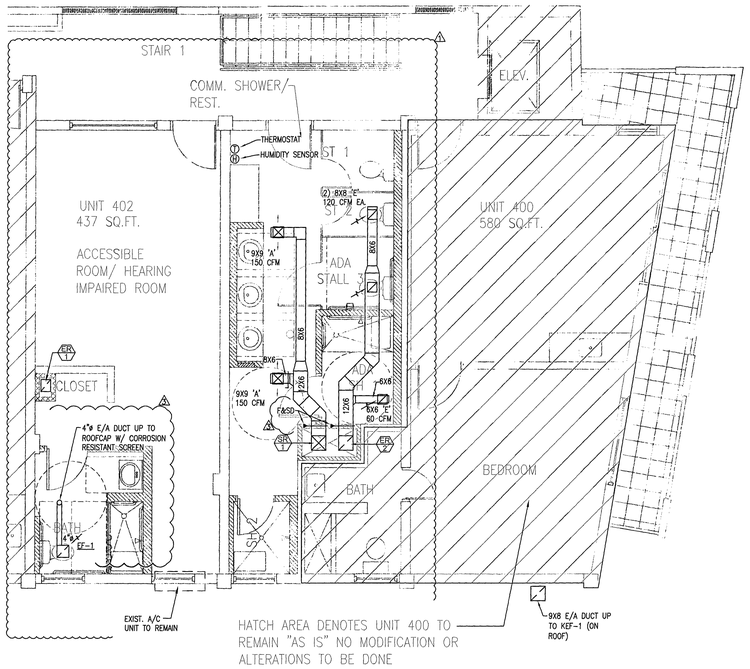
NUMBER:	DATE:	ITEM:
REVISIONS		
3	05/28/15	OWNER REV
2	11/21/15	CITY COMMTS.
1	10/06/14	CITY COMMTS. / CHANGE OF SCOPE

HOTEL EVA
INTERIOR IMPROVEMENTS
1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

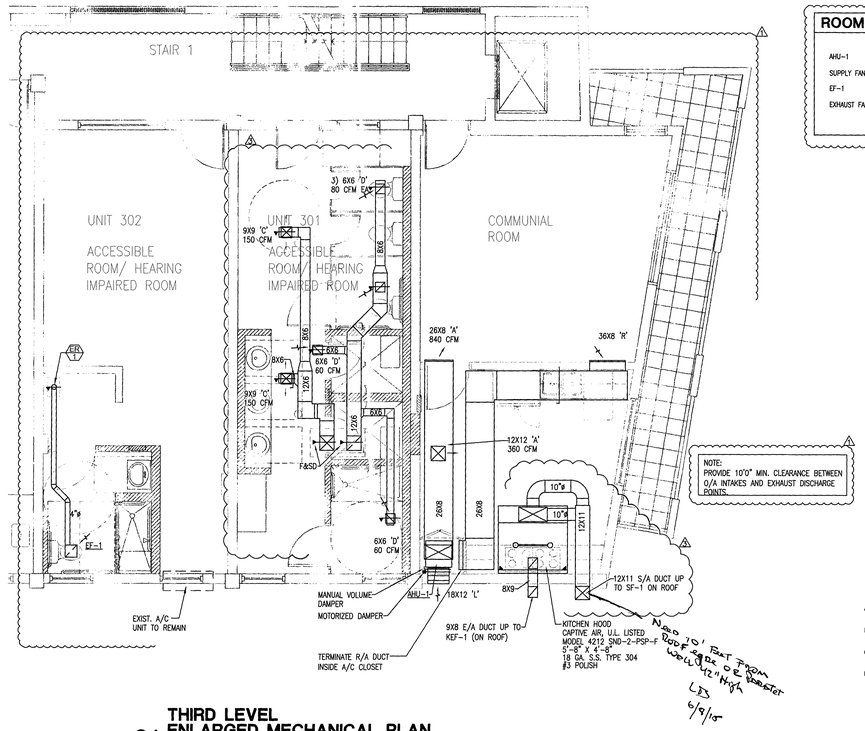
PRJ. MNGR.	DRAWING BY	SCALE
JJF	RSI	AS SHOWN

SHEET TITLE
GENERAL NOTES, ROOF FRAMING PLAN, & DETAILS

JOB NUMBER	SHEET NUMBER
14010.00	3 S1.0
DATE: 05-23-14	



02 FOURTH LEVEL ENLARGED MECHANICAL PLAN
SCALE: 1/4"=1'-0"



01 THIRD LEVEL ENLARGED MECHANICAL PLAN
SCALE: 1/4"=1'-0"

ROOM AIR BALANCE SCHEDULE

AHU-1	315 CFM
SUPPLY FAN SF-1	618 CFM
EF-1	-50 CFM
EXHAUST FAN EF-1	-773 CFM
	ROOM UNDER 110 CFM OF POSITIVE PRESSURE

KITCHEN GENERAL NOTES

A. VERIFY SUPPLY AND EXAUST INLET SIZES, AIR QUANTITIES, LOCATION, AND OTHER REQUIREMENTS FOR KITCHEN HOODS EQUIPMENT WITH KITCHEN CONSULTANT AND/OR EQUIPMENT SUPPLIER.

B. KITCHEN HOOD EXHAUST DUCTWORK SHALL BE OF MINIMUM 16 GAUGE BLACK IRON ALL WELDED CONSTRUCTION (LIQUID TIGHT EXTERNALLY WELDED). CONSTRUCT AND INSTALL AS PER LATEST NFPA 96 REQUIREMENTS.

C. PROVIDE CLEANOUTS FOR HORIZONTAL DUCTS AT EVERY CHANGE IN DIRECTION AND AT NOT MORE THAN 20 FT. SPACING. SQUARE THROAT ELBOWS WILL NOT BE ALLOWED. PROVIDE MINIMUM OF 1/ INCH PER FOOT SLOPE TOWARD HOOD FOR HORIZONTAL DUCTS.

D. CONCEALED KITCHEN HOOD EXHAUST DUCTWORK SHALL BE ENCLOSED IN A TWO HOUR FIRE RATED ENCLOSURE, WITH 6 INCH MINIMUM SEPARATION BETWEEN DUCT AND INTERIOR SURFACE OF ENCLOSURE.

E. KITCHEN SUPPLY AND EXHAUST FAN(S) SHALL BE INTERLOCKED WITH PILOT LIGHT IN KITCHEN AREA. ACTIVATION OF THE HOOD FIRE EXTINGUISHING SYSTEM SHALL CAUSE THE SUPPLY FAN(S) TO STOP OPERATION AND THE EXHAUST FAN(S) TO CONTINUE IN OPERATION.

F. FIXED PIPE EXTINGUISHING SYSTEMS IN A SINGLE HAZARD AREA SHALL BE ARRANGED FOR SIMULTANEOUS AUTOMATIC OPERATION UPON ACTIVATION OF ANYONE OF THE SYSTEMS.

G. MAKEUP AIR DUCTWORK SHALL BE GALVANNEED STEEL WITH GAUGES, DUCT CONSTRUCTION, BRACING AND SUSPENSION IN ACCORDANCE WITH THE RECOMMENDATIONS SET FORTH IN THE LATEST EDITION OF THE A.S.H.R.A.E. GUIDE AND S.M.A.C.N.A. STANDARDS. DUCT SIZE SHOWN AS "APPROX" DIMENSIONS. VERIFY EXACT LOCATION OF DUCT WITH RESPECT TO STRUCTURE BEFORE FABRICATION.

H. DUCT MOUNTED SMOKE DETECTOR SHALL BE B.R.K. ELECTRONICS MODEL NO. DH1851UC IONIZATION DETECTOR OR APPROVED EQUAL. DETECTOR TO BE U.L. LISTED PER UL268A. DETECTORS SHALL COMPLY WITH THE REQUIREMENTS LISTED ON N.F.P.A. 90A.

I. FANS SHALL BE AS SCHEDULED ON THE DRAWINGS, COMPLETE WITH ALL THE SPECIFIED ACCESSORIES. CENTRIFUGAL WHEELS TO BE STATICALLY AND DINAMICALLY BALANCED WITH FAN AND MOTOR ASSEMBLY ON VIBRATION MOUNTS. ALL FANS SHALL BE U.L. LISTED AND A.M.C.A. RATED.

J. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN 1 YEAR FROM DATE OF ACCEPTANCE.

K. ALL INDOOR GREASE LADEN AIR EXHAUST DUCTWORK SHALL BE WRAPPED WITH FIRE MASTER GREASE DUCT FIRE MASTER PROTECTION SYSTEM. 2300 F PURED JOINT FREE, LIGHTWEIGHT, FLEXIBLE, AND AND ENCAPSULATED SYSTEM OR NELSON FSB FLAMESHIELD BLANKET FROM POINT OF PENETRATION, THRU CONCEALED SPACE, TO POINT OF EXIT.

MANDATORY NOTES

A. SUPPLY AND EXHAUST FANS ARE INTERLOCKED WITH PLOT LIGHT IN KITCHEN AREA.

B. FIRE MODE REQUIRES EXHAUST FAN CONTINUES TO OPERATE AND SUPPLY FAN STOPS.

C. HOOD EXHAUST FANS SHALL OPERATE WHENEVER THE EXTINGUISHING SYSTEM IS ACTIVATED.

D. FIXED PIPE EXTINGUISHING SYSTEMS IN A SINGLE HAZARD AREA SHALL BE ARRANGED FOR SIMULTANEOUS AUTOMATIC OPERATION UPON ACTIVATION OF ANYONE OF THE SYSTEMS. COMMON EXHAUST DUCT FOR MORE THAN ONE HOOD WOULD DEFINE A SINGLE HAZARD AREA. EXCEPTION WOULD BE A SECONDARY FIRE SUPPRESSION SYSTEM CONTAINED IN THE COMMON EXHAUST DUCT.

HOOD INFORMATION – Job#2051184

HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	EXHAUST PLENUM TOTAL EXH. CFM	RISER(S) WIDTH	RISER(S) LENG.	RISER(S) DIA.	RISER(S) CFM	RISER(S) S.P.	TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG. END TO END	HOOD CONFIG. ROW
1		4212 SND-2-PSP-F	4' 10.00"	450 Deg.	773	9"	8"		773	-0.233"	618	430 SS Where Exposed	ALONE	ALONE

HOOD INFORMATION

HOOD NO.	TAG	FILTER(S) TYPE	FILTER(S) QTY.	FILTER(S) HEIGHT	FILTER(S) LENGTH	LIGHT(S) QTY.	LIGHT(S) TYPE	LIGHT(S) WIRE GUARD	LOCATION	UTILITY CABINET(S) FIRE SYSTEM TYPE	UTILITY CABINET(S) FIRE SYSTEM SIZE	UTILITY CABINET(S) ELECTRICAL MODEL #	SWITCHES QUANTITY	FIRE SYSTEM PIPING	HOOD HANGING WGHT
1		SS Baffle with Handles	3	16"	16"	2	L55 Series E26	NO						YES	193 LBS

HOOD OPTIONS

HOOD NO.	TAG	OPTION
1		BACKSPLASH 80.00" High X 58.00" Long 430 SS
		RIGHT QUARTER END PANEL 23" Top Width, 0" Bottom Width, 23" High 430 SS
		LEFT QUARTER END PANEL 23" Top Width, 0" Bottom Width, 23" High 430 SS

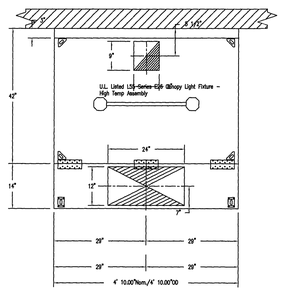
PERFORATED SUPPLY PLENUM(S)

HOOD NO.	TAG	POS.	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S) WIDTH	RISER(S) LENG.	RISER(S) DIA.	RISER(S) CFM	RISER(S) S.P.
1		Front	58"	14"	6"	MUA	12"	24"		618	0.147"

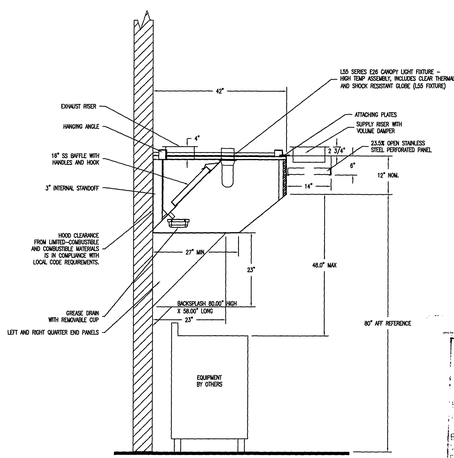
CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH UL 710 AND NFPA 96 AND ARE RECOGNIZED BY ONE OR MORE OF THE FOLLOWING:

ETL SANITATION LISTED

ETL LISTED FILE# 3054804-001

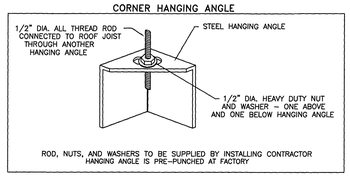


PLAN VIEW – Hood #1
4' 10.00" LONG 4212SND-2-PSP-F

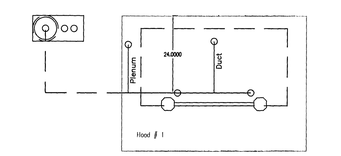


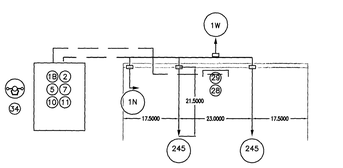
SECTION VIEW – MODEL 4212SND-2-PSP-F HOOD – #1

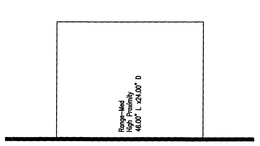
CORNER HANGING ANGLE



ROD, NUTS, AND WASHERS TO BE SUPPLIED BY INSTALLING CONTRACTOR
HANGING ANGLE IS PRE-PUNCHED AT FACTORY







NOTES
- FIELD PIPE DROPS AS SHOWN
  SLEEVING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC.
- MAXIMUM 9 ELBOWS IN SUPPLY LINE.
- MINIMUM 72 INCHES OF AGENT LINE FROM TANK TO FIRST NOZZLE.
- IF APPLICABLE, PRE-PIPED CHARBROILER DROPS ARE SHIPPED LOOSE.
- FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.
- APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.
- THIS FIRE SYSTEM COMPLIES WITH U.L. 300 REQUIREMENTS

Job #: 2051184
Job Name: EVA HOTEL MIAMI BEACH
Drawn By:
System Size: ANSUL-3.0 Total FP required: 6
Hood # 1 4' 10.00" Long x 42" Wide x 24" High
Riser # 1 Size: 8" x 8"

JMM Consulting Engineers LLC
Certificate of Authorization #6992
Jose M. Martinez, P.E.
11025 STINSON DIXON Suite 103
Miami, Florida 33178
TEL (305) 255-1021
FAX (305) 271-0080

BEAME ARCHITECTURAL PARTNERSHIP
3059 GRAND AVENUE, SUITE 440
COCONUT GROVE, FLORIDA 33133
E-mail : bap@bapdesign.com
Florida Corp AA0002364
PH 305.444.7100 FX 305.444.9803

OWNER:
J3 VENTURES LLC
1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

LAWRENCE BEAME, R.A.
REGISTRATION # 7871

NUMBER:	DATE:	ITEM:
REVISIONS		
1	5/21/15	GENERAL REVISIONS
2	10/06/14	CITY COMMTS. / CHANGE OF SCOPE

REVISIONS
DESCRIPTION	DATE:
1	-
2	-
3	-
4	-
5	-

CAPTIVE-AIRE
REGOFFICE
ADDRESS
www.captiveaire.com

OFFICE COPY
CITY OF MIAMI BEACH
APPROVED FOR PERMIT BY THE FOLLOWING:
BUILDING:
ZONING:
PLUMBING:
ELECTRICAL:
MECHANICAL:
FIRE PREVENTION:
FLOOD:
PUBLIC WORKS:
STRUCTURAL:
ELEVATOR:
ROOFING:

City of Miami Beach
Fire Prevention Division
PLANS APPROVED

JOSE M. MARTINEZ LICENSE No. 58018 STATE OF FLORIDA PROFESSIONAL ENGINEER

EVA HOTEL MIAMI BEACH
MIAMI BEACH, FL

DATE:

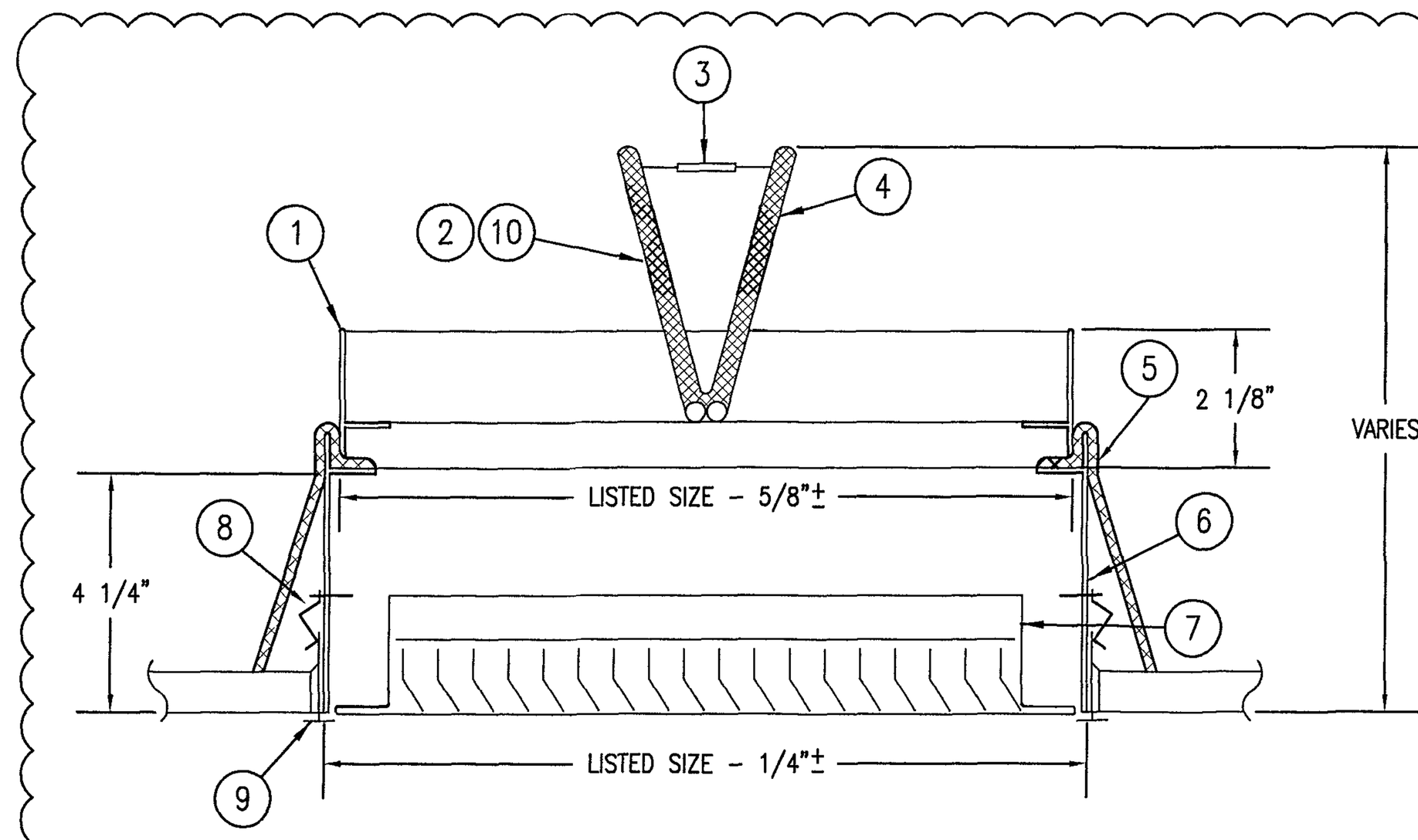
HOTEL EVA INTERIOR IMPROVEMENTS

1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

PRJ. MNGR.	DRAWING BY	SCALE

SHEET TITLE
ENLARGED MECHANICAL FLOOR PLAN

JOB NUMBER	SHEET NUMBER
DATE	M1.03

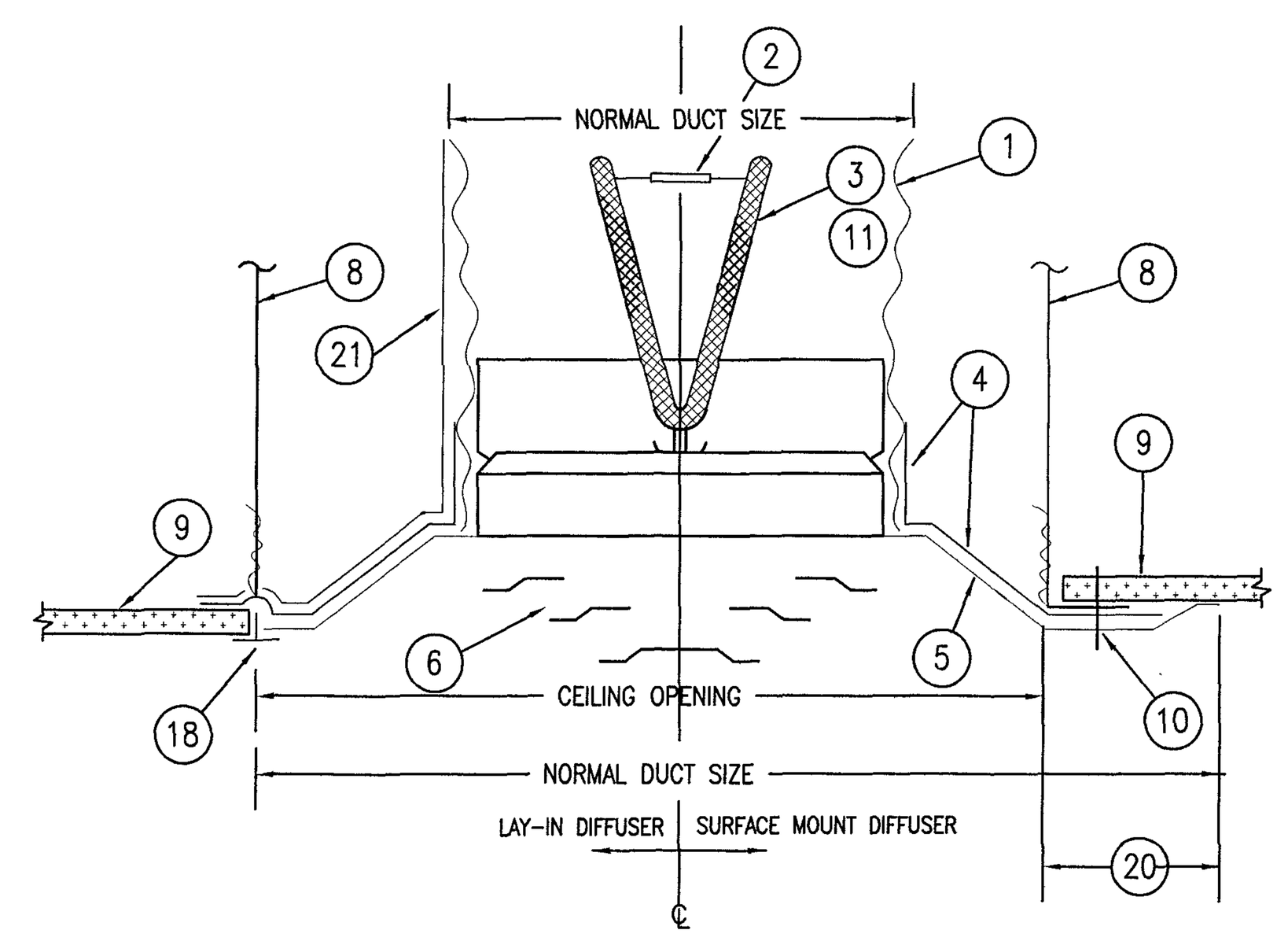


NOTES:

1. DAMPER FRAME: GALVANIZED STEEL, STANDARD (GALVALUME STEEL OR STAINLESS STEEL, OPTIONAL).
2. DAMPER BLADES: GALVANIZED STEEL, (GALVALUME STEEL OR STAINLESS STEEL, OPTIONAL.
3. U.L. LISTED FUSIBLE LINK (165°F UNLESS OTHERWISE INDICATED).
4. BLADE INSULATION: CERAMIC FIBER.
5. SHROUD: CERAMIC FIBER THERMAL BLANKET PER MANUFACTURER'S RECOMMENDATIONS.
6. EXTENSION FRAME: GALVANIZED STEEL, STANDARD. (GALVALUME STEEL OR STAINLESS STEEL, OPTIONAL).
7. RETURN GRILLE OR FILTER GRILLE, ALUMINUM OR STEEL PER SCHEDULE (ACCESSORIES AS INDICATED).
8. CEILING GRID CLIP, 4 ATTACHED. 2 EACH ON OPPOSITE SIDES.
9. SUPPLEMENTARY (OR EXISTING) CEILING GRID MEMBER.
10. ADJUSTABLE FOR VOLUME CONTROL.
11. INSTALL PER MANUFACTURER'S REDCOMMENDATIONS.
12. REFER TO PLANS/AIR DISTRIBUTION SCHEDULE FOR DIFFUSER/REGISTER COLLAR SIZE AND USE/THROW PATTERN.
13. DAMPER ASSEMBLIES BY NAILOR-HART OR EQUAL.
14. INSULATION FOR DUCT, DAMPER FRAME, DIFFUSER COLLAR ETC. TO BE EDGE VAPOR BARRIER SEALED, PER SPECS. AND EXTERNAL TO THERMAL BLANKET.

FIRE RATED CEILING RETURN AIR "LAY-IN" DIFFUSER DETAIL

N.T.S.

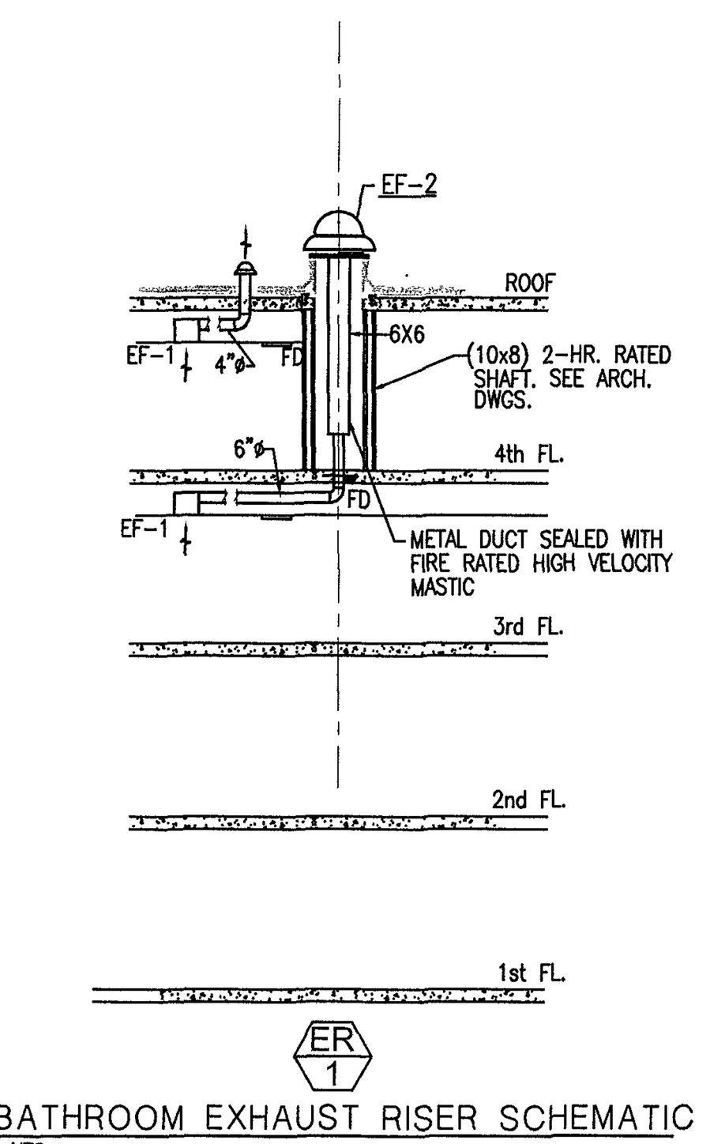


NOTES:

1. INSULATED FLEXIBLE OR STEEL DUCT PER PLANS/SPECS.
2. U.L. LISTED FUSIBLE LINK (165°F UNLESS OTHERWISE INDICATED)
3. CEILING RADIATION DAMPER OR FIRE STOP FLAP WITH CERAMIC FIBER INSULATION.
4. THERMAL FIBER BLANKET WHEN CLG. OPG. EXCEEDS DAMPER SIZE
5. OUTER CONE-GALVALUME STEEL
6. STEEL GRILLE/PATTERN DEFLECTOR-REFER TO SCHEDULE
7. MOUNTING SUPPORT FRAME
8. HANGER WIRES (BY OTHERS)
9. RATED CEILING
10. MOUNTING SCREWS
11. ADJUSTABLE FOR VOLUME CONTROL
12. INSTALL PER MFGR'S RECOMMENDATIONS
13. LAY-IN TYPE DIFFUSER/REGISTER SIMILAR. THERMAL BLANKET TO OVERLAP ADJACENT T-BARS IN LAY-IN INSTALLATION
14. SURFACE MOUNTED INSTALLATION SHOWN
15. REFER TO PLANS/AIR DISTRIBUTION SCHEDULE FOR DIFFUSER/REGISTER COLLAR SIZE AND AIR THROW PATTERN
16. DAMPER ASSEMBLIES BY NAILOR-HART OR EQUAL
17. U.L. CLASSIFIED CABS CEILING RADIATION DAMPER/U.L. CLASSIFIED BZZU FIRE RATED CEILING PACKAGE W/ DIFFUSERS
18. T-BAR LAY-IN CEILING GRID MEMBER
19. SUPPORT BRANCH DUCT FEEDING DIFFUSER DUCT DROP PER FIRE DAMPER ASSEMBLY INSTALLATION INSTRUCTIONS
20. 1" MINIMUM
21. INSULATION FOR DUCT, DAMPER FRAME, DIFFUSER COLLAR ETC. TO BE EDGE VAPOR BARRIER SEALED, PER SPECS. AND EXTERNAL TO THERMAL BLANKET.

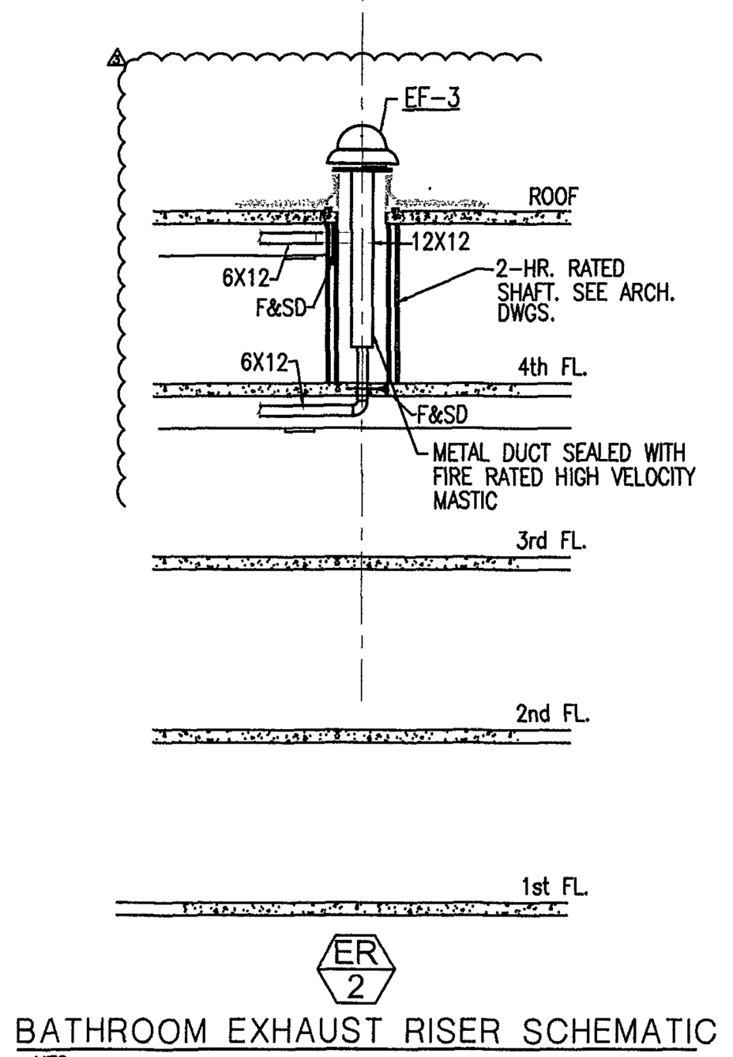
FIRE RATED CEILING DIFFUSER DETAIL

N.T.S.



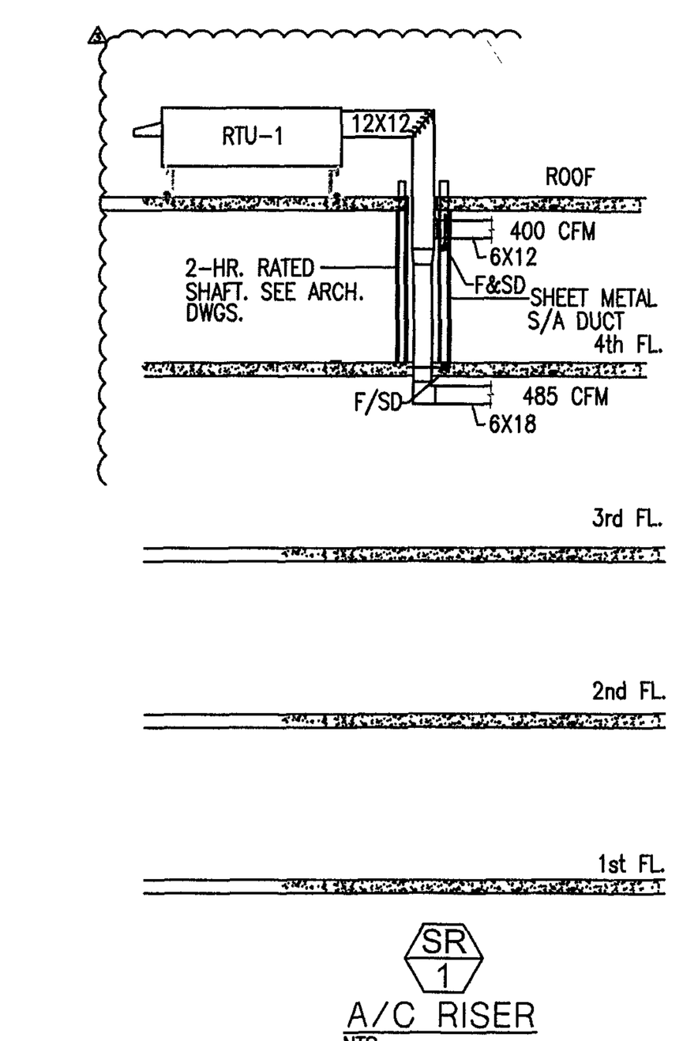
BATHROOM EXHAUST RISER SCHEMATIC (ER 1)

NTS



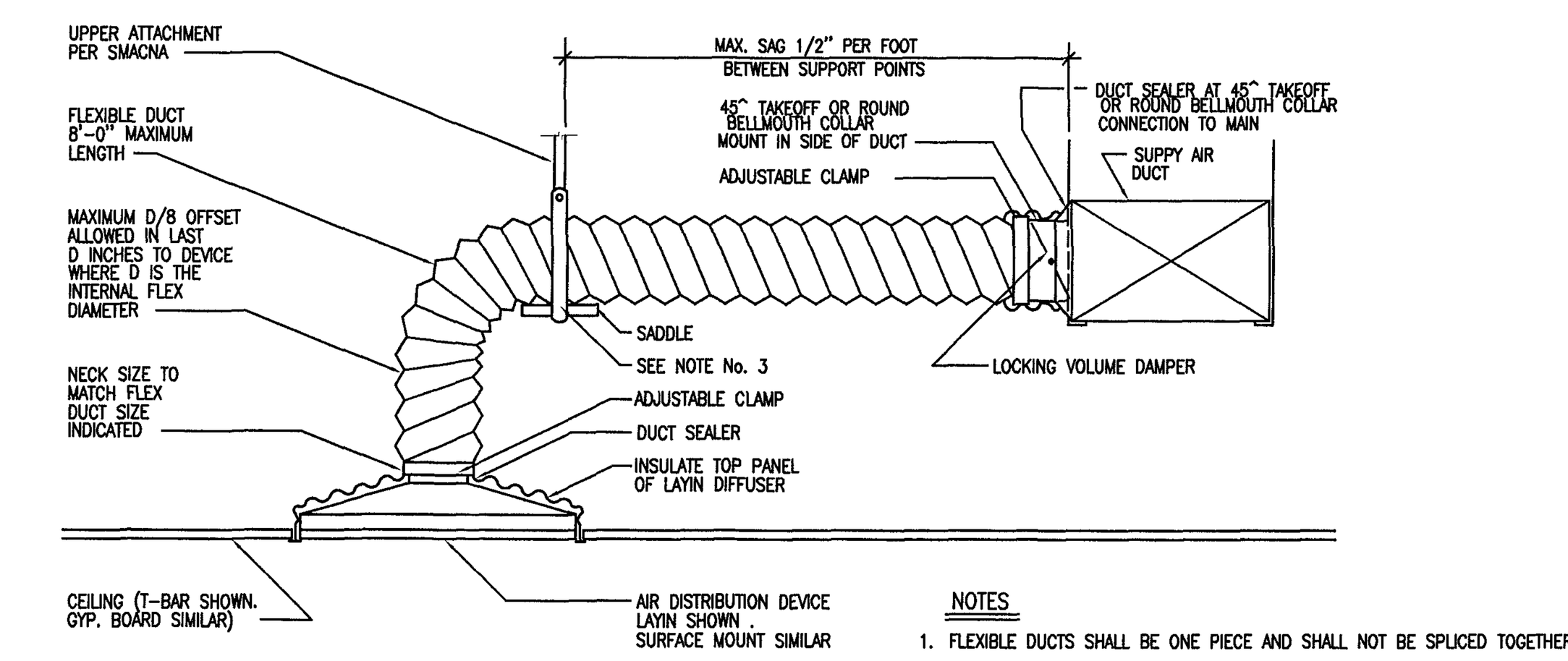
BATHROOM EXHAUST RISER SCHEMATIC (ER 2)

NTS



A/C RISER (SR 1)

NTS

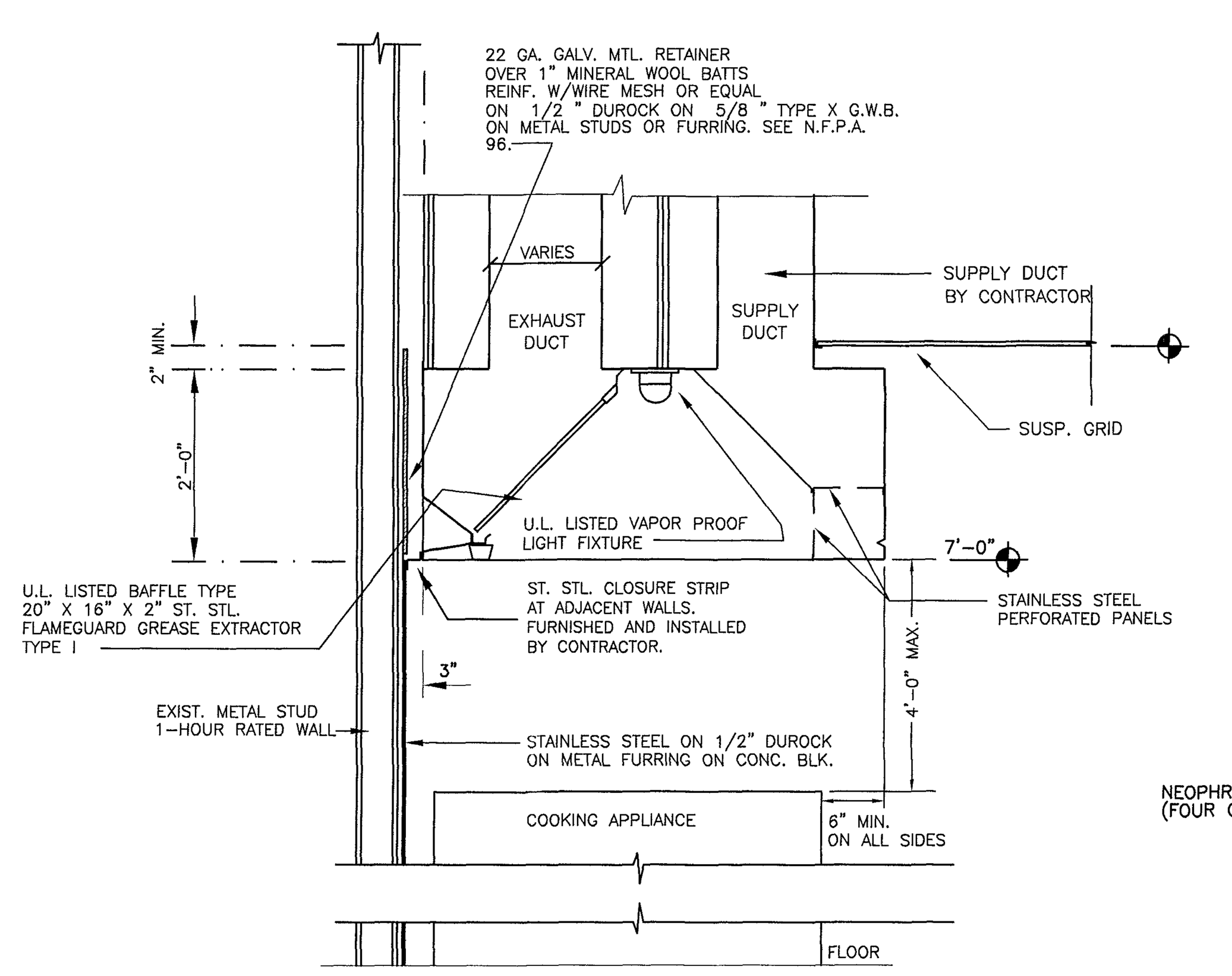


NOTES

1. FLEXIBLE DUCTS SHALL BE ONE PIECE AND SHALL NOT BE SPLICED TOGETHER .
2. EXTEND FLEXIBLE DUCT INSULATION TO DUCT/DIFFUSER PANEL INSULATION AND SEAL WITH MASTIC .
3. MINIMUM 1" WIDE 22 GALVANIZED STRAP HANGER WITH HEMMED EDGES PER SMACNA FIGURE 3-10 .

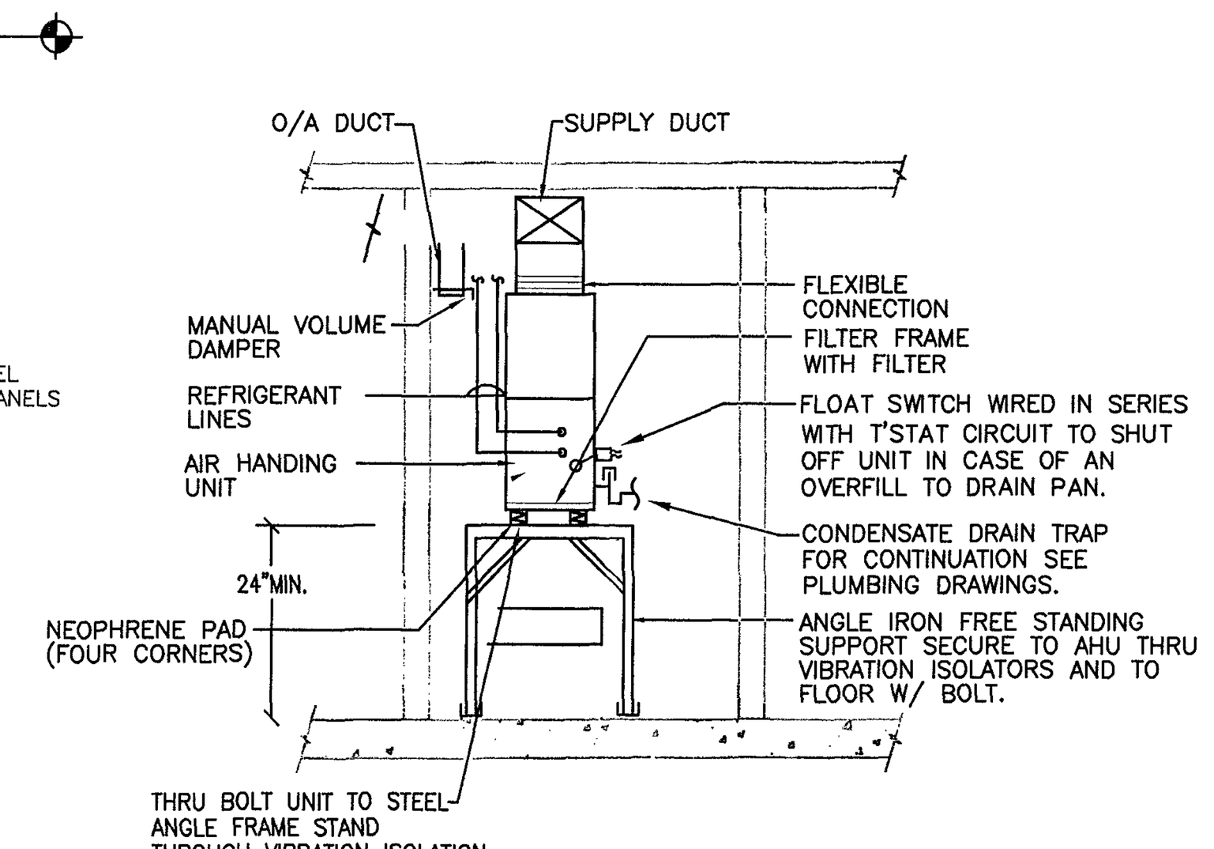
FLEXIBLE DUCT TAKEOFF DETAIL

N.T.S.



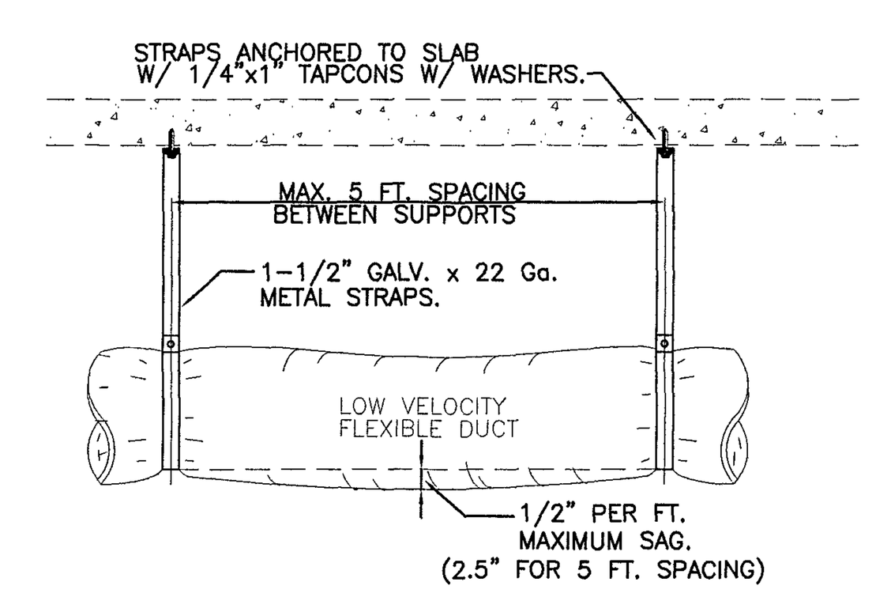
KITCHEN HOOD MOUNTING DETAIL

N.T.S.



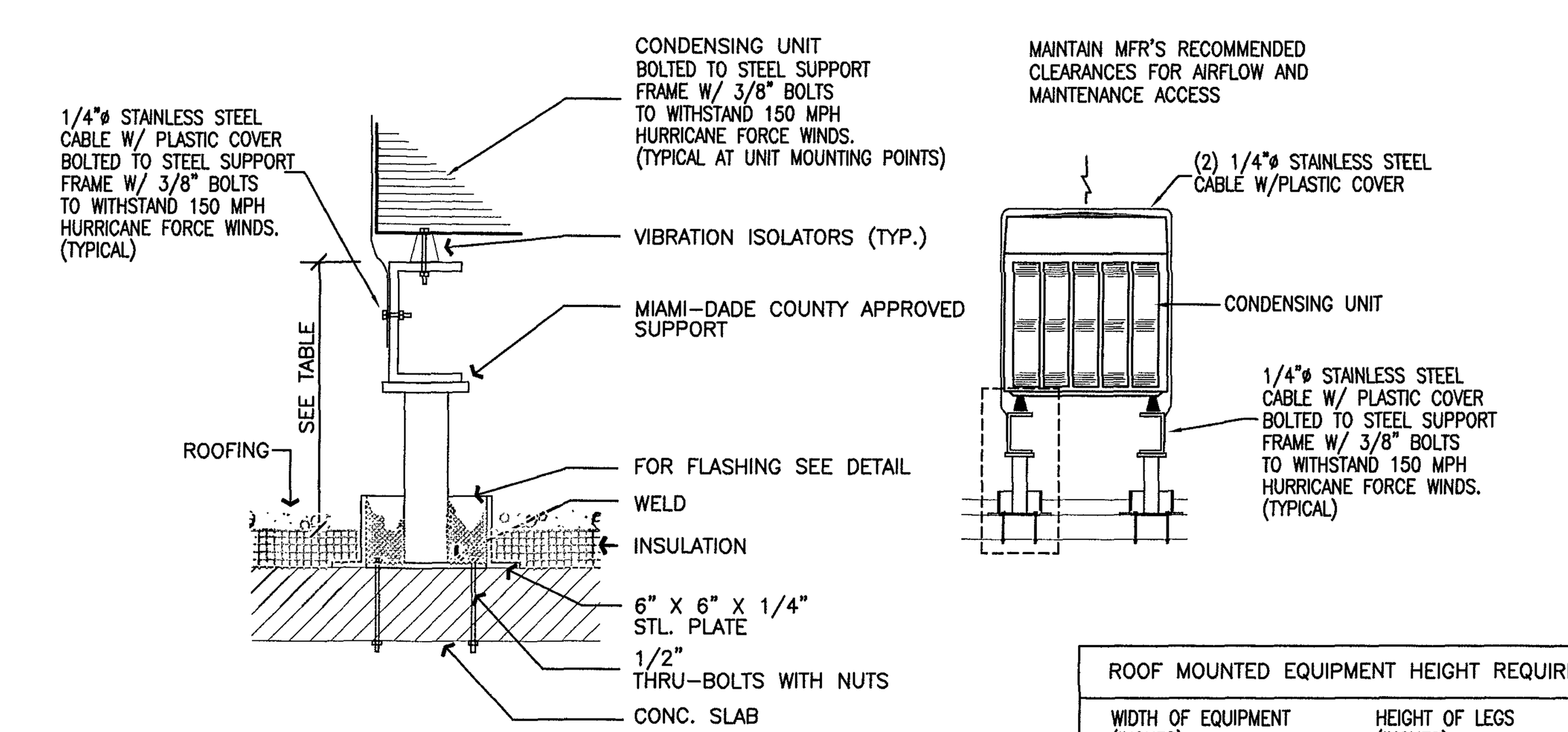
AHU-1 MOUNTING DETAIL

N.T.S.



FLEXIBLE DUCT HANGING DETAIL

NTS



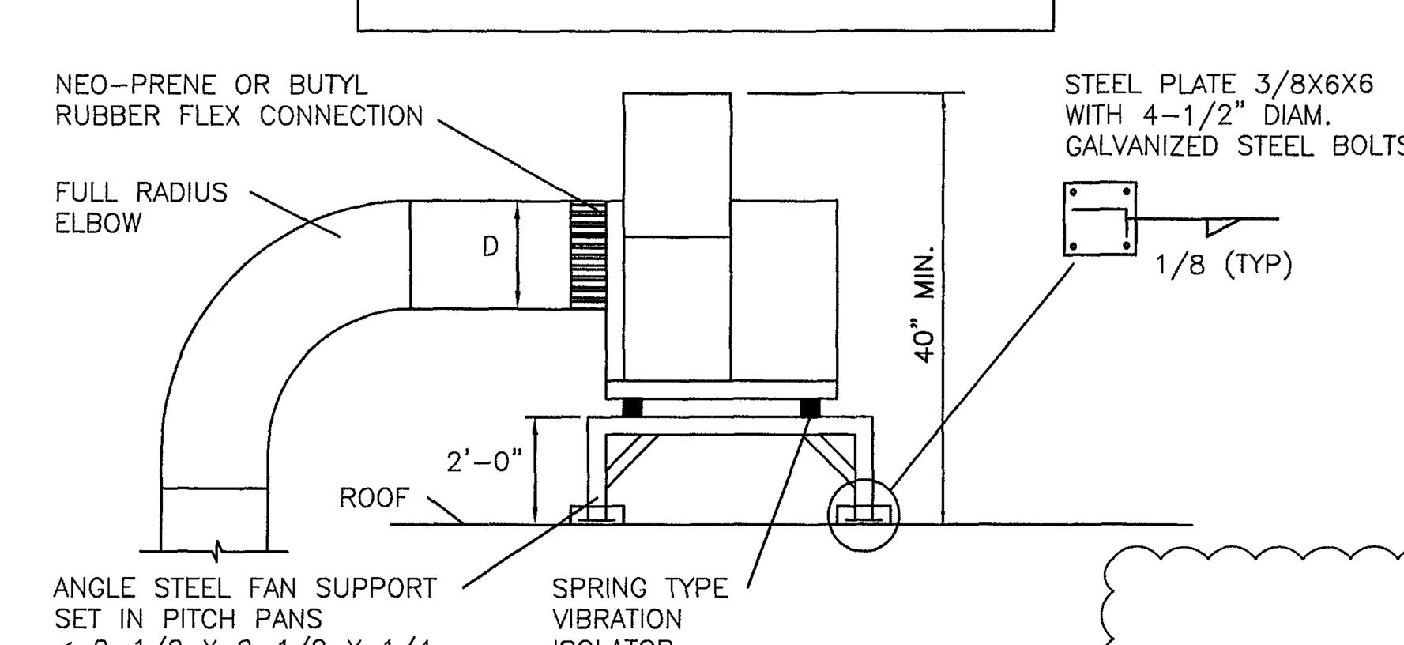
CONDENSING UNIT ROOF MOUNTING DETAIL

N.T.S.

NOTE: REFER TO STUCTURAL DWGS FOR NOA INFORMATION

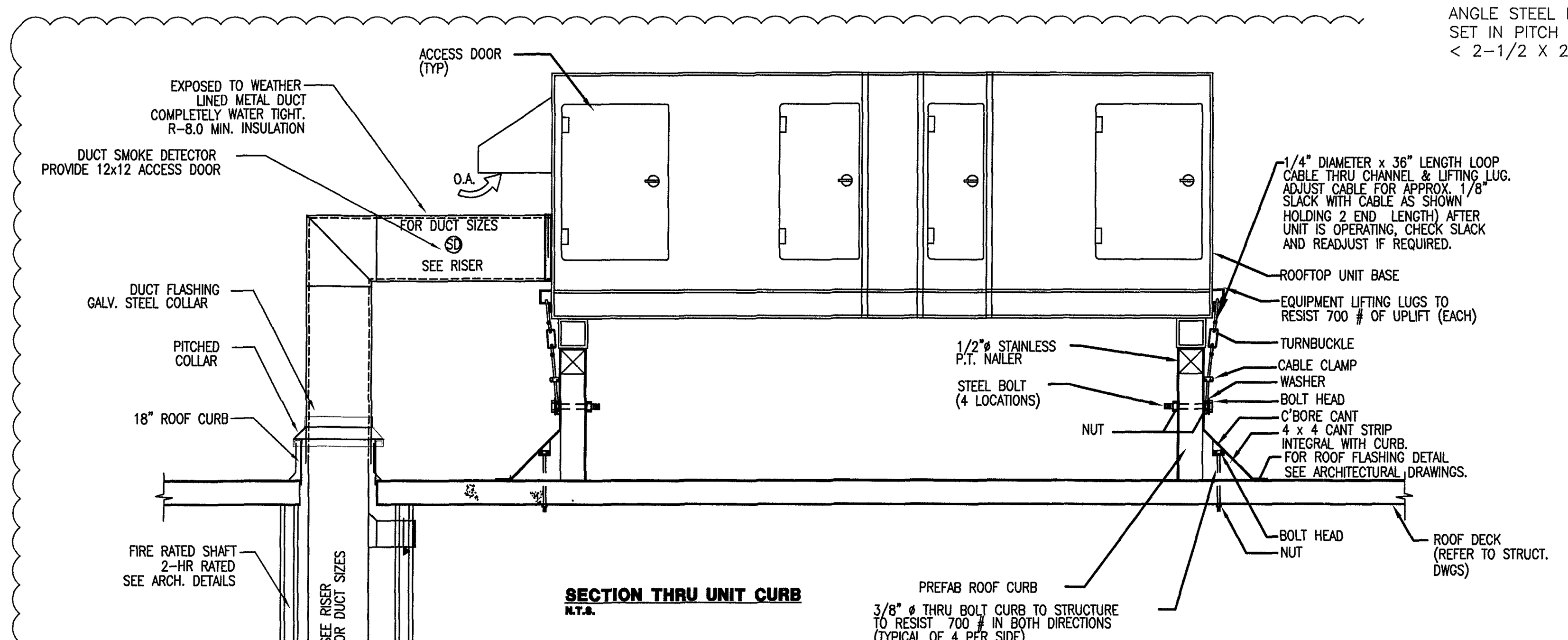
ROOF MOUNTED EQUIPMENT HEIGHT REQUIREMENTS	
WIDTH OF EQUIPMENT (INCHES)	HEIGHT OF LEGS (INCHES)
UP TO 24	14
25 TO 36	18
37 TO 48	24
49 TO 60	30
61 AND WIDER	48

NOTE:
ALL ROOF MOUNTED EQUIPMENT SHALL COMPLY WITH FBC 301.13



TYPICAL KITCHEN HOOD EXHAUST FAN DETAIL

N.T.S.

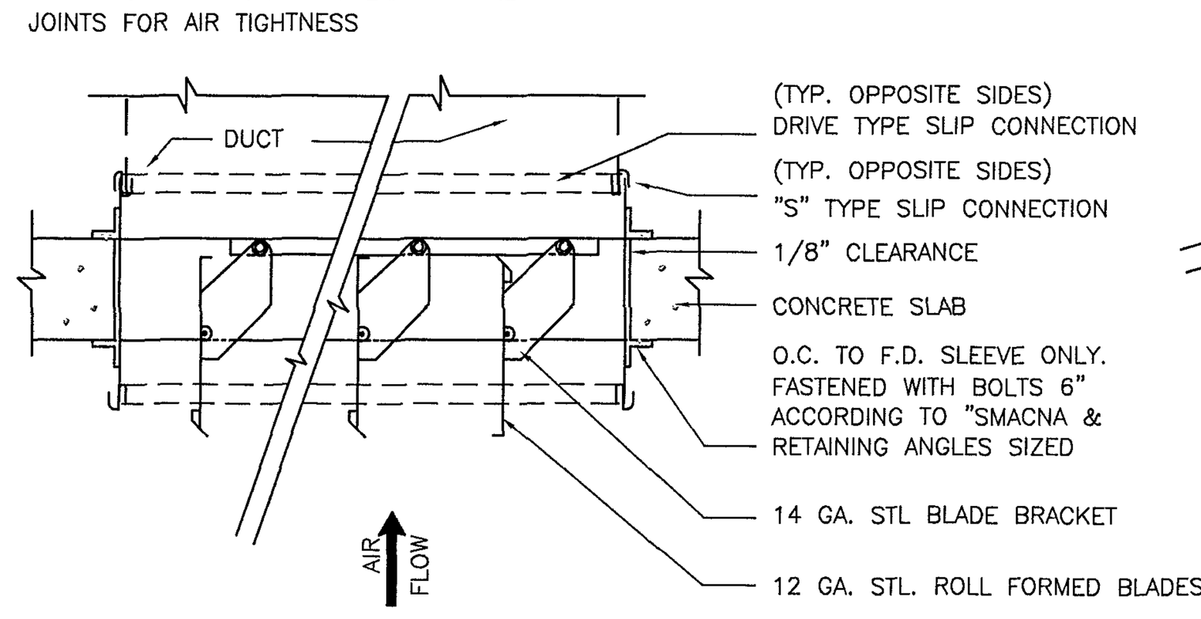


ROOFTOP UNIT MOUNTING DETAIL

N.T.S.

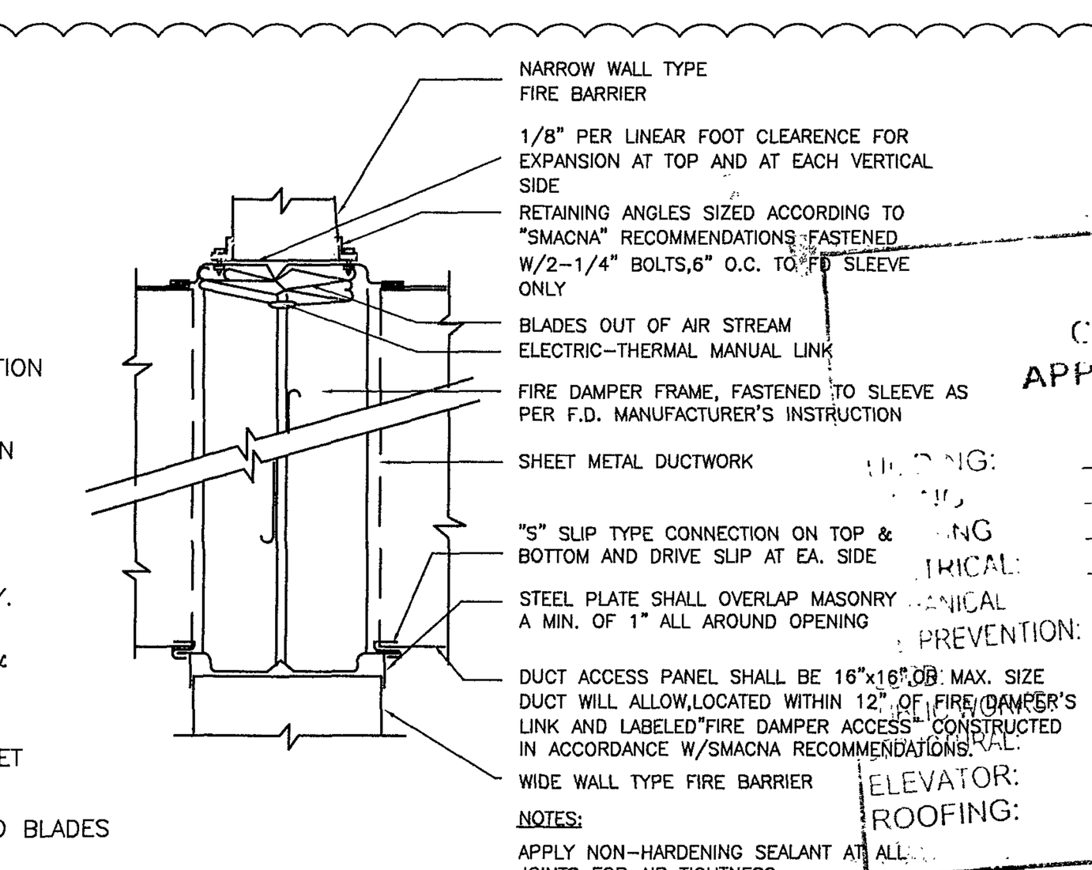
NOTES:

1. WELD FRAME OF F.D. TO 14 GA. SLEEVE.
2. APPLY NON-HARDENING SEALANT AT ALL JOINTS FOR AIR TIGHTNESS



BAROMETRIC RELIEF DAMPER MOUNTING DETAIL

N.T.S.



TYPICAL FIRE DAMPER WALL MOUNTING DETAIL

N.T.S.

FIRE DAMPERS SHALL BE U.L. CLASSIFIED DYNAMIC TYPE FIRE DAMPER

CITY OF MIAMI BEACH APPROVED FOR PERMIT BY THE FOLLOWING:

City of Miami Beach Fire Prevention Division PLANS APPROVED

JOSE M. MARTINEZ LICENSE No. 56018 STATE OF FLORIDA PROFESSIONAL ENGINEER

JMM Consulting Engineers LLC
Certificate Of Authorization #9892
Jose M. Martinez, P.E. #56018
10251 SUNSET DRIVE Suite 103
Miami, Florida 33173
TEL (305) 255-1852
FAX (305) 271-0060

BEAME ARCHITECTURAL PARTNERSHIP
3059 GRAND AVENUE, SUITE 440
COCONUT GROVE, FLORIDA 33133
E-mail : bap@bapdesign.com
Florida Corp AA0002364
PH 305.444.7100 FX 305.444.9803

OWNER:
J3 VENTURES LLC
1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

LAWRENCE BEAME, R.A.
REGISTRATION # 7871

NUMBER:	DATE:	ITEM:
3	5/21/15	GENERAL REVISIONS
2	11/19/14	CITY COMMTS.
1	10/06/14	CITY COMMTS. / CHANGE OF SCOPE

REVISIONS

HOTEL EVA INTERIOR IMPROVEMENTS

1506 COLLINS AVENUE
MIAMI BEACH,
FLORIDA 33139

PRJ. MNGR. | DRAWING BY | SCALE

SHEET TITLE

MECHANICAL RISERS

JOB NUMBER | SHEET NUMBER

DATE

M2.00

AIR COOLED SPLIT A/C UNIT SCHEDULE

	UNIT DESIGNATION	AHU-1	
	AREA SERVED	SEE FL. PLAN	
	OPERATING WEIGHT LBS.	150	
	DESIGN MANUFACTURER	TRANE	
	MODEL NUMBER		
	NOMINAL TONS	5	
	CONFIGURATION	HORIZONTAL	
AIR HANDLING UNIT — FAN	TOTAL AIR CFM	1200	
	VENT AIR CFM	300	
	EXTERNAL STATIC PRESSURE IN. OF H20	0.5	
	FAN MOTOR HP (NON-OVERLOAD) / F.L.A.	4.1	
	ELECTRICAL SERVICE AVAILABLE	208/1ø/60	
AIR HANDLING UNIT — EVAP. COIL	FACE VELOCITY FPM	500	
	GRAND TOTAL CAPACITY BTU/HR.	34,500	
	TOTAL SENSIBLE CAPACITY BTU/HR.	28,400	
	ENTERING AIR TEMP. DB/WB	80/67	
AIR HANDLING UNIT — FILTER	TYPE AND THICKNESS	THROWAWAY	
	QUANTITY AND SIZE	2"	
	FACE VELOCITY FPM MAX.	500	
AIR HANDLING UNIT — HEAT STRIP	ELECTRIC HEAT CAPACITY KW	4.1	
	NO. OF HEATING STEPS	1	
AIR COOLED CONDENSING UNIT	UNIT DESIGNATION	CU-1	
	TYPE OF FAN	PROPELLER	
	NO. OF FANS / HP (EA.) / FLA	1 / 1.4 FLA	
	AMBIENT AIR TEMP. DB	95	
	NO. OF COMPRESSORS	1	
	CAPACITY REDUCTION	0-100	
	COMPRESSOR R.L.A. (EA.)	15.3	
	ELECTRICAL SERVICE AVAILABLE	208/1ø/60	
	OPERATING WEIGHT LBS.	157	
	DESIGN MANUFACTURER MODEL NO.	CARRIER / 24ABB336A003	
	EER/SEER	14.0	
	SUCTION – LIQUID LINE SIZE	7/8" / 3/8"	

NOTES:

1. AIR HANDLING UNIT(S) SHALL BE PROVIDED WITH UNIT MOUNTED DISCONNECT SWITCH.
2. ALL AIR HANDLING UNITS SHALL BE PROVIDED WITH PROGRAMMABLE THERMOSTAT.
3. PROVIDE ALL CONDENSING UNIT COILS WITH COIL GRILLE PACKAGE AND FACTORY APPLIED EPOXY COATING.
4. PROVIDE ALL CONDENSING UNIT CABINET WITH FACTORY APPLIED EPOXY COATING.
5. APPROVED EQUIPMENT MANUFACTURERS SHALL BE TRANE OR CARRIER.

PACKAGED A/C UNIT SCHEDULE

	UNIT DESIGNATION	RTU-1	
	AREA SERVED:	O/A	
	UNIT TYPE	PACKAGE	
	REFRIGERANT TYPE	410	
FAN	TOTAL AIR CFM	600	
	OUTSIDE AIR CFM	600	
	EXTERNAL STATIC PRESSURE, IN. OF WATER	1.0	
	FAN SPEED RPM	1752	
	HP / FLA	1.0 HP/5.3 FLA	
EVAP. COIL	DESIGN AIR FLOW CFM	1350	
	ENTERING AIR TEMP., °F DB/WB	91.0/78.0	
	LEAVING AIR TEMP., °F DB/WB	54.17/55.62	
	FACE VELOCITY FPM (MAX)	500	
	TOTAL CAPACITY MBTU/HR.	49.51	
	SENSIBLE CAPACITY MBTU/HR.	22.93	
	REHEAT COIL CAPACITY MBTU/HR.	13	
FIL.	TYPE & THICKNESS	TAWAY 2'	
	FACE AREA, SQ. FT. (MIN)	--	
	OPERATING WEIGHT LBS.		
COMPRESSOR	NO. OF COMPRESSORS	1	
	CAPACITY REDUCTION PERCENT EACH	INFINITE	
	COMPRESSOR RPM (MAX)	3450	
	MOTOR POWER INPUT, KW (MAX)		
CONDENSER	TOTAL FULL LOAD AMPS	21.0	
	NO. OF FANS	1	
	HP EA / FLA EA.	2.8 FLA	
	TYPE	PROPELLER	
	AMBIENT AIR TEMPERATURE °F	95	
	ELECTRICAL SERVICE AVAILABLE	240/1/60	
	ELECTRICAL HEATER – TOTAL KW/STEPS	10 / 2	
ACCESS.	ROOF CURB	YES	
	VIBRATION ISOLATION TYPE	INTERNAL	
	M.C.A. / MOCP	59/60	
	MINIMUM SEER	14.5	
	MODEL NO.	RQ-004-1-J-FA19	
	DESIGN MANUFACTURER	AAON	

NOTES:

1. PROVIDE RTU-1 PROVIDE UNIT WITH COPELAND DIGITAL VARIABLE CAPACITY COMPRESSOR FOR CONTINUOUS CAPACITY CONTROL FROM 100% TO 10%.
2. PROVIDE ROOFTOP UNITS COILS WITH FACTORY APPLIED E-COATING, ELECTROSTATICALLY APPLIED, DIPPED AND BAKED WITH MINIMUM 5,000HR SALT SPRAY RATING PER ASTM B-117-95 TEST PROCEDURES
3. UNITS RTU-1 THRU RTU-5 SHALL BE PROVIDED WITH SINGLE POINT POWER CONNECTION
4. ROOFTOP UNIT RTU-1 THRU RTU-5 SHALL HAVE HORIZONTAL END DISCHARGE.
5. PROVIDE ALL UNITS WITH MOTORIZED OUTSIDE AIR INTAKE DAMPERS WITH TWO POSITION ACTUATORS
6. PROVIDE AL UNITS WITH MINIMUM 6-ROWS OF DX COOLING WITH TXV VALVE AND DOUBLE SLOPED STAINLESS STEEL DRAIN PANS
7. PROVIDE ALL UNITS WITH FACTORY INSTALLED CONSTANT VOLUME MAKE-UP AIR CONTROLLER WITH ENCNET INTERFACE. MAKE-UP AIR CONTROLLER SHALL BE BASED ON O.A. AIR DEW POINT. UNIT CONTROLLED ONLY BASED ON DISCHARGE OR SPACE TEMPERATURE WILL NOT BE CONSIDERED EQUAL.
8. UNITS CABINET SHALL BE 2" THINK DOUBLE WALL CONSTRUCTION
9. UNITS RTU-1 CABINET INSULATION SHALL BE INJECTED POLYURETHANE FOAM WITH MINIMUM R-VALUE OF R-13 – NO FIBERGLASS.
10. UNITS SHALL HAVE MODULATING CAPACITY CONTROL VIA HOT GAS BYPASS.
11. ALL UNITS CABINETS SHALL BE PROVIDED WITH INTERIOR AND EXTERIOR COATED FINISH WITH MINIMUM 2,500HR SALT SPRAY RATING PER ASTM B-117-95 TEST PROCEDURES.
12. APPROVED MANUFACTURERS SHALL BE AAON, ADDISON & DESERT AIR SUBJECT TO COMPLIANCE WITH ALL PERFORMANCE CHARACTERISTICS AND NOTES IN THIS SCHEDULE.
13. MORGAN/ER BY TRANE IS NOT AN APPROVED EQUAL.
14. PROVIDE CONDENSER FAN WITH ECM MOTOR AND HEAD PRESSURE CONTROL
15. PROVIDE DIRECT DRIVEN, BACKWARD INCLINED PLENUM TYPE SUPPLY FAN WITH V.F.D. – NO BELT DRIVEN OR FORWARD CURVED HOUSED FANS WILL BE ACCEPTED.
16. PROVIDE COMPRESSORS INSIDE THE UNIT IN AN ISOLATED COMPARTMENT WITH NOISE AND VIBRATION ISOLATION.
17. PROVIDE HINGED ACCESS DOORS FOR SUPPLY FAN, COMPRESSOR COMPARTMENT, CONTROL CABINET, HEATING ELEMENTS, FILTER SECTION ETC, WITH STAINLESS STEEL FULL PIANO HINGES AND LOCKABLE HANDLES
18. PROVIDE 24" TALL FACTORY FABRICATED ROOF CURBS WITH MCC N.O.A.
19. PROVIDE UNITS WITH THERMALLY INSULATED BASE.
20. PROVIDE UNIT WITH THE FOLLOWING FACTORY SUPPLIED SENSORS:
   a. OUTSIDE AIR TEMPERATURE AND HUMIDITY SENSORS FOR DEH POINT SYSTEM DEHUMIDIFICATION CYCLE CONTROL – FACTORY INSTALLED
   b. SUPPLY AIR TEMPERATURE SENSOR FOR MODE CHANGE OVER, REHEAT TEMPERATURE CONTROL AND COOLING CONTROL – FIELD INSTALLED BY CONTRACTOR
   c. PROOF OF FLOW SENSOR – FACTORY INSTALLED
   d. HEAD PRESSURE SENSOR FOR HEAD PRESSURE CONTROL AND CONDENSER FAN VARIABLE SPEED CONTROL – FACTORY INSTALLED
   e. PROVIDE SUCTION PRESSURE TRANSDUCER – FACTORY INSTALLED
   f. PROVIDE SPACE TEMPERATURE AND HUMIDITY SENSOR FOR SYSTEM OVERRIDE CONTROL – FIELD INSTALLED BY CONTRACTOR

FAN SCHEDULE

UNIT NUMBER		EF-1	EF-2	EF-3	KEF-1	KSF-1
AREAS SERVED		UNITS	TOILE ROOMS	TOILE ROOMS	HOOD	HOOD
LOCATION		CEILING	ROOF	ROOF	ROOF	CEILING
DUTY	SUPPLY/EXH.	EXH.	EXH.	EXH.	EXH.	SUPPLY
FAN TYPE		CEILING	CENTRIFUGAL	CENTRIFUGAL	UTILITY	INLINE
DRIVE	BELT/DIRECT	DIRECT	BELT	BELT	DIRECT	DIRECT
FAN SPEED	RPM	1200	1200	1200	1,200	1,053
AIR QUANTITY	CFM	50	60	700	773	618
TOTAL STATIC PRESS.	H_2O	.125	.25	.375	0.75	0.5
OPENING REQUIRED	IN.	--	--	--	--	--
FAN MOTOR	H/P	1/8	1/8	1/4	3/4	1/3
ELECTRICAL CHAR.	V/ø/60	120/1/60	120/1/60	120/1/60	120/1ø/60	120/1ø/60
MANUFACTURER		PANASONIC	COOK	COOK	CAPTIVE AIRE	CAPTIVE AIRE
MODEL NUMBER		WHISPER 50	60 ACEB	100 ACEB	USBI11BD-RM	c297
WEIGHT	LBS.	15	30	30	181	181
REMARKS	SONES	0.5	2.6	8.8	10.4	6.1
ROOF CURB		--	YES	YES	--	--
SERVICE SWITCH		YES	YES	YES	YES	YES
BACKDRAFT DAMPER		YES	YES	YES	YES	--
BIRD SCREEN		--	--	--	--	--

NOTES:

1. FANS KEF-1 & KSF-1 SHALL BE INTERLOCKED.
2. FAN KSF-1 SHALL BE PROVIDED WITH FILTER.
3. FANS EF-1 SHALL BE INTERLOCKED TO TOILET LIGHT FIXTURE.

O/A CALCULATIONS (BASED ON A.S.H.R.A.E. 62.1 -2007)

AREA	SQ. FT. (NET)*	O/A REQUIRED	CFM REQUIRED	A/C UNIT	CFM DESIGNED
AHU-1	181 SQ. FT. KITCHEN	(7.5 CFM / SQ. FT.)	135	AHU-1	135
	254 SQ. FT. DINING	(70 PERSONS / 15 CFM) + (1000 SQ. FT. / PERSON / 0.18 CFM / SQ. FT.)	135		135
			45		45
					315

HVAC SYMBOL LEGEND

T	THERMOSTAT	AHU	AIR HANDLING UNIT
SD	DUCT SMOKE DETECTOR	BTM.	BOTTOM
	TRANSITION	COND.	CONDENSATE
		C.U.	CONDENSING UNIT
	ELBOW W/ TURNING VANE	CONC.	CONCRETE
		CFM	CUBIC FEET PER MINUTE
	45° BRANCH DUCT TAKE-OFF	E.F.	EXHAUST FAN
		F.L.A.	FULL LOAD AMPS
	HORIZONTAL FIRE DAMPER	F.P.M.	FEET PER MINUTE
		H.P.	HORSEPOWER
	MANUAL VOLUME DAMPER	H.R.	HOUR
		IN.	INCH
	RETURN REGISTER	K.W.	KILOWATT
		LBS.	POUNDS
	SUPPLY DIFFUSER	MAX.	MAXIMUM
		MVD	MANUAL VOLUME DAMPER (OPPOSED BLADE)
	RETURN AIR GRILLE	NO.	NUMBER
		O/A	OUTSIDE AIR
	AIR FLOW DIRECTION	RPM.	REVOLUTIONS PER MINUTE
RTU	ROOF MTD. EXH. FAN	R/A	RETURN AIR
	DUCT TURN DOWN	REF.	REFRIGERANT
	DUCT TURN UP	RTU.	ROOFTOP UNIT
	FLEXIBLE DUCT	S/A	SUPPLY AIR
	NEW SUPPLY	TEMP.	TEMPERATURE
	NEW RETURN	"X"	AIR DISTRIBUTION DESIGNATION
	FIRE DAMPER		
	VALVE		

NOTES:

INTAKE/RELIEF VENT SCHEDULE

MARK	MANUFACTURER	MODEL #	THROAT AREA (FT^2)	THROAT AREA (FT^2)	HT (IN.)
RV-1	COOK	PR-12	16X16	1.78	

NOTES:

1. PROVIDE PREMANUFACTURED ROOF CURBS TO EACH AIR INTAKE/RELIEF VENT
2. PROVIDE AIR INTAKE/RELIEF VENT WITH INSECT SCREEN

HVAC DESIGN REQUIRES:	YES	NO
DUCT SMOKE DETECTOR		X
FIRE DAMPER(S)	X	
SMOKE DAMPER(S)		X
FIRE RATED ENCLOSURE	X	
FIRE RATED ROOF/FLOOR CEILING ASSEMBLY		X
FIRE STOPPING		X
SMOKE CONTROL		X

AIR DISTRIBUTION SCHEDULE

SYMBOL	NECK SIZE	MFGR.	MODEL NUMBER	REMARKS
A	SEE FL. PLAN	TITUS	272FL	S/A REG.
B	SEE FL. PLAN	TITUS	TDC	S/A DIFFUSER
C	SEE FL. PLAN	TITUS	TDC-FR	S/A DIFFUSER
D	SEE FL. PLAN	TITUS	PAR-FR	R/A GRILLE
E	SEE FL. PLAN	TITUS	25R	R/A GRILLE
L	SEE FL. PLAN	RUSKIN	EME 8625D	LOUVER

NOTES:

1. REFER TO PLAN FOR QUANTITY, LOCATION AIR THROW PATTERN AND SIZES.
2. ALL AIR DISTRIBUTION DEVICES SHALL BE OF EXTRUDED ALUMINUM CONSTRUCTION, FURNISH WITH OPPOSED BLADE DAMPERS AND CONCEALED MOUNTING FRAME FOR ACOUSTICAL OR PLASTER CEILING INSTALLATION.
3. LOUVER SHALL HAVE MIAMI-DADE COUNTY PRODUCT APPROVAL

NOTE
Sheet metal connections must be made using glass fabric and mastic (GFM).

EXCEPTION:
When construction pressure class is 1" W.G. or less and sheet metal surfaces are cleaned carefully UL listed pressure-sensitive aluminum tape may be used. All connections of fibrous glass duct to equipment and metal duct must be mechanically attached 12"(max.) on centers.

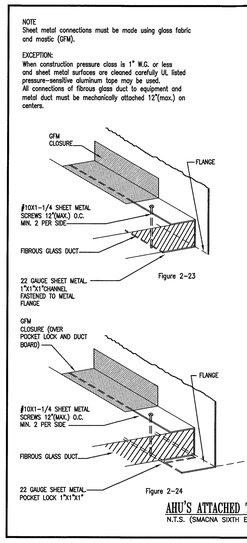


Figure 2-23

Figure 2-24

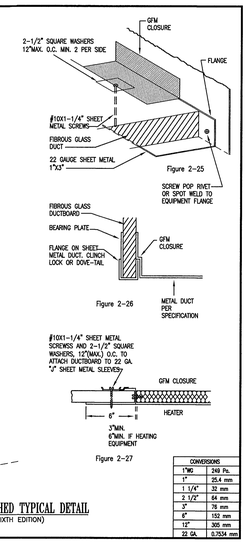


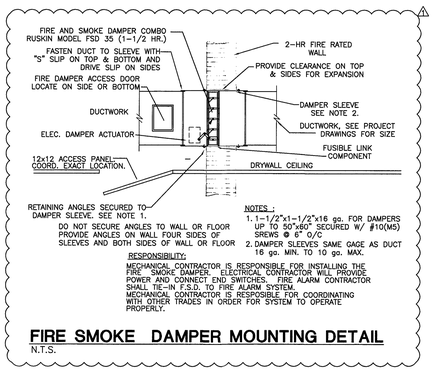
Figure 2-25

Figure 2-26

Figure 2-27

CONVERSIONS	
1"WG	249 Pa.
1"	25.4 mm
1 1/4"	32 mm
2 1/2"	64 mm
3"	76 mm
6"	152 mm
12"	305 mm
22 GA.	0.7534 mm

AHU'S ATTACHED TYPICAL DETAIL
N.T.S. (SMACNA SIXTH EDITION)



NOTES :
1. 1-1/2"x1-1/2"x16 ga. FOR DAMPERS UP TO 50"x60" SECURED W/ #10(M5) SREWS @ 6" O/C
2. DAMPER SLEEVES SAME GAGE AS DUCT 16 ga. MIN. TO 10 ga. MAX.

RESPONSIBILITY:
MECHANICAL CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE FIRE SMOKE DAMPER. ELECTRICAL CONTRACTOR WILL PROVIDE POWER AND CONNECT END SWITCHES. FIRE ALARM CONTRACTOR SHALL TIE-IN F.S.D. TO FIRE ALARM SYSTEM.
MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH OTHER TRADES IN ORDER FOR SYSTEM TO OPERATE PROPERLY.

FIRE SMOKE DAMPER MOUNTING DETAIL
N.T.S.

HVAC GENERAL NOTES:

1. THE WORK THAT IS TO BE DONE UNDER THIS HEADING INCLUDES THE FURNISHING OF ALL LABOR, MATERIALS AND EQUIPMENT PERMITS, FEES, INSPECTIONS, TESTS, INSURANCE, ETC., REQUIRED FOR THE COMPLETION OF THE AIR CONDITIONING, HEATING AND VENTILATION SYSTEMS SHOWN ON DRAWINGS OR LISTED BELOW.
2. THE DRAWINGS ARE GENERALLY DIAGRAMMATIC. THEY DO NOT SHOW EVERY BEND, OFF-SET, ELBOWS OR OTHER FITTINGS WHICH MAY BE REQUIRED FOR THE INSTALLATION IN THE SPACE ALLOCATED, OR FOR COORDINATION WITH OTHER TRADES.
3. DRAWINGS ARE NOT TO BE SCALED. UNLESS SPECIFIC DIMENSIONS ARE SHOWN, THE ARCHITECTURAL AND/OR STRUCTURAL DRAWINGS, AND SITE CONDITIONS SHALL GOVERN EXACT LOCATION OF MECHANICAL EQUIPMENT AND APPURTENANCES.
4. VERIFY ALL SPACE CONDITIONS & DIMENSIONS AT JOB SITE PRIOR TO FABRICATION OF DUCTWORK AND INSTALLATION OF EQUIPMENT AND ACCESSORIES.
5. AN INDEPENDENT BALANCING CONTRACTOR SHALL ADJUST AND BALANCE AIR DISTRIBUTION DEVICES IN ACCORDANCE WITH QUANTITIES SHOWN ON PLANS FOR REGULAR HVAC OPERATION AND FOR REQUIRED BUILDING PRESSURIZATION REQUIREMENTS.
6. ANY EQUIPMENT OR DEVICE TO REMAIN THAT MAY HAVE TO BE DISCONNECTED BECAUSE OF THE REMOVAL OF ANY OTHER DEVICE MUST BE RECONNECTED AND TIED BACK TO THE EXISTING BUILDING SYSTEM(S) AND TESTED FOR CORRECT OPERATION.
7. ANY WORK NOT SHOWN ON DRAWINGS OR SPECIFICALLY MENTIONED IN THE HVAC NOTES BUT CONSIDERED NECESSARY FOR THE COMPLETION OF THE WORK IN PROPER MANNER SHALL BE PROVIDED BY THE CONTRACTOR WITHOUT ADDITIONAL CHARGE.
8. COORDINATE SPACE ACCESSIBILITY AND WORKING HOURS REQUIREMENTS WITH OWNER'S REPRESENTATIVE PRIOR TO BIDDING THIS PROJECT. OTHER AREAS IN THIS OR ADJACENT FLOORS MAY HAVE SPECIAL REQUIREMENTS FOR ACCESSIBILITY TO EXISTING BUILDING SYSTEMS PRESENTLY IN THEIR SPACES BUT WHICH MAY NEED TO BE ACCESSED FOR THIS PROJECT.
9. CONTRACTOR SHALL DO HIS OWN CUTTING AND REMOVAL OF ALL HIS RELATED WORK IN ALL LOCATIONS WHERE REQUIRED EXCEPT WHERE OTHERWISE SHOWN ON THE DRAWINGS AND/OR AS SPECIFIED.
10. ALL BUILDING CONSTRUCTION AFFECTED BY THE REMOVAL, RELOCATION, INSTALLATION OF ANY PIECE OF EQUIPMENT SHALL BE REPAIRED AND REFINISHED AS REQUIRED TO MATCH EXISTING CONDITIONS OR AS DIRECTED BY THE ARCHITECTURAL DRAWINGS AND/OR SPECIFICATIONS.
11. DUCTWORK:
   A. ALL VENTILATION DUCTWORK SHALL BE GALVANIZED STEEL WITH GAUGES, DUCT CONSTRUCTION, BRACING AND SUSPENSION IN ACCORDANCE WITH THE RECOMMENDATIONS SET FORTH IN THE LATEST EDITION OF THE A.S.H.R.A.E. GUIDE AND S.M.A.C.N.A. STANDARDS. DUCT SIZES SHOWN ARE "INSIDE" DIMENSIONS. VERIFY EXACT LOCATION OF DUCT WITH RESPECT TO STRUCTURE BEFORE FABRICATION.
   B. FLEXIBLE DUCT SHALL BE STEEL HELIX WIRE ON 7/8" CENTERS, ENCAPSULATED IN A CONTINUOUS SOFT VINYL FILM, JOINED BY MOLECULAR WELDING TO FORM AN AIR TIGHT INNER CORE, THE CORE IS TO BE INSULATED WITH FIBERGLASS INSULATION (R=6), AND SHEATHED IN A REINFORCED, ALUMINUM METALIZED POLYESTER VAPOR BARRIER JACKET. PROVIDE SPIN COLLAR WITH DAMPER AND EXTRACTOR WHERE FLEXIBLE DUCT IS CONNECTED TO RECTANGULAR DUCTWORK. DAMPER ACTUATOR SHALL BE EXTENDED OUTSIDE INSULATION.
   C. SUPPLY & RETURN AIR DUCTWORK SHALL BE GALVANIZED METAL CONSTRUCTED TO THE S.M.A.C.N.A. PRESSURE CLASSIFICATIONS AS FOLLOWS: SUPPLY AND RETURN AIR DUCTWORK–1.0" W.G. DUCTWORK REINFORCEMENT SHALL BE IN ACCORDANCE WITH S.M.A.C.N.A. TABLE FOR 1" W.G. PRESSURE CLASSIFICATION. INSULATE S/A & R/A DUCT WITH 2 INCH, 1 LB. DENSITY (R=6.0) FIBERGLASS BLANKET WITH FACTORY APPLIED VAPOR BARRIER. VAPOR SEAL WITH APPROVED FIRE RATED MASTIC.
12. AIR DISTRIBUTION:
   A. SUPPLY AND RETURN AIR DIFFUSERS SHALL MATCH BUILDING STANDARDS AND SHALL BE OF EXTRUDED ALUMINUM CONSTRUCTION.
13. PROVIDE ACCESS PANELS IN WALLS OR CEILING FOR DAMPERS, CONTROL DEVICES, ETC. ACCESS PANELS SHALL BE MILCOR FLUSH TYPE.
14. SUBMIT SHOP DRAWINGS OF ALL MATERIALS, DUCTWORK, DUCTWORK LAYOUT EQUIPMENT & CONTROL SYSTEM FOR REVIEW PRIOR INSTALLATION AND/OR FABRICATION. DUCTWORK LAYOUT SHOP DRAWINGS SHALL BE PROVIDED AT 1/4" SCALE.
15. ALL EQUIPMENT AND MATERIALS SHALL BE GUARANTEED FOR THE PERIOD OF ONE YEAR, FURNISH 90 DAYS FREE SERVICE.
16. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2004 FLORIDA BUILDING CODE
17. SUBMIT A COMPLETE "AS-BUILT" RECORD SET IN REPRODUCIBLE PAPER SEPIA FORM TO ARCHITECT/ENGINEER FOR REVIEW PRIOR TO FINAL PAYMENT REQUISITION.
18. TESTING:
   A. BALANCE AIR SYSTEM TO DELIVER SPECIFIED AIR QUANTITIES AT EACH OUTLET WITHIN 10% USING A.A.B.C. PROCEDURES AND TESTS. SUBMIT AIR BALANCE TEST RESULTS FOR REVIEW PRIOR TO FINAL INSPECTION AND ACCEPTANCE.
   B. TEST AND BALANCE TO BE PERFORMED BY AN INDEPENDENT TEST AND BALANCE CONTRACTOR.

19A. ALL HVAC EQUIPMENT, AIR DISTRIBUTION, CONTROLS, APPURTENANCES, ETC. SHALL BE AS SHOWN ON THE DRAWINGS WITH RESPECT TO CAPACITY,QUALITY PERFORMANCE,ACCESSORIES,ETC.MANUFACTURERS USED FOR THE BASIS OF DESIGN ARE LISTED ON THE DRAWINGS SCHEDULES OR SPECIFIED HEREIN. SUBSTITUTIONS MUST MEET OR EXCEED ALL SPECIFIED REQUIREMENTS. NAMING ACCEPTABLE MANUFACTURERS DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH ALL DESIGN REQUIREMENTS SHOWN ON THE DRAWINGS OR LISTED HEREIN.

19B. EQUIPMENT IDENTIFICATION:
   A. ALL PIPING 1" IN DIAMETER OR LARGER EXPOSED OR CONCEALED IN ACCESSIBLE SPACES AND CEILINGS SHALL BE PROVIDED WITH COLOR BANDS, LEGENDS AND FLOW ARROWS IN ACCORDANCE WITH ANSI A13.1.
   B. ALL EQUIPMENT SHALL BE IDENTIFIED WITH THE SAME DESIGNATION SHOWN ON THE DRAWINGS.IDENTIFICATION SHALL BE WITH ENGRAVED PLASTIC NAMEPLATES USING 1" LETTERS ON EQUIPMENT HAVING CABINETS AND WITH BRASS TAGS WHERE CABINETS DO NOT EXIST.NAMEPLATES SHALL BE MINIMUM 2" X 4" SIZE.
20. EQUIPMENT IDENTIFICATION:
   A. ALL PIPING 1" IN DIAMETER OR LARGER EXPOSED OR CONCEALED IN ACCESSIBLE SPACES AND CEILINGS SHALL BE PROVIDED WITH COLOR BANDS, LEGENDS AND FLOW ARROWS IN ACCORDANCE WITH ANSI A13.1.
   B. ALL EQUIPMENT SHALL BE IDENTIFIED WITH THE SAME DESIGNATION SHOWN ON THE DRAWINGS.IDENTIFICATION SHALL BE WITH ENGRAVED PLASTIC NAMEPLATES USING 1" LETTERS ON EQUIPMENT HAVING CABINETS AND WITH BRASS TAGS WHERE CABINETS DO NOT EXIST.NAMEPLATES SHALL BE MINIMUM 2" X 4" SIZE.
21. ALL INSULATION PRODUCTS AND ACCESSORIES SHALL HAVE A FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DEVELOPED RATING OF 50 OR LESS IN ACCORDANCE WITH ASTM E84.
22. TEMPERATURE CONTROL SHALL BE A PROGRAMMABLE ROOM THERMOSTAT FOR HEATING/COOLING WITH STAGES AS REQUIRED.
23. VIBRATION ISOLATION: ALL EQUIPMENT AS PER MANUFACTURER RECOMMENDATIONS TO ELIMINATE ANY EQUIPMENT NOISE FROM BEING HEARD.
24. GUARANTEES:
   A. ALL COMPRESSOR MOTORS ON NEW EQUIPMENT FURNISHED UNDER THIS CONTRACT SHALL HAVE A MIN. 5 YEARS PRODUCT GUARANTEE FROM DATE OF START-UP.
   B. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN A 1 YEAR FROM DATE OF ACCEPTANCE.
25. TESTING:
   A. ALL REFRIGERANT HIGH SIDE PIPING TO 300 PSIG. LOW SIDE TO 150 PSIG. AFTER TESTING, EVACUATE SYSTEM TO 28IN. MERCURY GAUGE PRESSURE WITH VACUUM PUMP. HOLD FOR 25 HOURS WITH PUMP OFF. BREAK VACUUM WITH REFRIGERANT.
26. ALL CONDENSATE PIPING SHALL BE COPPER DWV. INSULATE COND. PIPES ABOVE GROUND WITH 3/4 INCH ARMAFLEX INSULATION.
27. PROVIDE SMOKE DETECTORS IN SUPPLY AIR DUCTS OF A/C UNITS 2000 CFM AND OVER INSTALL AS REQUIRED BY N.F.P.A.
   A. SMOKE DETECTORS SHALL BE FURNISHED AND WIRED BY DIVISION 16. DUCT INSTALLATION BY DIVISION 15.
   B. ACTIVATION OF SMOKE DETECTORS SHALL BE THROUGH BUILDING FIRE ALARM SYSTEM. COORDINATE INTERFACE WITH ELEC. CONTRACTOR.
28. FURNISH AND INSTALL FIRE DAMPERS WHERE INDICATED ON DRAWINGS. THESE DAMPERS SHALL BE CO-INSTALLED TO CONFORM TO NFPA 90A, AND UL 555–1996. PROVIDE DUCT ACCESS DOORS FOR ACCESSIBILITY TO FIRE DAMPERS. FIRE DAMPERS SHALL BEAR UL LABEL AND SHALL PROVIDE 100% FREE AREA SPACE. PERMITTING. FIRE DAMPERS IN S/A DUCTS USED FOR THE SMOKE CONTROL SYSTEM SHALL HAVE 260 DEGREES F FUSIBLE LINKS; ALL OTHER FIRE DAMPERS SHALL HAVE 165 DEGREES F. FUSIBLE LINKS. FIRE & MOTORIZED DAMPERS SHALL BE MANUFACTURED BY RUSKIN.

JMM Consulting Engineers, LLC
Certificate of Authorization #6692
Jose M. Martinez, P.E. #60016
10254 SUNSET DRIVE Suite 103
Miami, Florida 33173
TEL (305) 255-1624
FAX (305) 271-0090

BEAME ARCHITECTURAL PARTNERSHIP
3059 GRAND AVENUE, SUITE 440
COCONUT GROVE, FLORIDA 33133
E-mail : bap@bapdesign.com
Florida Corp AA0002364
PH 305.444.7100 FX 305.444.9803

OWNER:
J3 VENTURES LLC
1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

LAWRENCE BEAME, R.A.
REGISTRATION # 7871

NUMBER	DATE:	ITEM:
REVISIONS		
2	5/21/15	GENERAL REVISIONS
1	10/06/14	CITY COMMTS. / CHANGE OF SCOPE

HOTEL EVA
INTERIOR
IMPROVEMENTS
1506 COLLINS AVENUE
MIAMI BEACH,
FLORIDA 33139

OFFICE COPY
CITY OF MIAMI BEACH
APPROVED FOR PERMIT BY
THE FOLLOWING:
BUILDING:
ZONING:
PLUMBING:
ELECTRICAL:
MECHANICAL: 5/8/15
FIRE PREVENTION:
FLOOD:
PUBLIC WORKS:
STRUCTURAL:
ELEVATOR:
ROOFING:

City of Miami Beach
Fire Prevention Division
PLANS APPROVED

JOSE M. MARTINEZ LICENSE No. 60016 STATE OF FLORIDA PROFESSIONAL ENGINEER

PRJ. MNGR.	DRAWING BY	SCALE

SHEET TITLE
MECHANICAL NOTES AND SCHEDULES

JOB NUMBER	SHEET NUMBER
DATE	M2.01

UNITS NOTES:

1. CONTRACTOR SHALL COORDINATE ALL HIS WORK WITH OTHER TRADES IN ORDER TO FURNISH AND INSTALL ALL CONTROL WIRING AND RACEWAYS, ALL POWER CONTROL CIRCUITS WIRING AND RACEWAYS AS SHWON ON THE AIR CONDITIONING DRAWINGS OR SPECIFICATIONS. IF AIR CONDITIONING DRAWINGS REFER TO MANUFACTURER'S WIRING DIAGRAMS, THE CONTRACTOR SHALL VERIFY WITH SAID MANUFACTURER ALL REQUIREMENTS AND INCLUDE ALL RELATED WORK IN HIS CONTRACT.
2. PROVIDE ALL FINAL CONNECTIONS TO ALL EQUIPMENT AND APPLIANCES.
3. PROVIDE ALL A/C CONTROL AS REQUIRED BY A/C DRAWINGS OR MANUFACTURER DIAGRAMS.
4. ALL LAVATORIES AND KITCHEN RECEPTACLES SHALL BE GFI TYPE.
5. COORDINATE LOCATION OF ALL DISCONNECT SWITCHES WITH OTHER TRADES TO ALLOW N.E.C. REQUIREMENT CLEARANCE.
6. CIRCUITS WIRING REQUIRED TO BE AS FOLLOWS: 120V–2 WIRE (L–N); 120/240V – 3 WIRE (L–N); 240V–2 WIRE (LL). WHEN EQUIPMENT GROUND IS REQUIRED INCREASE CONDUIT SIZE AS REQUIRED.
7. ALL CONDUCTORS TO BE COPPER (THHN/THWN) TYPE RUN IN ELECTRICAL METALLIC TUBING.
8. ALL COUNTER RECEPTACLES AND SWITCHES TO BE MOUNTED PER FLA ACC CODE.
9. REFRIGERATOR RECEPTACLE TO BE MOUNTED + 48" A.F.F.
10. COORDINATE LOCATION OF AIR CONDITIONER (INDOOR UNIT) DISCONNECT SWITCH WITH A/C CONTRACTOR TO KEEP N.E.C. REQUIRED CLEARANCE.
11. MINIMUM WIRE SIZE SHALL BE #12 THHN/THWN WITH THE EXCEPTION OF 15A GENERAL LTG. AND RECEPTACLE BRANCH CIRCUITS WHICH ARE #14 THHN/THWN
12. CONDUIT IN FINISHED AREAS SHALL BE CONCEALED.
13. CONDUIT IN UNFINISHED AREAS SHALL BE EXPOSED.
14. FUSES SHALL BE DUAL ELEMENT, TIME DELAY TYPE.
15. INSTALL NYLON PULL STRING IN ALL EMPTY CONDUITS FOR FUTURE USE.
16. ALL MATERIALS SHALL BE U.L. APPROVED.
17. WORKMANSHIP SHALL BE TO BEST COMMERCIAL PRACTICE (MULTIFAMILY).
18. INSTALLATION SHALL BE IN ACCORDANCE WITH LOCAL, STATE AND NATIONAL CODES.
19. ALL LUMINARIES SHALL BE PROPERLY SUPPORTED IN ACCORDANCE WITH THE CEILING SYSTEM MANUFACTURER RECOMENDATIONS AND LOCAL CODE REQUIREMENTS.
20. THIS DRAWING IS A GUIDE FOR THE INSTALLATION OF ELECTRICAL SERVICE. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE A FUNCTIONING SYSTEM.
21. A/C EQUIPMENT WIRING, BREAKER AND FUSE SIZES ARE BASED ON A/C EQUIPMENT SPECIFIED, ON CONTRACT DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL WIRING, BREAKER AND FUSES SIZES IN ACCORDANCE WITH A/C EQUIPMENT NAMEPLATE REQUIREMENTS IF DIFFERENT FROM THAT SPECIFIED ON DRAWINGS, AS WELL AS ANY FEEDER CHANGES BEING AFFECTED BY THIS CHANGE. CONTRACTOR SHALL MAKE ABOVE MENTIONED CHANGES AT NO EXTRA COST.
22. ALL EQUIPMENT PANEL, DISCONNECTS, ETC. AND DEVICES RECEPTACLES SWITCHES, ETC. SHALL BE MOUNTED ABOVE FLOOD CRITERIA.
23. CONTRACTOR TO PROVIDE APPROVED FIRE RATED TAPE ON A/C DUCTS ABOVE ALL DOWNLIGHTS USED UNDER A/C DUCTS.
24. ELECTRICAL CONTRACTOR SHALL VERIFY ALL KITCHEN EQUIPMENT REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUGH–IN.
25. ALL SMALL APPLIANCE RECEPTACLES IN KITCHEN SHALL BE GFCI PROTECTED IN ACCORDANCE WITH NEC 210–8
26. ALL NEW 15 AND 20 AMP, 120 VOLT RECEPTACLES OUTLETS MUST BE LISTED TAMPER RESISTANT PER NEC2008 (406.11)

KITCHEN EQUIPMENT SCHEDULE

Type	Luminaire Description	Manufacturer and Catalog Number	Volts	Lamp Information No.	
K1	COOKTOP	SELECTED BY OWNER	240	2	8400 W
K2	REFRIGERATOR	SELECTED BY OWNER	115	1	1080 W
K3	DISHWASHER	SELECTED BY OWNER	240	1	10152 W

ILLUMINATION NOTES:

1. FOR EXACT LOCATION OF ALL LUMINARIES (LIGHT FIXTURES), LIGHT SWITCHES AND DEVICES SEE ARCHITECTURAL DRAWINGS.
2. LUMINARIES (LIGHT FIXTURES) IN CLOSETS SHALL BE INSTALLED IN COMPLIANCE W/ NEC–410.8.
3. MANUFACTURER AND CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER VENTILATION AND TEMPERATURE CONDITIONS OF LUMINARIES (LIGHT FIXTURES).
5. LUMINARIES (LIGHT FIXTURES) ABOVE BATH TUB & SHOWER INSTALLED IN COMPLIANCE W/ NEC– 410–4(a).
6. ALL LIGHTING FIXTURES INSTALLATION SHALL BE INSTALLED PER MANUFACTURER RECOMMENDATIONS, OWNER AND EC.
7. CONTRACTOR SHALL VERIFY CEILING CONSTRUCTION FOR EACH LUMINARIES TYPE AND LOCATION. ALL FIXTURES AS SELECTED BY OWNER
9. TOILET EXHAUST FAN SHALL BE CONTROLLED BY THE LIGHTING SYSTEM AS PER MANUFACTURER.

EQUIPMENT NOTES:

1. ALL WIRING DEVICES SHOWN SHALL CONFORM WITH THE MALE PLUGS OF EQUIPMENT SUPPLIED BY VENDORS OF THE UNIT.
2. CONTRACTOR SHALL FURNISH AND INSTALL ALL CORDS AND PLUGS DEEMED NECESSARY FOR THE PROPER FINAL INSTALLATION OF ALL ELECTRICAL EQUIPMENT.)
3. FOR EXACT LOCATION OF ALL KITCHEN EQUIPMENT (DISHWASHER, REFRIGERATOR, COOK TOP EXHAUST FANS ETC.,). SEE ARCHITECTURAL DRAWINGS.
4. PRIOR TO ROUGH–IN OF ELECTRICAL DEVICES COORDINATE EXACT LOCATION AND MOUNTING HEIGHTS WITH ARCHITECTURAL DRAWINGS.

NOTIFICATION NOTES:

(A) PUSH BUTTON FOR DOOR BELL OR ANNUNCIATOR LIGHT IN HEARING IMPAIRED ACCESSIBLE ROOM UNITS. MOUNT AT 48" AFF MAXIMUM.

(B) NOTIFICATION DEVICES SHALL BE PROVIDED TO ALERT ROOM OCCUPANTS

(C) ONE MASTER TOGGLE SWITCH AT MAIN ENTRY MAIN DOOR NEXT TO LIGHT SWITCH. COORDINATE REQUIREMENTS WITH DOOR SIGNAL SYSTEM WIRING DIAGRAMS & SYSTEM VENDOR. THE CONTROLS ALL PERMANENTLY WIRED LUMINARIES AND SWITCHED RECEPTACLES, EXCEPT THOSE IN THE BATHROOMS COMPLY WITH FLORIDA BUILDING CODE 505. ONE MASTER TOGGLE SWITCH AT MAIN ENTRY MAIN DOOR NEXT

(D) PROVIDE 1P/20A CIRCUIT BREAKER, WIRES AND CONDUIT SHALL BE EXTEND TO EXISTING PANEL

(E) EXISTING LIGHTS TO BE RE–USED SHALL BE TESTED FOR PROPER OPERATION OF LAMPS AND SWITCHES REPLACE ANY DEFECTIVE COMPONENTS AS REQUIRED.

ADDITIONAL NOTES:

FOR 120V 1~ E. FANS : INSTALL 1P–TOGGLE SW MOTOR RATED IF FAN HAS INTERNAL THERMAL PROTECTION. IF NO INTERNAL MOTOR STARTER W/ O.L. FURNISHED BY MECHANICAL CONTRACTOR

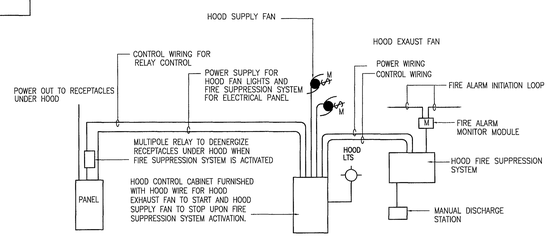
COORDINATE EXACT LOCATION WITH MECHANICAL DWGS. LOCATIONS SHOWN FOR MECHANICAL UNITS ARE ONLY APPROXIMATE. COORDINATE EXACT LOCATION. PRIOR TO ORDERING FINAL BIDS (TYP)

E.C. VERIFY THE CAPACITY REQUIREMENTS (FLA, MCA, AND MOCP), POLES AND VOLTAGE FOR ALL HVCA EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO THE PURCHASE AND INSTALLATION OF THE SAFETY SWITCHES, RACEWAYS, WIRING AND BRANCH CIRCUIT BREAKERS

* FUSED AS PER EQUIPMENT NAME PLATE

THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL DISCONNECT SWITCHES REQUIRED BY THE PROJECT, PRIOR TO THEIR INSTALLATION. THE INSTALLED LOCATION OF ANY DISCONNECT SHALL NOT IMPEDE THE ACCESS TO, OR WORKING SPACE AROUND, ANY PIECE OF EQUIPMENT. NEITHER SHALL THE LOCATION CAUSE ANY LOSS OF EQUIPMENT PERFORMANCE DUE TO IMPEDED AIR FLOW, ETC. THIS REQUIREMENT APPLIES REGARDLESS OF THE LOCATION SHOWN FOR THE DISCONNECTS ON THE PLANS. IF THERE IS ANY QUESTIONS AS TO DISCONNECT LOCATION, THE CONTRACTOR SHALL ASK THE ENGINEER FOR CLARIFICATION PRIOR TO INSTALLATION. IF ANY DISCONNECT IS FOUND TO BE INSTALLED IN SUCH A WAY THAT IT CAUSES ANY PROBLEMS AS MENTIONED ABOVE, IT SHALL BE RELOCATED AT THE EXPENSE OF THE CONTRACTOR.

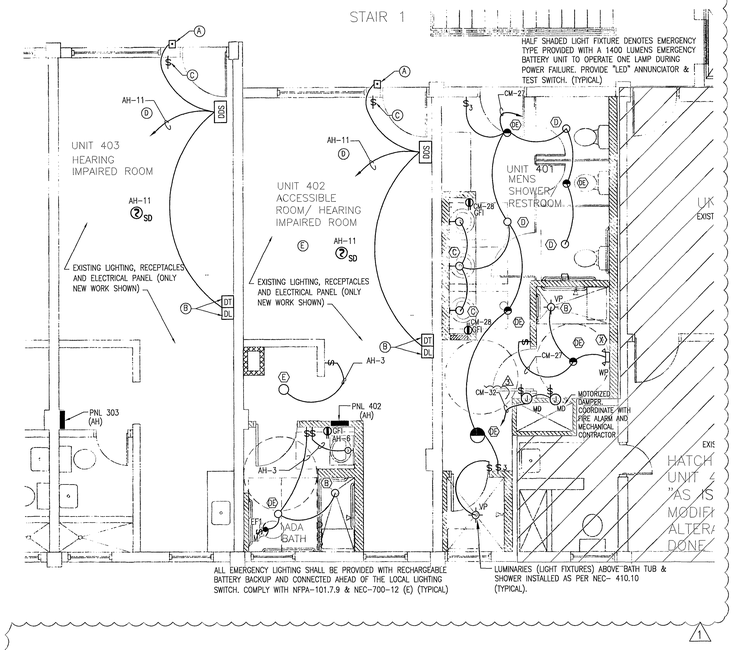
FOR HOOD (EF AND SF) ELECTRICAL CONTRACTOR COORDINATE FANS LOAD ON PANEL AS PER MANUFACTURER SPECIFICATIONS



TYPICAL EXHAUST HOOD CONTROL DIAGRAM

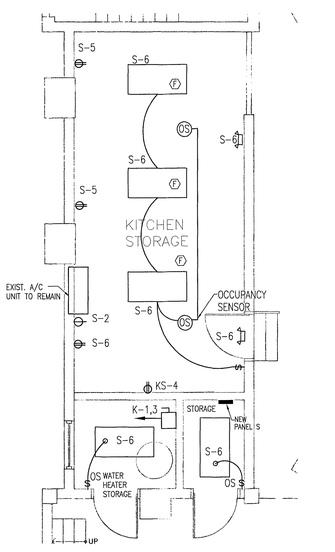
SCALE: N.T.S.

HOOD SUPPLY FANS TO STOP IF FIRE ALARM SYSTEM IS ACTIVATED
HOOD EXHAUST FANS TO START IF FIRE ALARM SYSTEM IS ACTIVATED



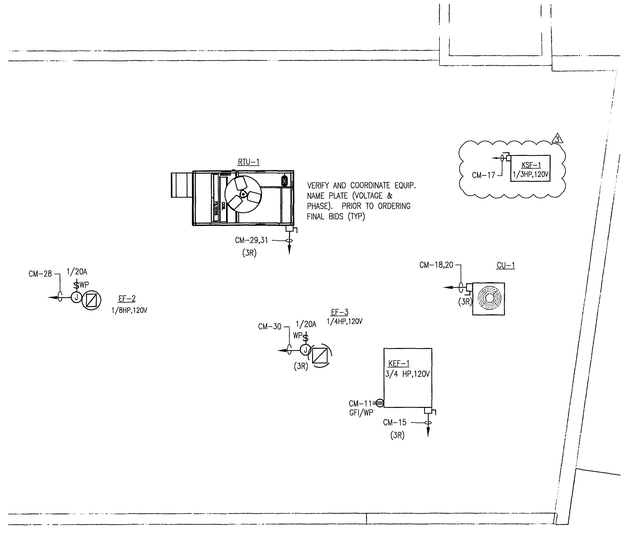
04 ENLARGED POWER PLAN ACCESSIBLE ROOM, SHOWER RESTROOM AND HEARING IMPAIRED ROOM

SCALE: 1/4"=1'–0"



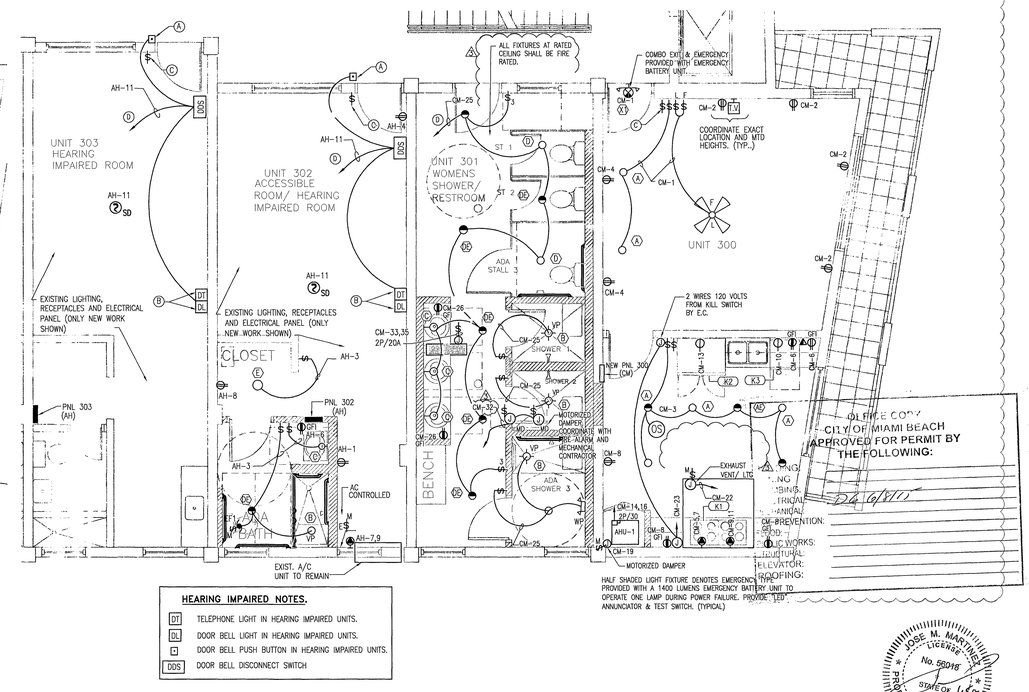
01 KITCHEN STORAGE ENLARGED ELECTRICAL PLAN

SCALE: 1/4"=1'–0"



02 PARTIAL ROOF PLAN

SCALE: 1/4"=1'–0"



HEARING IMPAIRED NOTES.

DT	TELEPHONE LIGHT IN HEARING IMPAIRED UNITS.
DL	DOOR BELL LIGHT IN HEARING IMPAIRED UNITS.
⊡	DOOR BELL PUSH BUTTON IN HEARING IMPAIRED UNITS.
DDS	DOOR BELL DISCONNECT SWITCH

03 ENLARGED POWER PLAN ACCESSIBLE, COMMUNAL, SHOWER RESTROOM AND HEARING IMPAIRED ROOM

SCALE: 1/4"=1'–0"

CITY OF MIAMI BEACH APPROVED FOR PERMIT BY THE FOLLOWING:

BUILDING:
ELECTRICAL:
MECHANICAL:
FIRE PREVENTION:
FLOOD:
PUBLIC WORKS:
STRUCTURAL:
ELEVATOR:
ROOFING:

JOSE M. MARTINEZ LICENSE No. 56018 STATE OF FLORIDA PROFESSIONAL ENGINEER

City of Miami Beach Fire Prevention Division PLANS APPROVED

N

Consulting Engineers LLC
Certificate of Authorization #6652
Jose M. Martinez, P.E. #56018
10351 STIRRUP HORSE Suite 103
Miami, Florida 33176
TEL (305) 255–1623
FAX (305) 271–0090

BEAME ARCHITECTURAL PARTNERSHIP

3059 GRAND AVENUE, SUITE 440
COCONUT GROVE, FLORIDA 33133
E-mail : bap@bapdesign.com
Florida Corp AA0002364
PH 305.444.7100 FX 305.444.9803

OWNER:
J3 VENTURES LLC
1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

LAWRENCE BEAME, R.A.
REGISTRATION # 7871

NUMBER:	DATE:	ITEM:
1	5/21/15	GENERAL REVISIONS
1	10/06/14	CITY COMMTS. / CHANGE OF SCOPE

REVISIONS

HOTEL EVA INTERIOR IMPROVEMENTS

1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

PRJ. MNGR. | DRAWING BY | SCALE

SHEET TITLE

ENLARGED UNITS POWER PLAN

JOB NUMBER | SHEET NUMBER

DATE

E2.03

NEW TYPICAL PANELS AH

MOUNTING: FLUSH MOUNTED
SHORT CIRCUIT RATING: 10K AIC
LOCATION: SEE ENLARGED POWER PLAN

CU BUS/GND. BUS
(UNITS 303 & 403)

VOLTS: 120/240V, 1ø, 3W
MAIN BUS AMPS: 125A
MAIN BREAKER AMPS: MLO

LOAD	COND.	WIRE	TRIP	POLE	DESCRIPTION	CKT No.	CKT No.	DESCRIPTION	POLE	TRIP	WIRE	COND.	LOAD
(*)	1/2"	12	20	1	GENERAL LIGHTING	1	2	GENERAL LIGHTING	1	20	12	1/2"	(*)
(*)	1/2"	12	20	1	GENERAL LIGHTING	3	4	GENERAL LIGHTING	1	20	12	1/2"	(*)
(*)	1/2"	12	20	1	GENERAL LIGHTING	5	6	RECEPTACLES FOR TOILET	1	20	12	1/2"	(*)
200	1/2"	12	20	2	EXISTING AC UNIT	7	8	GENERAL LIGHTING	1	20	12	1/2"	(*)
					MCA: 1 AMPS	9	10	SPACE	–	–	–	–	–
(*)	1/2"	12	20	1	ANNUNCIATOR/H. IMPAIRED	11	12	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	13	14	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	15	16	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	17	18	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	19	20	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	21	22	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	23	24	SPACE	–	–	–	–	–

TOTAL CONNECTED LOAD: SEE DEMAND ANALYSIS

1 (*) PART OF THE 2W/SQ.FT. LOAD AND PROVIDE AFCI TYPE BKR (NEC–210.12)
2. EXISTING BRANCH TO BE INVESTIGATED BY EC. PROVIDE PERMANENT MARKERS SHOWING LOAD IDENTIFICATION (WITH PERMANENT LABELS.)
3. PROVIDE CONDUITS, WIRING AND BKRS AS NOTED.

(*) PART OF THE 2W/SQ.FT. LOAD AND PROVIDE AFCI TYPE BKR (NEC–210.12)

CONNECTED LOAD CALCULATION

BASED ON 120/240V, 1ø, 3W

PANELS UNITS

GENERAL LIGHTING X 2W/SQFT = 840 VA
AC 240 X 1 @ 100% = 240 VA

TOTAL CONNECTED LOAD #1 = 1080 VA

GENERAL LOAD = 432 SQFT * 2 VA
7 CKTS. X 120 VA = 864 VA

NEW PANEL AH

ACCESSIBLE & HEARING IMPAIRED ROOM
(UNITS 402 & 302)
CU BUS/GND. BUS

MOUNTING: FLUSH MOUNTED
SHORT CIRCUIT RATING: 10K AIC
LOCATION: SEE ENLARGED POWER PLAN

VOLTS: 120/240V, 1ø, 3W
MAIN BUS AMPS: 125A
MAIN BREAKER AMPS: MLO

LOAD	COND.	WIRE	TRIP	POLE	DESCRIPTION	CKT No.	CKT No.	DESCRIPTION	POLE	TRIP	WIRE	COND.	LOAD
(*)	1/2"	12	20	1	GENERAL LIGHTING	1	2	GENERAL LIGHTING	1	20	12	1/2"	(*)
(*)	1/2"	12	20	1	GENERAL LIGHTING	3	4	GENERAL LIGHTING	1	20	12	1/2"	(*)
(*)	1/2"	12	20	1	GENERAL LIGHTING	5	6	RECEPTACLES FOR TOILET	1	20	12	1/2"	(*)
200	1/2"	12	20	2	EXISTING AC UNIT	7	8	GENERAL LIGHTING	1	20	12	1/2"	(*)
					MCA: 1 AMPS	9	10	SPACE	–	–	–	–	–
(*)	1/2"	12	20	1	ANNUNCIATOR/H. IMPAIRED	11	12	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	13	14	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	15	16	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	17	18	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	19	20	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	21	22	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	23	24	SPACE	–	–	–	–	–

TOTAL CONNECTED LOAD: SEE DEMAND ANALYSIS

1. (*) PART OF THE 2W/SQ.FT. LOAD AND PROVIDE AFCI TYPE BKR (NEC–210.12)
2. EXISTING BRANCH TO BE INVESTIGATED BY EC. PROVIDE PERMANENT MARKERS SHOWING LOAD IDENTIFICATION (WITH PERMANENT LABELS.)
3. PROVIDE CONDUITS, WIRING AND BKRS AS NOTED.
4. EXISTING BRANCH CIRCUIT TO BE EXTENDED TO NEW PANEL LOCATION. PROVIDE NEW BRANCH CIRCUIT BREAKER CONDUIT AND WIRING AS NOTED

CONNECTED LOAD CALCULATION

BASED ON 120/240V, 1ø, 3W

PANELS UNITS

GENERAL LIGHTING X 2W/SQFT = 840 VA
AC 240 X 1 @ 100% = 240 VA

TOTAL CONNECTED LOAD #1 = 1080 VA

GENERAL LOAD = 420 SQFT * 2 VA
7 CKTS. X 120 VA = 840 VA

NEW TYPICAL PANEL CM

COMMUNAL ROOM
CU BUS/GND. BUS

MOUNTING: FLUSH MOUNTED
SHORT CIRCUIT RATING: 22K AIC
LOCATION: SEE ENLARGED POWER PLAN

VOLTS: 120/240V, 1ø, 3W
MAIN BUS AMPS: 400A
MAIN BREAKER AMPS: MLO

LOAD	COND.	WIRE	TRIP	POLE	DESCRIPTION	CKT No.	CKT No.	DESCRIPTION	POLE	TRIP	WIRE	COND.	LOAD
400	1/2"	12	20	1	ILLUM. OPEN AREA	1	2	RECEPTACLES OPEN AREA	1	20	12	1/2"	360
400	1/2"	12	20	1	ILLUM. KITCHEN AREA	3	4	RECEPTACLES OPEN AREA	1	20	12	1/2"	360
8200	1"	6	50	2	COOK TOP (K1)	5	6	RECEPTACLES OPEN AREA	1	20	12	1/2"	360
					SEE EQUIPMENT NAME	7	8	RECEPTACLES KITCHEN AREA	1	20	12	1/2"	720
8200	1"	6	50	2	COOK TOP (K1)	9	10	DISWASHER (K3)	2	70	4	1 1/4"	10000
					SEE EQUIPMENT NAME	11	12						
1000	1/2"	12	20	1	REFRIGERATOR (K2)	13	14	AHU (4.1 KW)	2	30	10	3/4"	5084
1320	1/2"	8	20	1	KEF–1	15	16	SEE MECHANICAL DWGS					
900	1/2"	10	20	1	KSF–1	17	18	CU–1	2	40	10	3/4"	3600
100	1/2"	10	20	1	MOTORIZED DAMPER	19	20	NOT CONCURRENT LOAD					
400	1/2"	10	20	1	REC. ON ROFF	21	22	EXHAUST VENT/ LTG	1	20	12	1/2"	200
500	1/2"	12	20	1	FIRE SUPPRESSION SYSTEM	23	24	RECEPTACLES GFI	1	20	12	1/2"	200
1000	1/2"	12	20	1	ILLUM. COMMUNAL SHOWER & REST	25	26	RECEPTACLES GFI	1	20	12	1/2"	200
1000	1/2"	12	20	1	ILLUM. COMMUNAL SHOWER & REST	27	28	EF–2	1	20	12	1/2"	200
7100	1"	6	40	2	RTU–1	29	30	EF–3	1	20	12	1/2"	200
					SEE EQUIPMENT NAME	31	32	MOTORIZED DAMPER	1	20	12	1/2"	200
200	1/2"	12	20	2	RELOCATED AC UNIT	33	34	SPACE	–	–	–	–	–
						35	36	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	37	38	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	39	40	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	41	42	SPACE	–	–	–	–	–

TOTAL CONNECTED LOAD: SEE DEMAND ANALYSIS

1 SEE EQUIPMENT NAME PLATE PRIOR TO ORDERING AND INSTALLATION
2. BRANCH TO BE INVESTIGATED BY EC. PROVIDE PERMANENT MARKERS SHOWING LOAD IDENTIFICATION (WITH PERMANENT LABELS.)
4. NEW BRANCH CIRCUIT TO BE EXTENDED TO NEW PANEL LOCATION. PROVIDE NEW CIRCUIT BREAKER CONDUIT AND WIRING AS NOTED

NEW HOUSE PANEL DEMAND LOAD CALCULATION

BASED ON 120/240V, 3ø, 4W

PANEL "CM" COMMUNAL ROOM

ILLUM. LOAD @ 125%	=	1,000 VA
RECEPTACLES @ 100%	=	2,160 VA
COOK TOP @ 100%	=	16,400 VA
DISWASHER	=	10,000 VA
REFRIGERATOR	=	1,200 VA
MOTORIZED DAMPER	=	200 VA
AHU–1	=	5,080 VA
KEF–1 & KSF–1	=	2,160 VA
25% LARGEST MOTOR	=	600 VA
FIRE SUPPRESSION	=	500 VA
EF–2 & EF–3	=	400 VA
RTU–1	=	7,100 VA
ILLUM. COMMUNAL SHOWER 301 & 401	=	2,400 VA
REC GFI COMMUNAL SHOWER 301 & 401	=	720 VA
	=	56,324 VA
		240 VOLTS
	=	234 AMPS

TOTAL DEMAND LOAD CALCULATION

BASED ON 120/240V, 3ø, 4W

EXISTING HOUSE PANEL H ---------- 72 AMPS
EXISTING PANEL S ---------- 32 AMPS
NEW PANEL PANEL CM ---------- 234 AMPS
= 307 AMPS

EXISTING HOUSE PANEL

MOUNTING: FLUSH MOUNTED
SHORT CIRCUIT RATING: EXISTING
LOCATION: STORAGE

VOLTS: 120/240V, 3ø, 4W
MAIN BUS AMPS: 225A
MAIN BREAKER AMPS: 200A/3P

LOAD	COND.	WIRE	TRIP	POLE	DESCRIPTION	CKT No.	CKT No.	DESCRIPTION	POLE	TRIP	WIRE	COND.	LOAD
10528	3/4"	8	50	3	EXIST. ELEVATOR EQUIPMENT	1	2	EXISTING ELEV. PIT LOAD	1	20	12	1/2"	720
						3	4	EXISTING EXISTING ICE MAKER	1	20	12	1/2"	720
						5	6	SPACE	1	–	–	–	–
720	1/2"	12	20	1	EXISTING LOAD TO REMAIN	7	8	EXISTING ELEV. CABINET.	1	20	12	1/2"	1200
720	1/2"	12	20	1	EXISTING LOAD TO REMAIN	9	10	EXISTING LOAD TO REMAIN	1	20	12	1/2"	720
–	–	–	–	1	SPACE	11	12	SPACE	1	–	–	–	–
8000	11/2"	3	60	2	EXISTING LOAD TO REMAIN	13	14	EXISTING LOAD TO REMAIN	1	20	12	1/2"	500
						15	16	EXISTING LOAD TO REMAIN	1	20	12	1/2"	720
–	–	–	–	1	SPACE	17	18	SPACE	1	–	–	–	–
720	1/2"	12	20	1	EXISTING AC LOAD TO REMAIN	19	20	EXISTING LOAD TO REMAIN	1	20	12	1/2"	720
540	1/2"	12	20	1	EXISTING LOAD TO REMAIN	21	22	EXISTING LOAD TO REMAIN	1	20	12	1/2"	720
–	–	–	–	1	SPACE	23	24	EXISTING LOAD TO REMAIN	1	20	12	1/2"	720

TOTAL CONNECTED LOAD: 30,128 VA
SEE LOAD ANALYSI. 72 AMPS

1. BRANCH TO BE INVESTIGATED BY EC. PROVIDE PERMANENT MARKERS SHOWING LOAD IDENTIFICATION (WITH PERMANENT LABELS.)
2. EXISTING BRANCH CIRCUIT TO BE EXTENDED TO NEW PANEL LOCATION. PROVIDE NEW CIRCUIT BREAKER CONDUIT AND WIRING AS NOTED

3. HIGH LEG NOT TO BE USED FOR 120V, 1PH BRANCHES AS NOTED

NEW PANEL "S"

MOUNTING: FLUSH MOUNTED
SHORT CIRCUIT RATING: 22K AIC
LOCATION: STORAGE

VOLTS: 120/240V, 1ø, 3W
MAIN BUS AMPS: 125A
MAIN BREAKER AMPS: M.L.O.

LOAD	COND.	WIRE	TRIP	POLE	DESCRIPTION	CKT No.	CKT No.	DESCRIPTION	POLE	TRIP	WIRE	COND.	LOAD
4500	3/4"	10	30	2	EXIST. WATER HEATER	1	2	EXIST. A/C	1	20	12	1/2"	400
						3	4	REFRIGERATOR	1	20	12	1/2"	1200
720	1/2"	12	20	1	RECEPTACLES	5	6	RECEPTACLES	1	20	12	1/2"	720
			20	1	SPARE	7	8	SPACE	1	–	–	–	–
			20	1	SPARE	9	10	SPACE	1	–	–	–	–
			20	1	SPARE	11	12	SPACE	1	–	–	–	–
			20	1	SPARE	13	14	SPACE	1	–	–	–	–
			20	1	SPARE	15	16	SPACE	1	–	–	–	–
–	–	–	–	1	SPACE	17	18	SPACE	1	–	–	–	–
–	–	–	–	1	SPACE	19	20	SPACE	1	–	–	–	–
–	–	–	–	1	SPACE	21	22	SPACE	1	–	–	–	–
–	–	–	–	1	SPACE	23	24	SPACE	1	–	–	–	–

TOTAL CONNECTED LOAD: 8,000 VA
SEE LOAD ANALYSI. 31 AMPS

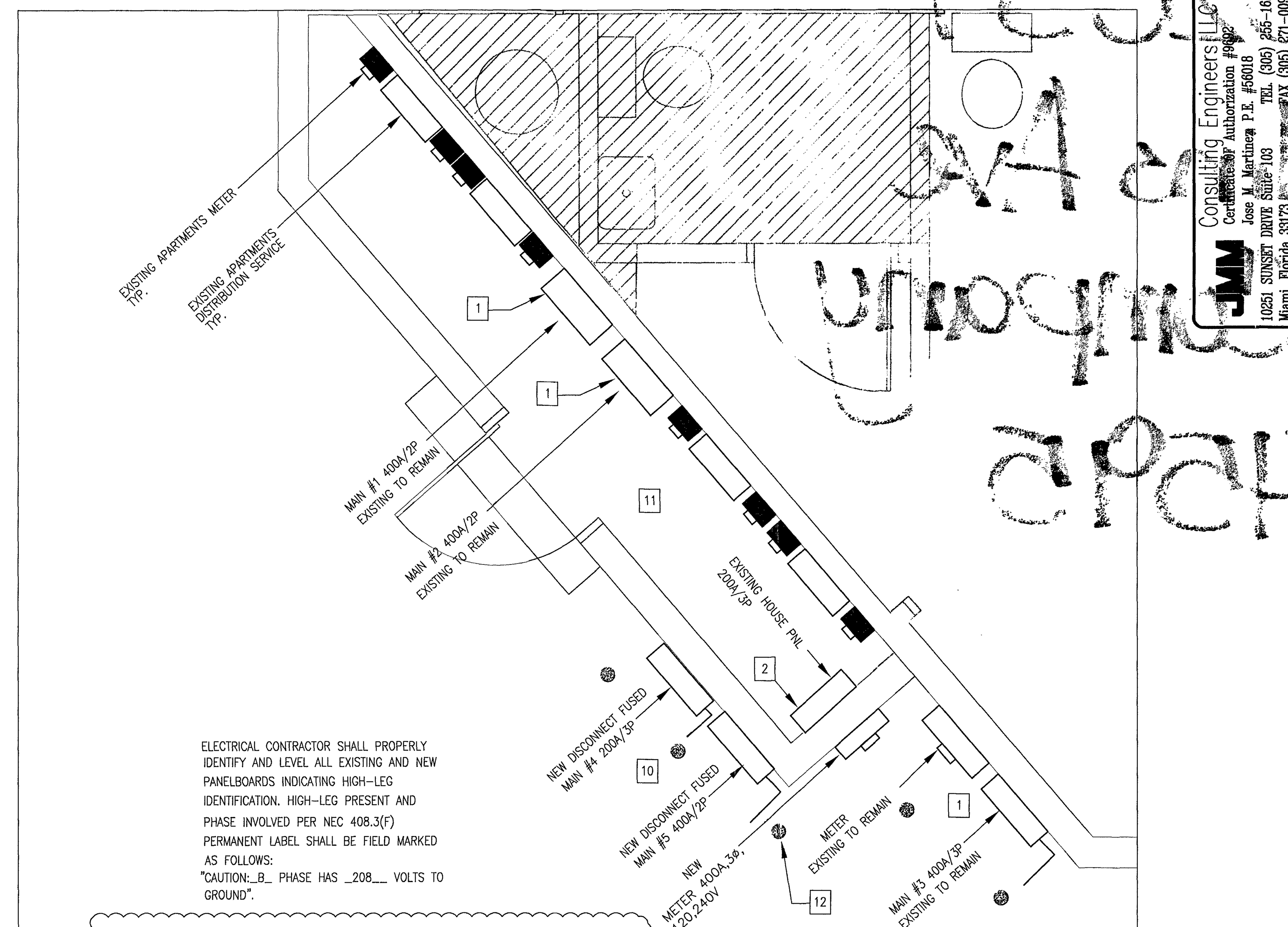
1. BRANCH TO BE INVESTIGATED BY EC. PROVIDE PERMANENT MARKERS SHOWING LOAD IDENTIFICATION (WITH PERMANENT LABELS.)
2. EXISTING BRANCH CIRCUIT TO BE EXTENDED TO NEW PANEL LOCATION. PROVIDE NEW CIRCUIT BREAKER CONDUIT AND WIRING AS NOTED

SYMBOL LEGEND

SYMBOL	DESCRIPTION (USE THOSE THAT APPLY)
	DISTRIBUTION
$	Single pole switch 20A
$3	Three–way switch 20A
$4	Four–way switch 20A
$D	Dimmer switch sized as required for the intended load
$M	Manual Motor Started Switch With Overload Protection
	Single receptacle outlet 20A
	Duplex receptacle outlet 15A. (Small appliances & bathrooms to be 20A) (Tamper resistant)
	Duplex receptacle outlet–split wire 15A (Tamper resistant)
	Floor duplex receptacle outlet 15A (Tamper resistant)
J	Junction box
	Fused Disconnect switch sized as required per equipment manufacturer nameplate
	Push Buttom for door Chime Door Chime
	Exhaust Fan
J / J	WALL OR CEILING MOUNTED JUNCTION BOX.
J	JUNCTION BOX AND DIRECT CONNECTION TO EQUIPMENT
	COMMUNICATIONS
	Terminal back board for TV and telephone system
	Telephone outlet–Combintion Telephone and Data outlet from TeL. Back board
T.V.	TV Cable outlet–from TV Back Board
SD	(110 v. with battery back–up, interconnected Single Smoke detector Not Parth of the Building fire Alarm System.

ADDRESSABLE FIRE ALARM SYSTEM NOTES

1. FURNISH AND INSTALL ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY FOR NEW FIRE ALARM DEVICES TO BE CONNECTED TO EXISTING FIRE ALARM SYSTEM WITH VOICE AS SPECIFIED HEREIN AND AS SHOWN ON THE ELECTRICAL DRAWINGS. THIS SYSTEM SHALL BE ZONED, ELECTRICALLY SUPERVISED, HAVE CLOSED CIRCUITS, AND SHALL BE CONNECTED, TESTED AND LEFT IN FIRST CLASS OPERATING CONDITION.
2. FIRE ALARM SYSTEM SHALL BE U.L. LISTED NFPA 72 APPROVED.
3. UPON ACTIVATION OF FIRE ALARM SYSTEM BY MANUAL STATION, THE FOLLOWING SHALL TAKE PLACE:
   A ENERGIZE ALARM SIGNALING DEVICES
   B SOUND AUDIBLE ALARMS AND FLASH VISUAL SIGNALS
   C ALERT LOCAL FIRE DEPARTMENT OR PROPRIETARY SYSTEM
   D CAUSE ZONE IN ALARM TO BE DISPLAYED ON THE ANNUNCIATOR
4. ALL WIRING AND CONDUIT SIZE SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION, AND REQUIREMENTS OF NEC, LOCAL CODES AND NFPA IN NO CASE. SHALL THE WIRING BE SMALLER THAN #16
5. ALL CONDUCTORS SHALL BE COOPER AND SHALL BE SIZED FOR A MAXIMUM LOSS OF IdB. MINIMUM WIRE SIZE SHALL BE AS REQUIRED BY MANUFACTURER IN NO CASE. SHALL THE WIRING BE SMALLER THAN #16 F.P.L. CU IN. 3/4 CONDUIT
6. QUANTITY OF WIRES PER DEVICES SHALL BE AS REQUIRED BY MANUFACTURER.
7. SYSTEM TO BE POWER LIMITED.
8. VISUAL ALARMS PER ANSI A117.1,4.26, FBC AND ADA
9. CONDUIT FOR FIRE ALARM SHALL BE METALLIC TYPE.
10. CONTRACTOR IS RESPONSIBLE FOR PROVIDING SIGNED & SEALED FIRE ALARM PERMIT DRAWINGS BY A FLORIDA REGISTERED ENGINEER. JMM CONSULTING ENGINEERS LLC IS NOT RESPONSIBLE FOR F/A PERMIT DWGS.



ELECTRICAL CONTRACTOR SHALL PROPERLY IDENTIFY AND LEVEL ALL EXISTING AND NEW PANELBOARDS INDICATING HIGH–LEG IDENTIFICATION. HIGH–LEG PRESENT AND PHASE INVOLVED PER NEC 408.3(F) PERMANENT LABEL SHALL BE FIELD MARKED AS FOLLOWS:
"CAUTION:_B_ PHASE HAS _208__ VOLTS TO GROUND".

ENLARGED EXISTING MAIN ELECTRICAL ROOM

SCALE: 1/2"=1'–0"

ADDITIONAL ELECTRICAL NOTES

1. ALL MAIN DISCONNECT SHALL BE IDENTIFIED. INDICATE THE EXISTING LOAD SERVED RE–LABEL MAINS AS REQUIRED. ELECTRICAL CONTRACTOR SHALL IDENTIFY EXISTING FEEDER.
2. POWER SUPPLY SHALL BE IDENTIFIED AT EACH PANEL @ MAIN WITH PERMANENT LABELS. VERIFY BONDING CONNECTIONS FOR ALL MAIN AND PANEL.
3. ABANDONED EQUIPMENT SHALL BE REMOVED COMPLETELY. VERIFY WITH OWNER (REMOVED ALL ELECTRICAL BOXES, CONDUITS AND WIRES THAT ARE NOT IN USE VERIFY W/ OWNER.)
4. NO LOOSE WIRING ALLOWED.
5. PROVIDE FIRE SEALING AT WALL AND CEILING PENETRATIONS. PROVIDE CONDUIT AS PER NEC IF REQUIRED.
6. VERIFY AND PROVIDE GROUNDING EQUIPMENT FOR ALL PANELS IN COMPLIANCE NEC–250, IF REQUIRED. (EXISTING GROUND TO REMAIN.)
7. ALL MISSING SCREWS FROM EQUIPMENT OR DISCONNECT COVERS SHALL BE PROVIDED.
8. EXISTING EQUIPMENT AND WIRING TO REMAIN AS IS. NOT IN THE SCOPE OF WORK.
9. EXISTING EQUIPMENT, WIRING (FEEDER) AND CONDUIT TO REMAIN AS IS. NOT ON THE SCOPE OF WORK. SHOWN ON THIS PLAN FOR REFERENCE ONLY.
10. EC TO VERIFY AND PROVIDE DEDICATED CLEARANCES SPACE (COMPLY WITH ARTICLE 110–26 OF THE NATIONAL ELECTRICAL CODE.)
11. EXISTING GROUND TO REMAIN. EC TO VERIFY AND PROVIDE AS PER NEC–250. SEE RISER DETAIL
12. COORDINATE WITH ARCHITECT AND OWNER FOR CONCRETE BOLLARD FOR TRAFFIC PROTECTION FOR MAIN AND METER

UTILITY SERVICE NOTES:

METER INSTALLATION CONNECTION AND ALL WORK RELATED TO ELECTRICAL POWER SERVICE SHALL BE COORDINATED WITH UTILITY CO. REPRESENTATIVE.

PRIOR TO INSTALLATION OF ROUGH ELECTRICAL WIRING, CHECK NAME PLATE DATA EQUIPMENT INVOLVED TO OBTAIN CORRECT SIZES AND OVER CURRENT PROTECTION.

ELECTRICAL INSTALLATION SHALL CONFORM TO N.E.C. FOR DEDICATED SPACE CLEARANCES AND GROUNDING REQUIREMENTS.

COORDINATE NEW SERVICE REQUIREMENTS WITH POWER CO. PRIOR TO COMMENCEMENT OF WORK AND BID.

GENERAL ELECTRICAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE, FLORIDA BUILDING CODE AND OTHER APPLICABLE CODES AND STANDARDS.
2. a) THE DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS, BENDS AND BOXES REQUIRED TO MAKE A COMPLETE NEAT INSTALLATION IN ACCORDANCE WITH N.E.C.
   b) WHEN CONFLICTS ARISE IN LOCATIONS WIRING DEVICES, ELECTRICAL EQUIPMENT, DISCONNECTS, PANELBOARDS, ETC. DUE TO FIELD CONDITION OR IMPROPER FIELD COORDINATION CONTRACTOR SHALL BRING IT TO THE A/E'S ATTENTION AND AT NO EXTRA COST RELOCATE, AND OR EXTEND WITHIN A REASONABLE DISTANCE SUCH ITEM WHICH IS IN CONFLICT. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING LOCATION OF ALL COMPONENTS PRIOR TO ROUGH IN WITH ALL TRADES NO EXTRAS WILL BE ALLOWED FOR FAILURE TO DO SO.
3. THE CONTRACTOR IS RESPONSIBLE FOR EVALUATING FIELD CONDITIONS BY VISITING THE SITE PRIOR TO COMMENCING / BIDDING WORK.
4. THE CONTRACTOR SHALL SATISFACTORILY REPAIR / REPLACE EQUIPMENT OR PART OF STRUCTURE DAMAGED AS A RESULT OF HIS WORK. SURFACES AND FINISHED AREAS SHALL BE RESTORED TO MATCH ADJACENT AREAS.
5. APPROVAL SHALL BE OBTAINED FROM A STRUCTURAL ENGINEER PRIOR TO CUTTING OR DRILLING ANY STRUCTUALSUPPORT MEMBER.
6. ALL DEVICE BOXES SHALL BE INSTALLED FLUSH AND CONDUITS RUN CONCEALED IN FINISHED AREAS EXCEPT AS SPECIFICALLY SHOWN/NOTED OTHERWISE.
7. ALL ELECTRICAL EQUIPMENT SHALL BE REMOVED FROM STRUCTURE TO BE REMOVED. ACCESSIBLE RACEWAYS, WIRES, BOXES, SWITCHES AND OTHER ELECTRICAL ITEMS ASSOCIATED WITH THIS WORK SHALL BE REMOVED IF NOT REQUIRED FOR NEW EQUIPMENT TO CONTINUE IN SERVICE.
8. a) MODIFY AND REROUTE EXISTING WIRING AS REQUIRED TO ACCOMPLISH INDICATED WORK AND CONTINUE SERVICE TO LOADS BEYOND AREA IN WHICH WORK IS DONE.
   b) CONTRACTOR SHALL RE–USE EXISTING SPARE BRANCH CIRCUIT BREAKER AND/OR EXISTING BRANCH CIRCUITS PRESENTLY SERVING ELECTRICAL DEVICES BEING REMOVED IN AREAS BEING REMODELED. ACTUAL CIRCUIT NUMBERS MAY VARY FROM ACTUAL FIELD CONDITIONS BUT ARE SHOWN TO FACILITATE CIRCUITING LAYOUT.
9. ALL MATERIAL REMOVED SHALL BE SISPOSED OF AS DIRECTED BY OWNER.
10. ALL WIRING INDICATED AS EXISTING IS BASED ON ORIGINAL CONTRACT DRAWINGS AND IS TO BE VERIFIED BY CONTRACTOR AT JOB SITE.
11. MINIMUM WIRE SIZE SHALL BE # 12 THHN / THWN UNLESS OTHERWISE NOTED ON PLANS.
12. ALL CONDUCTORS SHALL BE COPPER RUN IN METALLIC CONDUIT.
13. ALL CONDUCTORS SHALL BE RUN IN CONDUIT (METALLIC TYPE). IF PVC SCHEDULE 40 IS USED FOR UNDERGROUND FEEDERS ONLY, AN EQUIPMENT GROUND CONDUCTOR SIZED IN ACCORDANCE WITH N.E.C. 250–122 MUST BE INSTALLED AND CONDUIT SIZE INCREASED AS REQUIRED.
14. ALL MATERIALS SHALL BE U.L. APPROVED.
15. NEW TYPEWRITTEN PANEL TALLY SHALL BE FURNISHED AFTER JOB IS COMPLETED.
16. ALL BRANCH CIRCUITS SHALL BE PROPERLY PHASE BALANCED.
17. ALL NON POWER RELATED WIRING I N CEILING AIR CONDITIONING PLENUM RUNNING WITHOUT CONDUIT SHALL BE TEFLON COATED CLASSIFIED FOR USE IN PLENUMS.
18. SEE ARCHITECTURAL DRAWING FOR INFORMATION CONCERNING EXISTING CONDITIONS AND COUNTER DETAILS.
19. ALL BRANCH CIRCUITS TO HAVE A GREEN EQUIPMENT GROUNDING CONDUCTOR SIZED AS PER N.E.C. 250.122.
20. ALL DEVICES IN EXISTING WALLS NOT AFFECTED BY NEW CONSTRUCTION SHALL REMAIN ACTIVE.
21. ALL EMPTY CONDUITS TO BE PROVIDED WITH NYLON PULL STRINGS.
22. FUSES SHALL BE DUAL ELEMENT, TIME DELAY TYPE UNLESS OTHERWISE NOTED.
23. ALL LUMINARIES SHALL BE PROPERLY SUPPORTED IN ACCORDANCE WITH THE CEILING SYSTEM MANUFACTURER RECOMMENDATIONS AND LOCAL CODE REQUIREMENTS.
24. RISERS ARE DIAGRAMMATIC ONLY. THEY DO NOT SHOW EVERY BEND REQUIRED FOR THE INSTALLATION.
25. THIS DRAWING IS A GUIDE FOR THE ELECTRICAL INSTALLTION. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE A FUNCTIONING SYSTEM.
26. ALL CABLES SHALL BE RUN WITH OUT SPLICES EXCEPT IF OTHERWISE INDICATED.
27. ALL PULL AND JUNCTION BOXES SHAL BE ACCESSIBLE AT ALL TIMES.
28. EXACT POINT AND METHODS OF CONNECTION SHALL BE DETERMINED IN FIELD.
29. ALL WORK SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER.
30. ALL LOADS IN EXISTING PANELBOARDS ARE ESTIMATED.
31. CONTRACTOR SHALL INCLUDED IN HIS/HER BID SPECIFICATION BOOK REQUIREMENTS NO EXTRAS WILL BE ALLOWED FOR FAILURE TO DO SO.
32. THE ELECTRICAL CONTRACTOR'S SUB–CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL VOLTAGES ON PLANS UPON FIRST VISIT TO THE SITE. THE IN COMING SERVICE SHOULD CORRESPOND TO THE SPECIFICATIONS FOR THE LIGHTING FIXTURES AND THE H.V.A.C. EQUIPMENT AND BE PROPERLY NOTED ON THE ELECTRICAL PANEL DIAGRAMS AND RISERS. ANY DISCREPANCIES SHOULD BE REPORTED TO THE ARCHITECT IMMEDIATELY.
32. ALL RACEWAY ROUTED, INSULATED CONDUCTORS SYSTEM SHALL BE COLOR CODED AS FOLLOWS:

120/240V. 3ø SYSTEM
PHASE 'A' BLACK
PHASE 'B' ORANGE HOT LEG
PHASE 'C' BLUE
NEUTRAL WHITE GROUND GREEN

CITY OF MIAMI BEACH ... SUBMIT BY THE FOLLOWING:
RICAL: [illegible]
PREVENTION:
PUBLIC WORKS:
ROOFING:

City of Miami Beach
Fire Prevention Division
PLANS APPROVED

JOSE M. MARTINEZ
LICENSE
No. 56018
STATE OF FLORIDA
PROFESSIONAL ENGINEER
6/3/15

JMM Consulting Engineers LLC
Certificate of Authorization #9602
Jose M. Martinez P.E. #56018
10251 SUNSET DRIVE Suite 103
Miami, Florida 33173
TEL (305) 255–1621
FAX (305) 271–0090

BEAME ARCHITECTURAL PARTNERSHIP
3059 GRAND AVENUE, SUITE 440
COCONUT GROVE, FLORIDA 33133
E-mail - bap@bapdesign.com
Florida Corp AA0002364
PH 305.444.7100 FX 305.444.9803

OWNER:
J3 VENTURES LLC
1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

LAWRENCE BEAME, R.A.
REGISTRATION # 7871

NUMBER:	DATE:	ITEM:
3	5/21/15	GENERAL REVISIONS
1	10/06/14	CITY COMMTS. / CHANGE OF SCOPE

REVISIONS

HOTEL EVA INTERIOR IMPROVEMENTS

1506 COLLINS AVENUE
MIAMI BEACH,
FLORIDA 33139

PRJ. MNGR. | DRAWING BY | SCALE

SHEET TITLE: PANEL SCHEDULES

JOB NUMBER | DATE | SHEET NUMBER: E2.05

BREV152034
1506 Collins Ave
Office Company
B1404595

STRUCTURAL CALCULATIONS

FOR

Hotel Eva Generator

1506 Collins Ave.
Miami Beach, FL 33139

Prepared by:

UNITED Engineering, Inc.

Certificate of Authorization No. 29691

Project No.: 0213-03

January 7, 2016

UNITED Engineering, Inc. • 9700 S. Dixie Highway, Suite 880 • Miami, FL 33156 • 786.347.5250 • www.unitedeng.pro

UNITED Engineering, Inc.

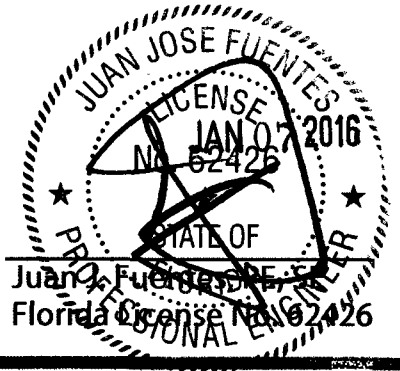
Index 1 of 2

Table of Contents

I. ITEMS **Pages**

Certificate of Authorization No. 29691

Calculations have been prepared by the undersigned engineer assuming responsibility for manual and computer generated information.



Juan J. Fuentes, P.E.
Florida License No. 62426

UNITED Engineering Inc.

PROJECT No. 0213-03 SHEET No. ____ OF ____
PROJECT NAME HOTEL EVA GENERATOR
CALCULATED BY AM DRAWN BY ____
SCALE ____ DATE 01/16

Index 2 of 2

= PROJECT LOCATION

- 1506 COLLINS AVE, MIAMI BEACH, FL 33139

= SCOPE

- New 110 sf concrete pad for electric generator.

= SOFTWARE

- Wind Loading- Standards Design Group Wind Load on Structures

= CODES

- **GRAVITY**

  FLORIDA BUILDING CODE 2010

- **WIND**

  ASCE 7-10

= LOADING

- **GRAVITY**

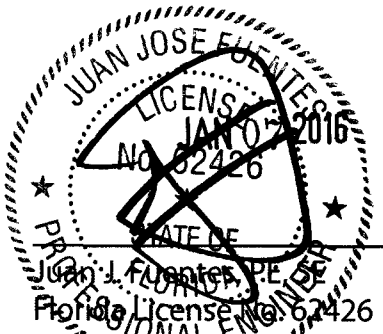
  Generator: Weight= 5,750 lbs

- **WIND**

  Please refer to attached "Wind Loads on Structures" analysis.

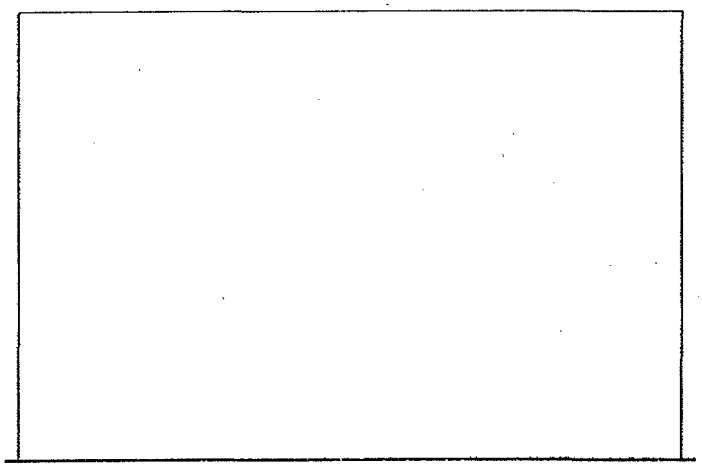
= GEOTECHNICAL REPORT

- Per Florida Building Code 1818.2, the allowable soil bearing pressure has been presumed to be 2,000 psf.



Juan J. Fuentes, P.E.
Florida License No. 62426

Project Name: Hotel Eva Generator



Location: Miami Beach, FL

By: AM

Start Date: 01/16

Comments:

ASCE7-10

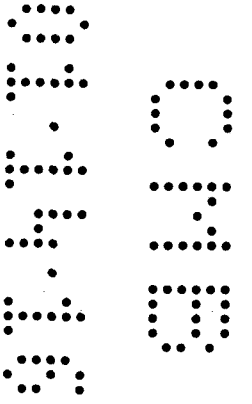
Local Information

Terrain Exposure: D
Basic Wind Speed: 175 mph

Topography: None

Optional Factors

This project uses load combinations from ASCE 7.



Hotel Eva Generator

January 7, 2016

ASCE7-10

Sign Structure

Structure Category: II

Sign Dimensions

Width: 9.0 ft

Height: 6.0 ft

Support Dimensions

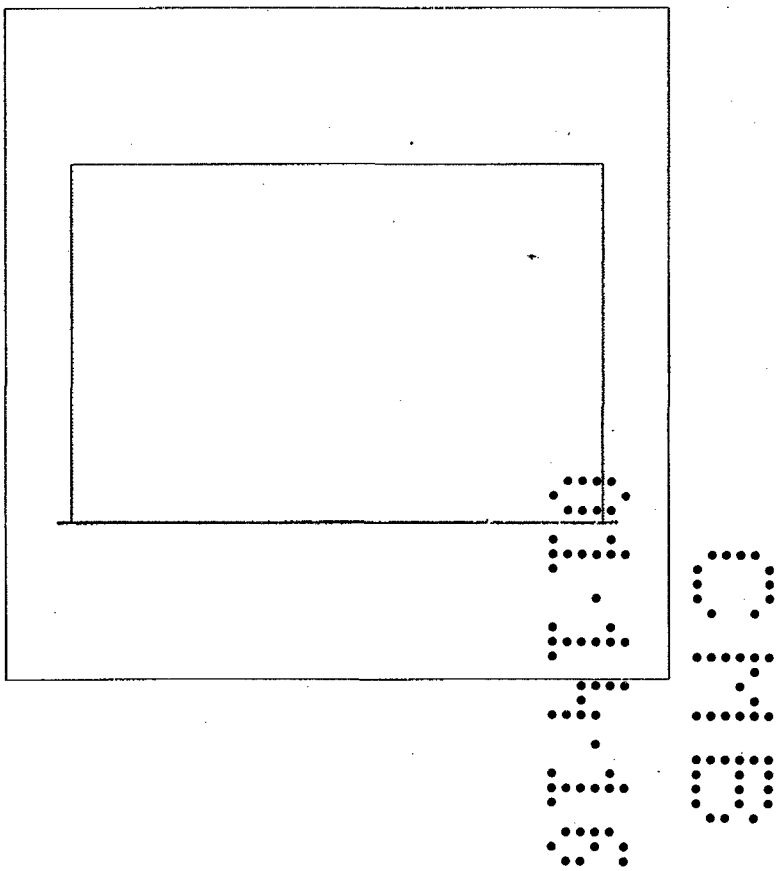
Number of Supports: 0

Sign Openings

Area of Openings: 0.0 sq ft

Percent Solid: 100 %

Sign is Solid



ASCE7-10

MWFRS Net Pressures

This data was calculated using the building of all heights method.

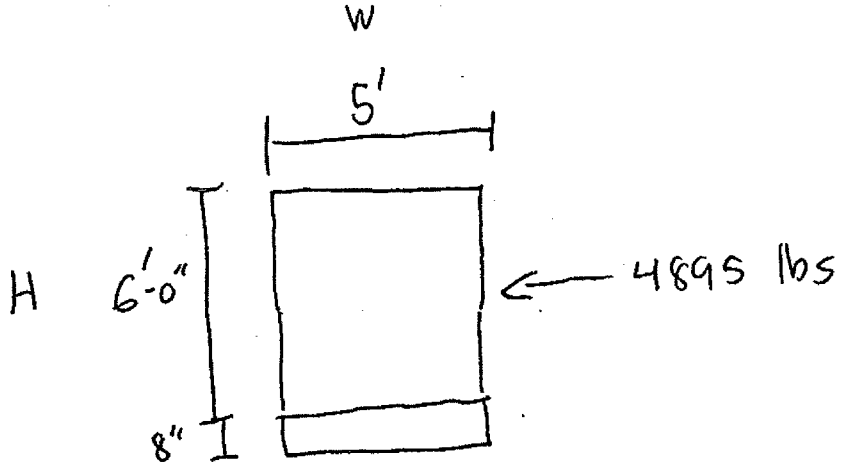
Wind Direction Normal to Face

	z (ft)	q (psf)	G	Cf	Af (sqft)	Force (lbf)
Sign Calculations						
	0.0 - 3.0	68.7	0.91	1.45	27.00	2447.5
	3.0 - 6.0	68.7				2447.5

L H

LOAD = 68.7psf (.91) (1.45) (9') (6') =

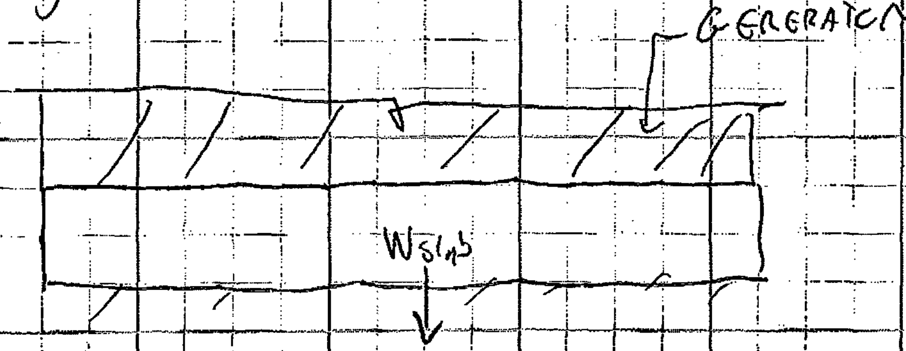
= 4,895 lbs



UNITED Engineering, Inc.

PROJECT No. 0213-01 SHEET No. ____ OF ____
PROJECT NAME HOTEL EVA GENERATOR
CALCULATED BY AM DRAWN BY ________
SCALE ________ DATE 01/16

= Overturning generator WIND



= Overturning moment (WIND from W/S)

= 4,895 lbs * (8/12 + 3') = 17,948 lb-ft (ultimate)

= Resisting moment

= Weight of the Unit = 5,750 lbs

5,750 lbs (2.5) = 14,375 lb-ft

= Wslab = 150 (8/12) (9') (5') = 4,500 lbs

4,500 lbs (2.5) = 11,250 lb-ft

25,625 lb-ft

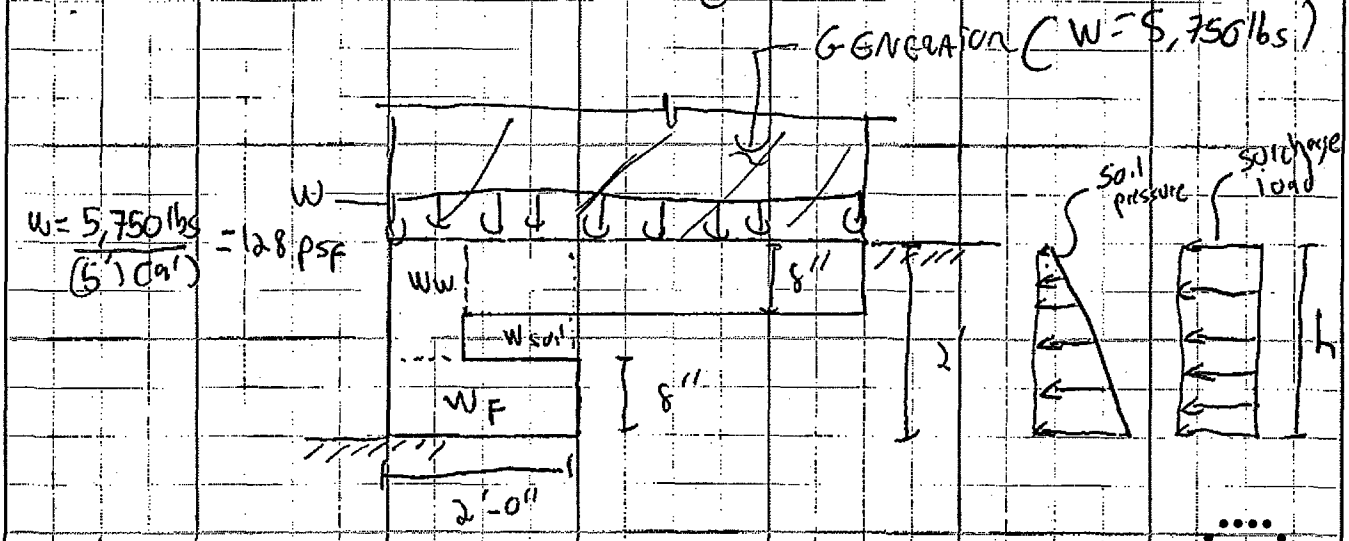
25,625 lb-ft > 17,948 lb-ft ∴ ok

.6D > .6W ∴ ok

UNITED Engineering, Inc.

PROJECT No. 0213-03 SHEET No. ____ OF ____
PROJECT NAME HOTEL EVA GENERATOR
CALCULATED BY AM DRAWN BY ____
SCALE ____ DATE 01/16

GENERATOR WALL OVERTURNING CHECK



$w = \frac{5,750 \text{ lbs}}{(5')(9')} = 128 \text{ psf}$

= Overturning moments

- Soil pressure

$-\frac{1}{2}\gamma_s K_a h^2 = \frac{1}{2}\left(120 \frac{\text{lbs}}{\text{ft}^3}\right)(.5)(2')^2 = 120 \text{ lb/ft}$

$-M_o = 120 \frac{\text{lb}}{\text{ft}}\left(\frac{2'}{3}\right) = 80 \frac{\text{lb-ft}}{\text{ft}}$

- Surcharge load

$-\frac{w}{\gamma_s} K_a \gamma_s h = \frac{28 \text{ psf}}{120 \text{ pcf}}(.5)(120 \text{ pcf})(2') = 128 \text{ lb/ft}$

$-M_o = 128 \frac{\text{lb}}{\text{ft}}\left(\frac{2'}{2}\right) = 128 \frac{\text{lb-ft}}{\text{ft}}$

- Total overturning moment = $208 \frac{\text{lb-ft}}{\text{ft}}$

= Resisting moments

- FOOTING WEIGHT

$-150 \text{ pcf}\left(\frac{8}{12}\right)(2') = 200 \frac{\text{lb}}{\text{ft}}$

$-M_R = 200 \text{ lb-ft}\,(1) = 200 \frac{\text{lb}}{\text{ft}}\text{-ft}$

UNITED Engineering, Inc.

PROJECT No. 0213-03 SHEET No. ____ OF ____
PROJECT NAME HOTEL GVA GENERATOR
CALCULATED BY AM DRAWN BY ____
SCALE ____ DATE 01/16

GENERATOR WALL OVERTURNING CHECK

1. Resisting Moment

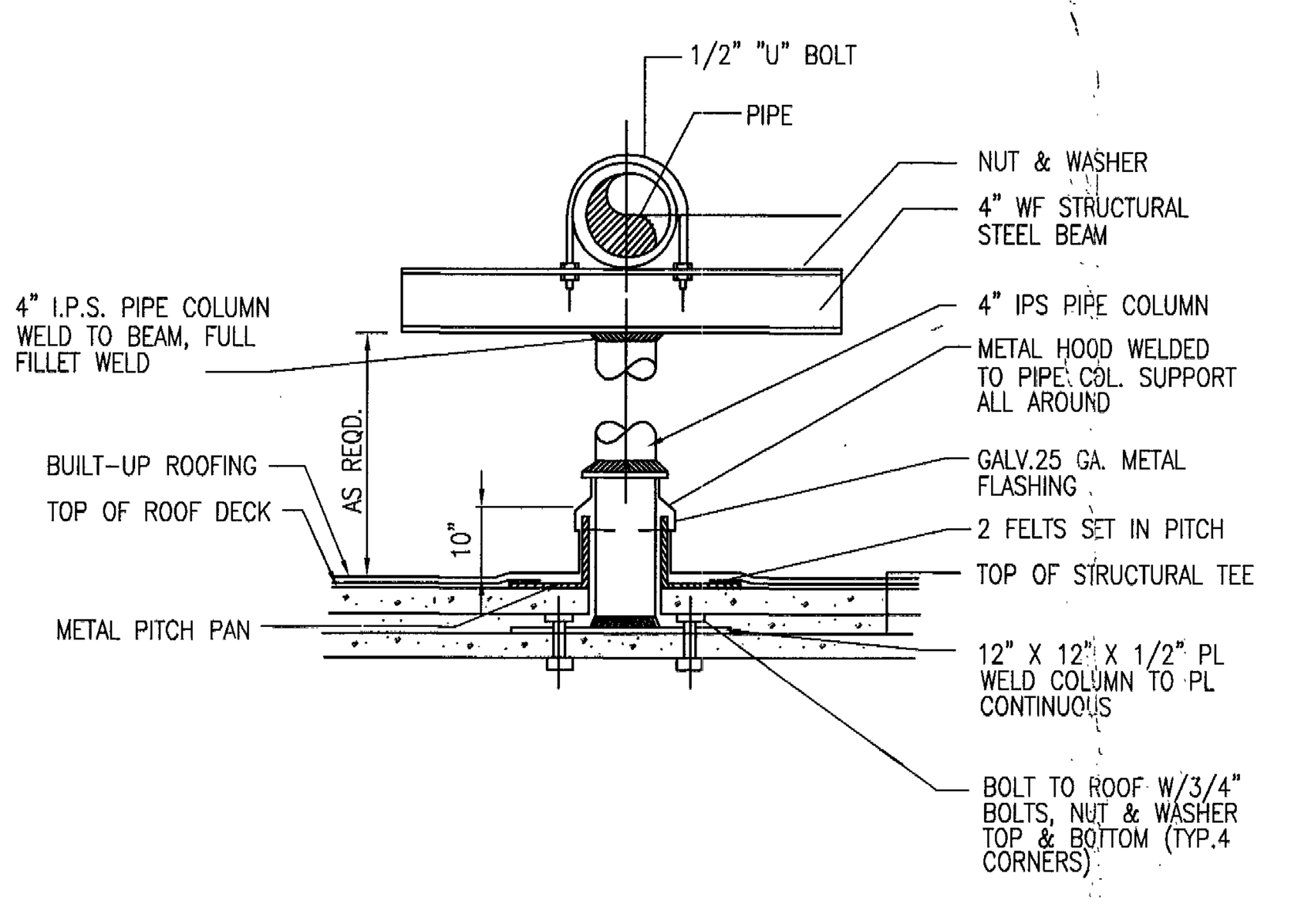
- W_{wall}
  - $150\ pcf \left(\frac{8}{12}\right)\left(\frac{16}{12}\right) = 133.33\ \frac{lb}{ft}$
  - $M_R = 133.33\ \frac{lb}{ft}\left(\frac{4}{12}\right) = 44.44\ \frac{lb\text{-}ft}{ft}$
- W_{soil}
  - $120\ pcf \left(\frac{8}{12}\right)\left(\frac{16}{12}\right) = 107\ \frac{lb}{ft}$
  - $M_R = 107\ \frac{lb}{ft}\ (1.33') = 142.31\ \frac{lb}{ft}\text{-}ft$
- Total resisting moment $= 387\ \frac{lb\text{-}ft}{ft}$

2. Safety Factor

$$\frac{M_R}{M_o} = \frac{387\ lb\text{-}ft/ft}{208\ lb\text{-}ft/ft} = 1.86$$

$1.86 > 1.5 \therefore OK$

BREV1600675



TYPICAL ROOFTOP PIPING SUPPORT DETAIL
N.T.S.

OFFSET PIPE CLAMP
Figure 179
The Offset Pipe Clamp is used on pipe lines running at a fixed distance from a wall or floor. The standard clearance is two inches (51mm) from the O.D. of pipe to the face of the surface. Non-standard clearances can be fabricated upon request.
Material: Carbon Steel.
Load Rating: Up to 650° F (343° C).
Finish: Plain, Painted, Electro-Galvanized, Hot-Dip Galvanized.
Ordering: Specify pipe size, figure number, and finish. For Metric applications specify Figure M179.

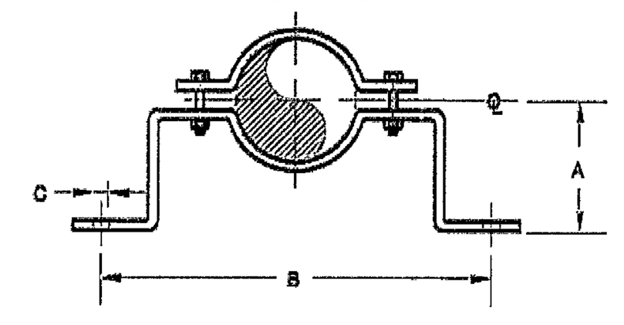


FIGURE 179 – OFFSET PIPE CLAMP

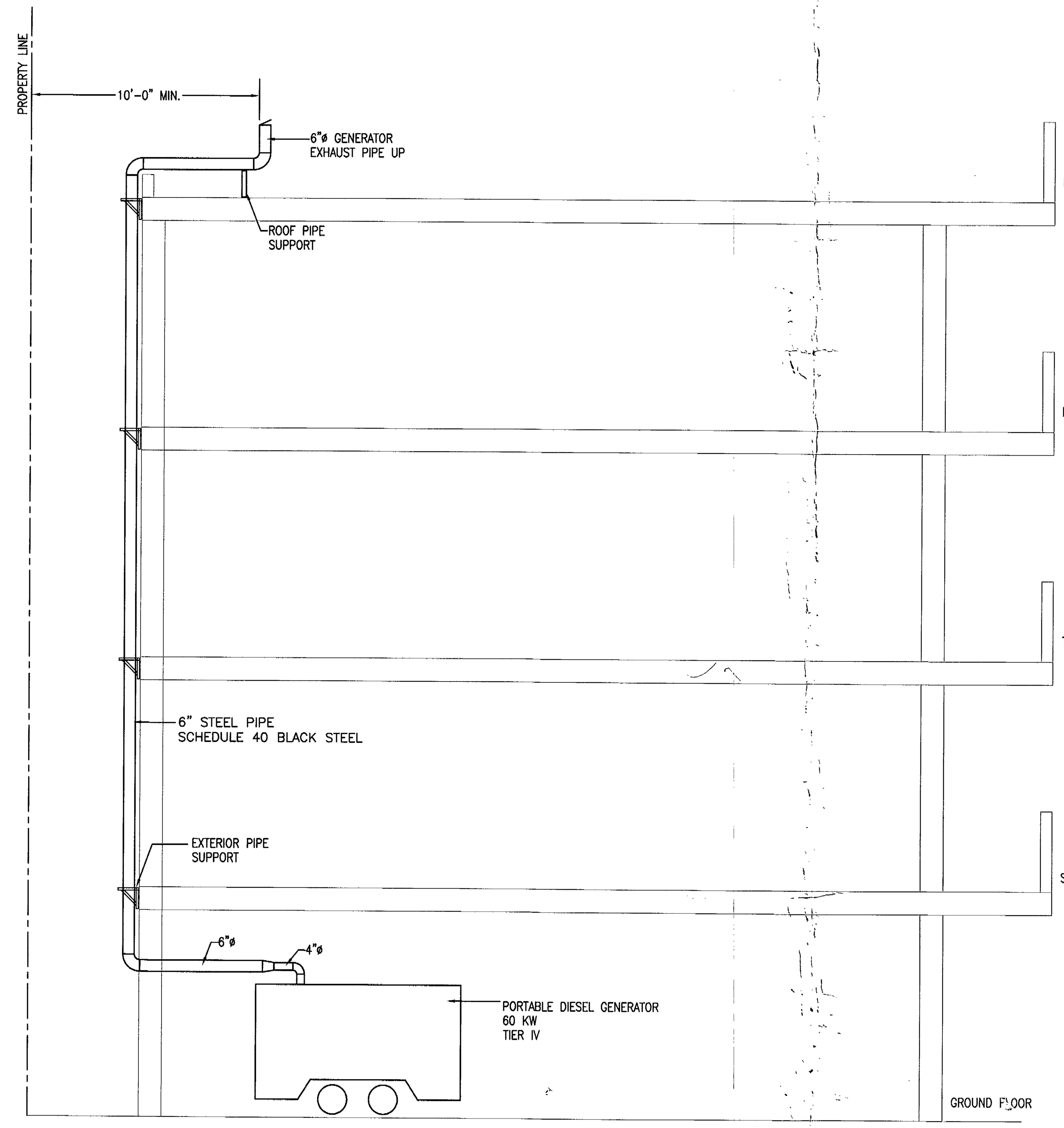
PIPE SIZE	MAX LOAD	A	B	C	WGT EACH
¾	190	2¾	8¾	7/16	1.3
20	845	70	222	11	0.59
1	190	2⅞	9⅛	7/16	1.4
25	845	73	235	11	0.64
1¼	190	3 1/16	9¾	7/16	1.5
32	845	78	248	11	0.68
1½	190	3 3/16	10	7/16	1.6
40	845	81	254	11	0.73
2	420	3½	11¼	9/16	2.8
50	1868	89	286	14	1.27
2½	420	3¾	11¾	9/16	2.9
65	1868	95	298	14	1.32
3	420	4 1/16	12¾	9/16	3.2
80	1868	103	327	14	1.45
4	610	4 9/16	13¾	9/16	4.2
100	2714	116	352	14	1.91
5	610	5 1/16	15⅝	11/16	6.5
125	2714	129	397	17	2.95
6	870	5⅝	16¾	11/16	7.2
150	3870	143	425	17	3.27
8	870	6⅝	18¾	11/16	8.3
200	3870	168	476	17	3.76
10	1050	7⅜	21½	13/16	12.4
250	4671	187	546	21	5.62
12	1200	8⅜	24⅞	13/16	21.0
300	5338	213	632	21	9.53

DIMENSIONS	TEMPERATURE	LOADS	WEIGHT
INCHES / MILLIMETERS	FAHRENHEIT / CELSIUS	POUNDS / NEWTONS	POUNDS / KILOGRAMS

CLAMP MANUFACTURER: BERGEN

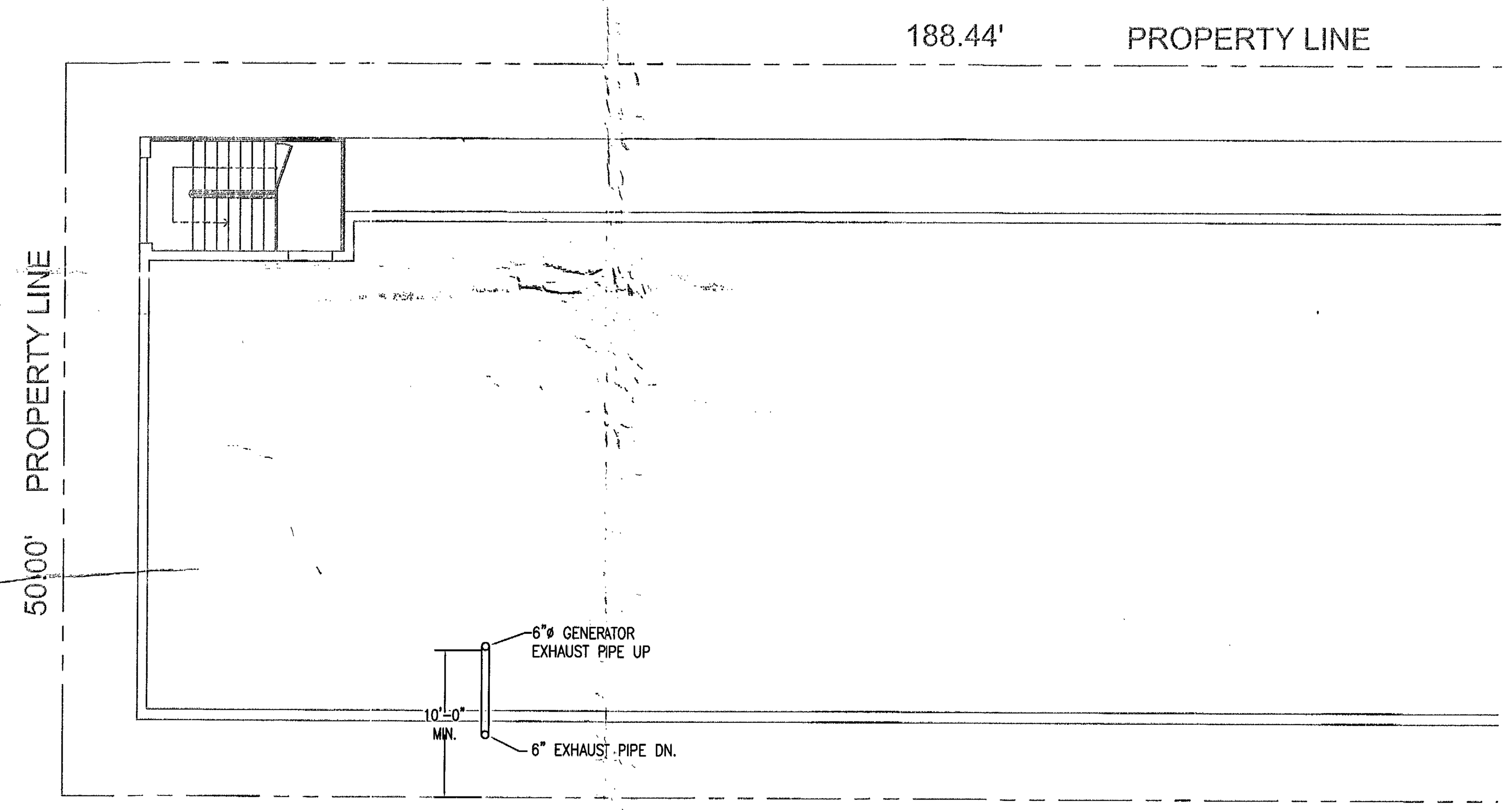
39

TYPICAL VERTICAL PIPING SUPPORT DETAIL
N.T.S.

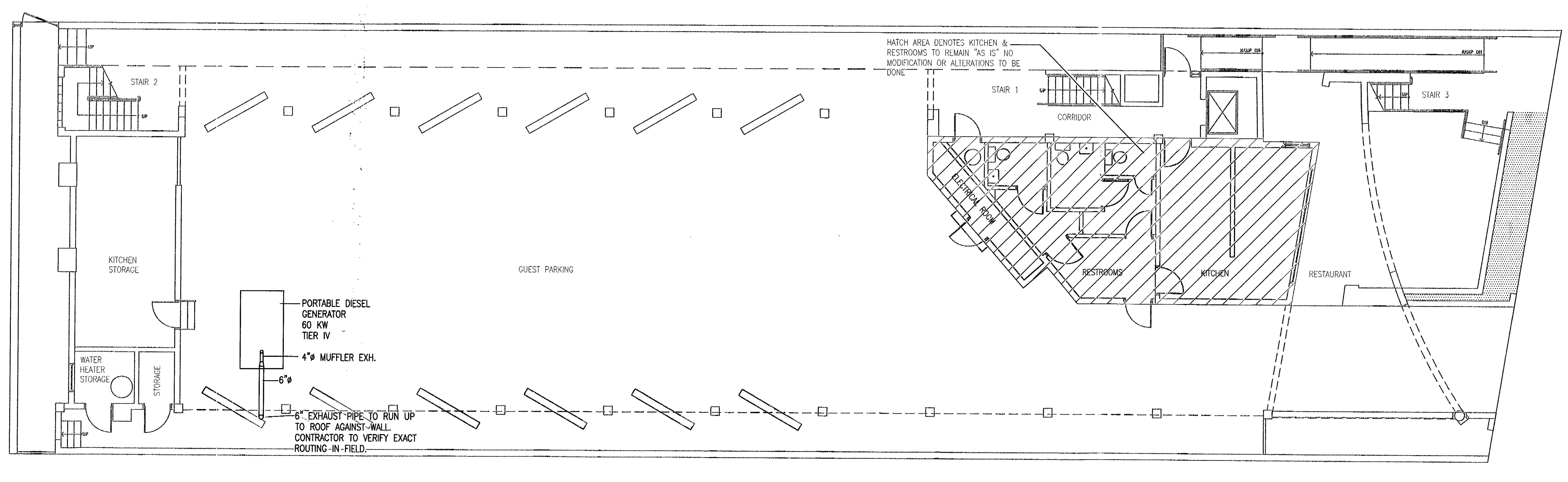


NOTE:
INSULATE GENERATOR EXHAUST PIPE AND MUFFLERS WITH 1-1/2" CALCIUM SILICATE INSULATION. PROVIDE .016" THICK ALUMINUM JACKET.

03 **EXHAUST PIPE RISER DIAGRAM**
SCALE: N.T.S.



02 **PARTIAL ROOF MECHANICAL PLAN**
SCALE: 1/8"=1'-0"



01 **GROUND LEVEL MECHANICAL PLAN**
SCALE: 1/8"=1'-0"

N

THIS SHEET HAS BEEN REVISED/REPLACED ORIGINAL SIGNATURE STAMP REMAINS VALID

OFFICE COPY
CITY OF MIAMI BEACH
APPROVED FOR PERMIT BY THE FOLLOWING:

BUILDING:	N/A 12-16-15
ZONING:	
PLUMBING:	12/16/15
ELECTRICAL:	02/03/2016
MECHANICAL:	12/16/15
FIRE PREVENTION:	2/3/16
FLOOD:	
PUBLIC WORKS:	
STRUCTURAL:	12/16/15
ELEVATOR:	
ROOFING:	

City of Miami Beach
Fire Prevention Division
PLANS APPROVED

JOSE M. MARTINEZ LICENSE No. 56018 STATE OF FLORIDA PROFESSIONAL ENGINEER

JMM Consulting Engineers LLC
Certificate of Authorization #9682
Jose M. Martinez, P.E. #56018
10251 SUNSET DRIVE Suite 103
Miami, Florida 33173
TEL (305) 255-1821
FAX (305) 271-0090

BEAME ARCHITECTURAL PARTNERSHIP
3059 GRAND AVENUE, SUITE 440
COCONUT GROVE, FLORIDA 33133
E-mail : bap@bapdesign.com
Florida Corp AA0002364
PH 305.444.7100 FX 305.444.9803

OWNER:
J3 VENTURES LLC
1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

LAWRENCE BEAME, R.A.
REGISTRATION # 7871

NUMBER:	DATE:	ITEM:
4	12/2/15	OWNER'S REQUEST

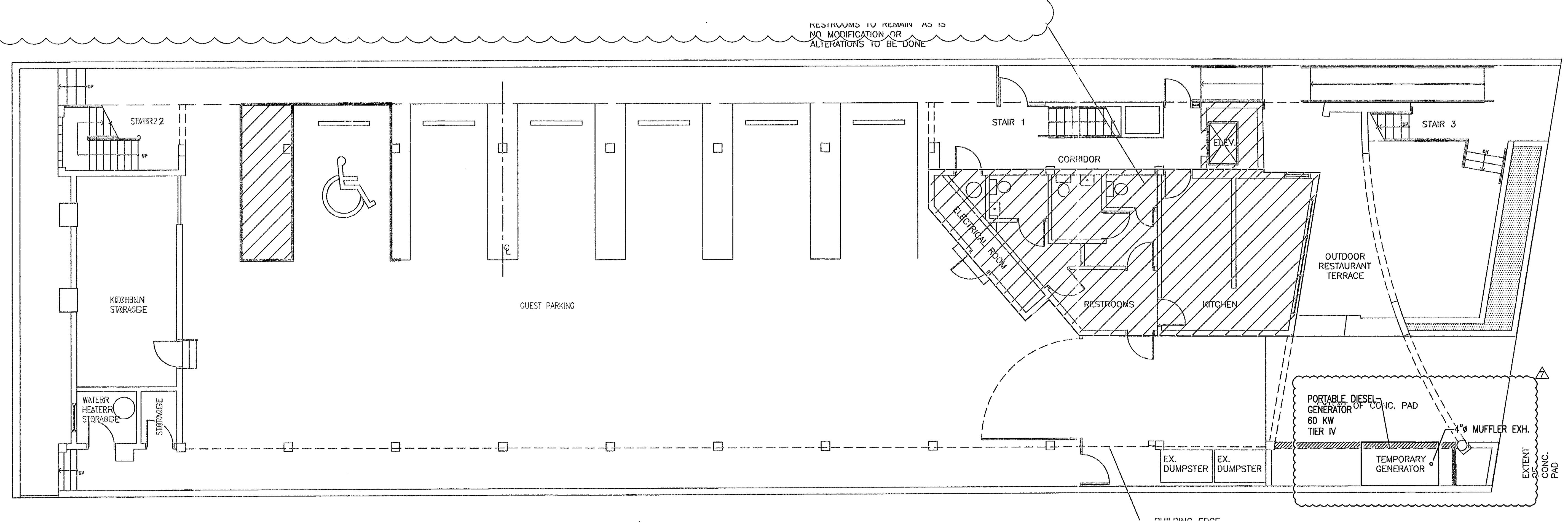
REVISIONS

HOTEL EVA INTERIOR IMPROVEMENTS
1506 COLLINS AVENUE
MIAMI BEACH
FLORIDA 33139

PRJ. MNGR. | DRAWING BY | SCALE

SHEET TITLE
NEW GROUND FLOOR MECHANICAL PLAN
FRONT

JOB NUMBER | SHEET NUMBER [redacted]
DATE



01 **GROUND LEVEL MECHANICAL PLAN**
SCALE: 1/8"=1'-0"

N

JMM Consulting Engineers LLC
Certificate OF Authorization #9692
Jose M. Martinez, P.E. #56018
10251 SUNSET DRIVE Suite 103 TEL. (305) 255-1621
Miami, Florida 33173 FAX (305) 271-0090

TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS SUBMITTED HEREWITH COMPLY WITH EXISTING INTERPRETATIONS AND PROVISIONS OF THE APPLICABLE BUILDING CODES. THIS DRAWING IS THE SOLE PROPERTY OF 'JMM CONSULTING ENGINEERS LLC' AND IS AN INSTRUMENT OF SERVICE NOT TO BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF JMM CONSULTING ENGINEERS, LLC.

B E A M E
ARCHITECTURAL
PARTNERSHIP

3059 GRAND AVENUE, SUITE 440
COCONUT GROVE, FLORIDA 33133
E-mail : bap@bapdesign.com
Florida Corp AA0002364
PH 305.444.7100 FX 305.444.9803

OWNER:
J3 VENTURES LLC
1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

LAWRENCE BEAME, R.A.
REGISTRATION # 7871

NUMBER:	DATE:	ITEM:
2	01/07/16	BUIDING DEPARTMENT COMM.
1	12/2/15	OWNER'S REQUEST

REVISIONS

HOTEL EVA
INTERIOR
IMPROVEMENTS
1506 COLLINS AVENUE
MIAMI BEACH,
FLORIDA 33139

City of Miami Beach
Fire Prevention Division
PLANS APPROVED

JOSE M. MARTINEZ LICENSE No. 56018 STATE OF FLORIDA PROFESSIONAL ENGINEER

REVIEWED
CITY OF MIAMI BEACH
FIRE DEPARTMENT

PROJ. MNGR. | DRAWING BY | SCALE

SHEET TITLE
NEW GROUND FLOOR MECHANICAL PLAN

JOB NUMBER
DATE
SHEET NUMBER
M1.00

LIGHTING FIXTURE SCHEDULE

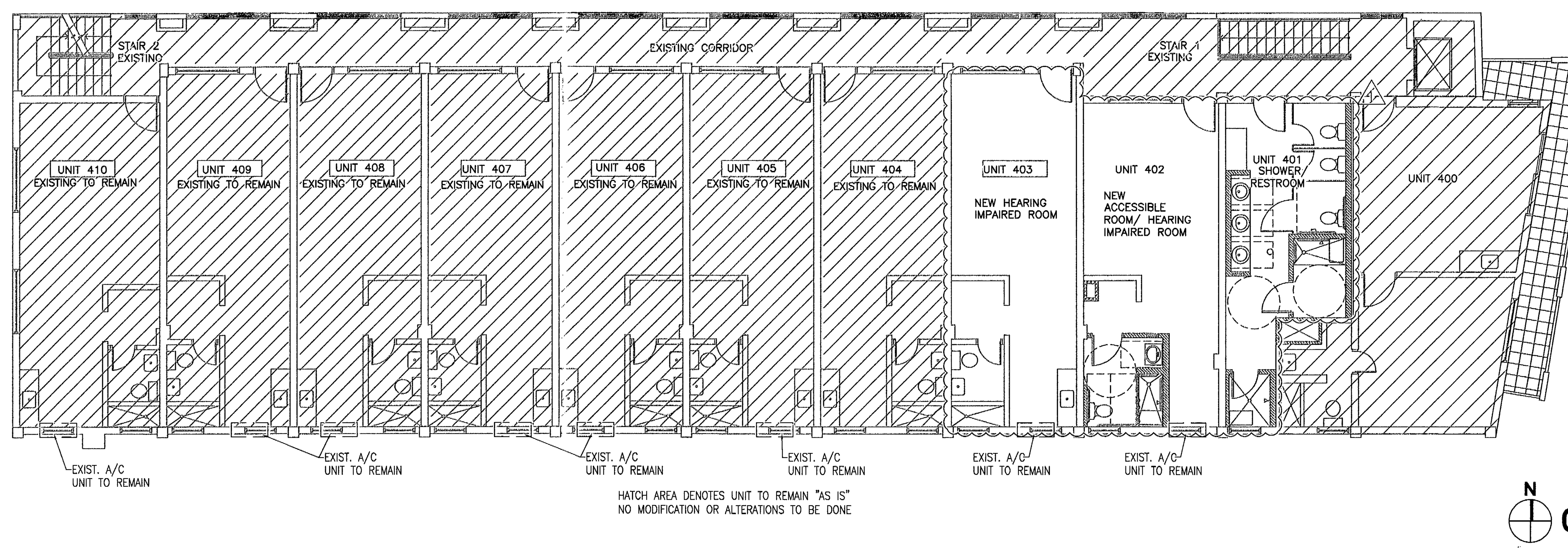
ALL FIXTURES SHALL BE U.L. APPROVED

MARK	MANUFACTURER	MODEL No.	TYPE	MOUNTING	LAMPS	VOLTS	NO	REMARKS
A	6" DOWN LIGHT MAXILUME	SELECTED BY OWNER	RECESSED DOWN-LIGHTS	CEILING	FLUORESCENT	120 VOLTS	2	--
B	6" DOWN LIGHT MAXILUME	SELECTED BY OWNER	RECESSED DOWN-LIGHTS	CEILING	FLUORESCENT	120 VOLTS	2	SHOWER V.T. (VAPOR TIGHT FOR WET LOCATIONS)
C	VANITY LTG LITHONIA	SELECTED BY OWNER	WALL ABOUT MIRROR	WALL	FLUORESCENT	120 VOLTS	1	--
D	6" DOWN LIGHT MAXILUME	SELECTED BY OWNER	RECESSED DOWN-LIGHTS	CEILING	FLUORESCENT	120 VOLTS	1	--
DE	6" DOWN LIGHT LITHONIA	SELECTED BY OWNER	RECESSED DOWN-LIGHTS	CEILING	FLUORESCENT	120 VOLTS	1	BATTERY BACK-UP
E	6" DOWN LIGHT LITHONIA	SELECTED BY OWNER	RECESSED DOWN-LIGHTS	CEILING	FLUORESCENT	120 VOLTS	1	BATTERY BACK-UP
F	2 X 4 LITHONIA	SELECTED BY OWNER	FLUORESCENT DOWN-LIGHTS	CEILING	FLUORESCENT	120 VOLTS	2	--
X	EXIT SIGN LITHONIA	SELECTED BY OWNER	LED	UNIVERSAL	LED	120 VOLTS	1	BATTERY BACK-UP
X1	COMBO EXIT SIGN LITHONIA	SELECTED BY OWNER	LED	UNIVERSAL	LED	120 VOLTS	1	BATTERY BACK-UP

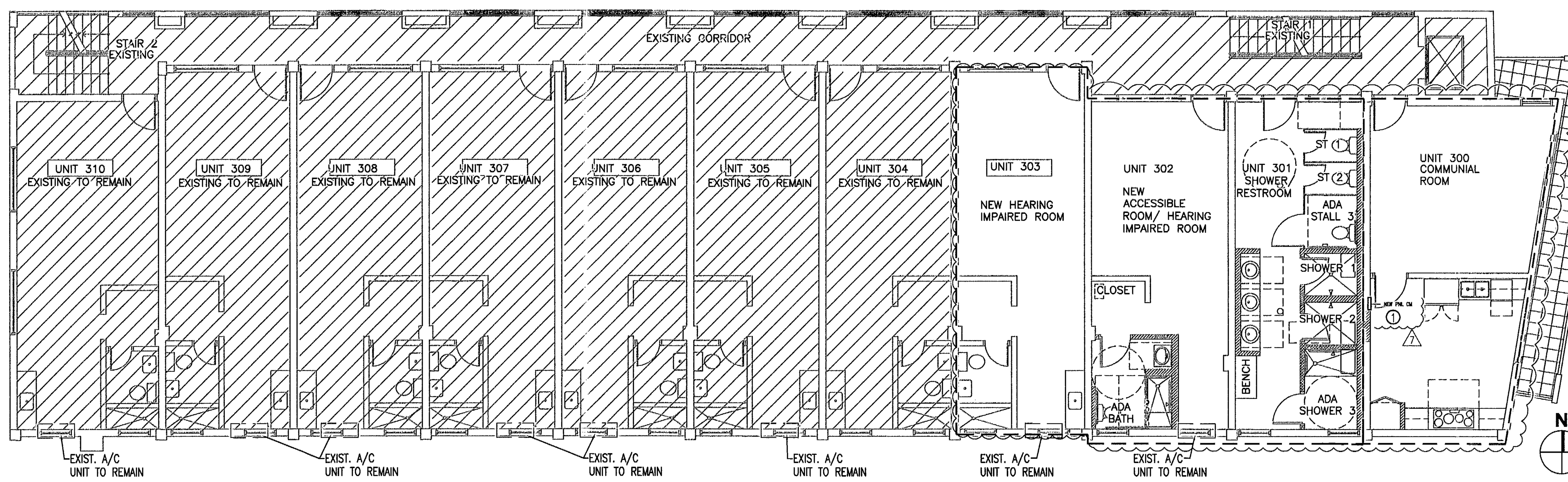
ALL LIGHTING FIXTURES INSTALLATION AND CONTROLS SHALL BE INSTALLED PER MANUFACTURER RECOMMENDATIONS BY LIGHTING SUPPLIER/CONTRATCOR

ELECTRICAL CONTRACTOR TO COORDINATE FOR INTERIOR RENOVATION PRIOR TO TO ORDERING AND FINAL BID/ OR INITIAL JOB CONSTRUCTION. NOTIFY THE ARCHITECT OR ENGINEER OF ANY DISCREPANCIES. FOR ELECTRICAL REFERENCE ONLY

ELECTRICAL CONTRACTOR TO INSPECT EXISTING WIRING AND REPAIR IT IF REQUIRED

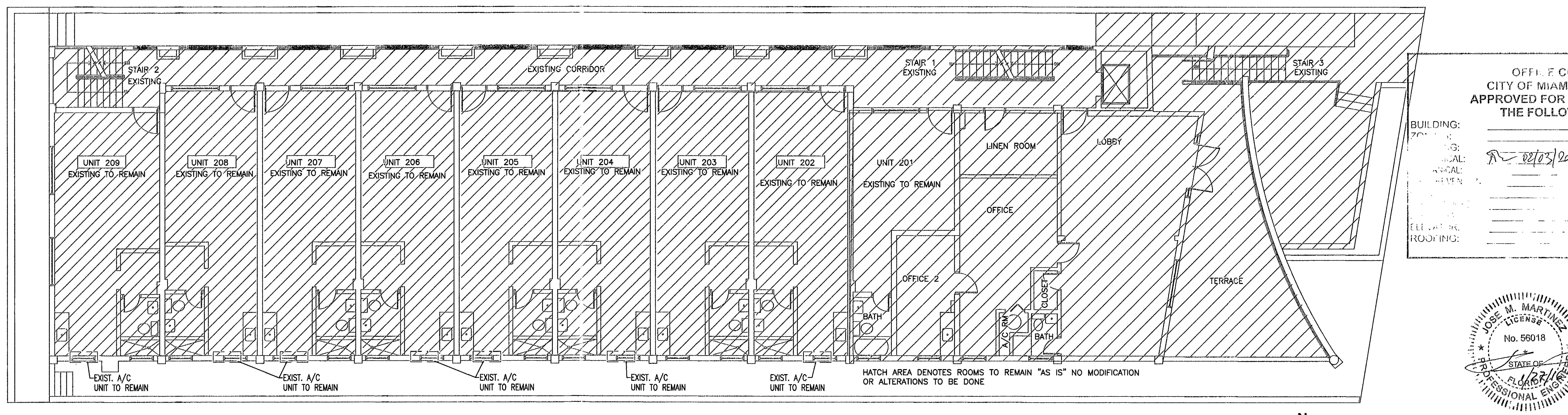


04 FOURTH LEVEL NEW ELECTRICAL PLAN
SCALE: 1/8"=1'-0"

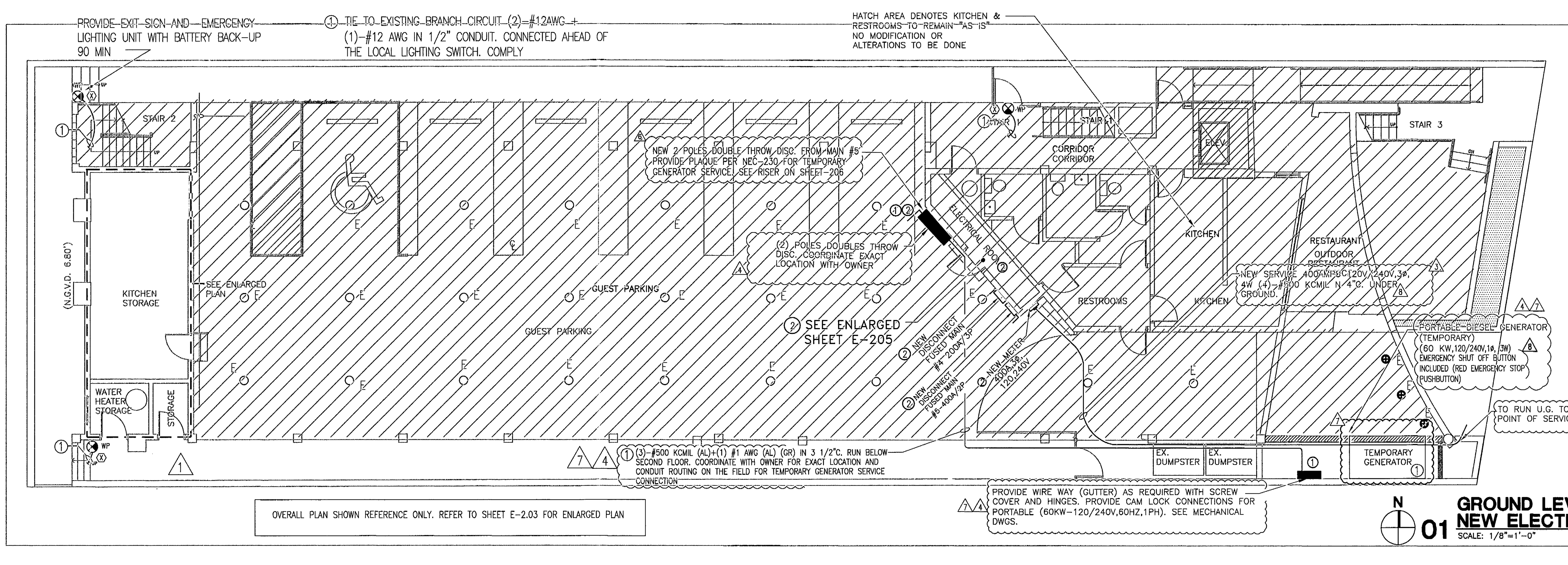


ELECTRICAL CONTRACTOR TO COORDINATE WITH OWNER AND ARCHITECT FOR INTERIOR RENOVATION. PRIOR TO TO ORDERING AND FINAL BID/ OR INITIAL JOB CONSTRUCTION. NOTIFY THE ARCHITECT OR ENGINEER OF ANY DISCREPANCIES. FOR ELECTRICAL REFERENCE ONLY

03 THIRD LEVEL NEW ELECTRICAL PLAN
SCALE: 1/8"=1'-0"



02 SECOND LEVEL EXISTING ELECTRICAL PLAN
SCALE: 1/8"=1'-0"



01 GROUND LEVEL NEW ELECTRICAL PLAN
SCALE: 1/8"=1'-0"

ADDITIONAL ELECTRICAL NOTES:

1. CONTRACTOR TO PROVIDE LEGIBLE PLAQUE FOR DISCONNECTS DOUBLES THROW, CAM LOCK AND PANEL CM WITH THE FOLLOWING "TEMPORARY GENERATOR SERVICE " CONDITION IS TEMPORARY UNTIL FPL SERVICE IS BROUGHT IN TO BUILDING ONCE FPL SERVICE IS CONNECTED. TEMPORARY GENERATOR WILL BE DISCONNECTED PER NEC-230.2 (7)
2. CONTRACTOR TO PROVIDE ON NEW AND EXISTING MAINS AND PANELS PERMANENT LOAD INDEX LABEL INDICATING TYPE OF LOAD SERVICE PER NEC- 230.2 (E)

(6)

JMM Consulting Engineers LLC
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Jose M. Martinez, P.E. #56018
10251 SUNSET DRIVE Suite 103 TEL. (305) 255-1621
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8	01/27/16	BUIDING DEPARTMENT COMM.
7	01/07/16	BUIDING DEPARTMENT COMM.
6	12/23/15	BUIDING DEPARTMENT COMM.
4	12/02/15	OWNER REQUEST
3	5/21/15	GENERAL REVISIONS
1	10/06/14	CITY COMMTS. / CHANGE OF SCOPE

REVISIONS

HOTEL EVA INTERIOR IMPROVEMENTS

1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

PRJ. MNGR. | DRAWING BY | SCALE

SHEET TITLE
NEW OVERALL ELECTRICAL FLOOR PLANS

JOB NUMBER | SHEET NUMBER
DATE

E2.02

NEW TYPICAL PANELS AH

MOUNTING: FLUSH MOUNTED
SHORT CIRCUIT RATING: 10K AIC
LOCATION: SEE ENLARGED POWER PLAN

CU BUS/GND. BUS
(UNITS 303 & 403)

VOLTS: 120/240V, 1Ø, 3W
MAIN BUS AMPS: 125A
MAIN BREAKER AMPS: MLO

LOAD	COND.	WIRE	TRIP	POLE	DESCRIPTION	CKT No.	CKT No.	DESCRIPTION	POLE	TRIP	WIRE	COND.	LOAD
(*)	1/2"	12	20	1	GENERAL LIGHTING	1	2	GENERAL LIGHTING	1	20	12	1/2"	(*)
(*)	1/2"	12	20	1	GENERAL LIGHTING	3	4	GENERAL LIGHTING	1	20	12	1/2"	(*)
(*)	1/2"	12	20	1	GENERAL LIGHTING	5	6	RECEPTACLES FOR TOILET	1	20	12	1/2"	(*)
200	1/2"	12	20	2	EXISTING AC UNIT	7	8	GENERAL LIGHTING	1	20	12	1/2"	(*)
					MCA: 1 AMPS	9	10	SPACE	–	–	–	–	–
(*)	1/2"	12	20	1	ANNUNCIATOR/H. IMPAIRED	11	12	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	13	14	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	15	16	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	17	18	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	19	20	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	21	22	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	23	24	SPACE	–	–	–	–	–

TOTAL CONNECTED LOAD: SEE DEMAND ANALYSIS

1 (*) PART OF THE 2W/SQ.FT. LOAD AND PROVIDE AFCI TYPE BKR (NEC-210.12)
2. EXISTING BRANCH TO BE INVESTIGATED BY EC. PROVIDE PERMANENT MARKERS SHOWING LOAD IDENTIFICATION (WITH PERMANENT LABELS.)
3. PROVIDE CONDUITS, WIRING AND BKRS AS NOTED.

(*) PART OF THE 2W/SQ.FT. LOAD AND PROVIDE AFCI TYPE BKR (NEC-210.12)

NEW PANEL AH

MOUNTING: FLUSH MOUNTED
SHORT CIRCUIT RATING: 10K AIC
LOCATION: SEE ENLARGED POWER PLAN

ACCESSIBLE & HEARING IMPAIRED ROOM
(UNITS 402 & 302)
CU BUS/GND. BUS

VOLTS: 120/240V, 1Ø, 3W
MAIN BUS AMPS: 125A
MAIN BREAKER AMPS: MLO

LOAD	COND.	WIRE	TRIP	POLE	DESCRIPTION	CKT No.	CKT No.	DESCRIPTION	POLE	TRIP	WIRE	COND.	LOAD
(*)	1/2"	12	20	1	GENERAL LIGHTING	1	2	GENERAL LIGHTING	1	20	12	1/2"	(*)
(*)	1/2"	12	20	1	GENERAL LIGHTING	3	4	GENERAL LIGHTING	1	20	12	1/2"	(*)
(*)	1/2"	12	20	1	GENERAL LIGHTING	5	6	RECEPTACLES FOR TOILET	1	20	12	1/2"	(*)
200	1/2"	12	20	2	EXISTING AC UNIT	7	8	GENERAL LIGHTING	1	20	12	1/2"	(*)
					MCA: 1 AMPS	9	10	SPACE	–	–	–	–	–
(*)	1/2"	12	20	1	ANNUNCIATOR/H. IMPAIRED	11	12	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	13	14	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	15	16	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	17	18	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	19	20	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	21	22	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	23	24	SPACE	–	–	–	–	–

TOTAL CONNECTED LOAD: SEE DEMAND ANALYSIS

1. (*) PART OF THE 2W/SQ.FT. LOAD AND PROVIDE AFCI TYPE BKR (NEC-210.12)
2. EXISTING BRANCH TO BE INVESTIGATED BY EC. PROVIDE PERMANENT MARKERS SHOWING LOAD IDENTIFICATION (WITH PERMANENT LABELS.)
3. PROVIDE CONDUITS, WIRING AND BKRS AS NOTED.
4. EXISTING BRANCH CIRCUIT TO BE EXTENDED TO NEW PANEL LOCATION. PROVIDE NEW BRANCH CIRCUIT BREAKER CONDUIT AND WIRING AS NOTED

NEW TYPICAL PANEL CM

MOUNTING: FLUSH MOUNTED
SHORT CIRCUIT RATING: 22K AIC
LOCATION: SEE ENLARGED POWER PLAN

COMMUNAL ROOM
CU BUS/GND. BUS

VOLTS: 120/240V, 1Ø, 3W
MAIN BUS AMPS: 400A
MAIN BREAKER AMPS: MLO

LOAD	COND.	WIRE	TRIP	POLE	DESCRIPTION	CKT No.	CKT No.	DESCRIPTION	POLE	TRIP	WIRE	COND.	LOAD
400	1/2"	12	20	1	ILLUM. OPEN AREA	1	2	RECEPTACLES OPEN AREA	1	20	12	1/2"	360
400	1/2"	12	20	1	ILLUM. KITCHEN AREA	3	4	RECEPTACLES OPEN AREA	1	20	12	1/2"	360
8200	1"	6	50	2	COOK TOP (K1)	5	6	RECEPTACLES OPEN AREA	1	20	12	1/2"	360
					SEE EQUIPMENT NAME	7	8	RECEPTACLES KITCHEN AREA	1	20	12	1/2"	720
--	--	–	50	2	FUTURE KITCHEN EQUIPMENT	9	10	DISWASHER (K3)	1	20	12	1/2"	1440
						11	12	SPACE	–	–	–	–	–
1000	1/2"	12	20	1	REFRIGERATOR (K2)	13	14	AHU (4.1 KW)	2	30	10	3/4"	5084
1320	1/2"	8	20	1	KEF-1	15	16	SEE MECHANICAL DWGS					
900	1/2"	10	20	1	KSF-1	17	18	CU-1	2	40	10	3/4"	3600
100	1/2"	10	20	1	MOTORIZED DAMPER	19	20	NOT CONCURRENT LOAD					
400	1/2"	10	20	1	REC. ON ROFF	21	22	EXHAUST VENT/ LTG	1	20	12	1/2"	200
500	1/2"	12	20	1	FIRE SUPPRESSION SYSTEM	23	24	RECEPTACLES GFI	1	20	12	1/2"	200
1000	1/2"	12	20	1	ILLUM. COMMUNAL SHOWER & REST	25	26	RECEPTACLES GFI	1	20	12	1/2"	200
1000	1/2"	12	20	1	ILLUM. COMMUNAL SHOWER & REST	27	28	EF-2	1	20	12	1/2"	200
7100	1"	6	40	2	RTU-1	29	30	EF-3	1	20	12	1/2"	200
					SEE EQUIPMENT NAME	31	32	MOTORIZED DAMPER	1	20	12	1/2"	200
200	1/2"	12	20	2	RELOCATED AC UNIT	33	34	SPACE					
						35	36	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	37	38	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	39	40	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	41	42	SPACE	–	–	–	–	–

TOTAL CONNECTED LOAD: SEE DEMAND ANALYSIS

1 SEE EQUIPMENT NAME PLATE PRIOR TO ORDERING AND INSTALLATION
2. BRANCH TO BE INVESTIGATED BY EC. PROVIDE PERMANENT MARKERS SHOWING LOAD IDENTIFICATION (WITH PERMANENT LABELS.)
4. NEW BRANCH CIRCUIT TO BE EXTENDED TO NEW PANEL LOCATION. PROVIDE NEW CIRCUIT BREAKER CONDUIT AND WIRING AS NOTED

EXISTING HOUSE PANEL

MOUNTING: FLUSH MOUNTED
SHORT CIRCUIT RATING: EXISTING
LOCATION: STORAGE

VOLTS: 120/240V, 3Ø, 4W
MAIN BUS AMPS: 225A
MAIN BREAKER AMPS: 200A/3P

LOAD	COND.	WIRE	TRIP	POLE	DESCRIPTION	CKT No.	CKT No.	DESCRIPTION	POLE	TRIP	WIRE	COND.	LOAD
10528	3/4"	8	50	3	EXIST. ELEVATOR EQUIPMENT	1	2	EXISTING ELEV. PIT LOAD	1	20	12	1/2"	720
						3	4	EXISTING EXISTING ICE MAKER	1	20	12	1/2"	720
						5	6	SPACE	1	–	–	–	–
720	1/2"	12	20	1	EXISTING LOAD TO REMAIN	7	8	EXISTING ELEV. CABINET.	1	20	12	1/2"	1200
720	1/2"	12	20	1	EXISTING LOAD TO REMAIN	9	10	EXISTING LOAD TO REMAIN	1	20	12	1/2"	720
–	–	–	–	1	SPACE	11	12	SPACE	1	–	–	–	–
8000	11/2"	3	60	2	EXISTING LOAD TO REMAIN	13	14	EXISTING LOAD TO REMAIN	1	20	12	1/2"	500
						15	16	EXISTING LOAD TO REMAIN	1	20	12	1/2"	720
–	–	–	–	1	SPACE	17	18	SPACE	1	–	–	–	–
720	1/2"	12	20	1	EXISTING AC LOAD TO REMAIN	19	20	EXISTING LOAD TO REMAIN	1	20	12	1/2"	720
540	1/2"	12	20	1	EXISTING LOAD TO REMAIN	21	22	EXISTING LOAD TO REMAIN	1	20	12	1/2"	720
–	–	–	–	1	SPACE	23	24	EXISTING LOAD TO REMAIN	1	20	12	1/2"	720

TOTAL CONNECTED LOAD: 30,128 VA
SEE LOAD ANALYSI. 72 AMPS

1. BRANCH TO BE INVESTIGATED BY EC. PROVIDE PERMANENT MARKERS SHOWING LOAD IDENTIFICATION (WITH PERMANENT LABELS.)
2. EXISTING BRANCH CIRCUIT TO BE EXTENDED TO NEW PANEL LOCATION. PROVIDE NEW CIRCUIT BREAKER CONDUIT AND WIRING AS NOTED

3. HIGH LEG NOT TO BE USED FOR 120V, 1PH BRANCHES AS NOTED

CONNECTED LOAD CALCULATION

BASED ON 120/240V, 1Ø, 3W

PANELS UNITS

GENERAL LIGHTING X 2W/SQFT = 840 VA
AC 240 X 1 @ 100% = 240 VA

TOTAL CONNECTED LOAD #1 = 1080 VA

GENERAL LOAD = 432 SQFT * 2 VA
7 CKTS. X 120 VA = 864 VA

CONNECTED LOAD CALCULATION

BASED ON 120/240V, 1Ø, 3W

PANELS UNITS

GENERAL LIGHTING X 2W/SQFT = 840 VA
AC 240 X 1 @ 100% = 240 VA

TOTAL CONNECTED LOAD #1 = 1080 VA

GENERAL LOAD = 420 SQFT * 2 VA
7 CKTS. X 120 VA = 840 VA

PANEL CM_DEMAND LOAD CALCULATION

BASED ON 120/240V, 1Ø, 4W

PANEL "CM" COMMUNAL ROOM

ILLUM. LOAD @ 125%	=	3,500 VA
RECEPTACLES @ 100%	=	2,160 VA
COOK TOP @ 100%	=	8,200 VA
DISWASHER	=	1,440 VA
REFRIGERATOR	=	1,200 VA
MOTORIZED DAMPER	=	200 VA
AHU-1	=	5,080 VA
KEF-1 & KSF-1	=	2,160 VA
25% LARGEST MOTOR	=	600 VA
FIRE SUPPRESSION	=	500 VA
EF-2 & EF-3	=	400 VA
RTU-1	=	7,100 VA
	=	35,540 VA / 240 VOLTS
	=	148 AMPS

TOTAL DEMAND LOAD CALCULATION

BASED ON 120/240V, 3Ø, 4W

EXISTING HOUSE PANEL H ---------- 72 AMPS
EXISTING PANEL S ---------- 32 AMPS
NEW PANEL PANEL CM ---------- 234 AMPS
= 307 AMPS

PORTABLE GENERATOR DEMAND LOAD CALCULATION FOR PANEL CM

BASED ON 120/240V, 1Ø, 4W

NEW PANEL PANEL CM ---------- 35.0 KVA

NEW PANEL "S"

MOUNTING: FLUSH MOUNTED
SHORT CIRCUIT RATING: 22K AIC
LOCATION: STORAGE

VOLTS: 120/240V, 1Ø, 3W
MAIN BUS AMPS: 125A
MAIN BREAKER AMPS: M.L.O.

LOAD	COND.	WIRE	TRIP	POLE	DESCRIPTION	CKT No.	CKT No.	DESCRIPTION	POLE	TRIP	WIRE	COND.	LOAD
4500	3/4"	10	30	2	EXIST. WATER HEATER	1	2	EXIST. A/C	1	20	12	1/2"	400
						3	4	REFRIGERATOR	1	20	12	1/2"	1200
720	1/2"	12	20	1	RECEPTACLES	5	6	RECEPTACLES	1	20	12	1/2"	720
			20	1	SPARE	7	8	SPACE	1	–	–	–	–
			20	1	SPARE	9	10	SPACE	1	–	–	–	–
			20	1	SPARE	11	12	SPACE	1	–	–	–	–
			20	1	SPARE	13	14	SPACE	1	–	–	–	–
			20	1	SPARE	15	16	SPACE	1	–	–	–	–
–	–	–	–	1	SPACE	17	18	SPACE	1	–	–	–	–
–	–	–	–	1	SPACE	19	20	SPACE	1	–	–	–	–
–	–	–	–	1	SPACE	21	22	SPACE	1	–	–	–	–
–	–	–	–	1	SPACE	23	24	SPACE	1	–	–	–	–

TOTAL CONNECTED LOAD: 8,000 VA
SEE LOAD ANALYSI. 31 AMPS

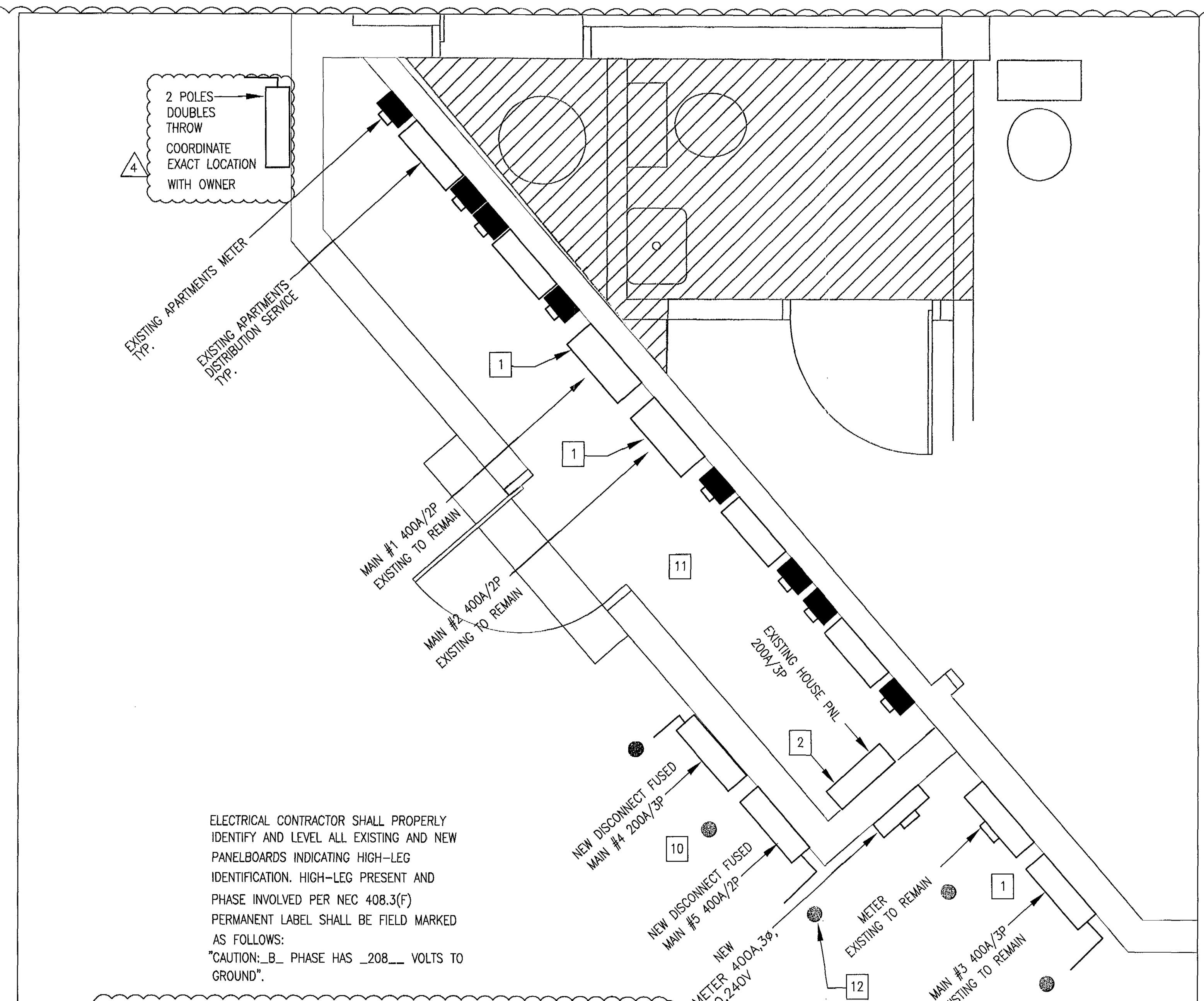
1. BRANCH TO BE INVESTIGATED BY EC. PROVIDE PERMANENT MARKERS SHOWING LOAD IDENTIFICATION (WITH PERMANENT LABELS.)
2. EXISTING BRANCH CIRCUIT TO BE EXTENDED TO NEW PANEL LOCATION. PROVIDE NEW CIRCUIT BREAKER CONDUIT AND WIRING AS NOTED

SYMBOL LEGEND

SYMBOL	DESCRIPTION (USE THOSE THAT APPLY)
	DISTRIBUTION
$	Single pole switch 20A
$3	Three-way switch 20A
$4	Four-way switch 20A
$D	Dimmer switch sized as required for the intended load
$M	Manual Motor Started Switch With Overload Protection
	Single receptacle outlet 20A
	Duplex receptacle outlet 15A. (Small appliances & bathrooms to be 20A) (Tamper resistant)
	Duplex receptacle outlet-split wire 15A (Tamper resistant)
	Floor duplex receptacle outlet 15A (Tamper resistant)
(J)	Junction box
	Fused Disconnect switch sized as required per equipment manufacturer nameplate
	Push Buttom for door Chime Door Chime
	Exhaust Fan
(J)/(J)	WALL OR CEILING MOUNTED JUNCTION BOX.
	JUNCTION BOX AND DIRECT CONNECTION TO EQUIPMENT
	COMMUNICATIONS
	Terminal back board for TV and telephone system
	Telephone outlet-Combintion Telephone and Data outlet from TeL. Back board
T.V.	TV Cable outlet-from TV Back Board
SD	(110 v. with battery back-up, interconnected Single Smoke detector Not Parth of the Building fire Alarm System.

ADDRESSABLE FIRE ALARM SYSTEM NOTES

1. FURNISH AND INSTALL ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY FOR NEW FIRE ALARM DEVICES TO BE CONNECTED TO EXISTING FIRE ALARM SYSTEM WITH VOICE AS SPECIFIED HEREIN AND AS SHOWN ON THE ELECTRICAL DRAWINGS. THIS SYSTEM SHALL BE ZONED, ELECTRICALLY SUPERVISED, HAVE CLOSED CIRCUITS, AND SHALL BE CONNECTED, TESTED AND LEFT IN FIRST CLASS OPERATING CONDITION.
2. FIRE ALARM SYSTEM SHALL BE U.L. LISTED NFPA 72 APPROVED.
3. UPON ACTIVATION OF FIRE ALARM SYSTEM BY MANUAL STATION, THE FOLLOWING SHALL TAKE PLACE:
   A ENERGIZE ALARM SIGNALING DEVICES
   B SOUND AUDIBLE ALARMS AND FLASH VISUAL SIGNALS
   C ALERT LOCAL FIRE DEPARTMENT OR PROPRIETARY SYSTEM
   D CAUSE ZONE IN ALARM TO BE DISPLAYED ON THE ANNUNCIATOR
4. ALL WIRING AND CONDUIT SIZE SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION, AND REQUIREMENTS OF NEC, LOCAL CODES AND NFPA IN NO CASE. SHALL THE WIRING BE SMALLER THAN #16
5. ALL CONDUCTORS SHALL BE COOPER AND SHALL BE SIZED FOR A MAXIMUM LOSS OF IdB. MINIMUM WIRE SIZE SHALL BE AS REQUIRED BY MANUFACTURER IN NO CASE. SHALL THE WIRING BE SMALLER THAN #16 F.P.L. CU IN. 3/4 CONDUIT
6. QUANTITY OF WIRES PER DEVICES SHALL BE AS REQUIRED BY MANUFACTURER.
7. SYSTEM TO BE POWER LIMITED.
8. VISUAL ALARMS PER ANSI A117.1,4.26, FBC AND ADA
9. CONDUIT FOR FIRE ALARM SHALL BE METALLIC TYPE.
10. CONTRACTOR IS RESPONSIBLE FOR PROVIDING SIGNED & SEALED FIRE ALARM PERMIT DRAWINGS BY A FLORIDA REGISTERED ENGINEER. JMM CONSULTING ENGINEERS LLC IS NOT RESPONSIBLE FOR F/A PERMIT DWGS.



ENLARGED EXISTING MAIN ELECTRICAL ROOM

SCALE: 1/2"=1'-0"

ADDITIONAL ELECTRICAL NOTES

1. ALL MAIN DISCONNECT SHALL BE IDENTIFIED. INDICATE THE EXISTING LOAD SERVED RE-LABEL MAINS AS REQUIRED. ELECTRICAL CONTRACTOR SHALL IDENTIFY EXISTING FEEDER.
2. POWER SUPPLY SHALL BE IDENTIFIED AT EACH PANEL @ MAIN WITH PERMANENT LABELS. VERIFY BONDING CONNECTIONS FOR ALL MAIN AND PANEL.
3. ABANDONED EQUIPMENT SHALL BE REMOVED COMPLETELY. VERIFY WITH OWNER (REMOVED ALL ELECTRICAL BOXES, CONDUITS AND WIRES THAT ARE NOT IN USE VERIFY W/ OWNER.)
4. NO LOOSE WIRING ALLOWED.
5. PROVIDE FIRE SEALING AT WALL AND CEILING PENETRATIONS. PROVIDE CONDUIT AS PER NEC IF REQUIRED.
6. VERIFY AND PROVIDE GROUNDING EQUIPMENT FOR ALL PANELS IN COMPLIANCE NEC-250, IF REQUIRED. (EXISTING GROUND TO REMAIN.)
7. ALL MISSING SCREWS FROM EQUIPMENT OR DISCONNECT COVERS SHALL BE PROVIDED.
8. EXISTING EQUIPMENT AND WIRING TO REMAIN AS IS. NOT IN THE SCOPE OF WORK.
9. EXISTING EQUIPMENT, WIRING (FEEDER) AND CONDUIT TO REMAIN AS IS. NOT ON THE SCOPE OF WORK. SHOWN ON THIS PLAN FOR REFERENCE ONLY.
10. EC TO VERIFY AND PROVIDE DEDICATED CLEARANCES SPACE (COMPLY WITH ARTICLE 110-26 OF THE NATIONAL ELECTRICAL CODE.)
11. EXISTING GROUND TO REMAIN. EC TO VERIFY AND PROVIDE AS PER NEC-250. SEE RISER DETAIL
12. COORDINATE WITH ARCHITECT AND OWNER FOR CONCRETE BOLLARD FOR TRAFFIC PROTECTION FOR MAIN AND METER

UTILITY SERVICE NOTES:

METER INSTALLATION CONNECTION AND ALL WORK RELATED TO ELECTRICAL POWER SERVICE SHALL BE COORDINATED WITH UTILITY CO. REPRESENTATIVE.

PRIOR TO INSTALLATION OF ROUGH ELECTRICAL WIRING, CHECK NAME PLATE DATA EQUIPMENT INVOLVED TO OBTAIN CORRECT SIZES AND OVER CURRENT PROTECTION.

ELECTRICAL INSTALLATION SHALL CONFORM TO N.E.C. FOR DEDICATED SPACE CLEARANCES AND GROUNDING REQUIREMENTS.

COORDINATE NEW SERVICE REQUIREMENTS WITH POWER CO. PRIOR TO COMMENCEMENT OF WORK AND BID.

OFFICE COPY
CITY OF MIAMI BEACH
APPROVED FOR PERMIT BY THE FOLLOWING:
BUILDING:
ZONING:
PLUMBING:
ELECTRICAL: 02/03/2016
MECHANICAL:
FIRE PREVENTION:
FLOOD:
PUBLIC WORKS:
STRUCTURAL:
ELEVATOR:
ROOFING:

GENERAL ELECTRICAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE, FLORIDA BUILDING CODE AND OTHER APPLICABLE CODES AND STANDARDS.
2. a) THE DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS, BENDS AND BOXES REQUIRED TO MAKE A COMPLETE NEAT INSTALLATION IN ACCORDANCE WITH N.E.C.
   b) WHEN CONFLICTS ARISE IN LOCATIONS WIRING DEVICES, ELECTRICAL EQUIPMENT, DISCONNECTS, PANELBOARDS, ETC. DUE TO FIELD CONDITION OR IMPROPER FIELD COORDINATION CONTRACTOR SHALL BRING IT TO THE A/E'S ATTENTION AND AT NO EXTRA COST RELOCATE, AND OR EXTEND WITHIN A REASONABLE DISTANCE SUCH ITEM WHICH IS IN CONFLICT. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING LOCATION OF ALL COMPONENTS PRIOR TO ROUGH IN WITH ALL TRADES NO EXTRAS WILL BE ALLOWED FOR FAILURE TO DO SO.
3. THE CONTRACTOR IS RESPONSIBLE FOR EVALUATING FIELD CONDITIONS BY VISITING THE SITE PRIOR TO COMMENCING / BIDDING WORK.
4. THE CONTRACTOR SHALL SATISFACTORILY REPAIR / REPLACE EQUIPMENT OR PART OF STRUCTURE DAMAGED AS A RESULT OF HIS WORK. SURFACES AND FINISHED AREAS SHALL BE RESTORED TO MATCH ADJACENT AREAS.
5. APPROVAL SHALL BE OBTAINED FROM A STRUCTURAL ENGINEER PRIOR TO CUTTING OR DRILLING ANY STRUCTUALSUPPORT MEMBER.
6. ALL DEVICE BOXES SHALL BE INSTALLED FLUSH AND CONDUITS RUN CONCEALED IN FINISHED AREAS EXCEPT AS SPECIFICALLY SHOWN/NOTED OTHERWISE.
7. ALL ELECTRICAL EQUIPMENT SHALL BE REMOVED FROM STRUCTURE TO BE REMOVED. ACCESSIBLE RACEWAYS, WIRES, BOXES, SWITCHES AND OTHER ELECTRICAL ITEMS ASSOCIATED WITH THIS WORK SHALL BE REMOVED IF NOT REQUIRED FOR NEW EQUIPMENT TO CONTINUE IN SERVICE.
8. a) MODIFY AND REROUTE EXISTING WIRING AS REQUIRED TO ACCOMPLISH INDICATED WORK AND CONTINUE SERVICE TO LOADS BEYOND AREA IN WHICH WORK IS DONE.
   b) CONTRACTOR SHALL RE-USE EXISTING SPARE BRANCH CIRCUIT BREAKER AND/OR EXISTING BRANCH CIRCUITS PRESENTLY SERVING ELECTRICAL DEVICES BEING REMOVED IN AREAS BEING REMODELED. ACTUAL CIRCUIT NUMBERS MAY VARY FROM ACTUAL FIELD CONDITIONS BUT ARE SHOWN TO FACILITATE CIRCUITING LAYOUT.
9. ALL MATERIAL REMOVED SHALL BE SISPOSED OF AS DIRECTED BY OWNER.
10. ALL WIRING INDICATED AS EXISTING IS BASED ON ORIGINAL CONTRACT DRAWINGS AND IS TO BE VERIFIED BY CONTRACTOR AT JOB SITE.
11. MINIMUM WIRE SIZE SHALL BE # 12 THHN / THWN UNLESS OTHERWISE NOTED ON PLANS.
12. ALL CONDUCTORS SHALL BE COPPER RUN IN METALLIC CONDUIT.
13. ALL CONDUCTORS SHALL BE RUN IN CONDUIT (METALLIC TYPE). IF PVC SCHEDULE 40 IS USED FOR UNDERGROUND FEEDERS ONLY, AN EQUIPMENT GROUND CONDUCTOR SIZED IN ACCORDANCE WITH N.E.C. 250-122 MUST BE INSTALLED AND CONDUIT SIZE INCREASED AS REQUIRED.
14. ALL MATERIALS SHALL BE U.L. APPROVED.
15. NEW TYPEWRITTEN PANEL TALLY SHALL BE FURNISHED AFTER JOB IS COMPLETED.
16. ALL BRANCH CIRCUITS SHALL BE PROPERLY PHASE BALANCED.
17. ALL NON POWER RELATED WIRING I N CEILING AIR CONDITIONING PLENUM RUNNING WITHOUT CONDUIT SHALL BE TEFLON COATED CLASSIFIED FOR USE IN PLENUMS.
18. SEE ARCHITECTURAL DRAWING FOR INFORMATION CONCERNING EXISTING CONDITIONS AND COUNTER DETAILS.
19. ALL BRANCH CIRCUITS TO HAVE A GREEN EQUIPMENT GROUNDING CONDUCTOR SIZED AS PER N.E.C. 250.122.
20. ALL DEVICES IN EXISTING WALLS NOT AFFECTED BY NEW CONSTRUCTION SHALL REMAIN ACTIVE.
21. ALL EMPTY CONDUITS TO BE PROVIDED WITH NYLON PULL STRINGS.
22. FUSES SHALL BE DUAL ELEMENT, TIME DELAY TYPE UNLESS OTHERWISE NOTED.
23. ALL LUMINARIES SHALL BE PROPERLY SUPPORTED IN ACCORDANCE WITH THE CEILING SYSTEM MANUFACTURER RECOMMENDATIONS AND LOCAL CODE REQUIREMENTS.
24. RISERS ARE DIAGRAMMATIC ONLY. THEY DO NOT SHOW EVERY BEND REQUIRED FOR THE INSTALLATION.
25. THIS DRAWING IS A GUIDE FOR THE ELECTRICAL INSTALLTION. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE A FUNCTIONING SYSTEM.
26. ALL CABLES SHALL BE RUN WITH OUT SPLICES EXCEPT IF OTHERWISE INDICATED.
27. ALL PULL AND JUNCTION BOXES SHAL BE ACCESSIBLE AT ALL TIMES.
28. EXACT POINT AND METHODS OF CONNECTION SHALL BE DETERMINED IN FIELD.
29. ALL WORK SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER.
30. ALL LOADS IN EXISTING PANELBOARDS ARE ESTIMATED.
31. CONTRACTOR SHALL INCLUDED IN HIS/HER BID SPECIFICATION BOOK REQUIREMENTS. NO EXTRAS WILL BE ALLOWED FOR FAILURE TO DO SO.
32. THE ELECTRICAL CONTRACTOR'S SUB-CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL VOLTAGES ON PLANS UPON FIRST VISIT TO THE SITE. THE IN COMING SERVICE SHOULD CORRESPOND TO THE SPECIFICATIONS FOR THE LIGHTING FIXTURES AND THE H.V.A.C. EQUIPMENT AND BE PROPERLY NOTED ON THE ELECTRICAL PANEL DIAGRAMS AND RISERS. ANY DISCREPANCIES SHOULD BE REPORTED TO THE ARCHITECT IMMEDIATELY.
32. ALL RACEWAY ROUTED, INSULATED CONDUCTORS SYSTEM SHALL BE COLOR CODED AS FOLLOWS:

120/240V. 3Ø SYSTEM
PHASE 'A' BLACK
PHASE 'B' ORANGE HOT LEG
PHASE 'C' BLUE
NEUTRAL WHITE GROUND GREEN

City of Miami Beach
Fire Prevention Division
PLANS APPROVED

JOSE M. MARTINEZ LICENSE No. 56018 STATE OF FLORIDA PROFESSIONAL ENGINEER

JMM Consulting Engineers LLC
Certificate OF Authorization #9692
Jose M. Martinez, P.E. #56018
10820 SUNSET DRIVE Suite 103 Miami, Florida 33173
TEL (305) 256-1621 FAX (305) 271-9090

BEAME ARCHITECTURAL PARTNERSHIP
3059 GRAND AVENUE, SUITE 440
COCONUT GROVE, FLORIDA 33133
E-mail : bap@bapdesign.com
Florida Corp AA0002364
PH 305.444.7100 FX 305.444.9803

OWNER:
J3 VENTURES LLC
1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

LAWRENCE BEAME, R.A.
REGISTRATION # 7871

NUMBER	DATE	ITEM
4	12/02/15	OWNER REVISION REVISIONS
3	5/21/15	GENERAL REVISIONS
1	10/06/14	CITY COMMTS. / CHANGE OF SCOPE

REVISIONS

HOTEL EVA INTERIOR IMPROVEMENTS

1506 COLLINS AVENUE
MIAMI BEACH,
FLORIDA 33139

PRJ. MNGR. | DRAWING BY | SCALE

SHEET TITLE

PANEL SCHEDULES

JOB NUMBER | SHEET NUMBER

DATE

E2.05

ADDITIONAL ELECTRICAL NOTES

1 ALL MAIN DISCONNECT SHALL BE IDENTIFIED. INDICATE THE EXISTING LOAD SERVED RE-LABEL MAINS AS REQUIRED. ELECTRICAL CONTRACTOR SHALL IDENTIFY EXISTING FEEDER.

2 POWER SUPPLY SHALL BE IDENTIFIED AT EACH PANEL @ MAIN WITH PERMANENT LABELS. VERIFY BONDING CONNECTIONS FOR ALL MAIN AND PANEL.

3 ABANDONED EQUIPMENT SHALL BE REMOVED COMPLETELY. VERIFY WITH OWNER (REMOVED ALL ELECTRICAL BOXES, CONDUITS AND WIRES THAT ARE NOT IN USE VERIFY W/ OWNER.)

5 PROVIDE FIRE SEALING AT WALL AND CEILING PENETRATIONS. PROVIDE CONDUIT AS PER NEC IF REQUIRED.

6 NO LOOSE WIRING ALLOWED.

7 • VERIFY AND PROVIDE GROUNDING EQUIPMENT FOR ALL PANELS IN COMPLIANCE NEC-250, IF REQUIRED. (EXISTING GROUND TO REMAIN.)

8 ALL MISSING SCREWS FROM EQUIPMENT OR DISCONNECT COVERS SHALL BE PROVIDED.

9 EC TO VERIFY AND PROVIDE DEDICATED CLEARANCES SPACE (COMPLY WITH ARTICLE 110-26 OF THE NATIONAL ELECTRICAL CODE.)

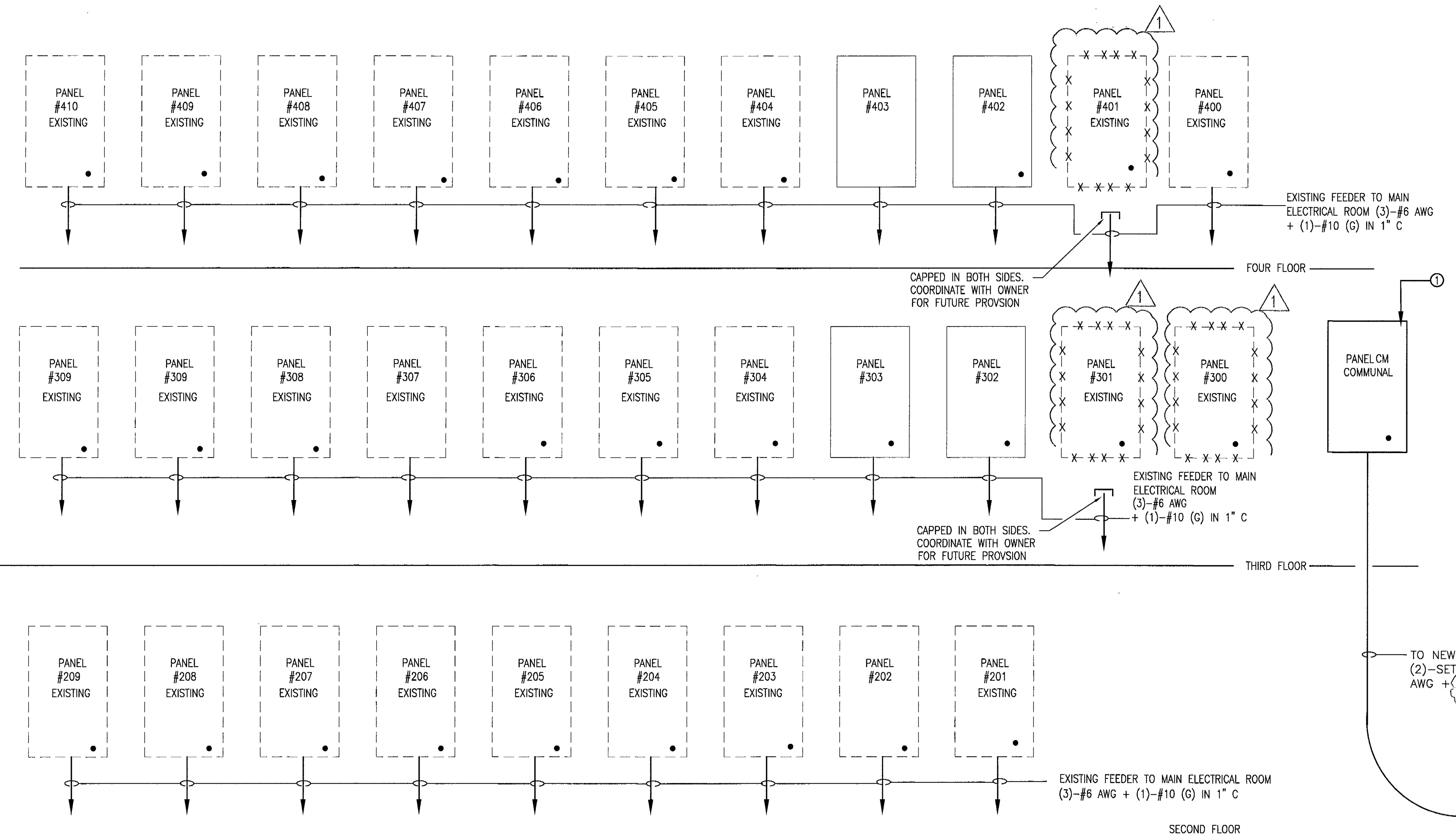
10 EXISTING GROUND TO REMAIN. PROVIDE AS PER NEC-250

11 REPLACE ANY AGED COTTON INSULATED WIRING WITH NEW THERMOPLASTIC INSULATION WIRINGS.

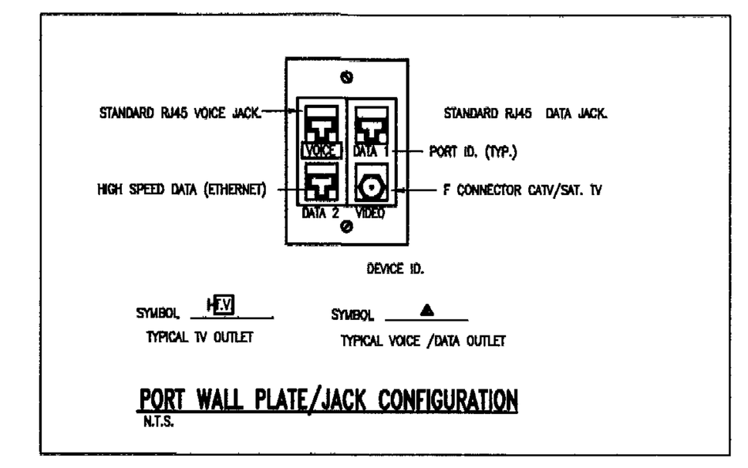
12 COORDINATE WITH ARCHITECT AND OWNER FOR CONCRETE BOLLARD FOR TRAFFIC PROTECTION FOR EXISTING AND NEW MAIN

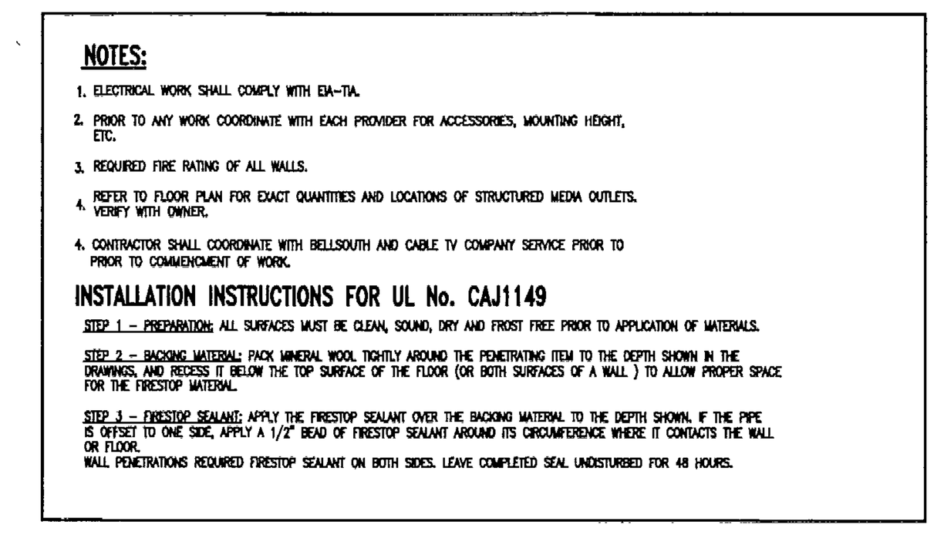
LOAD ANALYSIS FOR UNITS

THIS PROJECT INVOLVES INTERIOR RENOVATION ONLY. FOR UNITS NO ADDITIONAL LOADS ARE REQUIRED.



PANEL #410 EXISTING
PANEL #409 EXISTING
PANEL #408 EXISTING
PANEL #407 EXISTING
PANEL #406 EXISTING
PANEL #405 EXISTING
PANEL #404 EXISTING
PANEL #403
PANEL #402
PANEL #401 EXISTING
PANEL #400 EXISTING
EXISTING FEEDER TO MAIN ELECTRICAL ROOM (3)-#6 AWG + (1)-#10 (G) IN 1" C
CAPPED IN BOTH SIDES. COORDINATE WITH OWNER FOR FUTURE PROVSION
FOUR FLOOR
PANEL #309 EXISTING
PANEL #309 EXISTING
PANEL #308 EXISTING
PANEL #307 EXISTING
PANEL #306 EXISTING
PANEL #305 EXISTING
PANEL #304 EXISTING
PANEL #303
PANEL #302
PANEL #301 EXISTING
PANEL #300 EXISTING
PANEL CM COMMUNAL
EXISTING FEEDER TO MAIN ELECTRICAL ROOM (3)-#6 AWG + (1)-#10 (G) IN 1" C
THIRD FLOOR
TO NEW PANEL CM (2)-SETS OF (3)-#3/0 AWG + (1)#4 AWG IN 3"C
PANEL #209 EXISTING
PANEL #208 EXISTING
PANEL #207 EXISTING
PANEL #206 EXISTING
PANEL #205 EXISTING
PANEL #204 EXISTING
PANEL #203 EXISTING
PANEL #202
PANEL #201 EXISTING
EXISTING FEEDER TO MAIN ELECTRICAL ROOM (3)-#6 AWG + (1)-#10 (G) IN 1" C
SECOND FLOOR





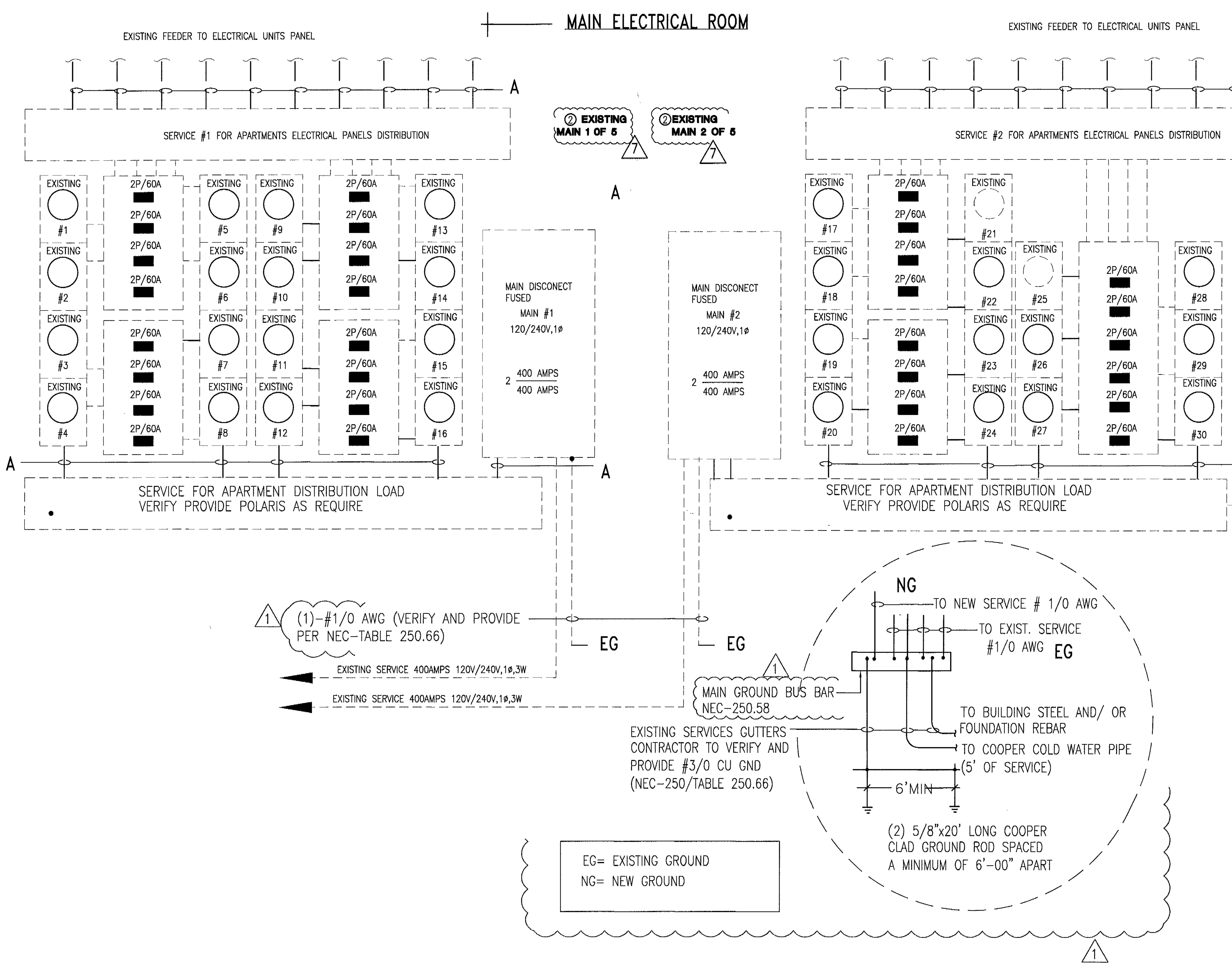
ADDITIONAL ELECTRICAL NOTES

ALL ELECTRICAL EQUIPMENT INDICATED BY A "X" CROSSED LINE IS TO BE REMOVED COORDINATE WITH OWNER

ALL ELECTRICAL EQUIPMENT INDICATED BY A CONTINUOS LINE IS NEW

ALL ELECTRICAL EQUIPMENT INDICATED BY A DASHED LINE IS EXISTING TO REMAIN

THE EXISTING BRANCH CIRCUIT NUMBERS SHOWN ON THIS PLAN ARE FOR REFERENCE ONLY. THE CONTRACTOR SHALL RE-USE ALL POSSIBLE EXISTING BRANCH CIRCUITS SERVING THIS AREA. PROVIDE AS-BUILT DOCUMENTS TO REFLECT ACTUAL CIRCUITS USED. PROVIDE NEW TYPED PANEL SCHEDULES DIRECTORY REFLECTING EACH RESPECTIVE BREAKER USED. THIS DRAWING HAS BEEN CREATED TO REFLECT EXISTING. AS-BUILT CONDITIONS PROVIDED BY OWNER AND ARCHITECT.

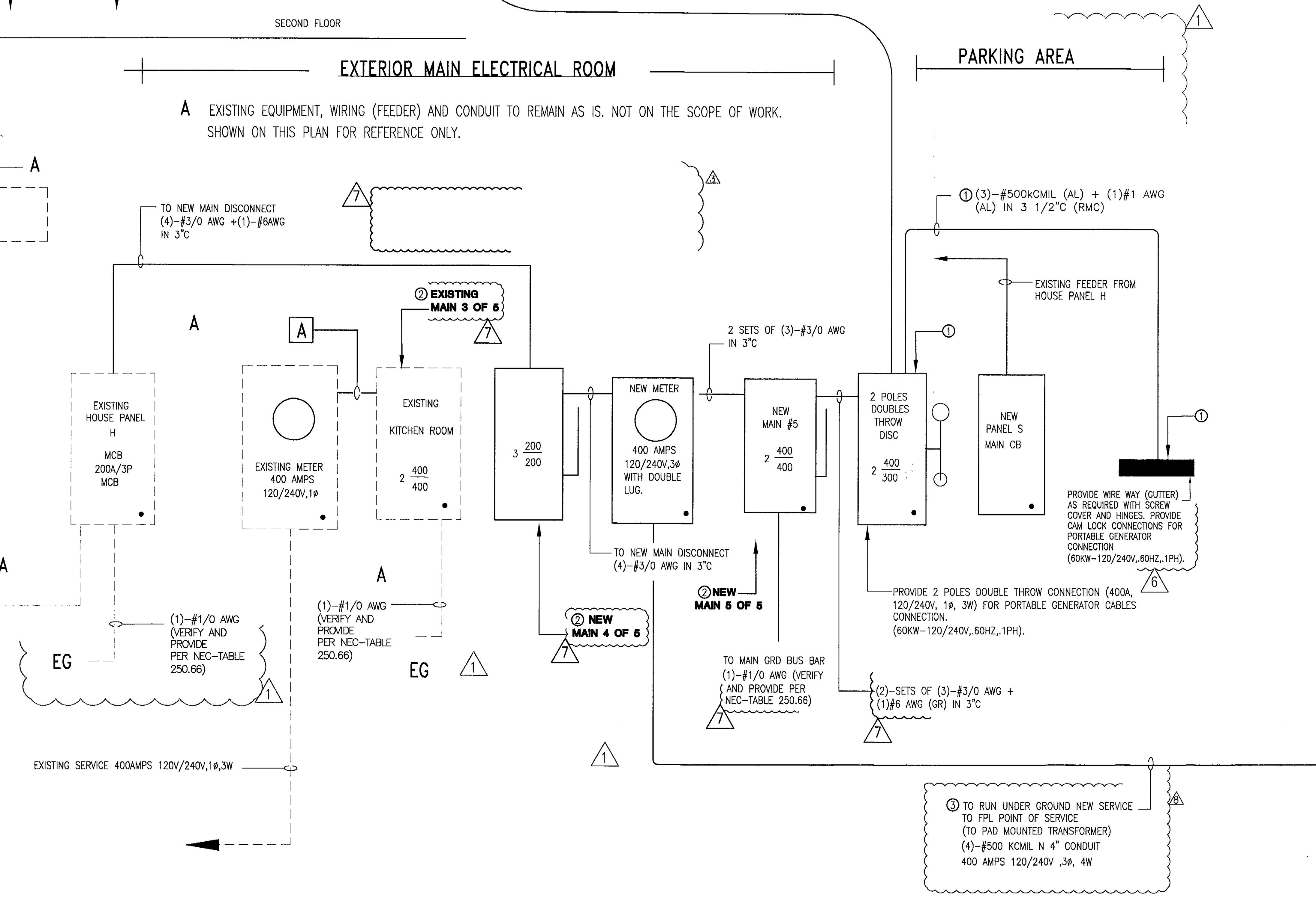


MAIN ELECTRICAL ROOM
EXISTING FEEDER TO ELECTRICAL UNITS PANEL
SERVICE #1 FOR APARTMENTS ELECTRICAL PANELS DISTRIBUTION
SERVICE #2 FOR APARTMENTS ELECTRICAL PANELS DISTRIBUTION
② EXISTING MAIN 1 OF 5
② EXISTING MAIN 2 OF 5
MAIN DISCONECT FUSED MAIN #1 120/240V,1ø 400 AMPS 400 AMPS
MAIN DISCONECT FUSED MAIN #2 120/240V,1ø 400 AMPS 400 AMPS
SERVICE FOR APARTMENT DISTRIBUTION LOAD VERIFY PROVIDE POLARIS AS REQUIRE
(1)-#1/0 AWG (VERIFY AND PROVIDE PER NEC-TABLE 250.66)
EXISTING SERVICE 400AMPS 120V/240V,1ø,3W
NG
TO NEW SERVICE # 1/0 AWG
TO EXIST. SERVICE #1/0 AWG
EG
MAIN GROUND BUS BAR NEC-250.58
EXISTING SERVICES GUTTERS CONTRACTOR TO VERIFY AND PROVIDE #3/0 CU GND (NEC-250/TABLE 250.66)
TO BUILDING STEEL AND/ OR FOUNDATION REBAR
TO COOPER COLD WATER PIPE (5' OF SERVICE)
6'MIN
(2) 5/8"x20' LONG COOPER CLAD GROUND ROD SPACED A MINIMUM OF 6'-00" APART
EG= EXISTING GROUND
NG= NEW GROUND

ELECTRICAL RISER DIAGRAM

N.T.S.

SHOWN FOR REFERENCE ONLY.



EXTERIOR MAIN ELECTRICAL ROOM
PARKING AREA
A EXISTING EQUIPMENT, WIRING (FEEDER) AND CONDUIT TO REMAIN AS IS. NOT ON THE SCOPE OF WORK. SHOWN ON THIS PLAN FOR REFERENCE ONLY.
TO NEW MAIN DISCONNECT (4)-#3/0 AWG +(1)-#6AWG IN 3"C
② EXISTING MAIN 3 OF 5
EXISTING HOUSE PANEL H MCB 200A/3P MCB
EXISTING METER 400 AMPS 120/240V,1ø
EXISTING KITCHEN ROOM 400 400
NEW METER 400 AMPS 120/240V,3ø WITH DOUBLE LUG.
NEW MAIN #5 400 400
2 POLES DOUBLES THROW DISC 400 300
NEW PANEL S MAIN CB
① (3)-#500kCMIL (AL) + (1)#1 AWG (AL) IN 3 1/2"C (RMC)
EXISTING FEEDER FROM HOUSE PANEL H
2 SETS OF (3)-#3/0 AWG IN 3"C
TO NEW MAIN DISCONNECT (4)-#3/0 AWG IN 3"C
② NEW MAIN 5 OF 5
② NEW MAIN 4 OF 5
PROVIDE WIRE WAY (GUTTER) AS REQUIRED WITH SCREW COVER AND HINGES. PROVIDE CAM LOCK CONNECTIONS FOR PORTABLE GENERATOR CONNECTION (60KW-120/240V,60HZ,1PH).
PROVIDE 2 POLES DOUBLE THROW CONNECTION (400A, 120/240V, 1ø, 3W) FOR PORTABLE GENERATOR CABLES CONNECTION. (60KW-120/240V,60HZ,1PH).
(1)-#1/0 AWG (VERIFY AND PROVIDE PER NEC-TABLE 250.66)
EG
TO MAIN GRD BUS BAR (1)-#1/0 AWG (VERIFY AND PROVIDE PER NEC-TABLE 250.66)
(2)-SETS OF (3)-#3/0 AWG + (1)#6 AWG (GR) IN 3"C
EXISTING SERVICE 400AMPS 120V/240V,1ø,3W
③ TO RUN UNDER GROUND NEW SERVICE TO FPL POINT OF SERVICE (TO PAD MOUNTED TRANSFORMER) (4)-#500 KCMIL N 4" CONDUIT 400 AMPS 120/240V ,3ø, 4W

UTILITY SERVICE NOTES:

CT AND METER INSTALLATION CONNECTION AND ALL WORK RELATED TO ELECTRICAL POWER SERVICE SHALL BE COORDINATED WITH UTILITY CO. REPRESENTATIVE.

PRIOR TO INSTALLATION OF ROUGH ELECTRICAL WIRING, CHECK NAME PLATE DATA EQUIPMENT INVOLVED TO OBTAIN CORRECT SIZES AND OVER CURRENT PROTECTION.

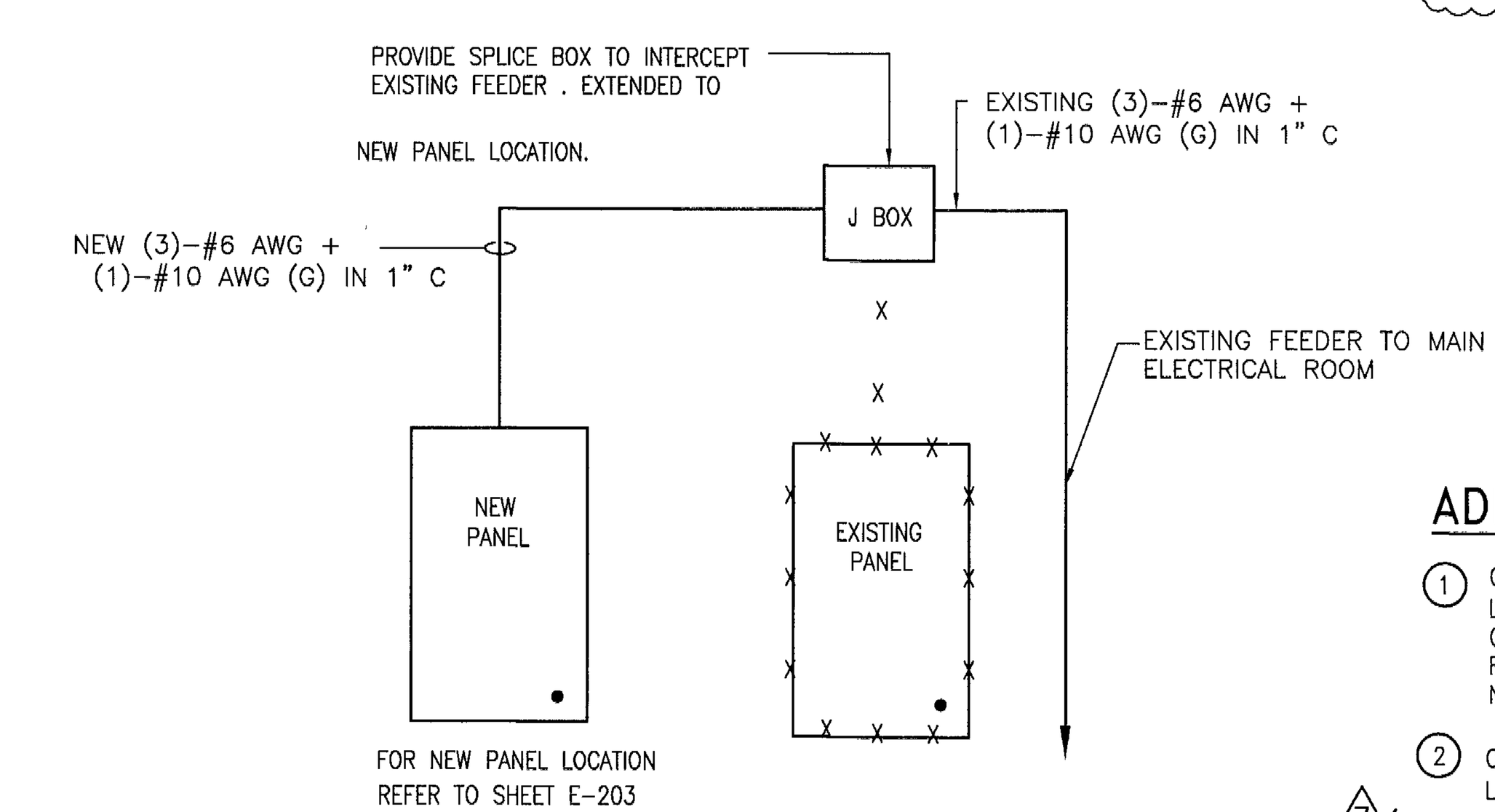
ELECTRICAL INSTALLATION SHALL CONFORM TO N.E.C. FOR DEDICATED SPACE CLEARANCES AND GROUNDING REQUIREMENTS.

COORDINATE NEW SERVICE REQUIREMENTS WITH POWER CO. PRIOR TO COMMENCEMENT OF WORK.

ALL EQUIPMENT TO BE MOUNTED ABOVE FLOOD LEVEL. 1

CONTRACTOR TO PROVIDE AND VERIFY EQUIPMENT GROUNDING CONDUCTOR AS PER NEC250-122

ENGINNER ASSUMED A FAULT CURRENT OF 65K AIC. CONTRACTOR SHALL COORDINATE WITH POWER CO. FOR ACTUAL FAULT CURRENT. EQUIPMENT INSTALLED SHALL WITHSTAND POWER CO. AVAILABLE FAULT CURRENT.



PROVIDE SPLICE BOX TO INTERCEPT EXISTING FEEDER . EXTENDED TO NEW PANEL LOCATION.
EXISTING (3)-#6 AWG + (1)-#10 AWG (G) IN 1" C
NEW (3)-#6 AWG + (1)-#10 AWG (G) IN 1" C
J BOX
EXISTING FEEDER TO MAIN ELECTRICAL ROOM
NEW PANEL
EXISTING PANEL
FOR NEW PANEL LOCATION REFER TO SHEET E-203

ELECTRICAL DETAIL FOR UNITS PANEL CONNECTION

ADDITIONAL ELECTRICAL NOTES:

① CONTRACTOR TO PROVIDE LEGIBLE PLAQUE FOR DISCONNECTS DOUBLES THROW, CAM LOCK AND PANEL CM WITH THE FOLLOWING "TEMPORARY GENERATOR SERVICE" CONDITION IS TEMPORARY UNTIL FPL SERVICE IS BROUGHT IN TO BUILDING ONCE FPL SERVICE IS CONNECTED. TEMPORARY GENERATOR WILL BE DISCONNECTED. PER NEC-230.2

② CONTRACTOR TO PROVIDE ON NEW AND EXISTING MAINS AND PANELS PERMANENT LOAD INDEX LABEL INDICATING TYPE OF LOAD SERVICE PER NEC- 230.2 (E)

③ PROVIDE NEW SERVICE CONDUCTOR FOR NEW MAIN #5 PER NEC-230.6

JMM Consulting Engineers LLC
Certificate Of Authorization #9692
Jose M. Martinez, P.E. #56016
10051 SUNSET DRIVE Suite 103
Miami, Florida 33173
TEL (305) 255-1621
FAX (305) 271-0090

BEAME ARCHITECTURAL PARTNERSHIP
3059 GRAND AVENUE, SUITE 440
COCONUT GROVE, FLORIDA 33133
E-mail : bap@bapdesign.com
Florida Corp AA0002364
PH 305.444.7100 FX 305.444.9803

OWNER:

J3 VENTURES LLC
1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

LAWRENCE BEAME, R.A.
REGISTRATION # 7871

NUMBER	DATE	ITEM
8	01/27/16	BUILDING DEPARTMENT COMM.
7	01/07/16	BUILDING DEPARTMENT COMM.
4	12/02/15	OWNER REQUEST
3	5/21/15	GENERAL REVISIONS
1	10/06/14	CITY COMMTS. / CHANGE OF SCOPE

REVISIONS

HOTEL EVA INTERIOR IMPROVEMENTS

1506 COLLINS AVENUE
MIAMI BEACH,
FLORIDA 33139

PRJ. MNGR. | DRAWING BY | SCALE

SHEET TITLE

PARTIAL ELECTRICAL RISER

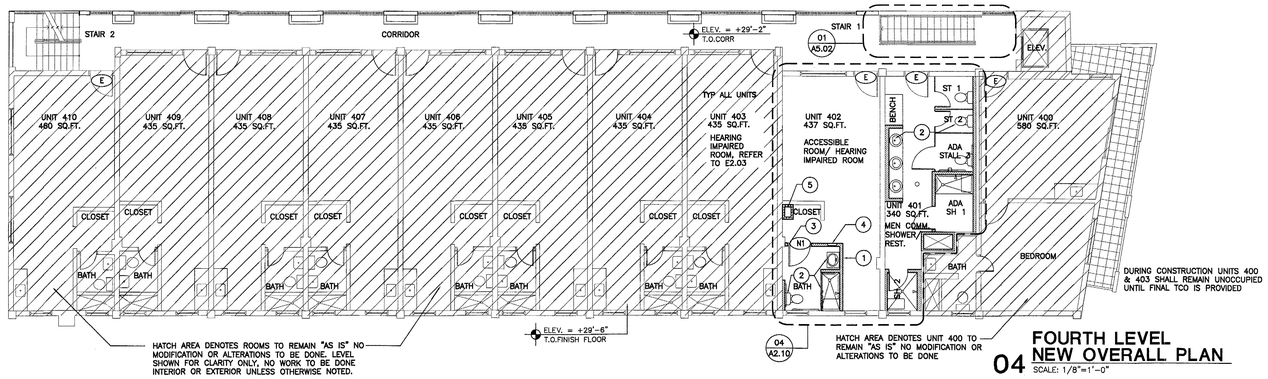
JOB NUMBER

DATE

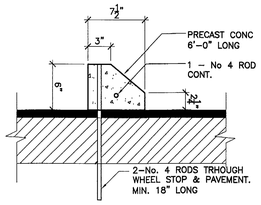
SHEET NUMBER

E2.06

ROOM SIZE SCHEDULE	
UNIT	SQ. FT.
400	580 SQ.FT
401	340 SQ.FT
402	437 SQ.FT
403	435 SQ.FT
404	435 SQ.FT
405	435 SQ.FT
406	435 SQ.FT
407	435 SQ.FT
408	435 SQ.FT
409	435 SQ.FT
410	460 SQ.FT

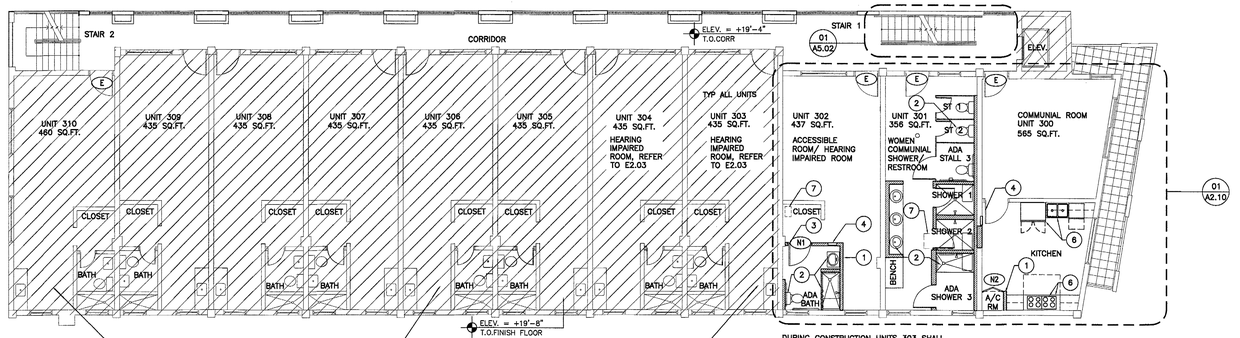


04 FOURTH LEVEL NEW OVERALL PLAN
SCALE: 1/8"=1'-0"



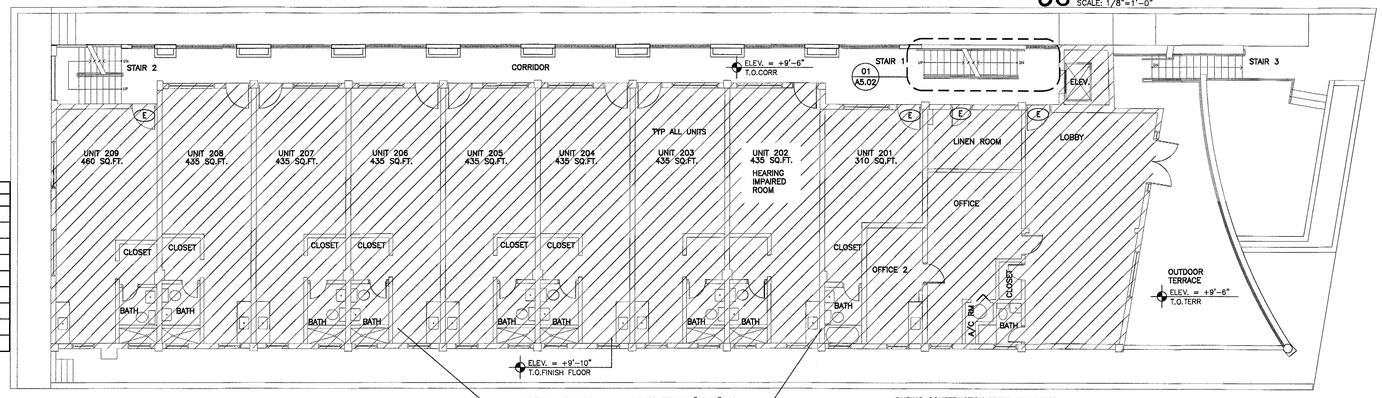
05 WHEEL STOP DETAIL
SCALE: 1-1/2"=1'-0"

ROOM SIZE SCHEDULE	
UNIT	SQ. FT.
300	565 SQ.FT
301	356 SQ.FT
302	437 SQ.FT
303	435 SQ.FT
304	435 SQ.FT
305	435 SQ.FT
306	435 SQ.FT
307	435 SQ.FT
308	435 SQ.FT
309	435 SQ.FT
310	460 SQ.FT

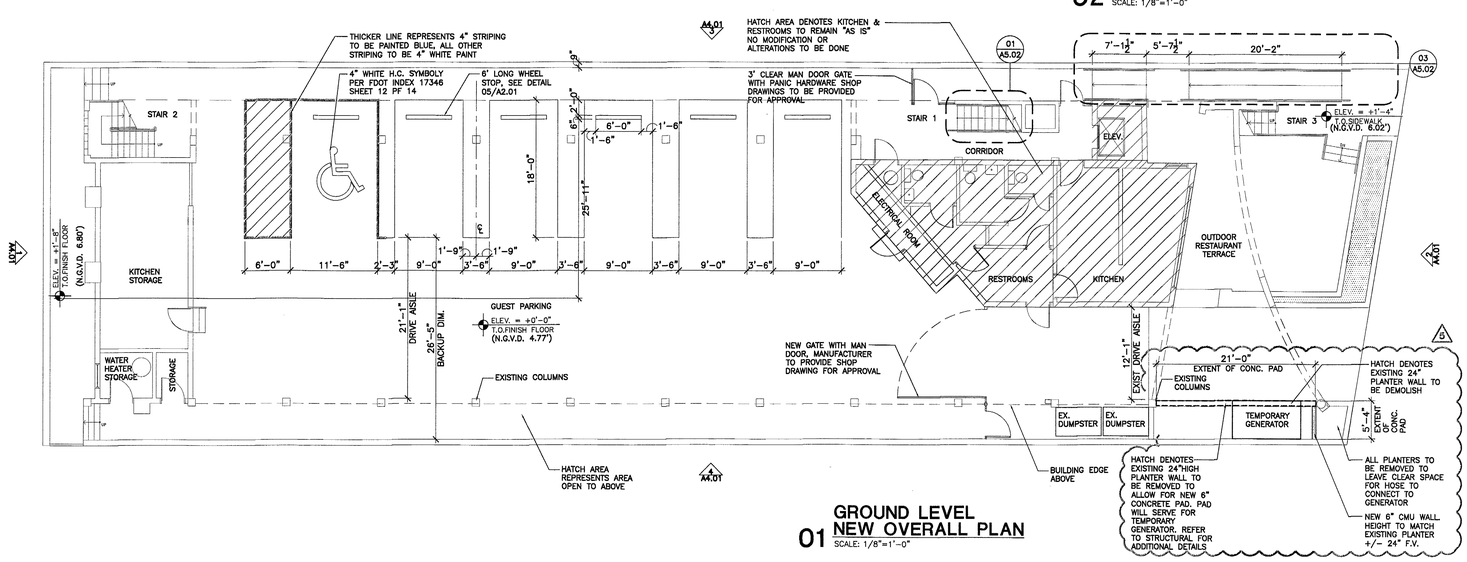


03 THIRD LEVEL NEW OVERALL PLAN
SCALE: 1/8"=1'-0"

ROOM SIZE SCHEDULE	
UNIT	SQ. FT.
201	310 SQ.FT
202	435 SQ.FT
203	435 SQ.FT
204	435 SQ.FT
205	435 SQ.FT
206	435 SQ.FT
207	435 SQ.FT
208	435 SQ.FT
209	460 SQ.FT



02 SECOND LEVEL NEW OVERALL PLAN
SCALE: 1/8"=1'-0"



01 GROUND LEVEL NEW OVERALL PLAN
SCALE: 1/8"=1'-0"

GENERAL NOTES

TOTAL GUEST ROOMS AND AMOUNT OF ROOMS THAT HAVE MOBILITY AND COMMUNICATION FEATURES WHICH COMPLIES WITH THE FAC224 ON TABLE 224.2 AND 224.4

TOTAL NUMBER OF UNITS	28
TOTAL NUMBER OF UNITS WITH COMMUNICATION FEATURES (HEARING IMPAIRED) UNIT 202, 302, 303, 304, 402 & 403	6
TOTAL NUMBER OF ACCESSIBLE UNITS WITH MOBILITY FEATURES (ADA ROOMS) UNIT 302 & 402	2

KEY NOTES

1. NEW WALL PARTITIONS REFER TO ENLARGE PLANS FOR TYPICAL WALL TYPE & NOTES
2. NEW BATHROOM FIXTURES, REFER TO ENLARGE PLANS FOR ADDITIONAL INFORMATION
3. NEW 3'-0" SOLID CORE WOOD DOORS
4. NEW ELECTRICAL PANELS, REFER TO ELECTRICAL DWG'S FOR ADDITIONAL INFORMATION
5. NEW CHASE WALL FOR BATHROOM VENTS, REFER TO ENLARGE PLANS FOR ADDITIONAL INFORMATION
6. NEW KITCHEN CABINETS, FIXTURES & APPLIANCES. REFER TO ENLARGE PLAN & MEP DRAWINGS FOR ADDITIONAL INFORMATION
7. LOCATION OF CHASE ABOVE

City of Miami Beach
Fire Prevention Division
PLANS APPROVED

INTERIOR IMPROVEMENT NOTES

–ANY EXISTING PARTITIONS DAMAGED DURING DEMOLITION TO BE PATCH & RE–FINISH TO ITS ORIGINAL CONDITIONS.

–CONTRACTOR SHALL CAREFULLY VERIFY IN FIELD ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCING WORK. ANY DISCREPANCIES MUST BE NOTIFIED TO ARCHITECT.

–ALL EXISTING CONDITIONS TO REMAIN UNLESS OTHERWISE NOTED, TYP.

–GC TO VERIFY DOORS MARKED AS (E) TO BE 90 MIN. FIRE RATED. IF NOT REPLACE WITH 90 MIN. RATED DOORS, PER PHASING PLAN A1.03

REVIEWED
CITY OF MIAMI BEACH
FIRE DEPARTMENT

N

BEAME ARCHITECTURAL PARTNERSHIP

3059 GRAND AVENUE, SUITE 440
COCONUT GROVE, FLORIDA 33133
E-mail : bap@bapdesign.com
Florida Corp AA0002364
PH 305.444.7100 FX 305.444.9803

OWNER:
J3 VENTURES LLC
1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

LAWRENCE BEAME, R.A.
REGISTRATION # 7871

5	01-04-16	FIELD COORDINATION
4	05-21-15	FIELD COORDINATION
3	01-19-15	BUILDING COMMENTS
2	11-19-14	BUILDING COMMENTS
1	10-06-14	CITY COMMENTS/ CHANGE OF SCOPE
	05-23-14	ISSUED FOR PERMIT

NUMBER: | DATE: | ITEM:
REVISIONS

HOTEL EVA INTERIOR IMPROVEMENTS

1506 COLLINS AVENUE
MIAMI BEACH,
FLORIDA 33139

PRJ. MNGR.	DRAWING BY	SCALE
C.D.	VS	AS SHOWN

SHEET TITLE

NEW OVERALL FLOOR PLANS

JOB NUMBER	SHEET NUMBER
14010.00	A2.02
DATE	
05–23–14	

STRUCTURAL NOTES

GENERAL NOTES:

1. The Governing Code for this project is the Florida Building Code, 2010 Edition. This Code prescribes which Edition of each referenced standard applies to this project.

2. To the best of our knowledge, the Structural drawings and specifications comply with the applicable requirements of the Governing Building Code.

3. Construction is to comply with the requirements of the Governing Building Code and all other applicable Federal, State, and local Codes, Standards, Regulations and Laws.

4. The Structural documents are to be used in conjunction with the Architectural documents. Use these notes in conjunction with the project specifications. If a conflict exist, notify the Architect.

5. Details labeled "Typical" apply to all situations that are the same or similar to those specifically referenced, whether or not they are keyed in at each location. Questions regarding the applicability of typical details shall be resolved by the Architect.

6. Openings shown on Structural drawings are only pictorial. See the Architectural and M.E.P. drawings for the size and location of openings in the structure.

7. Contractors who discover discrepancies, omissions or variations in the contract documents during bidding shall immediately notify the Architect. The Architect will resolve the condition and issue a written clarification.

8. The General Contractor shall coordinate all contract documents with field conditions and dimensions and project shop drawings prior to construction. Do not scale drawings; use only printed dimensions. Report any discrepancies in writing to the Architect prior to proceeding with work. Do not change size or location of Structural members without written instructions from the Structural Engineer of record.

9. The contractor shall protect adjacent property, his own work and the public from harm. The contractor is solely responsible for construction means and methods, and jobsite safety including all OSHA requirements.

10. The Structure is designed to be structurally sound when completed. Prior to completion, the Contractor is responsible for stability and temporary bracing, including, but not limited to, masonry walls. Wherever the Contractor is unsure of these requirements, the Contractor shall retain a Florida Licensed Engineer to design and inspect the temporary bracing and stability of the Structure.

11. DESIGN SUPERIMPOSED LOADS:

Occupancy	LIVE LOAD	DEAD LOAD
Generator	0 PSF	5,750 lbs

12. DESIGN WIND LOADS:

Governing Code	ASCE 7-10
Basic Wind Speed	Vult= 176 MPH/Vasd= 136 MPH
Risk Category	II
Building Enclosure	Enclosed
Directionality Factor	Kd = 0.85
Exposure	D
Mean Roof Height	42 FEET

SHOP DRAWINGS AND OTHER SUBMITTALS:

1. Submit specific components, such as columns, footings, etc., in a single package. Submit similar floors together.

2. On first submittal, clearly flag and cloud all differences from the contract documents. On resubmittals, flag and cloud all changes and additions to previous submittal; only clouded items will be reviewed.

3. Submittals for special structural, load-carrying items that are required by Codes or Standards to resist forces must be prepared by, or under the direct supervision of, a Delegated Engineer. Examples include precast concrete, prefabricated wood components, open web steel joists and joist girders, post-tensioning systems, Tilt-Up panels, structural steel connections, structural light gage steel framing, exterior enclosure systems and shoring and reshoring.

4. A Delegated Engineer is defined as a Florida Licensed Engineer who specializes in and undertakes the design of Structural Components or Structural Systems included in a specific submittal prepared for this project and is an employee or officer of, or Consultant to, the Contractor or fabricator responsible for the submittal. The Delegated Engineer shall sign, seal and date the submittal, including calculations and drawings.

5. The trade Contractor is responsible for confirming and correlating dimensions at the job sites, for tolerances, clearances, quantities, fabrication processes and techniques of construction, coordination of the work with other trades and full compliance with the contract documents.

REINFORCED CONCRETE:

1. Comply with ACI 301 and 318.

2. Provide Structural Concrete with a minimum ultimate Compressive Design Strength of 5,000 psi in 28 days as follows:

3. Use normal weight concrete for all Structural Members. u.o.n.

4. Provide ASTM A-615 Grade 60 reinforcing steel. Reinforcing shall be accurately placed, rigidly supported and firmly tied in place, with appropriate bar supports and spacers. Lap bottom steel over supports and top steel at midspan (u.o.n.). Hook discontinuous ends of all top bars and all bars in walls, u.o.n. Provide cover over reinforcing as follows:

Element	bottom	top	sides
Footings	3"	2"	3"
Slabs on Grade	2"	1"	2"
Walls Retaining Fill	–	–	2"

5. Tension Development Length and Lap Splice Lengths shall be as follows:

TENSION DEVELOPMENT LENGTH FOR BARS (IN)		
REBAR	TOP BARS	OTHER BARS
#3	22	17
#4	29	22
#5	36	28
#6	43	33
#7	63	48
#8	72	55

LAP SPLICE LENGTH FOR BARS (IN)		
REBAR	TOP BARS	OTHER BARS
#3	28	22
#4	37	29
#5	47	36
#6	56	43
#7	81	63
#8	93	72

(F'c = 3,000 PSI, cover ≥ Db, spacing ≥ 2Db for beams & columns, spacing ≥ 3Db for others bars.
Top bars are horizontal bars with more than 12 inches of concrete cast below bars.)

6. Where specified, provide plain, cold-drawn electrically-welded wire reinforcement conforming to ASTM A-185. Supply in flat sheets only. Lap splice two cross wire spacing.

7. In addition to specified reinforcing, provide xx tons of reinforcing bars to be detailed, fabricated, delivered to site and placed as directed by the Architect/Engineer to account for unforeseeable conditions.

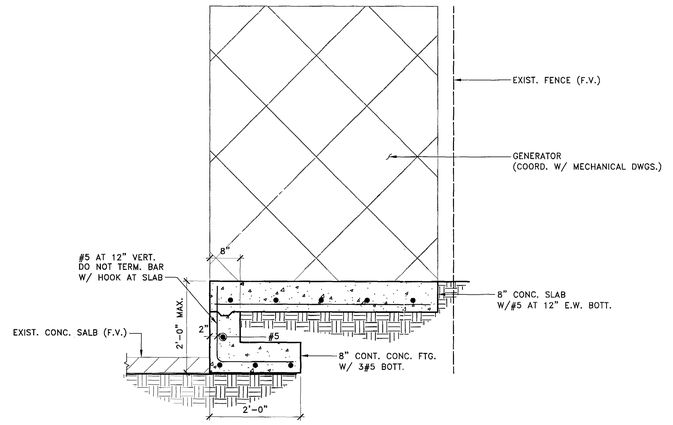
8. Utilities shall not penetrate beams or columns but may pass through slabs and walls individually, u.o.n. For openings 24" long or less, cut reinforcing and replace alongside opening with splice bars of equivalent area with 48 bar dia. lap. Prepare and submit shop drawings for openings longer than 24". For rectangular openings 12" long or longer, add 1#5 x 6' mid depth diagonal at all 4 corners.

9. Where reinforcing steel congestion permits, conduit and pipes up to 1" diameter may be embedded in concrete per ACI 318, section 6.3. Space at 3 diameters o.c. Place between outer layers of reinforcing if conduits are significantly congested, additional reinforcing perpendicular to piping may be required. Requests to embed larger pipes shall be accompanied by a detailed description and be submitted to the Architect for evaluation.

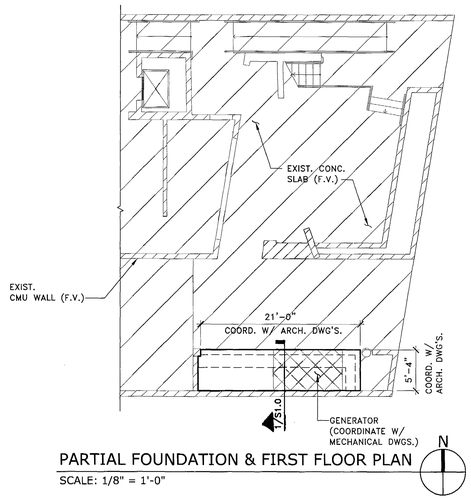
10. Provide construction joints in accordance with ACI 318, section 6.4. Provide keyways and adequate dowels. Submit drawings showing location of construction joints and direction of pour for review.

11. Provide 3/4" chamfer for all exposed corners.

12. Provide reinforcing steel placer with a set of Structural Drawings for field reference. Inspect reinforcing steel placing from Structural Drawings.



1 TYPICAL WALL SECTION
SCALE: 3/4" = 1'-0"



PARTIAL FOUNDATION & FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

City of Miami Beach
Fire Prevention Division
PLANS APPROVED

BEAME ARCHITECTURAL PARTNERSHIP
3059 GRAND AVENUE, SUITE 440
COCONUT GROVE, FLORIDA 33133
E-mail : bap@bapdesign.com
Florida Corp AA0002364
PH 305.444.7100 FX 305.444.9803

OWNER:
J3 VENTURES LLC
1506 COLLINS AVENUE
MIAMI BEACH, FLORIDA 33139

UNITED Engineering, Inc.
STRUCTURAL ENGINEERS
12595 SW 137 Avenue, Suite 112
Miami, Florida 33186
Tel.: 786.347.5250
Email: info@unitedeng.pro
Certificate of Authorization No. 29691

UNITED Project No.: 0213-03

JUAN J. FUENTES, P.E., S.E.
STRUCTURAL ENGINEER
FLORIDA LICENSE NO: 62426

NUMBER:	DATE:	ITEM:
REVISIONS		

HOTEL EVA
INTERIOR
IMPROVEMENTS
1506 COLLINS AVENUE
MIAMI BEACH,
FLORIDA 33139

PRJ. MNGR.	DRAWING BY	SCALE
JMFN	AM	AS SHOWN

SHEET TITLE

GENERAL NOTES, PARTIAL FOUNDATION & FIRST FLOOR PLAN, & DETAILS

JOB NUMBER	SHEET NUMBER
14010.00	S1.0
DATE: 05-23-14	

FP150234

Gamewell FCI FIRE CONTROL INSTRUMENTS

by Honeywell

S3 Series Control Panel

Description

The Gamewell-FCI, S3 Series Intelligent Fire Alarm Control Panel provides the latest innovative high-end processing power. It offers a simple, intuitive solution for the small to mid-sized fire alarm applications.

In standalone or network configurations, the S3 Series complies with most fire alarm application requirements. It supports either of the following types of networks.

- Up to 64 nodes using the 7100 Series panel.
- Up to 122 nodes using the S3 Series or E3 Series® panels.

Use either twisted-pair wire or fiber-optic to network panels at a high-speed 625K baud ARCNET network bus.

With flexible Boolean logic, intelligent detection, and Ethernet connectivity, this system provides power and versatility that surpasses comparable, small addressable fire alarm systems.

The basic S3 Series consists of an SLP (Smart Loop Panel) main board, LCD-SLP touchscreen display, SLC loop personality modules, and 7 amp power supply. The SLP provides either one or two SLC loops in Class A or B configuration that supports either of the following protocols:

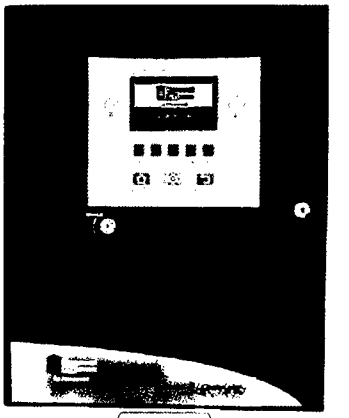
- Up to 318 devices per loop using the System Sensor® protocol. If you add a second loop module, it increases the maximum device count to 636 devices.
- Up to 126 devices per loop using the Apollo protocol. If you add a second loop module, it increases the maximum device count to 252 devices.

Four Class B or two Class A NACs can be wired and synchronized using the System Sensor, Cooper-Wheelock, or Gentex strobes. To retrofit the SLP on the existing audible/visual appliances, the on-board Electronic EOL (EEOL) automatically adjusts to the EOL resistor in the field.

A 4.3" (10.92 cm) color touchscreen display screen shows the following:

- Events on the system
- Status of analog addressable devices
- Complete diagnostic fault codes/messages
- Five programmable function buttons with LED status for accessibility to the following functions:
  - Disable/Enable
  - Bypass Output
  - Lamp Test
  - Trouble Acknowledge
  - Alarm Acknowledge
  - Custom-defined

Small Analog Addressable Fire Alarm Control Panel



S3 Series

Features

- Listed per ANSI/UL® Standard 864 9th Edition.
- IBC Seismic Certified.
- Allows one SLC loop (expandable to two loops) that supports either System Sensor or Apollo devices in Class A or Class B (Style 4, 6 or 7).
- System Sensor supports up to 318 intelligent devices and each SLC loop supports the following.
  - up to 159 detectors.
  - up to 159 modules (expandable to 636 maximum per panel).
- Apollo supports up to 126 intelligent detectors and modules per SLC. (Expandable to 252 maximum per panel).
- Includes a high resolution (4.3") (10.92 cm) color touchscreen display.
- Supports a network system of up to 122 nodes (includes E3 Series® panels) or up to 64 nodes (includes 7100 Series).
- Provides 7.0 amp power supply (120VAC or 240VAC).
- Includes four Class B or two Class A built-in Notification Appliance Circuits (NAC). Provides selectable System Sensor, Cooper-Wheelock, or Gentex strobe synchronization.
- Supports up to 32 serial annunciators (LCD, LED-only, LED Switch).

SIGNALING
UL LISTED S1869 7165-1703:0176

THE VMC GROUP
Reference Certificate of Compliance VMA-45894-02C (Revision 1)

ISO 9001 CERTIFIED

GAMEWELL-FCI
12 Clintonville Road, Northford, CT 06472-1610 USA • Tel: (203) 484-7161 • Fax: (203) 484-7118

Application

The S3 Series Fire Alarm and Life Safety System is an easy-to-use intelligent fire alarm solution designed for the small to mid-sized buildings. Analog technology delivers the benefits of a simple system installation, while a user-friendly interface makes panel operation and system maintenance quick and intuitive.

Smart Panel Programming

Using Boolean logic programming, the installer may customize the system to precisely suit the needs of the building owner. Auto-programming allows the installer to instantly locate all the devices on the SLC loop.

Simple, Intuitive Display

The front panel display provides a user-friendly interface for the operator's control. A 4.3" (10.922 cm) color touch-screen displays system status, event details and service modes. On the front of the panel, six LEDs show the following conditions.

- Fire
- Silenced
- Hazard (Gas or CO)
- AC Power
- Supervisory
- Trouble

Five custom programmable switches allow the user quick access to common functions specific to the building like device disable, output bypass and device status.

Perfect for Retrofits

The S3 Series is well-suited for retrofit applications. The SLP provides a simple way to upgrade your fire protection system. It is designed to be an upgrade solution for the legacy FCI 7100 and Gamewell 602 Series panels. An added feature is the SLP's EEOL. Using EEOL, the installers can automatically identify the EOL for existing audible/visual appliances.

Flexibility for Future Growth

The S3 Series can be expanded to add a second SLC loop without replacing the entire system. Using the RPT-E3-UTP Network Repeater, you can network up to 64 nodes (122 nodes with the ANX node expander) using either twisted-pair or fiber-optic. The built-in Ethernet port allows the connection to the Gamewell-FCI's FocalPoint Graphical Workstation.

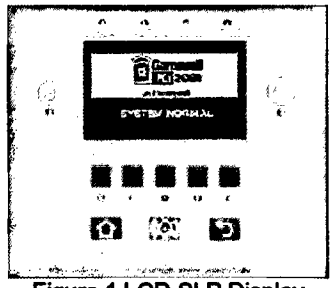


Figure 1 LCD-SLP Display

Features (Continued)

- Offers an Ethernet port for programming, a variety of system reports, and a FocalPoint® Graphic Workstation connectivity.
- Provides two fully-programmable Form-C contacts for Fire, Trouble, and Supervisory.
- TimeCap - Saves time and date up to 48 hours without any power or battery.
- Automatically adjusts to any NAC End-of-Line Resistor (EOL) value (1k-55k ohm) for legacy audible/visual appliances.
- Removable display can be used as a remote annunciator.
- Suitable for pre-action deluge applications.

Optional Accessories

DACT-E3 - Dialer

The Digital Alarm Communication Transmitter sends digital signals over telephone lines to the central station. It connects to the SLP through an RS-485 bus. Using the Contact ID format, the DACT-E3 provides a four-digit account code followed by the code/numbers listed below:

- Three-digit Event Code
- Two-digit Group Number
- Three-digit Contact Number

All codes are used to provide specific point identification. The DACT-E3 is compatible with digital alarm communicator receivers (DACRs) that receive the following signaling formats:

- Contact ID
- SIA
- 3+1
- 4+2

For more information, refer to the following data sheets:
DACT-E3 Data Sheet, P/N: 9020-0610
FML-E3/FSL-E3 Data Sheet, P/N: 9021-60783

RPT-E3-UTP - Network Repeater Card

The Network Repeater allows the SLP fire control panels to connect to the broadband network from remote locations. It connects to other networked units using unshielded, twisted-pair wiring. The RPT-E3-UTP is available with two add-on fiber modules:

- **FML-E3** connects to the network using either 62.5/125 micron multi-mode fiber.
- **FSL-E3** connects to the network using 9/125 micron single-mode fiber.

Refer to the RPT-E3-UTP Data Sheet, P/N: 9020-0609.

LCD-7100 - Remote Annunciator

The Remote serial display features an 80-character display. The LCD-7100 can be surface or flush-mounted on a standard 4-gang electrical box. You can use up to five LCD-7100 remote annunciators per SLP panel. For more information, refer to the LCD-7100 Data Sheet, P/N: 9020-0486.

ASM-16 - Addressable Switch/LED Module

There are 16 programmable switches available to perform any function the application requires. Each ASM-16 switch has 3 LEDs fully programmable in red, yellow, and green. These LEDs can be programmed to operate with a certain button press or operate independently as a status signal (e.g. ON, OFF, Activated, etc).
Up to 16 ASM-16 modules can be connected to the SLP panel. For more information, refer to the ASM-16 Data Sheet, P/N: 9020-0554.

ANU-48 - 48 LED Driver Unit

The ANU-48 provides output for eight remote panel switches and 48 remote LEDs for use in a remotely located UL® Listed annunciator enclosure. Up to 16 ANU-48 modules can be connected to the SLP panel. For more information, refer to the ANU-48 Data Sheet, P/N: 9020-0596.

Figure 2 illustrates the SLP-BB Cabinet Enclosure.

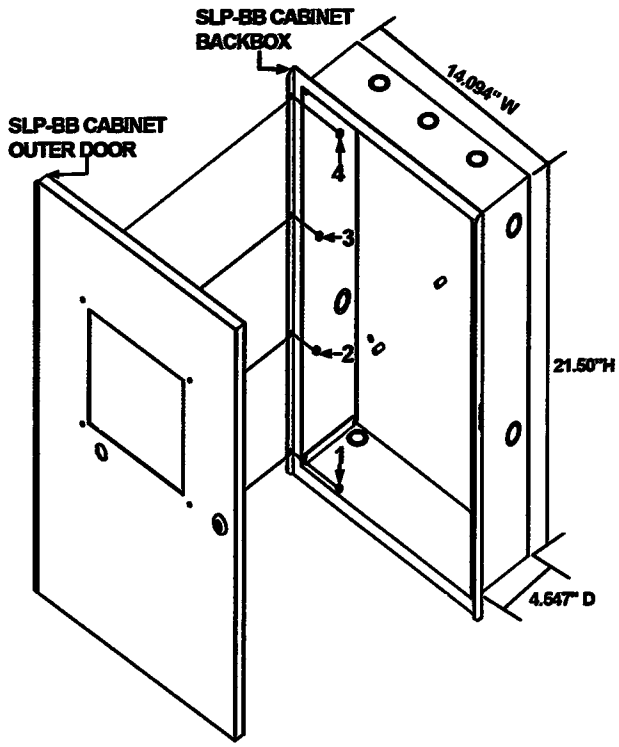


Figure 2 SLP Enclosure

Specifications

Device Loops	Up to two Class A or B, System Sensor units, each loop supporting up to 318 device addresses. Or- Apollo units, each loop supporting up to 126 device addresses per loop.
NAC circuits	4 Class B or 2 Class A (2.0 A each circuit), 6.0 A total
NAC Operating Voltage	24 VDC
NAC Minimum Voltage	19.5 VDC @ 20.4 V battery voltage
SLC Loop Circuit Operating Voltage	24 V peak-to-peak
Input Voltage	120 VAC, 60 Hz 240 VAC 50-60 Hz
Input Current	120 VAC, 2.75 amps max. 240 VAC, 1.4 amps max.
Aux Power 1 (Continuous)	24 VDC nominal at 1.0A
Aux Power 2 (Resettable)	24 VDC nominal at 1.0A
Base Panel Current draw	Standby: 0.111 amps Alarm: 0.243 amps
Operating Temperature	32°-120° F (0°-49° C)
Relative Humidity	93% (non-condensing)
Battery Charger Voltage	+24 VDC
Battery Charger Capacity	55 A/H batteries (cabinet accommodates 12 A/H batteries)
Alarm, Trouble & Supervisory Relay Contacts	Form-C, 2 amps @ 24VDC (resistive)

Cabinet Dimensions:

SLP-BB Dimensions	14.094" W x 21.5" H x 4.547" D (35.79 W x 54.61 H x 11.54 cm)
S3BB-RB Dimensions	19 3/8" W x 19 3/8" H x 4.5" D (49.22 W x 49.22 H x 11.43 D)

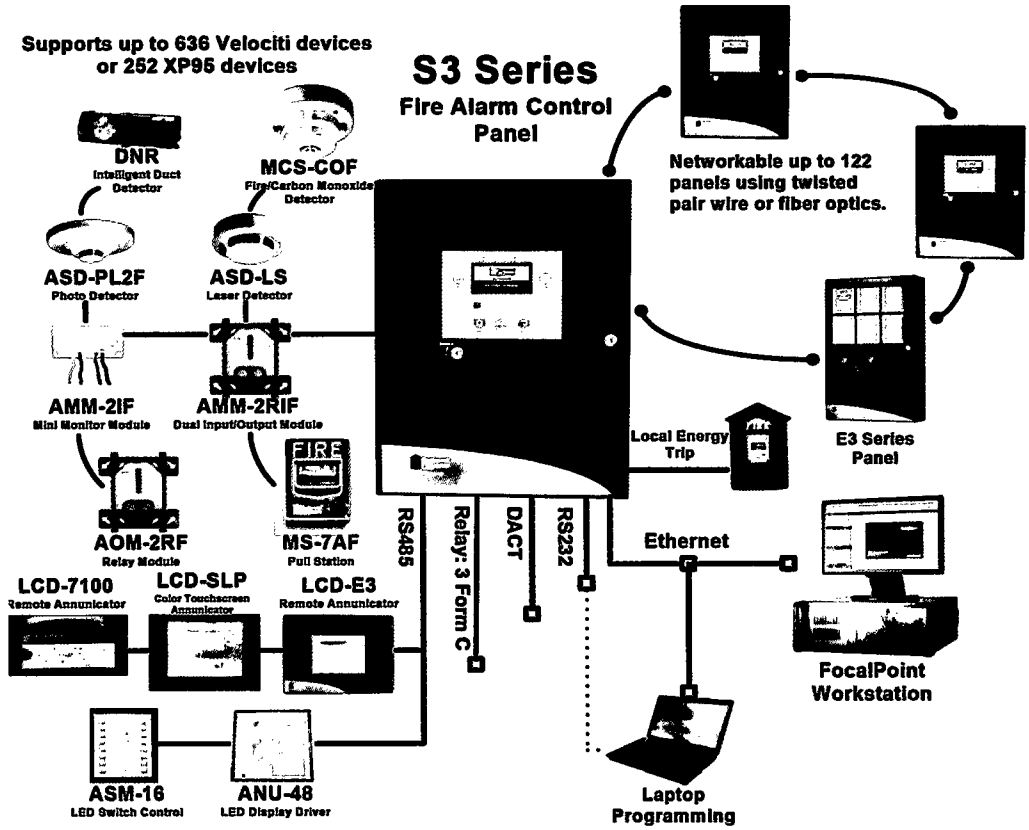


Figure 3 SLP Panel Configuration

Ordering Information

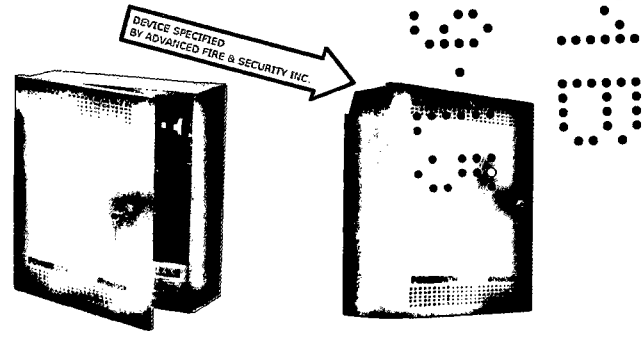
Part Number	Description
SLP-BLK	SLP addressable FACP in black SLP-BB enclosure. Requires either an SLC-PM or an SLC95-PM for SLC loops.
SLP-RED	SLP addressable FACP with red door and black SLP-BB backbox. Requires either an SLC-PM or an SLC95-PM for SLC loops.
SLP-RED-G	SLP addressable FACP 240VAC power supply with red door and black SLP-BB backbox. Requires either an SLC-PM or an SLC95-PM for SLC loops.
SLC-PM	System Sensor Loop Card - 1 loop used for 159 sensors and 159 modules. For use with the SLP-E3 panels only.
SLC95-PM	Apollo Loop Card-1 loop used for 126 sensors and modules. For use with the SLP-E3 panels only.

Ordering Information (Continued)

Part Number	Description
Accessories	
DACT-E3	Digital Dialer Communicator Transmitter for the S3 or E3 Series.
LCD-SLP	LCD Color Touchscreen display with five programmable switches. For use with the S3 Series panels. Remote annunciation requires the E3 Series A2 cabinet. (E3BB-BA2, E3BB-RA2)
RPT-E3-UTP	Network repeater card with twisted-pair fiber connections require either an FML-E3 or an FSL-E3 card.
FML-E3	Multi-mode fiber-optic card for one channel on the RPT-E3-UTP.
FSL-E3	Single-mode fiber-optic card for one channel on the RPT-E3-UTP.
SLP-RB	SLP motherboard For use with the replacement or the retrofit solutions.
FLPS-7-RB	SLP 120VAC 7A power supply. For use with the replacement or the retrofit solutions.
SLP-RETROFIT	SLP Retrofit Kit for the 7100 B-Slim and IF602 panels. Includes the new door and the mounting plate. Requires the following: • SLP-RB • LCD-SLP • SLC-PM/ SLC95-PM • FLPS-7-RB
S3BB-RB	SLP red cabinet with an inner door for the mounting display behind the plexiglass. Requires the following: • SLP-RB • LCD-SLP • SLC-PM/ SLC95-PM • FLPS-7-RB
LCD-7100	Remote Serial LCD Annunciator
ASM-16	Remote Programmable Addressable Switch/LED Module
ANU-48	Remote LED Driver Module

COOPER Notification

POWERPATH™ NAC POWER SUPPLIES



PS-6 PS-8

Description

The Wheelock Series PS-6 and PS-8 are 24VDC, filtered and regulated, supervised remote power supply/battery chargers are used for supervision and expanded power driving capability of Fire Alarm Notification Appliance Circuits. The PS-6 provides 6 amps of power distributed across 4 outputs, while the PS-8 provides 8 Amps across 4 output. In addition the PS-8 provides additional room in the chassis for accessories like an Addressable Control Module, with mounting studs.

The Power Supplies may be connected to any 12V or 24V (FWR or DC) Fire Alarm Control Panel (FACP) by using a Notification Appliance Circuit (NAC) or a "Dry Contact". Primary applications include NAC expansion (supports ADA requirements) and auxiliary power to support system accessories. This unit provides filtered and regulated 24VDC, up to four (4) Class "B", two (2) Class "A", or two (2) Class "B" and one (1) Class "A" Notification Appliance Circuits. With the optional plug-in PS-EXP module the unit supports (8) Class "B" or (4) Class "A" Notification Appliance Circuits. Additionally, an auxiliary power output of 2.5 Amps (disconnected upon AC power loss or an alarm condition) or up to 0.240 A of constant power on the PS-8 and 0.075 A of constant power on the PS-6.

The Wheelock Power Supplies can accommodate 7 or 12 AH batteries inside its lockable chassis. Using an external battery cabinet it can charge up to 33 AH batteries (pending UL testing). Two FACP NAC circuits or two "Dry" contact initiating circuits can be connected to the inputs. These inputs can then be directed to control supervision and power delivery to any combination of the four (4) outputs. Each output is rated at 3.0 Amps (Class "B") or (Class "A") and can be programmed to generate a steady or Code 3 Temporal Horn sound and a strobe output under alarm condition. Total load for the PS-6 and PS-8 NAC circuits must not exceed the power supplies rated output.

The Power Suppliesunder non-alarm condition provides independent supervision for Class "A" and Class "B" FACP NAC circuits. In the event of circuit trouble, the FACP will be notified via the POWERPATH steered input (IN1 or IN2). In addition there are two sets of trouble reporting terminals, one used for AC power loss reporting and the other for all troubles. The AC power loss reporting, on the common trouble terminals and on IN1 or IN2, can be delayed for either 30 seconds or 170 minutes. The AC power loss terminals will always report the trouble within 1 second after loss of AC power.

The PS-6 and PS-8 Power Supplies are UL Listed under UL Standard 864, 9th Edition to be used with any 24 volt Listed Regulated notification appliances. They include the capability to synchronize Wheelock strobes and horns and to silence the horn signal when horn/strobes are operating on two wires.

Features

Approvals

- Approvals Include: UL Standard 864, 1481
- Pending: California State Fire Marshal (CSFM), New York City (MEA), Factory Mutual (FM), Chicago (BFP) See Approvals by model in Specification and Ordering Information
- Compliant with NFPA 72

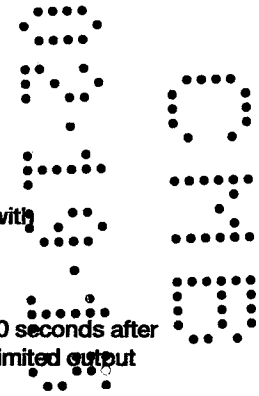
Inputs

- 120VAC, 50/60Hz, 4.25 Amps (PS-6/8) and 5.32 Amps (PS-8) Operating Power in Alarm
- 240VAC, 60Hz, 2.42 Amps (PS-6E and 3.22 Amps (PS-8E) ' Operating Power in Alarm
- 24VDC Battery Backup Connection
- Two (2), 12V or 24V NAC Initiating Circuits (8-33V at 5mA) FWR or DC
- Two (2) "Dry" Contact initiating Circuits
- Accepts two (2) Class "A" or two (2) Class "B" circuit inputs
- Built in battery charger for sealed lead acid or gel type batteries

...Features continued on next page

Outputs

- NAC outputs are 24VDC, 3.0 Amps each, power limited
- 8 Amps on PS-8 and 6 Amps on the PS-6 total alarm current
- Capable of four (4), Class "B" circuits
- Capable of two (2) Class "A" circuits
- Capable of one (1) Class "A" circuit and two (2) Class "B" circuits
- Capable of (8) Class "B" or four (4) Class "A" circuits with optional PS-EXP module
- Temporal (Code 3), constant voltage output, Wheelock Sync output or True input to output follower mode
- Built-in Wheelock synchronization mode that can be fed to any or all of the output circuits
- Input and output can be synchronized with "IN>OUT SYNC" mode (SM, DSM, 2nd POWERPATH™ or FACP with synchronization protocol is required)
- Audible silence capability
- Filtered and electronically regulated output
- 2.5 Amp auxiliary power limited output with reset capability. (Removed upon AC loss or alarm. Automatic reset 30 seconds after AC power returns or the alarm condition is over) or 0.075 Amps (PS-6) or 0.240 Amps (PS-8) of auxiliary power limited output which remains on during AC loss or an alarm condition when configured for 24 hour battery backup



Supervision

- Compatible with 12V or 24V (FWR or DC) FACP
- Signaling appliance circuits are supervised and steered to either IN1 or IN2
- 10K Ohm, 1 Watt (Wheelock Model #MPEOL) End of Line Resistor (EOLR) for supervision of all outputs
- 37 distinguishable trouble diagnostics
- AC loss trouble reported over a separate set of contacts (delay of 1 second)
- All troubles are reported over the common trouble contacts (AC loss can have a delay of 30 seconds or 170 minutes)
- Automatic switchover to standby battery when AC fails
- Thermal and short circuit protection with auto reset
- Input and output status LED indicators
- AC fail supervision
- Battery presence and low battery supervision
- Ground Fault Detection, with diagnostics to indicate which circuit fault is on
- Latching LED's for NAC trouble annunciation and Diagnostic trouble LED's (latching can be disabled)

Power

- Not Battery Dependent
- Automatic switch over to standby batteries when AC fails
- Supports sealed lead acid or gel type batteries
- Fused battery protection
- Thermal and short circuit protection with auto reset
- Supports both 7AH or 12AH batteries in the same cabinet

POWERPATH™ Operating Modes (refer to Installation Manual):

Normal Mode: Provides constant 24 VDC output upon initiation by a voltage to input IN1 or IN2 or by a contact opening on DRY1 or DRY2. The unit returns to standby mode when the input is deactivated.

Wheelock Sync Mode: Provides signals for synchronization of patented Wheelock audible and strobe notification appliances. Audibles can also be silenced in this mode while the strobes continue to flash.

In>Out Sync Mode: Accepts a synchronization signal on the input to provide a coded output or synchronized output. This signal may come from a FACP, another POWERPATH or a Wheelock SM or DSM synchronization module. Caution: Do not use strobes on coded output circuits.

True Input Follower Mode: Accepts a coded signal on the input to provide a coded output with the same timing as the input. The signal may come from a FACP, another POWERPATH or other coded source. Caution: Do not use strobes on coded output circuits.

Temporal Mode: Codes the output voltage in a code-3 temporal pattern to drive audible appliances such as horns, bells or chimes. Caution: Do not use strobes on coded output circuits.

Specifications and Ordering Information

Model Number	Order Code	Input Voltage/Current	Approvals				
			UL	MEA	CSFM	FM	BFP
PS-6	105530	6 amp, red enclosure	X	*	*	*	*
PS-6B	100257	6 amp, black enclosure	X	*	*	*	*
PS-8	105531	8 amp, red enclosure	X	*	*	*	*
PS-8B	105830	8 amp, black enclosure	X	*	*	*	*
PS-EXP	105334	4 class B or 2 class A expansion module	*	*	*	*	*

X= Approved
*= Pending

Input Circuit	**Input Voltage and Current**
Input voltage Range	8 to 33 VDC
Input Current @ 12 VDC	0.005 amps
Input Current @ 24 VDC	0.005 amps
Output Circuit	**Output Voltage and Current**
Four (4) Class B or Two (2) Class A or One (1) Class A and Two (2) Class "B" or 8 Class B or 4 Class A (optional PS-EXP module necessary)	24 VDC @ up to 3 amps per curcuit
Continuous duty up to 3 Amps per circuit, up to 4 Amps maximum per panel	
Standby Current	**0.129 Amps**
Alarm Current	**0.129 Amps**
Primary PS-6 (120 VAC models)	105 to 130 VAC, 50/60 Hz @ 4.25 Amps
Primary PS-8 (120VAC models)	105 to 130 VAC 50/60 Hz @ 5.32 Amps
Primary PS-6E (240 VAC models)	210 to 260 VAC, 50/60 Hz @ 2.42 Amps
Primary PS-8E (240 VAC models)	210 to 260 VAC 50/60 Hz @ 3.22 Amps
Secondary Power Charging Capacity	32 Amp hours @ 0.750 Amps per hour
Enclosure can house up to two 12 AH batteries	
Aux Output	
CP Mode: PS-6 up to 75 mA	PS-8 up to 250 mA
MP Mode: 2.5A during non alarm	

Dimensions		**Comments**
PS-6/PS-6B	17"H x 13"W x 3.5"D	Small profile
PS-8/PS-8B	17"H x 15"W x 5.5"D	Additional room for modules
PS-EXP	4.3"H x 3.7"W x 1"D	Plugs into main pcb on all models

Architects and Engineers Specifications

The power supply shall be **Wheelock POWERPATH™ Series PS-8,** or equivalent. The unit shall be stand alone power supply intended for powering fire alarm notification appliances via its own Notification Appliance Circuit(s) (NAC). The unit shall be UL 864 Listed for power limited operation of outputs and comply with NFPA 70 (NEC), article 760.
The power supply shall support a full 8A of notification power even if the battery is in a degraded mode and only AC power is connected.
The power supply shall be activated by a standard Notification Appliance Circuit (NAC) from any Fire Alarm Control Panel (FACP) or a "Dry contact" opening. The units shall be 8 ampere, 24 VDC, regulated and filtered, supervised remote power supply/charger. It shall operate over the voltage range of 8 to 33 VDC or FWR. The primary application of the unit shall be able to expand fire alarm system capabilities for additional NAC circuits to support ADA requirements and to provide auxiliary power to support system accessories or functions. The power supply shall provide four Class "B", two Class "A", or two Class "B" and one Class "A" NAC circuit(s). Eight Class "B" or Four Class "A" circuits shall be available with an optional PS-EXP module. The PS-8 unit shall supply up to 240 mA of auxiliary power that is available during both non-alarm and alarm or auxiliary power of not less than 2.5A at 24 VDC during non-alarm. The power supply shall be capable of charging batteries of up to 33 ampere hours per NFPA 72 at maximum rate of 0.750 Amps per hour.
Input activation options shall be from not less than two NAC circuits or Dry Contact closures. These inputs shall have the capability of being directed to any combination of the four NAC circuit outputs. Each NAC circuit output shall be rated at 3 amperes for Class "B" applications or 3 amperes each for Class "A". The outputs shall be programmable to generate a steady or Temporal (Code 3) output and or a synchronized strobe or horn output. The power supply shall provide independent loop supervision for either Class "A" or Class "B" FACP NAC circuits and shall have the capability to "steer" all alarm or trouble conditions to either incoming NAC circuit. The units shall have common trouble terminals. The power supply shall be powered from a 120 VAC source with a current consumption of xx amperes max. The unit shall incorporate short circuit protection with auto reset. The power supply shall incorporate a built in battery charger for lead acid or gel type batteries with automatic switchover to battery back up in the event of AC power failure. The charger shall incorporate fused protection for the batteries and have the ability to report low battery and/or no battery condition(s). Standby current for battery back up shall be 0.129 Amps max. The power supply shall have the ability to latch trouble LED's so the circuit in trouble can be identified. The cabinet dimensions shall be 17" H x 15" W x 5.5" D.

The power supply shall be **Wheelock POWERPATH™ Series PS-6,** or equivalent. The unit shall be stand alone power supply intended for powering fire alarm notification appliances via its own Notification Appliance Circuit(s) (NAC). The unit shall be UL 864 Listed for power limited operation of outputs and comply with NFPA 70 (NEC), article 760.
The power supply shall support a full 6A of notification power even if the battery is in a degraded mode and only AC power is connected.
The power supply shall be activated by a standard Notification Appliance Circuit (NAC) from any Fire Alarm Control Panel (FACP) or a "Dry contact" opening. The units shall be 6 ampere, 24 VDC, regulated and filtered, supervised remote power supply/charger. It shall operate over the voltage range of 8 to 33 VDC or FWR. The primary application of the unit shall be able to expand fire alarm system capabilities for additional NAC circuits to support ADA requirements and to provide auxiliary power to support system accessories or functions. The power supply shall provide four Class "B", two Class "A", or two Class "B" and one Class "A" NAC circuit(s). Eight Class "B" or Four Class "A" circuits shall be available with an optional PS-EXP module. The PS-6 unit shall supply up to 200 mA of auxiliary power that is available during both non-alarm and alarm or auxiliary power of not less than 2.5A at 24 VDC during non-alarm. The power supply shall be capable of charging batteries of up to 33 ampere hours per NFPA 72 at a maximum rate of 0.750 Amps per hour.
Input activation options shall be from not less than two NAC circuits or Dry Contact closures. These inputs shall have the capability of being directed to any combination of the four NAC circuit outputs. Each NAC circuit output shall be rated at 3 amperes for Class "B" applications or 3 amperes each for Class "A". The outputs shall be programmable to generate a steady or Temporal (Code 3) output and or a synchronized strobe or horn output. The power supply shall provide independent loop supervision for either Class "A" or Class "B" FACP NAC circuits and shall have the capability to "steer" all alarm or trouble conditions to either incoming NAC circuit. The units shall have common trouble terminals. The power supply shall be powered from a 120 VAC source with a current consumption of xx amperes max. The unit shall incorporate short circuit protection with auto reset. The power supply shall incorporate a built in battery charger for lead acid or gel type batteries with automatic switchover to battery back up in the event of AC power failure. The charger shall incorporate fused protection for the batteries and have the ability to report low battery and/or no battery condition(s). Standby current for battery back up shall be 0.130 Amps max. The power supply shall have the ability to latch trouble LED's so the circuit in trouble can be identified. The cabinet dimensions shall be 17" H x 13" W x 3.5" D.

⚠ WARNING: PLEASE READ THESE SPECIFICATIONS AND INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. FAILURE TO COMPLY WITH ANY OF THESE INSTRUCTIONS, CAUTIONS AND WARNINGS COULD RESULT IN IMPROPER APPLICATION, INSTALLATION AND/OR OPERATION OF THESE PRODUCTS IN AN EMERGENCY SITUATION, WHICH COULD RESULT IN PROPERTY DAMAGE, AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.

NOTE: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Wheelock Inc. standard terms and conditions.

NEMA Member

WE ENCOURAGE AND SUPPORT NICET CERTIFICATION
1 YEAR WARRANTY
Made in USA
S9100 PS-6 & 8 06/08

NJ Location
273 Branchport Ave.
Long Branch, NJ 07740
P: 800-631-2148
F: 732-222-8707
www.coopernotification.com

FL Location
7565 Commerce Ct.
Sarasota, FL 34243
P: 941-487-2300
F: 941-487-2389

VA Location
P: 877-459-7726
F: 703-294-6560

7744F/7788F

AES CORPORATION | IntelliNet For Alarm Monitoring

UL Listed

RF Subscriber Unit

UL Fire, AA Burglary and NFPA-72 Compliant

UL Listed

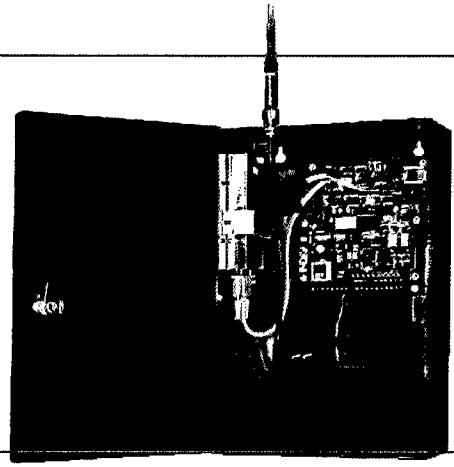
UL Listed Central Station

Remote Station

864 Ed. 9, 827, 1610, 365, 681

CSFM

NFPA RF Section 8.6.3.5



- **Options for Full Data for Fire and Burglary**
- **Available in 7744F & 7788F Zone Configurations**
- **Built-in Power Supply and Battery Charger**
- **Local Annunciation Options on Board**

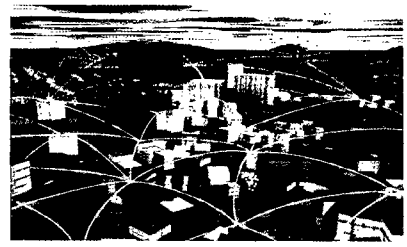
Advanced Wireless Alarm Monitoring

The 7744F/7788F smart subscriber unit links an alarm panel to an alarm monitoring central station. This 2-way transceiver and repeater in one is housed in a full size locking steel cabinet for superior performance. The 7744F/7788F supports a wide range of inputs such as NO/NC/EOL and direct voltage. It automatically senses wire and antenna cuts, and monitors battery and AC power status. Advanced status reporting, self-diagnostics and a built-in power supply make the 7744F/7788F the first choice for all wireless alarm communication needs.

Full Data for Fire and Burglary

Use with the optional Firetap for full fire data or the IntelliTap for full fire and burglary data.

Available Configurations	Available Options
7744F – 4 reversing polarity inputs plus 4 programmable EOL inputs	FireTap 7770
7788F – Programmable EOL inputs with 8 zones	IntelliTap 7067
	NEMA 4 Enclosure
	High Gain Antenna
	Additional Back Up Battery
	Available in Burglary Beige or Fire Red



Wireless mesh networking is an innovative technology adopted by many industries with applications that need to communicate data over a large geographic area with a high level of reliability at a low total cost of ownership.

The advanced design and 2-way communications capability provides easy installation, expansion, and management when compared to alternative communication methods, both wired and wireless.

7744F/7788F
RF Subscriber Unit

Technical Specifications

Radio
Standard CSAA frequency ranges: 450-470 MHz and 130-174 MHz, VHF and UHF. Others available

Standard Output Power
2 watts (requires FCC license)

Power Input
16.5 VAC, 40VA UL listed
Class II transformer required

Voltage
12 VDC nominal

Current
175mA standby; 800mA transmit

Alarm Signal Inputs
- 4 individually programmable Zones: NO/NC/EOL, trouble restore
- RS-232
- Reversing voltage (7744F only) 12 or 24 VDC

Operating Temperature Range
0° to 50°C, 32° to 122°F

Storage Temperature Range
-10° to 60°C, 14° to 140°F

Relative Humidity Range
0-85% RHC non-condensing

Back up Battery
12V, 7.5 AHr

Low Battery Reporting
22.5-minute test cycle

AC Status
Reports to central station after approximately 60 minutes without AC power, reports power restored after approximately 60 minutes of restored power. programmable from 60 to 180 minutes

Antenna Cut (local reporting)
Form 'C' Contact 1 AMP

Size
13.25"H x 8.5"W x 4.3"D
34cm x 21.5cm x 11cm

Weight
6.4 lbs, 2.9 Kilograms (excluding battery)

Colors
Available in standard Burglary Beige or Fire Red
Please specify when ordering

Available Options
- 7788F RF subscriber unit with 8 EOL inputs
- 7744F RF subscriber unit with 4 EOL inputs and 4 reverse polarity inputs
- 7770 - FireTap
- 7067 - IntelliTap
- NEMA 4 Enclosure

Please specify when ordering

AES-*IntelliNet*™ is the industry leader in delivering high quality wireless mesh networks to the fire and security industry in commercial, corporate, government, and educational applications with its broad line of products and advanced network management tools. Users of AES-*IntelliNet* networks have gained significant revenue, communications, and cost advantages while meeting the high standards of reliability required for the fire and security industry. AES-*IntelliNet* alarm monitoring systems are deployed at hundreds of thousands of locations in over 130 countries.

AES CORPORATION | *IntelliNet* For Alarm Monitoring

For more information
Call 800-AES-NETS (800-237-6387)

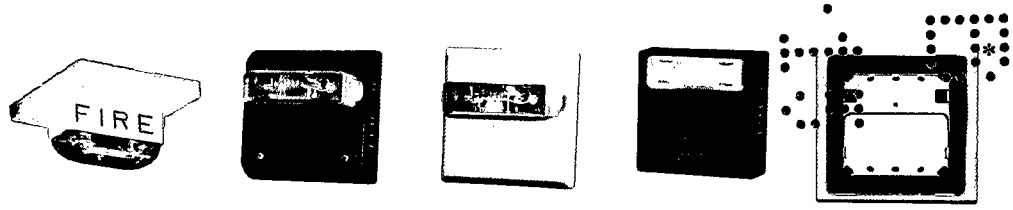
AES Corporation | 285 Newbury Street | Peabody, MA 01960 USA
Tel. +1 978-535-7310 | Fax +1 978-535-7313 | Email info@aes-intellinet.com
Web www.aes-intellinet.com

Available configurations
- 7788F, 8 EOL inputs
- 7744F, 4 EOL inputs w/4 reverse polarity inputs

7744F/7788F/08/09

COOPER Notification

Weatherproof Appliances - Series AH Audibles, AS Audible Strobes, MT Multitone Strobes, RSS Strobes and ET70 Speaker Strobes and Weatherproof Mounting Accessories



Description:

Designed for life safety, performance and reliability, Cooper Notification's Wheelock cost effective weatherpoof notification appliances include:

Weatherproof Appliances	Series
Strobes	RSSWP
Horn Strobes	ASWP
Horns	AH-24WP, AH-12WP
Multitone Horn Strobes	MTWP
Multitone Horns	MT
Speaker Strobes	ET70WP
Speakers	ET-1010

All strobe models are UL dual listed - meeting both UL1638 and UL1971 requirements. As dual listed appliances, these weatherproof strobes, horn strobes and speaker strobes are listed for outdoor applications under UL 1638 as well as under UL 1971, the Standard for Safety Signaling Devices for Hearing Impaired. With an extended temperature range of –31°F to 150°F (-35°C to 66°C), Wheelock weatherproof appliances meet or exceed UL outdoor test requirements for rain, humidity and corrosion resistance while providing multiple strobe intensity options, including the highest strobe ratings available for area coverage per NFPA 72 strobe spacing tables (up to 185 candela for wall mounting and 177 candela for ceiling mounting).

To enable weatherproof mounting, Cooper Notification provides the industry's widest choice of mounting options for surface or unique semi-flush installation. Models are available for surface mounting to Wheelock weatherproof backboxes on walls or ceilings. The optional WP-KIT allows the weatherproof backboxes (IOB, WPBB or WPSBB) to be mounted to a recessed electrical box for concealed conduit installation. For semi-flush installation, the WPA* and WFPA* kits allow a customer to mount the weatherproof appliances to a recessed electrical box without the need for an external weatherproof backbox. See the Backboxes, Plates and Gaskets Table on page three of this document for a summarization of these mounting options and the required accessories.

All models may be synchronized using the Wheelock DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels incorporating the Wheelock Patented Sync Protocol. The horn output of horn strobes can be independently controlled on 2-wire circuits using the Wheelock patented sync protocol. MTWP horn strobe models are 4-wire appliances; the strobes can be synchronized while the audible can be connected to a coded fire alarm system or can be set to produce any of eight selectable tones.

Features:

- Approvals include: UL Standards 1971, 1638, 464 and 1480 California State Fire Marshal (CSFM), New York City (MEA), Factory Mutual (FM), Chicago (BFP) and ULC . See agency approvals by model number on page two of this document
- Compliance with the following requirements: NFPA, UFC, ANSI 117.1, OSHA Part 29, 1910.165, ADA
- Weatherproof with extended temperature range of –40°F to 150°F (-40°C to 66°C)*
- Dual Listed strobe models (UL 1638 and UL 1971)
- Industry's highest strobe candela options
- Synchronize using the Wheelock Sync Modules or panels with built-in Wheelock Patented Sync Protocol
- Models with field selectable tone, dBA and candela settings
- Wall or ceiling mounting options
- Surface of semi-flush mounting
- IN/OUT wiring termination accepting two #12-18 AWG wires at each terminal

The series RSSWP, ASWP, AH-24WP, MTWP-2475W, and MT-12/24 have UL / ULC approval down to -40°F. The ET-1010 and ET70WP have UL approval down to -40°F. The AH-12WP has UL approval down to -31°F.

E5946
S5391
S2652

151-92-E

7125-0785:131 (ASWP)
7125-0785:146 (ET70WP)
7125-0785:156 (MTWP)
7300-0785:154 (RSSWP)

NOTE: All CAUTIONS and WARNINGS are identified by the symbol ⚠. All warnings are printed in bold capital letters.

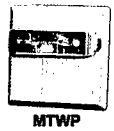
⚠ WARNING: PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. VISIT WWW.COOPERNOTIFICATION.COM OR CONTACT COOPER WHEELOCK FOR THE CURRENT INSTALLATION INSTRUCTIONS. FAILURE TO COMPLY WITH ANY OF THESE INSTRUCTIONS, CAUTIONS OR WARNINGS COULD RESULT IN IMPROPER APPLICATION, INSTALLATION AND/OR OPERATION OF THESE PRODUCTS IN AN EMERGENCY SITUATION, WHICH COULD RESULT IN PROPERTY DAMAGE, AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.

General Notes:

- Strobes are designed to flash at 1 flash per second minimum over their UL Listed Regulated Voltage Range.
- All candela ratings represent minimum effective Strobe intensity based on UL Standards 1971 and 1638 as indicated in candela ratings table.

Wall Mount

RSSWP


MTWP


ASWP

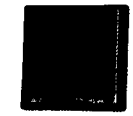

ET70WP

Ceiling Mount

RSSWP MTWP

ASWP ET70WP

Wall or Ceiling Mount


MT


AH


ET-1010

Strobe		Order Code
RSSWP-2475W-FR	Red	9013
RSSWP-2475W-FW	White	3034
RSSWP-24MCWH-FR	Red	5161
RSSWP-24MCWH-FW	White	5165
Audible Strobe		
ASWP-2475W-FR	Red	9012
ASWP-24MCWH-FR	Red	5137
ASWP-24MCWH-FW	White	5140
Multi-tone Strobe		
MTWP-2475W-FR	Red	8420
MTWP-2475W-FW	White	3112
MTWP-24MCWH-FR	Red	5132
MTWP-24MCWH-FW	White	5134
Speaker Strobe		
ET70WP-2475W-FR	Red	9077
ET70WP-2475W-FW	White	3179
ET70WP-24185W-FR	Red	4885
ET70WP-24185W-FW	White	4891
ET70WP-24135W-FR	Red	4872
ET70WP-24135W-FW	White	4875

Strobe		Order Code
RSSWP-2475C-FR	Red	4338
RSSWP-2475C-FW	White	4446
RSSWP-24MCCH-FR	Red	5167
RSSWP-24MCCH-FW	White	5187
Audible Strobe		
ASWP-2475C-FR	Red	4251
ASWP-2475C-FW	White	4502
ASWP-24MCCH-FR	Red	5149
ASWP-24MCCH-FW	White	5157
Multi-tone Strobe		
MTWP-2475C-FR	Red	4457
MTWP-2475C-FW	White	4478
MTWP-24MCCH-FR	Red	5102
MTWP-24MCCH-FW	White	5122
Speaker Strobe		
ET70WP-2475C-FR	Red	4452
ET70WP-2475C-FW	White	4454
ET70WP-24177C-FR	Red	4845
ET70WP-24177C-FW	White	4859
ET70WP-24115C-FR	Red	4550
ET70WP-24115C-FW	White	4732

Audible		Order Code
AH-24WP-R	Red	7416
AH-12WP-R	Red	7415
Horn		
MT-12/24-R	Red	5023
Speaker		
ET-1010-R	Red	3135
ET-1010-W	White	3137

UL Max. Current	AH	
	24 VDC	12 VDC
High (99) dBA	0.080	0.192
Med (95) dBA	0.043	0.108
Low (90) dBA	0.021	0.058

UL Reverberant dBA @ 10 Feet							
Watts	1/8	1/4	1/2	1	2	4	8
ET-1010	77	80	83	86	87	92	94
ET70WP	78	81	84	87	90	93	95

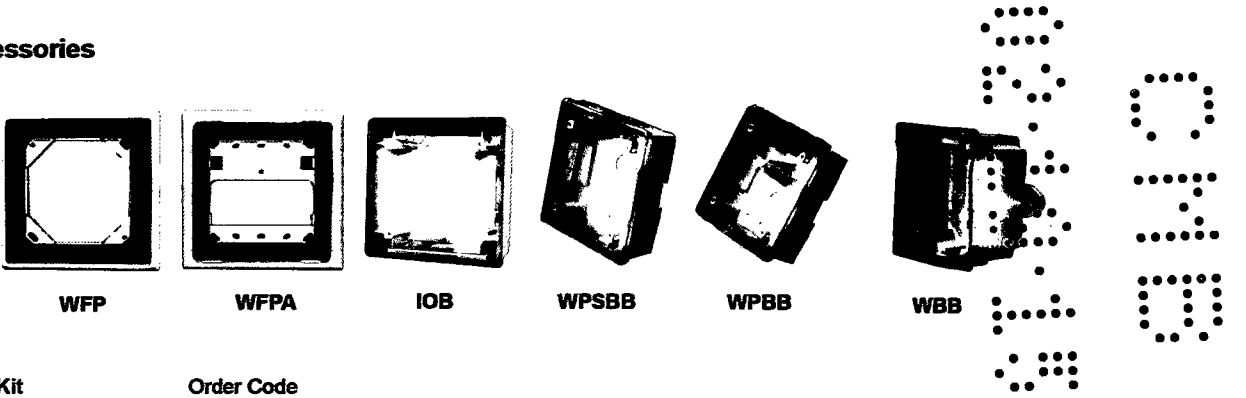
	Candela Ratings						
Series	UL 1971	UL 1638 @ 77°F	UL 1638 @ -40°F	RSS, ET70WP and MTWP UL Max Current (Strobe Only)	ASWP		
					High	Med	Low
2475	30**	180	115	0.138	0.168	0.155	0.150
MCWH	135	135	56	0.300	0.355	0.340	0.335
	185	185	77	0.420	0.480	0.465	0.460
MCCH	115	115	47	0.300	0.355	0.340	0.335
	177	177	73	0.420	0.480	0.465	0.460
24185	185	185	77	0.420			
24177	177	177	73	0.420			

**Wall mount rating only

Model Number	Agency Approvals				
Strobe	**UL**	**MEA**	**CSFM**	**FM**	**BFP**
RSSWP-2475	X	X	X	X	-
RSSWP-24MCWH	X	-	X	-	-
RSSWP-24MCCH	X	-	X	-	-
Audible Strobe					
ASWP-2475	X	X	X	X	X
ASWP-MCWH	X	-	X	-	-
ASWP-MCCH	X	-	X	-	-
Multitone Strobe					
MTWP-2475	X	X	X	X	-
MTWP-MCWH	X	-	X	-	-
MTWP-MCCH	X	-	X	-	-
Horns/Audibles					
AH-24WP	X	X	X	X	X
AH-12WP	X	X	X	X	X
MT-12/24	X	X	X	X	X
Speaker Strobe					
ET70WP-2475	X	-	X	X	-
ET70WP-185	X	-	X	X	-
ET70WP-177	X	-	X	X	-
ET70WP-115	X	-	X	X	-
ET70WP-135	X	-	X	X	-

UL Max. Current (Audible)	MTWP/MT 24 VDC		MT 12 VDC	
dBA	HI	STD	HI	STD
Horn	0.108	0.044	0.177	0.034
Bell	0.053	0.024	0.095	0.020
March Time	0.104	0.038	0.142	0.034
Code 3 Horn	0.091	0.035	0.142	0.034
Code 3 Tone	0.075	0.035	0.105	0.021
Slow Whoop	0.098	0.037	0.142	0.035
Siren	0.104	0.036	0.152	0.030
Hi/Lo	0.057	0.025	0.114	0.026

Mounting Accessories



WFP WFPA IOB WPSBB WPBB WBB

Gasket Kit		Order Code
WP-KIT		4486
Flush Plates		
WFPA-R	Red	4698
WFPA-W	White	4701
WFP-R	Red	4696
WFP-W	White	4697
Backboxes		
IOB-R*	Red	5046
IOB-W*	White	5047
WPSBB-R*	Red	9751
WPSBB-W*	White	3033
WPBB-R*	Red	9014
WPBB-W*	White	4692
WBB-R	Red	2959
WBB-W	White	2960

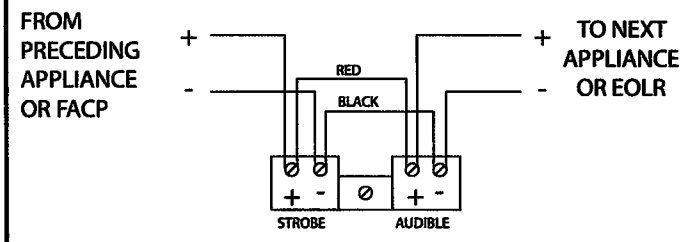
Mounting Options:

	Backboxes, Plates, Gasket Kits		
	Surface Mount		Flush Mount
	Exposed Conduit	Concealed Conduit	
RSSWP Strobes	WPSBB	WPSBB + WP-KIT	WFP
ET70WP Speaker Strobes	IOB	IOB + WP-KIT	WFP
ASWP Horn Strobes	WPBB	WPBB + WP-KIT	WFPA
AHWP Horns	WBB	-	WFP
ET-1010 Speakers	WBB	-	WFP
MTWP Multitone Horn Strobes	IOB	IOB + WP-KIT	WFP
Multitone Horn	IOB	IOB + WP-KIT	WFP

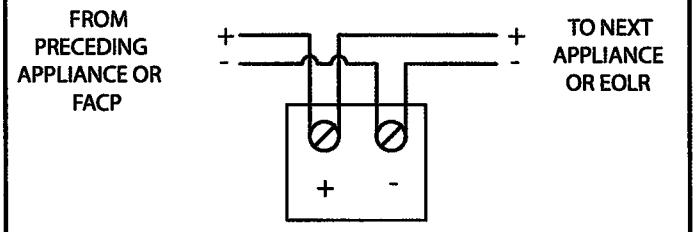
*IOB, WPSBB and WPBB models include weep holes and plug in the event that moisture may have entered the appliance

Wiring Diagrams

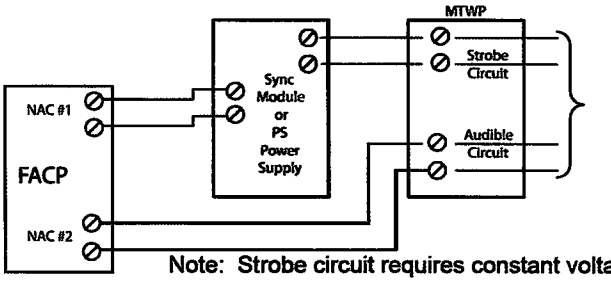
SERIES MTWP AUDIBLE APPLIANCE AND STROBE OPERATE IN UNISON. RED AND BLACK SHUNT-WIRES ARE SUPPLIED.



SERIES RSSWP, ASWP, AHWP, MTWP AND MT-12/24 APPLIANCES

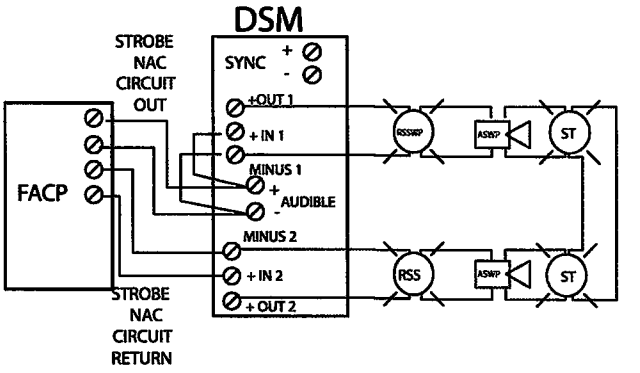


SERIES MTWP APPLIANCES SYNCHRONIZED STROBE OPERATION WITH CODED FACP



Note: Strobe circuit requires constant voltage.

SERIES RSSWP/ASWP APPLIANCES SYNCHRONIZED W/ DSM MODULE SINGLE CLASS "A" NAC CIRCUIT



Note: Models are available in Red or White. Contact Customer Service for Order Code and Delivery.
#Refer to Data Sheet S7000 for Mounting Options

NOTE: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Cooper Wheelock Inc. dba Cooper Notification standard terms and conditions.

ARCHITECTS AND ENGINEERS SPECIFICATIONS

General
Weatherproof notification appliances shall be UL listed for outdoor use. Weatherproof Strobe appliances shall be listed under UL Standard 1638 (Standard for Visual Signaling Appliances) for Indoor/Outdoor use and UL Standard 1971 (Standard for Safety Signaling Devices for Hearing Impaired). The appliances shall be available for optional wall mounting or ceiling mounting to weatherproof backboxes using either exposed conduit or concealed conduit, or semi-flush mounting to a recessed electrical box in walls or ceilings using Wheelock mounting accessories.

Weatherproof Strobes
Weatherproof Strobe appliances shall produce a minimum flash rate of 60 flashes per minute over the UL Regulated Voltage Range of 16 to 33 VDC and shall incorporate a Xenon flashtube. The weatherproof strobes shall be available with UL 1971 candela ratings up to 185 cd for wall mounting and 177 cd for ceiling mounting. UL 1638 candela ratings up to 180 cd at 77°F shall be available. The strobes shall operate over an extended temperature range of –40°F to 150°F (-40°C to 66°C) and be listed for maximum humidity of 95% RH. Strobe inputs shall be polarized for compatibility with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP).

Weatherproof Audibles and Audible/Strobe Combinations Weatherproof horns and multitone audibles shall be listed for Indoor/Outdoor use under UL Standard 464. The horns shall be able to produce a continuous output or a temporal code-3 output that can be synchronized. The horns shall have at least 3 sound level settings. Horn/Strobe combinations shall be able to be synchronized on a single NAC.

Multitone audibles shall be able to produce 8 distinct tones selectable by dip switch and shall have at least 2 sound level settings. Multitone Audible/Strobe combinations shall have independent inputs for the audible and strobe. The strobes shall be able to be synchronized. The audibles shall be able to be coded when operated on a separate NAC.

Weatherproof Speakers and Speaker/Strobes
Weatherproof speakers and speaker/strobes shall be listed for Indoor/Outdoor use under UL Standard 1480. All speakers shall provide field selectable taps for 1/8W to 8W operation for either 25 VRMS or 70 VRMS audio systems and shall incorporate a sealed back construction for extra protection and improved audibility. Speakers without strobes shall be Wheelock Series ET-1010. They shall be listed to produce up to 94 dBA and shall incorporate a vandal resistant grille design. Speaker with strobes shall be Wheelock Series ET70WP. They shall be available for surface or semi-flush mounting to walls or ceilings and shall be listed to produce up to 93 dBA.

Synchronization Modules
When synchronization of strobes or temporal code-3 audibles is required, the appliances shall be compatible with the Wheelock Series DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels with built-in Wheelock Patented Sync Protocol. The strobes and audibles shall not drift out of synchronization at any time during operation.

Series ASWP audibles and strobes shall be able to be synchronized on a 2-wire circuit with the ability to silence the audible if required. The strobes on Series MT multitone audible/strobe appliances shall be able to be synchronized and shall be able to be operated on a separate circuit from the audibles while the audible circuit is connected to a coded or continuous NAC.

Weatherproof Mounting Accessories
Weatherproof mounting options shall include surface mounting or semi-flush mounting to walls or ceilings. Surface mounted appliances shall mount to Wheelock IOB, WBB, WPBB or WPSBB weatherproof backboxes using either exposed conduit or concealed conduit. For concealed conduit the weatherproof backbox shall be mounted to a recessed electrical box with Wheelock's WP-KIT to provide a weatherproof seal for the electrical box. Semi-flush mounted appliances shall mount to a recessed electrical box using Wheelock WFP or WFPA flush plates to provide a weatherproof seal between the electrical box and the appliance.

NEMA Member

WE ENCOURAGE AND SUPPORT NICET CERTIFICATION
3 YEAR WARRANTY

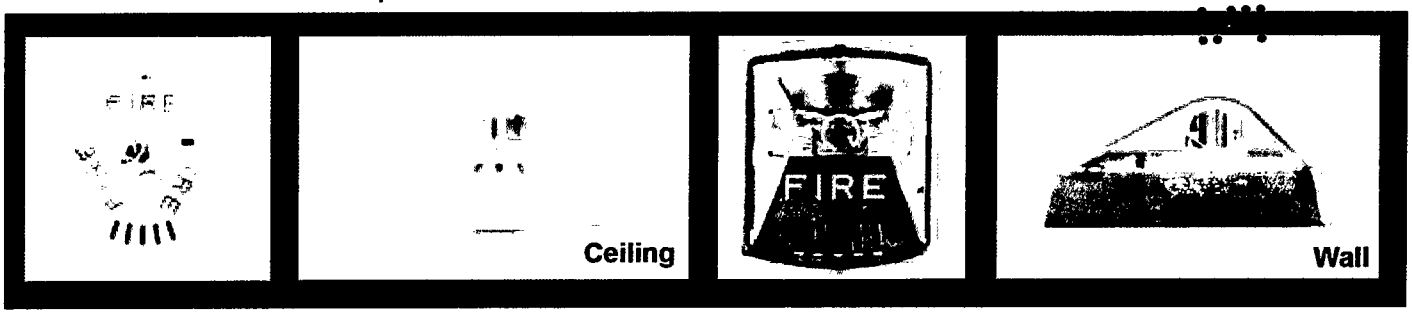
S9004 WP 06/11

NJ Location
273 Branchport Ave.
Long Branch, NJ 07740
P: 800-631-2148
F: 732-222-8707
www.coopernotification.com

COOPER Notification

EXCEDER™

Strobe, Horn Strobe, and Horn Notification Appliances



Description:

The Wheelock® Exceder™ Series of notification appliances feature a sleek modern design that will please building owners with reduced total cost of ownership. Installers will benefit from its comprehensive feature list, including the most candela options in one appliance, low current draw, no tools needed for setting changes, voltage test points, 12/24 VDC operation, universal mounting base and multiple mounting options for both new and retrofit construction.

The Wheelock® Exceder™ Series incorporates high reliability and high efficiency optics to minimize current draw allowing for a greater number of appliances on the notification appliance circuit. All strobe models feature an industry first of 8 candela settings on a single appliance. Models with an audible feature 3 sound settings (90, 95, 99 dB). All switches to change settings, can be set without the use of a tool and are located behind the appliance to prevent tampering. Wall models feature voltage test points to take readings with a voltage meter for troubleshooting and AHJ inspection.

The Wheelock® Exceder™ Series of wall and ceiling notification appliances feature a Universal Mounting Base (UMB) designed to simplify the installation and testing of horns, strobes, and combination horn strobes. The separate universal mounting base can be pre-wired to allow full testing of circuit wiring before the appliance is installed and the surface is finished. It comes complete with a Contact Cover for protection against dirt, dust, paint and damage to the contacts. The Contact Cover also acts as a shunting device to allow pre-wire testing for common wiring issues. The Contact Cover is polarized to prevent it from being installed incorrectly and prevents the appliance from being installed while it is on the UMB. When the Contact Cover is removed the circuit will show an open until the appliance is installed. The UMB allows for consistent installation and easy replacement of appliances if required. Wall models provide an optional locking screw for extra secure installation, while the ceiling models provide a captivated screw to prevent the screw from falling during installation.

Compliance
- UL 1971, UL 464, ULC, CSFM, FM
- ADA/NFPA/ANSI/OSHA
- RoHS

- **Save up to 48% in current draw***
- **Up to 9 models now in 1 appliance**
- **Save up to 14% cost of installation****

Sleek Modern Aesthetics

Finger Slide Switches

Voltage Test Points

Multiple Voltages

3 Audible Settings
90, 95, 99 dB

8 Candela Settings ***
Wall - 15/1575/30/75/95/110/135/185
Ceiling - 15/30/60/75/95/115/150/177

Universal Mounting Base ***
Ceiling and Wall
Mounts to 5 Backbox Types

Environmentally Friendly
Low Current Draw

Compatibility and Requirements
- Synchronize using the Wheelock® Sync Modules or panels with built-in Wheelock® Patented Sync Protocol
- Compatible with UL "Regulated Voltage" using filtered VDC or unfiltered VRMS input voltage
- Strobes produce 1 flash per second over the "Regulated Voltage" range

* Compared to competitive models
** Compared to previous models
*** Patented

NOTE: All CAUTIONS and WARNINGS are identified by the symbol ⚠. All warnings are printed in bold capital letters.

⚠ WARNING: PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. VISIT WWW.COOPERNOTIFICATION.COM OR CONTACT COOPER NOTIFICATION FOR THE CURRENT INSTALLATION INSTRUCTIONS. FAILURE TO COMPLY WITH ANY OF THESE INSTRUCTIONS, CAUTIONS OR WARNINGS COULD RESULT IN IMPROPER APPLICATION, INSTALLATION AND/OR OPERATION OF THESE PRODUCTS IN AN EMERGENCY SITUATION, WHICH COULD RESULT IN PROPERTY DAMAGE, AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.

General Notes:

General Notes:

- Strobes are designed to flash at 1 flash per second minimum over their "Regulated Voltage Range".
- All candela ratings represent minimum effective strobe intensity based on UL Standard 1971.
- Series Exceder Strobe products are Listed under UL Standards 1971 and 464 for indoor use with a temperature range of 32°F to 120°F (0°C to 49°C) and maximum humidity of 93% (± 2%) UL 464 (85% UL 1971).
- Series Exceder horns are under UL Standard 464 for audible signal appliances (Indoor use only).

Low Current Draw = Fewer Power Supplies

Strobe Ratings per UL Standard 1971

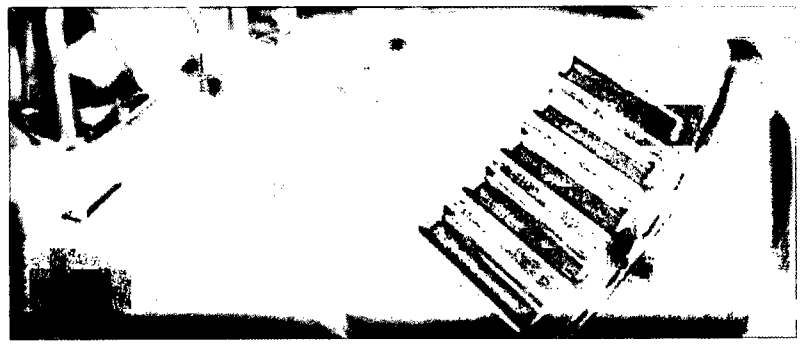
		UL Max Current*													
		24 VDC / 24 FWR												12 VDC	
Model	Regulated Voltage Range VDC	(15)	15/75	(30)	60	75	95	(110)	115	135	150	177	185	15	15/75
ST	8.0-33.0	(0.057)	0.070	(0.085)		0.135	0.163	(0.182)		0.205			0.253	0.110	0.140
STC	8.0-33.0	0.061		0.085	0.103	0.135	0.163		0.182		0.205	0.253		0.110	

Horn Strobe Ratings per UL 1971 & Anechoic at 24 VDC

		UL Max Current* at Anechoic 99 dBA													
		24 VDC												12 VDC	
Model	Regulated Voltage Range VDC	(15)	15/75	30	60	(75)	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	(0.082)	0.095	0.102		(0.148)	0.176	0.197		0.242			0.282	0.125	0.159
HSC	8.0-33.0	0.082		0.102	0.141	0.148	0.176		0.197		0.242	0.282		0.125	
		UL Max Current* at Anechoic 95 dBA													
		24 VDC												12 VDC	
Model	Regulated Voltage Range VDC	15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.073	0.083	0.087		0.139	0.163	0.186		0.230			0.272	0.122	0.153
HSC	8.0-33.0	0.073		0.087	0.128	0.139	0.163		0.186		0.230	0.272		0.122	
		UL Max Current* at Anechoic 90 dBA													
		24 VDC												12 VDC	
Model	Regulated Voltage Range VDC	15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.065	0.075	0.084		0.136	0.157	0.184		0.226			0.267	0.120	0.148
HSC	8.0-33.0	0.065		0.084	0.120	0.136	0.157		0.184		0.226	0.267		0.120	

Horn Ratings per UL Anechoic

Model	Regulated Voltage Range VDC	99 dB	95 dB	90 dB
HN	16-33.0	0.064	0.044	0.022
HNC	16-33.0	0.084	0.044	0.022
HN	8.0-17.5	0.047	0.026	0.017
HNC	8.0-17.5	0.047	0.026	0.017



* UL max current rating is the maximum RMS current within the listed voltage range (16-33 VDC for 24 VDC units). For strobes the UL max current is usually at the minimum listed voltage (16 VDC for 24 VDC units). For audibles the max current is usually at the maximum listed voltage (33 VDC for 24 VDC units). For unfiltered ratings, see installation instructions.

Specification & Ordering Information

Easy to remember model codes | 8 candelas on 1 device | 1 gang, 2 gang, 4" sq, 3.5" octal & 4" octal boxes

Model	Strobe Candela	Sync w/ DSM or Wheelock Power Supplies	12/24 VDC*	Mounting Options
Horn Strobes				
HSR	15/1575/30/75/95/110/135/185	X	X	UMB**
HSW	15/1575/30/75/95/110/135/185	X	X	UMB**
HSRC	15/30/60/75/95/115/150/177	X	X	UMB**
HSWC	15/30/60/75/95/115/150/177	X	X	UMB**
Strobes				
STR	15/1575/30/75/95/110/135/185	X	X	UMB**
STW	15/1575/30/75/95/110/135/185	X	X	UMB**
STRC	15/30/60/75/95/115/150/177	X	X	UMB**
STWC	15/30/60/75/95/115/150/177	X	X	UMB**
Horn				
HNR		X	X	UMB**
HNW		X	X	UMB**
HNRC		X	X	UMB**
HNWC		X	X	UMB**

*12 VDC models feature 15 & 15/75 settings

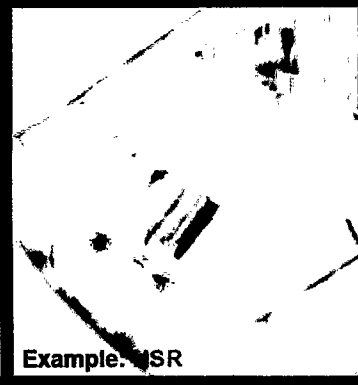
**UMB = Universal Mounting Base

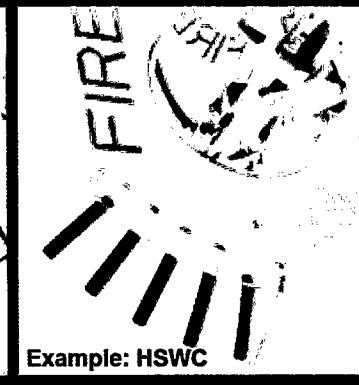
Model Legend

HN = Horn
ST = Strobe
HS = Horn Strobe
C = Ceiling Mount
W = White
R = Red

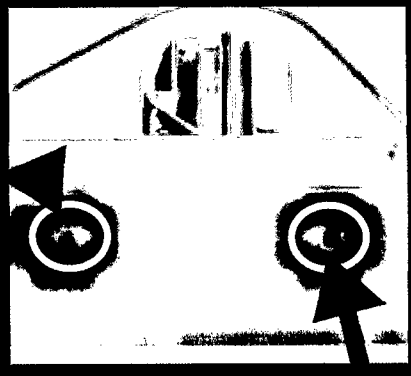
A = Agent Lettering (Strobes only)
AL = Alert Lettering (Strobes only)
N = No Lettering (Strobes only)

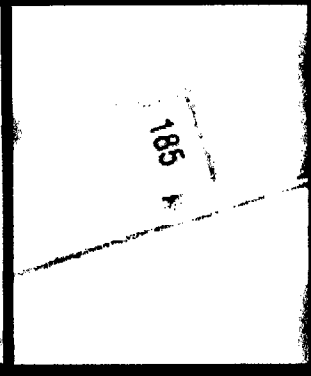
Example 1: STRC = Strobe, Red, Ceiling Mount
Example 2: HSR = Horn Strobe, Red, Wall Mount
Example 3: HSW = Horn Strobe, White, Wall Mount
Example 4: STW-AL = Strobe, White, Wall Mount, Alert Lettering


Example: HSR

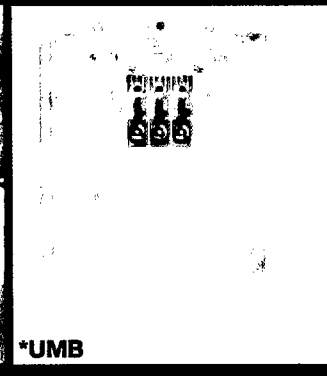


Example: HSWC

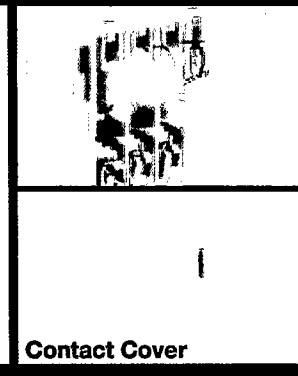

Voltage test points for quick troubleshooting and easy spot checking (wall models only)



8 candela settings


*UMB

Common base for wall and ceiling with 5 mounting options


Contact Cover

NOTE: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Cooper Wheelock Inc., dba Cooper Notification standard terms and conditions.

Architects and Engineers Specifications

The notification appliances shall be Wheelock® Exceder™ Series HS Audible Strobe appliances, Series ST Visual Strobe appliances and Series HN Audible appliances or approved equals. The Series HS and ST Strobes shall be listed for UL Standard 1971 (Emergency Devices for the Hearing-Impaired) for Indoor Fire Protection Service. The Series HS and HN Audibles shall be UL Listed under Standard 464 (Fire Protective Signaling). All Series shall meet the requirements of FCC Part 15 Class B. All inputs shall be compatible with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP) with the ability to operate from 8 to 33 VDC. Indoor wall models shall incorporate voltage test points for easy voltage inspection.

The Series HS Audible Strobe and ST Strobe appliances shall produce a flash rate of one (1) flash per second over the Regulated Voltage Range and shall incorporate a Xenon flashtube enclosed in a rugged Lexan® lens. The Series shall be of low current design. Where Multi-Candela appliances are specified, the strobe intensity shall have 8 field selectable settings at 15, 15/75, 30, 75, 95, 110, 135, 185 candela for wall mount and 15, 30, 60, 75, 95, 115, 150, 177 candela for ceiling mount. The selector switch for selecting the candela shall be tamper resistant. The 15/75 candela strobe shall be specified when 15 candela UL Standard 1971 Listing with 75 candela on-axis is required (e.g. ADA compliance). Appliances with candela settings shall show the candela selection in a visible location at all times when installed.

The audible shall have a minimum of three (3) field selectable settings for dBA levels and shall have a choice of continuous or temporal (Code 3) audible outputs.

The Series HS Audible Strobe, ST Strobe and Series HN Audible shall incorporate a patented Universal Mounting Base that shall allow mounting to a single-gang, double-gang, 4-inch square, 3.5-inch octal, 4-inch octal or 100mm European type back boxes. Two wire appliance wiring shall be capable of directly connecting to the mounting base. Continuity checking of the entire NAC circuit prior to attaching any notification appliances shall be allowed. Product shall come with Contact Cover to protect contact springs. Removal of an appliance shall result in a supervision fault condition by the Fire Alarm Control Panel (FACP). The mounting base shall be the same base among all horn, strobe, horn strobe, wall and ceiling models. All notification appliances shall be backwards compatible.

The Series HS and ST wall models shall have a low profile measuring 5.24" H x 4.58" W x 2.19" D. Series HN wall shall measure 5.24" H x 4.58" W x 1.6" D. The Series HSC and STC shall been round and have a low profile with a diameter of 6.68" x 2.63" D. Series HNC ceiling shall have a diameter of 6.68" x 1.50" D.

When synchronization is required, the appliance shall be compatible with Wheelock®'s DSM Sync Modules, Wheelock® Power Supplies or other manufacturer's panels with built-in Wheelock® Patented Sync Protocol. The strobes shall not drift out of synchronization at any time during operation. If the sync protocol fails to operate, the strobe shall revert to a non-synchronized flash-rate and still maintain (1) flash per second over its Regulated Voltage Range. The appliance shall also be designed so that the audible signal may be silenced while maintaining strobe activation when used with Wheelock® synchronization protocol.

Wall Appliances – UL Standard 1971, UL Standard 464, California State Fire Marshal (CSFM), ULC, FM, RoHS
Ceiling Appliances – UL Standard 1971, UL Standard 464, California State Fire Marshal (CSFM), ULC, FM, RoHS

NEMA Member

WE ENCOURAGE AND SUPPORT NICET CERTIFICATION
3 YEAR WARRANTY

Exceder - Spec Sheet 5/13

NJ Location
273 Branchport Ave.
Long Branch, NJ 07740
P: 800-631-2148
F: 732-222-8707
www.coopernotification.com

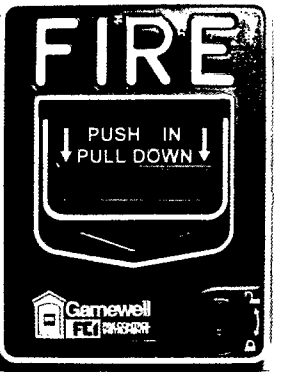
Gamewell FCI FIRE CONTROL INSTRUMENTS

by Honeywell

MS-7AF, MS-7 and MS-7S

DEVICE SPECIFIED BY ADVANCED FIRE & SECURITY INC.

Non-Coded, Manual Fire Alarm Stations



MS-7

Description

The Gamewell-FCI MS-7 Style manual fire alarm stations are available in a wide variety of configurations. The Stations comply with the Americans with Disabilities Act (ADA) 5-lb. maximum pull force requirement. Operating instructions and Braille text are engraved in the handle. All stations have a key lock/reset which is keyed alike with Gamewell-FCI fire alarm control panels and other manual fire alarm stations.

MS-7AF Velociti Addressable Station

The MS-7AF Velociti® Series addressable station is a double action station designed for installation in the signaling line circuit of Gamewell-FCI analog addressable control panels. Activation of the station causes its assigned address to register at the control panel. The door contains an LED which flashes green in normal condition and lights steady red when the station has been activated.* The station features screw terminals.

MS-7ASF Velociti Addressable Station

The MS-7ASF Velociti® Series addressable station is a single action station designed for installation in the signaling line circuit of Gamewell-FCI analog addressable control panels. Activation of the station causes its assigned address to register at the control panel. The door contains an LED which flashes green in normal condition and lights steady red when the station has been activated.* The station features screw terminals.

The Velociti® Series stations use a communication protocol that substantially increases the speed of communication between the sensors and certain Gamewell-FCI analog addressable fire alarm controls. These devices operate in a grouped fashion. If one of the devices in the group has a status change, the panel's microprocessor stops the group poll and focuses on the single device. The net effect is response speed up to five times greater than earlier designs.

MS-7 Double Action Station

The MS-7 double action station is used with conventional-fire alarm control panels. It features a set of single pole contacts and screw terminals for connection to an initiating circuit.

Features

- Addressable stations compatible with all Gamewell-FCI analog addressable fire alarm controls
- Conventional stations suitable for use with any UL® Listed control panel
- Both single and double action stations available
- Tumbler lock for test and reset keyed alike with Gamewell-FCI controls
- Surface or semi-flush mounting
- Shock and vibration resistant
- Stations (MS-7LOB) Listed for outdoor applications
- Complies with ADA pull force requirements

Only the red LED is operative in panels that do not operate in Velociti mode.

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SIGNALING UL LISTED 52465 FM APPROVED 3023594 MEA Approved 67-02-E Vol.VIII 07150-0694:261

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MS-7S Single Action Station
The MS-7S single action station is used with conventional fire alarm control panels. It features a set of single pole contacts and wire leads for connection to an initiating circuit.

MS-7SP Double Action Station
The MS-7SP is a double action station similar to the MS-7 station, with the additional feature of both English and Spanish instructions molded into the unit.

MS-7LOB Double Action Station (Listed for Outdoor Applications)
The MS-7LOB station must be mounted on a Model SB-I/O backbox. In retrofit applications, the station is UL Listed for use with the WP-10 backbox. It is intended for use with conventional control panels and has a set of single pole contacts and screw terminals.

Mounting
The MS-7 interior stations may be surface mounted (use backbox SB-I/0) or semi-flush mounted on a standard double-gang, or 4-inch (10.2 cm) square electrical box. An optional trim ring (BG-TR) may also be used for semi-flush mounting.

NYC-Plate
The NYC-Plate provides the backplate for the manual pull station. (See Figure 1).

Figure 1 NYC-Plate

Specifications

Material:	Lexan®
Contact Ratings:	0.25 amps. @ 30 VAC/VDC (resistive)
Dimensions:	5 5/8" H x 4 1/4" W x 1 1/4" D (14 x 10.1 x 3.2 cm)
Operating Temperature (MS-7AF):	32° to 120° F (0° to 49° C)
Relative Humidity (MS-7AF):	10 to 93% (non-condensing)
Alarm Current:	.0030 amp. 0.007 for LED
Supervisory Current (MS-7AF):	.00030 amps.

Ordering Information

Model	Description
MS-7	Double action station.
MS-7AF**	Velociti addressable double action station.
MS-7ASF	Velociti addressable single action station
MS-7S	Single action station, wire leads.
MS-7SP	Double action station, English and Spanish instructions.
MS-7LOB	Double action station, outdoor use. (Must use SB-I/O - Indoor/ outdoor use backbox).
SB-I/O	Indoor/outdoor use backback-box.
SB-10	Surface backbox.
BG-TR.	Trim ring for semi-flush mount
NYC-Plate	NYC backplate for manual pull station

**For use with Gamewell-FCI analog addressable control panels only.

Gamewell FCI FIRE CONTROL INSTRUMENTS

by Honeywell

Velociti® Series AMM-2F

DEVICE SPECIFIED BY ADVANCED FIRE & SECURITY INC.

Addressable Monitor Module

Description

The Gamewell-FCI Velociti® Series, addressable monitor module AMM-2F is a single Style B, Class B initiating device circuit (IDC) with a 47KW end-of-line resistor. This module provides an address for any device or group of devices connected to this circuit on the signaling line circuit (SLC) of the Gamewell-FCI addressable series fire alarm control panel. Any initiating device with normally open (N.O.) dry contacts may be made addressable when connected to the AMM-2F module.

The Velociti® Series use a communication protocol that substantially increases the speed of communication between the sensors and certain Gamewell-FCI analog addressable fire alarm controls. These devices operate in a grouped fashion. If one of the devices in the group has a status change, the panel's microprocessor stops the group poll and concentrates on the single device. The net effect is response speed up to five times greater than earlier designs.

The AMM-2F module can be programmed to provide a wide variety of input functions to the Gamewell-FCI addressable series fire alarm control panels. It can be identified as a manual station, heat detector, plenum detector, waterflow switch, tamper switch, N.O. contact, smoke detector, projected beam smoke detector, sub loop, remote zone, etc. It can also serve as a remote system silence, system reset, system acknowledge or drill switch. It is even possible to customize its device type to meet specific job requirements.

The initiating device circuit of the AMM-2F can support a maximum line resistance of up to 40 ohms allowing the use of linear heat detection devices. The compact size facilitates the installation of the module inside manual stations, or mounting boxes of various types of alarm initiating devices.

Ordering Information

Model	Description
AMM-2F	Addressable monitor module, single circuit, Style B, Class B

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AMM-2F

Features

- Compact size allows easy installation
- Class B, Style B, initiating circuit
- 40 Ohm line resistance for each initiating device circuit
- Connects to any normally open dry contact device
- Bicolor LEDs flash green whenever the module is addressed, and light steady red on alarm*

*Note: Only the red LED is operative in panels that do not operate in Velociti® mode.

Specifications

Supervisory current:	.000375 amps.
Alarm current:	.00060 amps.
Operating temperature:	32° to 120° F (0° to 49° C)
Relative humidity:	10 to 93% (non-condensing)
End-of-line Resistance:	47K ohms
Dimensions:	1.3" L x 2.5" W x 0.5" D (3.3 x 6.4 x 1.3 cm)

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SIGNALING UL LISTED S1949 FM APPROVED 3023594 MEA Approved 227-03-E Vol.IV 07300-0894:178

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Gamewell FCI FIRE CONTROL INSTRUMENTS

by Honeywell

Velociti® Series

DEVICE SPECIFIED BY ADVANCED FIRE & SECURITY INC.

AOM-2RF

Description

The Gamewell-FCI Velociti® Series, addressable output relay control module (AOM-2RF) allows an Gamewell-FCI analog addressable fire alarm control to switch discrete relay contacts by code command. The relay provides two (2), isolated sets of Form-C contacts which transfer simultaneously. Circuit connections to the relay contacts are not supervised by the module.

The Velociti® Series use a communication protocol that substantially increases the speed of communication between the sensors and certain Gamewell-FCI analog addressable fire alarm controls. These devices operate in a grouped fashion. If one of the devices in the group has a status change, the panel's microprocessor stops the group poll and concentrates on the single device. The net effect is response speed up to five times greater than earlier designs.

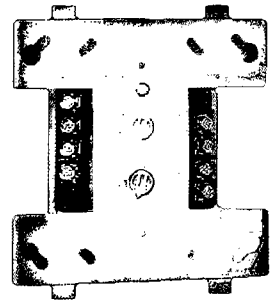
The AOM-2RF Module is designed for installation in the signaling line circuit of any Gamewell-FCI analog addressable fire control panel. The module contains a panel controlled LED. The AOM-2RF is designed to mount in a 4" square junction box 2 1/8" deep.

Relay Contact Ratings

Current Rating	Maximum Voltage	Load Description	Application
3A	30 VDC	Resistive	Non-Coded
2A	30 VDC	Resistive	Coded
0.9A	110 VDC	Resistive	Non-Coded
0.5A	125 VAC	Resistive	Non-Coded
0.5A	30 VDC	Inductive (L/R=5ms)	Coded
1A	30 VDC	Inductive (L/R=2ms)	Coded
0.5A	125 VAC	Inductive (PF=.35)	Non-Coded
0.7A	75 VAC	Inductive	Non-Coded

Velociti® Series is a registered trademark of Honeywell International Inc.

Addressable Output Relay Control Module



AOM-2RF

Features

- Two (2) sets of Form "C" contacts
- Visual rotary, decimal switch addressing (01-159)
- Bicolor LEDs flash green whenever the sensor is addressed, and light steady red on alarm*
- Compact size allows easy installation

Note: Only the red LED is operative in panels that do not operate in Velociti® mode.

Specifications

Supervisory current: .000375 amps.
Alarm current: .0065 amps.
Operating temperature: 32° to 120° F (0° to 49° C)
Relative humidity: 10 to 93% relative humidity (non-condensing)
Dimensions: 4 1/2" H x 4" W x 1 1/4" (11.4 x 10.2 x 3.2 cm)

Ordering Information

Model	Description
AOM-2RF	Addressable output relay control module

An ISO 9001-2000 Company

SIGNALING

UL LISTED S1949 FM APPROVED 3023594 MEA Approved 227-03-E Vol.IV 07300-0894:178

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Gamewell FCI FIRE CONTROL INSTRUMENTS

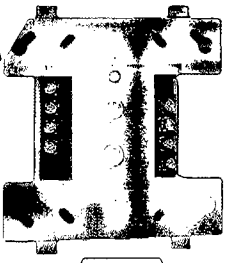
by Honeywell

Velociti® Series

AOM-2SF

DEVICE SPECIFIED BY ADVANCED FIRE & SECURITY INC.

Addressable Output Relay Supervised Control Module



AOM-2SF

Description

The Gamewell-FCI Velociti® Series addressable output supervised control module (AOM-2SF) allows an Gamewell-FCI analog addressable fire alarm control to switch an external power supply, such as a DC supply or audio amplifier (up to 80 VRMS) to notification appliances. The AOM-2SF notification appliance circuit can be wired either Class A (Style Z) or Class B (Style Y). It also supervises the wiring to the connected loads and reports their status to the panel as NORMAL, OPEN or SHORT CIRCUIT. The module contains a panel controlled LED.

The Velociti® Series use a communication protocol that substantially increases the speed of communication between the sensors and certain Gamewell-FCI analog addressable fire alarm controls. These devices operate in a grouped fashion. If one of the devices in the group has a status change, the panel's microprocessor stops the group poll and concentrates on the single device. The net effect is response speed up to five times greater than earlier designs.

The module is UL Listed as suitable for releasing device service and FM Approved for deluge and preaction service. Refer to the Gamewell-FCI Compatibility Addendum, P/N 9000-0427, for a list of approved, compatible solenoids. The AOM-2SF module is designed for installation in the signaling line circuit of any Gamewell-FCI analog addressable control panel. The signaling line circuits of Gamewell-FCI analog addressable control panels are designed to accommodate up to 159 modules per circuit. The AOM-2SF is designed to mount in a 4" (10.16 cm) square junction box 2 1/8" (5.5 cm) deep.

Relay Contact Ratings

Current Rating	Maximum Voltage	Load Description	Application
3A	30 VDC	Resistive	Non-Coded
2A	30 VDC	Resistive	Coded
0.9A	110 VDC	Resistive	Non-Coded
0.5A	125 VAC	Resistive	Non-Coded
0.5A	30 VDC	Inductive (L/R=5ms)	Coded
1A	30 VDC	Inductive (L/R=2ms)	Coded
0.5A	125 VAC	Inductive (PF=.35)	Non-Coded
0.7A	75 VAC	Inductive	Non-Coded

Features

- Compact Size allows easy installation
- Class A, Style Z, or Class B, Style Y notification appliance circuit
- Will accommodate audio amplifiers up to 80 V_{RMS}
- Listed as suitable for releasing device service
- Bicolor LEDS flash green whenever the module is addressed, and lights steady red on alarm*

*Note: Only the red LED is operative in panels that do not operate in Velociti® mode.

Specifications

Supervisory Current:	.000375 amps.
Alarm Current:	.0065 amps.
Operating Temperature:	32° to 120° F (0° to 49° C)
Relative Humidity:	10 to 93% relative humidity (non-condensing)
Dimensions:	4 1/2" H x 4" W x 1 1/4" D (11.4 H x 10.2 W x 3.2 D cm)

Ordering Information

Model	Description
AOM-2SF	Addressable output supervised control module

An ISO 9001-2000 Company

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12 Clintonville Road, Northford, CT 06472-1610 USA • Tel: (203) 484-7161 • Fax: (203) 484-7118

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Gamewell FCI FIRE CONTROL INSTRUMENTS

by Honeywell

Velociti® Series

ATD-L2F, ATD-RL2F

Addressable Thermal Sensor

DEVICE SPECIFIED BY ADVANCED FIRE & SECURITY INC.

Description

The Gamewell-FCI Velociti® Series, addressable plug-in thermal sensors with integral communication provide features that surpass conventional sensors. Point ID capability allows each sensor's address to be set, providing exact locations for pinpointing alarm locations and for selective maintenance. ATD thermal sensors use an innovative thermistor sensing circuit to produce 135°F/57°C fixed-temperature (ATD-L2F). The ATD-RL2F provides a combination 15°/minute rate-of-rise with 135° fixed thermal detection that is included in a low-profile package. The ATD-HL2F provides fixed high-temperature detection at 190°F/88°C. These thermal sensors provide cost-effective, addressable property protection in a variety of applications.

The Velociti® Series uses a communication protocol that substantially increases the speed of communication between the sensors and Gamewell-FCI analog addressable fire alarm controls. These devices operate in a grouped fashion. If one of the devices in the group has a status change, the panel's microprocessor stops the group poll and concentrates on the single device. The net effect is response speed up to five times greater than earlier designs.

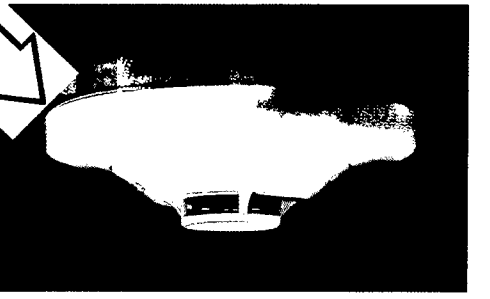
Installation

ATD plug-in sensors use a separate base to simplify installation, service, and maintenance. A special tool allows maintenance personnel to plug-in and remove sensors without using a ladder.

Mount the base on a box which is at least 1.5" (3.8 cm) deep. Suitable mounting base boxes include:

- 4.0" (10.2 cm) square box.
- 3.5" (8.9 cm) or 4.0" (10.2 cm) octagonal box.
- Single-gang box (except relay or isolator base).
- With B501BH or B501BHT base, use a 4.0" (10.2 cm) square box.
- With B224RB or B224BI base, use a 3.5" (8.9 cm) octagonal box, or a 4.0" (10.2 cm) octagonal or square box.

NOTE: Because of the inherent supervision provided by the SLC, end-of-line resistors are not required. Wiring "T-taps" or branches are permitted for Style 4 (Class "B") wiring.



ATD-L2F

Features

- Sleek, low-profile design
- Visual rotary switch addressing
- Built-in functional test switch activated by an external magnet
- Bicolor LEDs flash green whenever the sensor is addressed, and light steadily red on alarm*
- Optional relay, isolator, or sounder bases
- Low standby current
- Addressable communication
- Stable communication technique with noise immunity
- Optional remote, single-gang LED accessory (RA-400Z)
- Suitable for installation in ducts

Note: *Only the red LED is operative in panels that do not operate in Velociti® mode.

An ISO 9000-2000 Company

SIGNALING UL LISTED S2332 FM APPROVED 3023594 MEA Approved 219-02-E Vol.VI 07270-0694:256

GAMEWELL-FCI
12 Clintonville Road, Northford, CT 06472-1610 USA • Tel: (203) 484-7161 • Fax: (203) 484-7118

Specifications

Size:	2.1" (5.3 cm) high x 4.1" (10.4 cm) diameter installed in B501 base, 6.1" (15.5 cm) diameter installed in ADB-FLF base
Shipping Weight:	4.8 oz. (137 g)
Operating Temperature:	
ATD-L2F or	
ATD-RL2F	–4° F to 100° F (–20° C to 38°C)
ATD-HL2	–4° F to 150°F (–20 C to 66°C)
Sensor Spacing:	UL® approved for 50 ft. (15.2 m) center to center FM approved for 25 x 25 ft. (7.6 x 7.6 m) spacing
Relative Humidity:	10 – 93% (non-condensing)
ATD-L2F	Fixed-temperature setpoint 135°F (57°C)
ATD-RL2F	Combination 135° F fixed temperature and 15° (8.3°c) per minute rate-of-rise°
ATD-HL2F	Fixed-temperature setpoint 190°F (88°C)

Electrical Specifications

Voltage Range:	15 - 32 volts DC peak
Standby Current:	200 mA @ 24 VDC (without communication)
(max. avg.)	.0003 A @ 24 VDC (one communication every 5 seconds with LED enabled)
LED Current (max.)	.0065 A @ 24 VDC (LED lit)
Voltage Range	15 –32 volts DC peak

Specifications

Bases and Options

ADB-FLF	6.1" (15.5 cm) diameter standard base
B501	4.1" (10.4 cm) diameter flangeless base
B501BH or B501BHT	Sounder base assembly (B501BHT produces a Temporal Pattern) includes B501 base
B224RB Relay Base	Up to 14 AWG (2.0 mm2) Relay type: Form-C Rating: 2.0A @ 30 VDC resistive 0.3 A @ 110 VDC inductive 1.0 A @ 30 VDC inductive
B224RB Relay Base Dimensions:	6.2": (15.7 cm) x 1.2" (3.0 cm)
B224BI Isolator Base Dimensions:	6.2" (15.7 cm) x 1.2" (3.0 cm) Maximum 25 devices between isolator bases
RA-400Z	Remote alarm indicator, LED
BCK-200	Black detector covers (box of 10)

Ordering Information

Model	Description
ATD-L2F	Addressable thermal sensor, fixed, 135° F
ATD-RL2F	Addressable thermal sensor, combination fixed,135° F and 15°/minute rate-of-rise.
ATD-HL2F	Addressable thermal sensor, fixed, 190° F

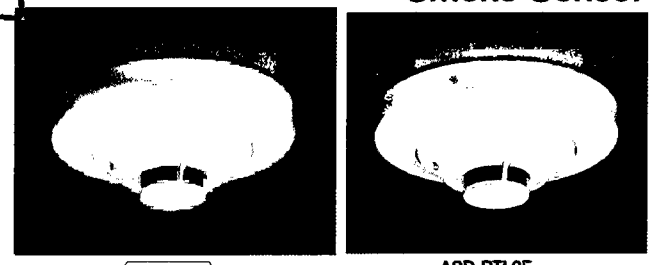
Gamewell FCI FIRE CONTROL INSTRUMENTS

by Honeywell

Velociti® Series ASD-PL2F and ASD-PTL2F

DEVICE SPECIFIED BY ADVANCED FIRE & SECURITY INC.

Analog, Addressable Photoelectronic Smoke Sensor



(ASD-PL2F) ASD-PTL2F

Description

The Gamewell-FCI Velociti® Series, analog addressable plug-in smoke sensors with integral communication provide features that surpass conventional sensors. Sensitivity can be programmed in the control panel software, and is continuously monitored and reported to the panel. Point ID capability allows each sensor's address to be set, providing exact locations for selective maintenance when the chamber contamination reaches an unacceptable level. The ASD-PL2F photoelectric sensor's unique optical sensing chamber is engineered to sense smoke produced by a wide range of combustion sources. Dual electronic thermistors add 135°F (57°C) fixed-temperature thermal sensing on the ASD-PTL2F model.

The Velociti® Series use a communication protocol that substantially increases the speed of communication between the sensors and certain Gamewell-FCI analog addressable fire alarm controls. These devices operate in a grouped fashion. If one of the devices in the group has a status change, the panel's microprocessor stops the group poll and concentrates on the single device. The net effect is a response speed up to five times greater than earlier designs.

Features

- Sleek, low-profile design
- Visual rotary, decimal switch addressing (01-159)
- Built-in functional test switch activated by an external magnet
- Bicolor LEDs flash green whenever the sensor is addressed, and light steady red on alarm*
- Optional relay, isolator, or sounder bases
- Low standby current
- Analog addressable communication
- Stable communication technique with noise immunity
- Optional remote, single-gang LED Indicator (RA400Z)
- Suitable for installation in ducts
- Compatible with Gamewell-FCI analog addressable panels

Note: *Only the red LED is operative in panels that do not operate in Velociti® mode.

Ordering Information

Model	Description
(ASD-PL2F)	Analog, addressable photoelectronic smoke sensor
ASD-PTL2F	Analog, addressable photoelectronic smoke sensor with thermal sensing

An ISO 9001-2000 Company

SIGNALING UL LISTED S1913 FM APPROVED 3023594 MEA Approved 219-02-E Vol.VI 07272-0694:263

GAMEWELL-FCI
12 Clintonville Road, Northford, CT 06472-1653 USA • Tel: (203) 484-7161 • Fax: (203) 484-7118

Installation

ASD-PL2F plug-in sensors use a separate base to simplify installation, service, and maintenance. A special tool allows maintenance personnel to plug-in and remove sensors without using a ladder.

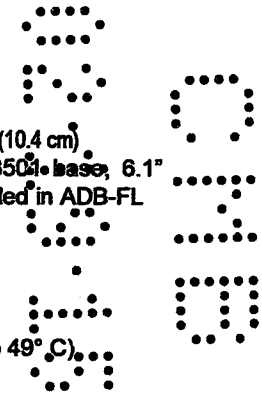
Mount the base on a box which is at least 1.5" (3.8 cm) deep. Suitable mounting base boxes include:

- 4.0" (10.2 cm) square box
- 3.5" (8.9 cm) or 4.0" (10.2 cm) octagonal box
- Single-gang box (except relay or isolator bases)
- With B501BH or B501BHT base, use a 4.0" (10.2 cm) square box
- With B224RB or B224BI base, use a 3.5" (8.9 cm) octagonal box, or a 4.0" (10.2 cm) octagonal or square box

NOTE: Because of the inherent supervision provided by the SLC, end-of-line resistors are not required. Wiring "T-taps" or branches are permitted for Style 4 (Class "B") wiring.

Sensor Spacing
Gamewell-FCI recommends spacing sensors in compliance with NFPA 72. In low airflow applications with smooth ceilings, space sensors 30 feet (9.1 m). For specific information regarding sensor spacing, placement and special applications, refer to NFPA 72.

Specifications



Size:	2.1" (5.1 cm) high x 4.1" (10.4 cm) diameter installed in B501 base; 6.1" (15.5 cm) diameter installed in ADB-FL base.
Shipping Weight:	5.2 oz. (147 g)
Operating Temperature:	ASD-PL2F: 32° F to 120° F (0° C to 49° C) ASD-PTL2F: 32° F to 100° F (0° C to 38° C)
UL®-Listed Velocity Range:	0-4000 ft./min. (1,219.2 m/min.), suitable for installation in ducts.
Relative Humidity:	10-93% (non-condensing)
Thermal Ratings:	Fixed-temperature setpoint 135° F (57° C)

Electrical Specifications

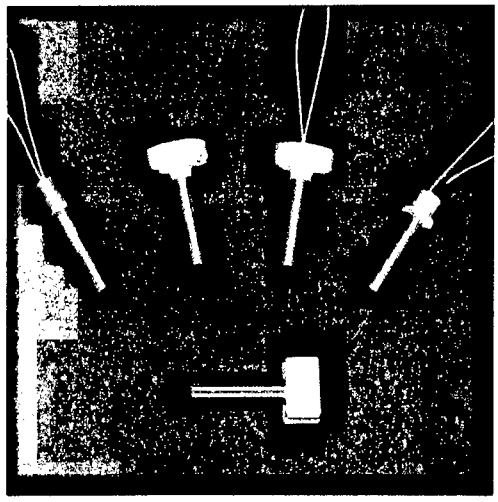
VoltageRange:	15 – 32 volts DC peak
Standby Current:	(max. avg.): .0003 A @ 24 VDC (one communication every 5 seconds with LED enabled)
Maximum Alarm Current:	.0065 A @ 24 VDC (LED) lit).

Bases and Options

ADB-FL	6.1" (15.5 cm) diameter
B501	4.1" (10.4 cm) diameter
B501BH or B501BHT	Sounder base assembly (B501BHT produces a temporal pattern). Includes B501 base
B224RB Relay Base	Screw terminals: Up to 14 AWG (2.0 mm^2) Relay type: Form-C Rating: 2.0A @ 30 VDC resistive; 0.3 A @ 110 VDC inductive; 1.0 A @ 30 VDC inductive. Dimensions: 6.2" x 1.2" (15.7 x 3.0 cm) **Maximum:** 25 devices between isolator bases.
RA400Z	Remote alarm indicator, LED.
BCK-200	Black detector covers (box of 10)

302 Series

Rate-Compensation Heat Detectors



Description

The **Thermotech 302 Series** rate-compensation heat detectors operate within a conrolled range of two to three degrees of their set points, regardless of the speed or rate of temperature rise. These detectors are available in either 135° F or 194° F ratings.

The 302 Series are normally-open devices designed especially for fire detection and alarm systems.

Principles of Operation

The 302 Series rate-compensation heat detectors respond and activate the fire alarm immediately whenever the ambient temperature reaches the preset temperature setting. Under rapid heat rise conditions, the rate-compensation feature enables the detector to respond one to three degrees ahead of the setting. At the same time, however, it does not respond to momentary temperature flucuations below the selected protection level, thus eliminating false alarms. When temperature drops back down below the protection level, the detector automatically resets itself.

Application Information

302 Series detectors have a smooth-ceiling UL rating of 50' x 50' (15.24 x 15.24 meters) and are the only type of heat detectors having such a rating on both fixed temperature and rate compensation.

Features

- Immediate response. The 302 Series activates whenever ambient air temperature reaches a detector's setting, eliminating the thermal time lag inherent in conventional heat detectors.
- Eliminates false alarms. The 302 Series do not respond to momentary temperature fluctuations below the selected temperature.
- Universal application. The 302 Series can be used in all areas for any type of occupancy.
- Self-restoring.
- Hermetically sealed, shock resistant, corrosion resistant, and tamper-proff.

Listings

Listings and approvals below apply to the 302 Series M Rate-Compensation Heat Detectors. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- UL Listed: file S539 & E35018A.
- CSFM approved: file 7270-0021:001.
- FM approved: file

Gamewell FCI FIRE CONTROL INSTRUMENTS
by Honeywell

Product Line Information

302-135: 135°F Interior Vertical Mounting, FM and UL (See Note 1).

302-194: 194°F Interior Vertical Mounting, FM and UL (See Note 1).

302-AW-135:135°F All-Weather Vertical Mounting, FM and UL (See Note 2).

302-AW-194: 194°F All-Weather Vertical Mounting, FM and UL (See Note 2).

302-ET-135:135°F All-Weather Vertical Mounting, FM and UL (See Note 3).

302-ET-194: 194°F All-Weather Vertical Mounting, FM and UL (See Note 3).

302-EPM-135: 135°F Explosion-Proof Mounting, UL (See Note 4).

302-EPM-194: 194°F Explosion Proof Mounting, UL (See Note 4).

AP-P: Decorative white plastic adaptor plate for mounting 302 and 302-AM to 4" outlet box.

Note 1: For interior mounting in any atmosphere that is compatible with terminal screw type connections. UL rating 50' x 50' (15.24 x 15.24 meters).

Note 2: Humitically sealed for moisture-proof or dust-proof installations. Requires no special backbox when the all-weather leads are properly spliced to 'THW' or equivalent type wire.

Note 3: Humitically sealed for moisture-proof or dust-proof installations. Requires no special backbox. Has plastic hexagonal wrench grip bushing with 1/2" (1.27 cm) conduit threads for attachment to threaded hub cover, or any special outlet box.

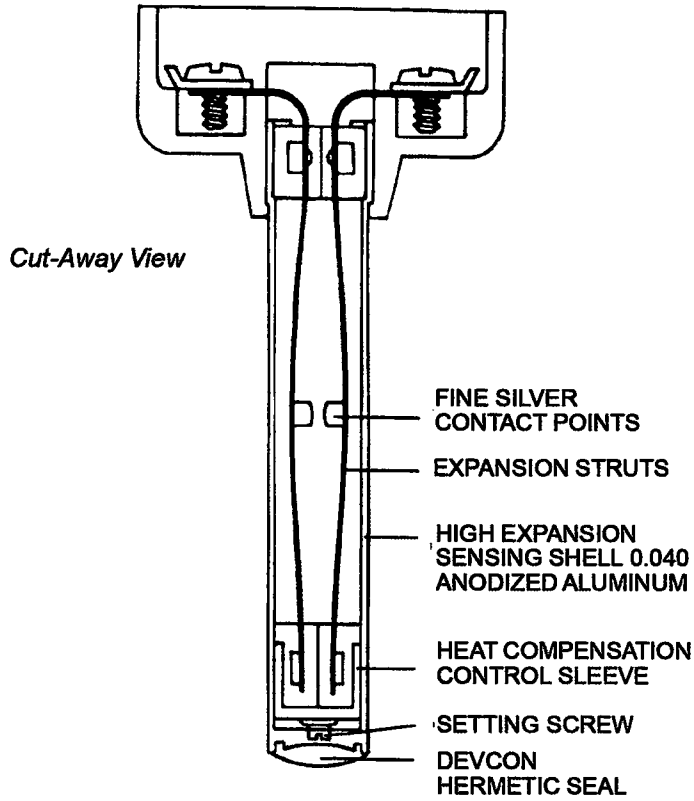
Note 4: Explosion-proof for installation in hazardous locations. Has hexagonal wrench grip bushing with 1/2" (1.27 cm) conduit threads for attachment to threaded hub cover of Series JL fixture fitting as manufactured by Killark Electric Co., or equal.

Specifications

Dimensions
Total overall length: 4-1/8"
Base diameter: 2"

Electrical Ratings

Voltage	*Current*
6-125 VAC	5 amps
6-25 VDC	1 amp
125 VDC	0.5 amp



Cut-Away View

Gamewell FCI FIRE CONTROL INSTRUMENTS
by Honeywell

Gamewell-FCI
12 Clintonville Road
Northford, CT 06472-1610
Phone: 203-484-7161
Fax: 203-484-7118
www.gamewell-fci.com

A Honeywell Company

Specifications and wiring information are provided for information only and are believed to be accurate. Gamewell-FCI assumes no responsibility for their use. Data and design are subject to change without notice. Installation and wiring instructions shipped with the product shall always be used for actual installation. For more information, contact Gamewell-FCI.

Gamewell FCI FIRE CONTROL INSTRUMENTS

by Honeywell

Velociti® Series ASD-PL2F, ASD-PTL2F and ASD-PL2FR

Description

The Gamewell-FCI Velociti® Series, analog addressable plug-in smoke sensors with integral communication provide features that surpass conventional sensors. Sensitivity can be programmed in the control panel software, and is continuously monitored and reported to the panel. Point ID capability allows each sensor's address to be set, providing exact locations for selective maintenance when the chamber contamination reaches an unacceptable level. The ASD-PL2F photoelectric sensor's unique optical sensing chamber is engineered to sense smoke produced by a wide range of combustion sources. Dual electronic thermistors add 135°F (57°C) fixed-temperature thermal sensing on the ASD-PTL2F model.

The Velociti® Series use a communication protocol that substantially increases the speed of communication between the sensors and certain Gamewell-FCI analog addressable fire alarm controls. These devices operate in a grouped fashion. If one of the devices in the group has a status change, the panel's microprocessor stops the group poll and concentrates on the single device. The net effect is a response speed up to five times greater than earlier designs.

Ordering Information

Model	Description
ASD-PL2F	Analog, addressable photoelectronic smoke sensor
ASD-PTL2F	Analog, addressable photoelectronic smoke sensor with thermal sensing
ASD-PL2FR	Analog, addressable photoelectronic smoke sensor used with the DNR duct base when the remote test is required.

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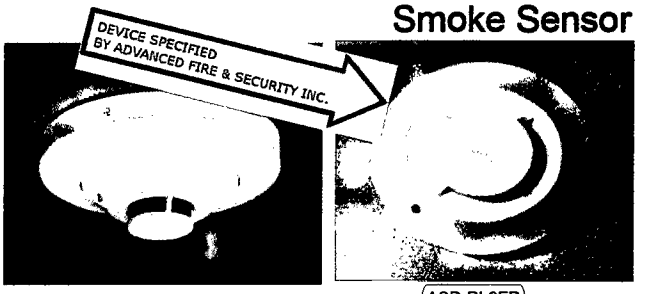
UL® is a registered trademark of Underwriters Laboratories Inc.

Analog, Addressable Photoelectronic Smoke Sensor



ASD-PL2F/ASD-PTL2F ASD-PL2FR

Features

- Sleek, low-profile design
- Visual rotary, decimal switch addressing (01-159)
- Built-in functional test switch activated by an external magnet
- Bicolor LEDs flash green whenever the sensor is addressed, and light steady red on alarm*
- Optional relay, isolator, or sounder bases
- Low standby current
- Analog addressable communication
- Stable communication technique with noise immunity
- Optional remote, single-gang LED Indicator (RA400Z)
- Compatible with Gamewell-FCI analog addressable panels

Note: *Only the red LED is operative in panels that do not operate in Velociti® mode.

An ISO 9000-2000 Company

SIGNALING UL LISTED S1913 FM APPROVED 3023594 MEA Approved 219-02-E Vol.VI 7272-1703:121

GAMEWELL-FCI
12 Clintonville Road, Northford, CT 06472-1653 USA • Tel: (203) 484-7161 • Fax: (203) 484-7118

Installation

ASD-PL2F plug-in sensors use a separate base to simplify installation, service, and maintenance. A special tool allows maintenance personnel to plug-in and remove sensors without using a ladder.

Mount the base on a box which is at least 1.5" (3.8 cm) deep. Suitable mounting base boxes include:

- 4.0" (10.2 cm) square box
- 3.5" (8.9 cm) or 4.0" (10.2 cm) octagonal box
- Single-gang box (except relay or isolator bases)
- With B200SR base, mounted on a 4.0" (10.2 cm) square box
- With B224RB or B224BI base, mounted on a 3.5" (8.9 cm) octagonal box, or a 4.0" (10.2 cm) octagonal or square box

NOTE: Because of the inherent supervision provided by the SLC, end-of-line resistors are not required. Wiring "T-taps" or branches are permitted for Style 4 (Class "B") wiring.

Sensor Spacing
Gamewell-FCI recommends spacing sensors in compliance with NFPA 72. In low airflow applications with smooth ceilings, space sensors 30 feet (9.1 m). For specific information regarding sensor spacing, placement and special applications, refer to NFPA 72.

Specifications

Size:	2.1" (5.1 cm) high x 4.1" (10.4 cm) diameter installed in the B501 base, 6.1" (15.5 cm) diameter installed in the ADB-FL base.
Shipping Weight:	5.2 oz. (147 g)
Operating Temperature:	ASD-PL2F: 32° F to 120° F (0° C to 49° C) ASD-PTL2F: 32° F to 100° F (0° C to 38° C)
UL®-Listed Velocity Range:	0-4000 ft./min. (1,219.2 m/min.), suitable for installation in ducts.
Relative Humidity:	10-93% (non-condensing)
Thermal Ratings:	Fixed-temperature setpoint 135° F (57° C)

Electrical Specifications

VoltageRange:	15 – 32 volts DC peak
Standby Current:	(max. avg.): .0003 A @ 24 VDC (one communication every 5 seconds with LED enabled)
Maximum Alarm Current:	.0065 A @ 24 VDC (LED) lit).

Bases and Options

ADB-FL	6.1" (15.5 cm) diameter
B200SR	6.875" (17.46 cm) Base Diameter 2.0" (5.08 cm) Base Height
B224RB Relay Base	Screw terminals: Up to 14 AWG (2.0 mm^2) Relay type: Form-C Rating: 2.0A @ 30 VDC resistive; 0.3 A @ 110 VDC inductive; 1.0 A @ 30 VDC inductive. Dimensions: 6.2" x 1.2" (15.7 x 3.0 cm) **Maximum:** 25 devices between isolator bases.
RA400Z	Remote alarm indicator, LED.
BCK-200	Black detector covers (box of 10)
DNR	Duct smoke housing

Gamewell FCI FIRE CONTROL INSTRUMENTS

by Honeywell

InnovairFlex™ Series DNR/DNRW Duct Smoke Housing

DEVICE SPECIFIED BY ADVANCED FIRE & SECURITY INC.

Description

The InnovairFlex™ Series, DNR intelligent, non-relay photoelectric duct smoke detector, and the DNRW watertight, non-relay photoelectric duct smoke detector feature a pivoting housing that fits both square and rectangular footprints. These detectors are capable of mounting to a round or rectangular duct. The DNR/DNRW detectors can be used with the E3 Series® and 7100 Series Systems.

Note: The InnovairFlex™ Series, DNR requires the Velociti® Series, ASD-PL2FR Sensor and AOM-2RF, if relays are required for the fan control.

The DNRW duct smoke detector, with its NEMA 4 rating, is Listed as a watertight enclosure providing protection against falling dirt, rain, and windblown dust, splashing and hose directed water. These features allow operators to use the detector in the most extreme environments.

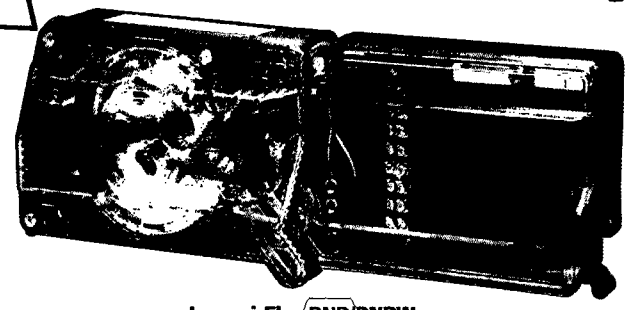
The units sense smoke in the most challenging conditions, operating in airflow speeds of 100 to 4,000 feet per minute, temperatures of -4°F to 158°F, and a humidity range of 0 to 95 percent (non-condensing).

An improved cover design isolates the sensor head from the low-flow feature for simple maintenance. A cover tamper feature was added to indicate a trouble signal for a removed or improperly installed sensor cover. The InnovairFlex housing provides a 3/4-inch conduit knockout and ample space to facilitate easy wiring and mounting of the relay module.

The InnovairFlex duct smoke detector can be customized to meet local codes and specifications without additional wiring. The new InnovairFlex product line is compatible with all previous Innovair models, including remote test accessories.

WARNING: Duct smoke detectors have specific limitations.
DUCT SMOKE DETECTORS ARE:
NOT a substitute for an open area smoke detector,
NOT a substitute for early warning detection, and NOT a replacement for a building's regular fire detection system.
Refer to NFPA 72 and 90A for additional duct smoke detector 2911 application information.

Intelligent Non-Relay Photoelectric Duct Smoke Housing



InnovairFlex-DNR/DNRW

Features

- Photoelectric, integrated low-flow technology
- Air velocity rating from 100 ft/min to 4,000ft/min (0.5m/s to 20.32m/sec)
- Versatile mounting options: square or rectangular configuration
- Broad ranges for operating temperature (-4°F to 158°F) and humidity (0% to 95% non-condensing)
- Patented sampling tube installs from front or back of the detector with no tools required
- New Cover tamper signal
- Increased wiring space with a newly added 3/4-inch conduit knockout
- Available space within housing to accommodate the mounting of the relay module
- Easily accessible code wheels on sensor head (sold separately)
- Clear cover for convenient visual inspection
- UL® 268A Listed
- Remote testing capability
- Requires SLC line power only
- NEMA Type 4 UL Listed for non-hazardous indoor and outdoor applications (DNRW only)
- UV Resistant, UL® Listed housing and cover material (DNRW only)

An ISO 9000-2000 Company

SIGNALING
UL LISTED S911 | FM APPROVED 3029700 | MSFM 2202 2207 | 3242-2653:209 | ULC S911

GAMEWELL-FCI
12 Clintonville Road, Northford, CT 06472-1610 USA • Tel: (203) 484-7161 • Fax: (203) 484-7118

Architectural/Engineering Specifications

The air duct smoke detector shall be a System Sensor InnovairFlex™ DNR Intelligent Non-Relay Photoelectric Duct Smoke Detector and DNRW Watertight NEMA4 Duct Smoke Detector. The detector housing shall be UL Listed per UL 268A specifically for use in air handling systems. The flexible housing of the duct smoke detector fits both square and rectangular footprints. The detector shall operate at air velocities of 100 ft/min to 4,000 ft/min (0.5 m/sec to 20.32 m/sec). The unit shall be capable of providing a trouble signal in the event that the sensor cover is removed or improperly installed. It shall be capable of local testing via magnetic switch or remote testing using the RTS151KEY remote test station. Terminal connections shall be of the strip and clamp method suitable for 12–18 AWG wiring.

Physical Specifications

Size:	
Rectangular Dimensions:	14.38 in (37 cm) Length; 5 in (12.7 cm) Width; 2.5 in (6.6 cm) Depth
Square Dimensions:	7.75 in (19.7 cm) Length; 9 in (22.9 cm) Width; 2.5 in (6.35 cm) Depth
Weight:	1.6 lb (0.73 kg)
Environmental Rating:	NEMA4 (DNRW only)
Operating Temperature Range:	–4° to 158°F (–20° to 70°C)
Storage Temperature Range:	–22° to 158°F (–30° to 70°C)
Operating Humidity Range:	0% to 95% relative humidity non-condensing
Air Duct Velocity:	100 to 4000 ft/min (0.5 to 20.32 m/sec)
DCOIL - (if included)	17.5 - 26.4 VDC .95mA max.

Electrical Ratings

For information on the electrical specifications, refer to the InnovairFlex DNR Duct Smoke Detector Installation Instructions, P/N I56-3051-001R.

Accessory Current Loads at 24 VDC

Device	Standby	Trouble
RA100Z	0 mA	12 mA Max.
RTS151/RTS151KEY	0 mA	12 mA Max.

Installing the InnovairFlex Sampling Tube

The InnovairFlex sampling tube may be installed from the front or back of the detector. The tube locks securely into place and can be removed by releasing the front or rear locking tab. (Figure 3 illustrates the front locking tab).

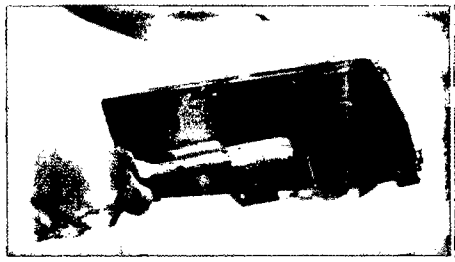


Figure 1

Figure 2

Figure 3

Wiring for Intelligent Non-Relay Duct Smoke Detector

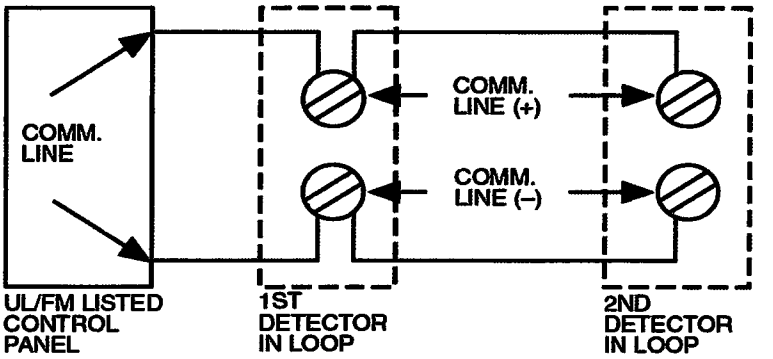


Figure 4 System Wiring Diagram for DNR

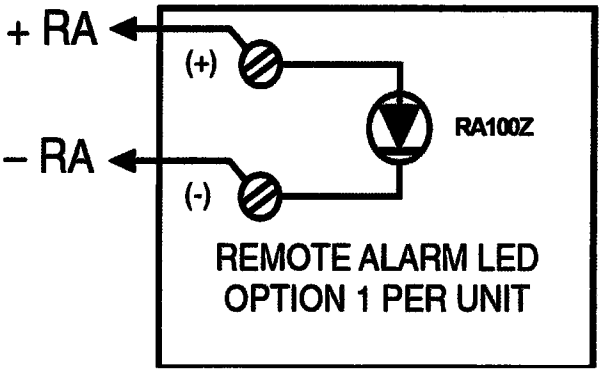


Figure 5 DNR to RA100Z

DNR TO RTS451/RTS451KEY/RTS151/ RTS151KEY WITH "R" REMOTE TEST CAPABLE DETECTOR HEAD OPTION:

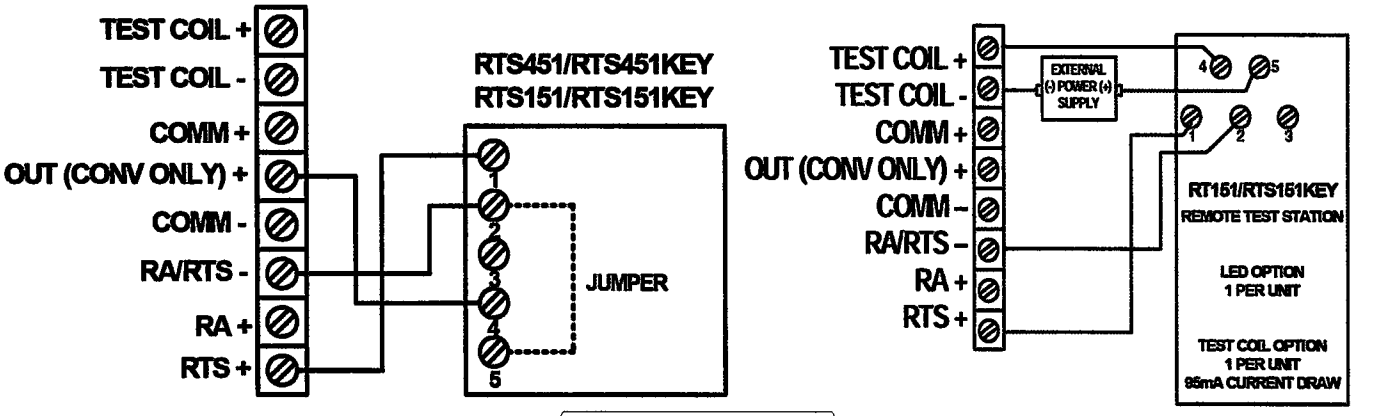


Figure 6 DNR to RTS151/RTS151 Key

Important Notes:

- The use of either RTS151 or RTS151KEY requires the installation of an accessory coil, DCOIL, sold separately. For additional information, refer to the DNR or DNRW Duct Smoke Detector Installation Instructions, P/N I56-3051-001R and the Duct Application Smoke Detectors Application Guide.
- The RTS151/RTS151KEY test coil circuit requires an external 24 VDC power supply which must be UL Listed.

Accessories

System Sensor provides system flexibility with a variety of accessories, including two remote test stations and different means of visible and audible system annunciation. As with our duct smoke detectors, all duct smoke detector accessories are UL Listed.

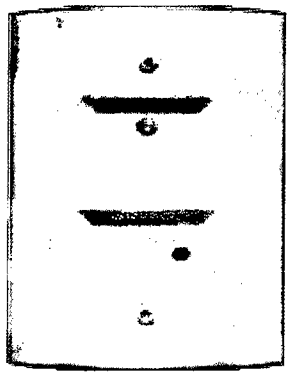


Figure 7 RTS151 UL S2522

Figure 8 RTS151KEY UL S2522

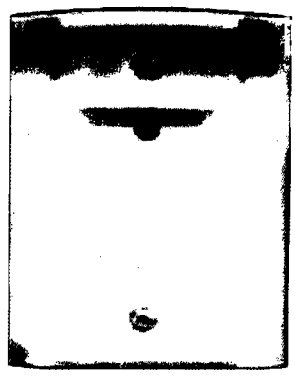


Figure 9 RA100Z UL S2522

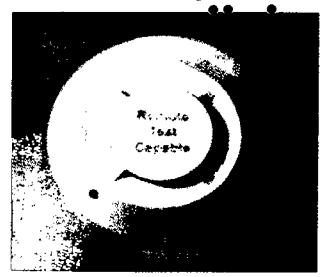


Figure 10 ASD-PL2FR

Ordering Information

Part Number	Description
DNR	Intelligent non-relay photoelectric low-flow duct smoke detector
DNRW	Watertight intelligent non-relay photoelectric low-flow duct smoke detector
ASD-PL2FR	Intelligent photoelectric smoke sensor with remote test capability in duct applications

Accessories

Part Number	Description
DCOIL	Remove test coil required with RTS151/RTS151151KEY
DST1	Metal sampling tube duct width up to 1 ft (0.3m)
DST1.5	Metal sampling tube duct widths 1 ft to 2 ft (0.3 to 0.6 m)
DST1.5	Metal sampling tube duct widths 1 ft to 2 ft (0.3 to 0.6 m)
DST3	Metal sampling tube duct widths 2 ft to 4 ft (0.6 to 1.2 m)
DST5	Metal sampling tube duct widths 4 ft to 8 ft (1.2 to 2.4 m)
DST10	Metal sampling tube duct widths 8 ft to 12 ft (2.4 to 3.7 m)
DH400OE-1	Weatherproof enclosure
ETX	Metal exhaust tube duct width 1ft (0.3m)
M02-04-00	Test magnet
P48-21-00	End cap for metal sampling tubes
RA100Z/RA100ZA	Remote annunciator alarm LED
RTS151	Remote test station
RTS151KEY	Remote test station with key lock

Gamewell FCI FIRE CONTROL INSTRUMENTS

by Honeywell

InnovairFlex™ Series Duct Smoke Detector Accessories

Description

The InnovairFlex Series Duct Smoke Detector accessories add functionality to the duct detection system by allowing quick, convenient inspections at eye level and effective audible and visible notification options. All Gamewell-FCI duct detectors and accessories are UL Listed.

The following duct smoke detector accessories are available

- APA151 Piezo Annunciator
- MHR Mini-Horn, Red
- MHW Mini-Horn, White
- RA100Z/RA100ZA Remote Annunciator
- RTS151 REmote Test Station
- RTS151KEY Remote Test Station with Key
- RTS2 Multi-Signaling Accessory
- AOS Add-On Strobe
- RTS2-AOS Multi-Signaling Accessory

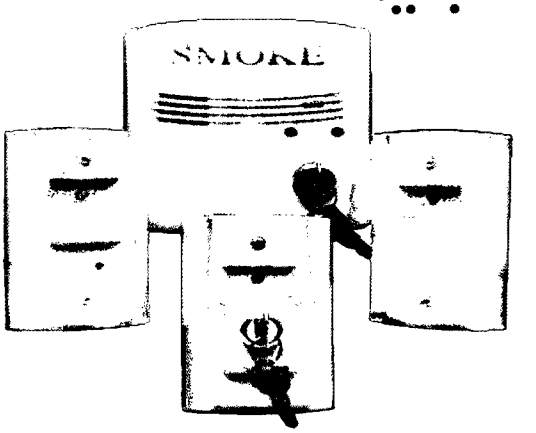
The **APA151** piezo annunciator, which replaces the APA451 with a new, improved look, provides an audible alarm signal, a red LED to indicate alarm status, and a green LED to indicate power status. It is intended for use with Gamewell-FCI 4-wire conventional duct smoke detector applications without a system control panel, to comply with NFPA 90A.

The **MHR** and **MHW** SpectrAlert® Advance mini-horns feature temporal or continuous tones at high and low volume settings. Their small footprint allows mounting to single-gang back boxes for applications where a small device is desired.

The **RA100Z** and **RA100ZA** remote annunciators are designed for both conventional and intelligent applications. Their red LED provides visual indication of an alarm condition.

The **RTS151** and **RTS151KEY** remote test stations are automatic fire detector accessories designed to test duct smoke detectors from a convenient location. For 4-wire detectors, the RTS151KEY test station features a multi-colored LED that alternates between steady green and red. For 2-wire detectors, the LED illuminates red for alarm.

Notification and Test Accessories



InnovairFlex-Series Accessories

Features

- APA151 piezo annunciator offers a new style and provides enhanced audible alarm signals
- MRH and MHW SpectrAlert Advance mini-horns feature temporal and continuous tones for both high and low volume settings
- RA100Z and RA100ZA remote annunciators flexible versatility are used for both conventional and intelligent applications
- RTS151 and RTS151KEY remote test stations are designed to test duct detectors from remote locations
- RTS2 and RTS2-AOS multi-signaling accessories are used with the InnovairFlex 4-wire conventional duct smoke detectors

An ISO 9000-2000 Company

SIGNALING UL LISTED FM APPROVED

GAMEWELL-FCI
12 Clintonville Road, Northford, CT 06472-1610 USA • Tel: (203) 484-7161 • Fax: (203) 484-7118

Description (Continued)

The **RTS2** and **RTS2-AOS** multi-signaling accessories are designed to work with InnovairFlex 4-wire conventional duct smoke detectors. These accessories include a key switch that can be used to select one of two connected sensors to be tested, reset, or both by a push button switch. They also enable sensitivity measurements using the SENS-RDR sensitivity reader (sold separately). The AOS (Add-On Strobe) is an optional accessory included with the RTS2-AOS model.

Specifications, Duct Smoke Detector Accessories

APA151 Piezo Annunciator

Voltage:	Regulated 24 VDC
Operating Voltage:	16 to 33 VDC
Maximum Alarm Current:	30 mA
Temperature Range:	0°C to 49°C (32°F to 120°F)
Relative Humidity:	10 to 93% non-condensing
Wire Gauge:	12 to 18 AWG
Dimensions:	4.6" H × 2.9" W × .45" D (11.6 H x 7.3 W x 1.1 D cm)

MHR/MHW SpectrAlert® Advance Mini-Horns

Voltage:	Regulated 12 DC or FWR (Full Wave Rectified) or Regulated 24 VDC or FWR
Operating Voltage:	8 to 33 VDC (9 to 33 VDC with Sync-Circuit™ Module)
Sounder Current Draw:	22 mA RMS max. at 8 to 17.5 Volts DC 17 mA RMS max. at 8 to 17.5 Volts FWR 29 mA RMS max. at 16 to 33 Volts DC 25 mA RMS max. at 16 to 33 Volts FWR
Temperature Range:	0°C to 49°C (32°F to 120°F)
Humidity Range	10 to 93% non-condensing
Nominal Sounder Frequency:	3 kHz
Wire Gauge:	12 to 18 AWG
Dimensions	4.6" H × 2.9" W × 0.45" D (11.6 H x 7.3 W x 1.1 D cm)

RA100Z/RA100ZA Remote Annunciator

Voltage Range:	Conventional System: 3.1 to 32 VDC Intelligent System: 18 to 32 VDC
Maximum Alarm Current:	12 mA
Dimensions:	4.6" H × 2.8" W × 1.3" D (11.6 H x 7.1 W x 3.3 D cm)

Specifications, Duct Smoke Detector Accessories (Continued)

RTS151 Remote Test Station

Power Requirements:	Alarm LED: 2.8 to 32 VDC, 12 mA max. Total Current: 105 mA max.
Test Switch:	10 VA @ 32 VDC
Reset Switch:	10 VA @ 32 VDC
Alarm Response Time:	40 seconds max.
Temperature Range:	–10°C to 60°C (14°F to 140°F)
Relative Humidity:	95% non-condensing
Wire Gauge:	14 to 18 AWG
Dimensions:	4.8" H x 2.90" W x 1.4" D (12.1 H x 7.3 W x 3.5 D cm)

RTS151KEY Remote Test Station with Key

Power Requirements:	Power LED (Green): 14 to 35 VDC, 12 mA max. Alarm LED (Red): 2.8 to 32 VDC, 12 mA max. Total Current: 105 mA max.
Alarm Response Time:	40 seconds max.
Temperature Range:	–10°C to 60°C (14°F to 140°F)
Relative Humidity:	95% non-condensing
Wire Gauge:	14 to 18 AWG
Dimensions	4.6" H × 2.75" W × 1.8" D (11.6 H x 6.9 W x 4.5 D cm)

RTS2 and RTS2-AOS Multi-signaling Accessory

Voltage:	20 to 29 VDC
Power Requirements:	
Standby:	3.0 mA max.
Trouble:	16.0 mA max.
Alarm without strobe:	30 mA max.
Alarm with strobe:	55 mA max.
Sounder:	85 dBA at ten feet
Temperature Range:	–10°C to 60°C (14°F to 140°F)
Relative Humidity:	95% non-condensing
Wire Gauge:	14 to 22 AWG
Dimensions:	4.8" W x 5.3" H x 1.6" D (12.1 W x 13.4 H x 4.0 D cm)

For the very latest product specifications and listing information, please visit the Gamewell-FCI Web site at www.gamewell-fci.com.

Accessories

Gamewell-FCI provides system flexibility with a variety of accessories, including two remote test stations and several different means of visible and audible system annunciation. As with our duct smoke detectors, all duct smoke detector accessories are UL Listed.

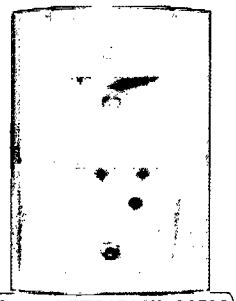


Figure 1 RTS151 UL S2522

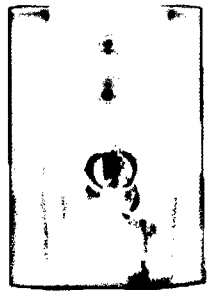


Figure 2 RTS151KEY UL S2522

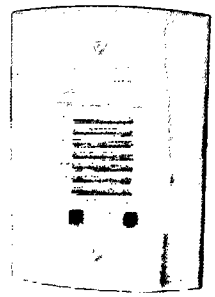


Figure 3 APA151 UL S4011

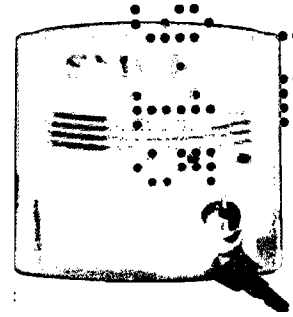


Figure 4 RTS2-AOS UL S2522

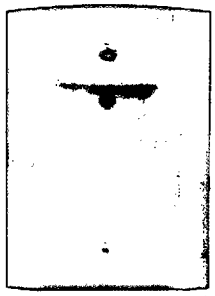


Figure 5 RA100Z UL S2522

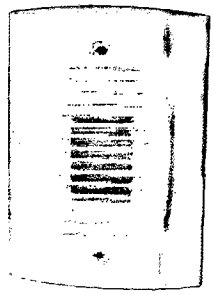


Figure 6 MHW UL S4011

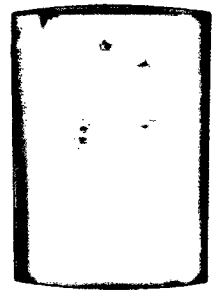


Figure 7 MHR UL S4011

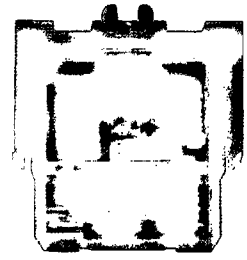


Figure 8 RTS2-AOS with PS24LOW Strobe and PS12/24 LENSW lens

Ordering Information

Part Number **Description**

Accessories

Part Number	Description
APA151	Piezo Annunciator
MHR	Mini Horn, Red
MHW	Mini Horn, White
RA100Z/RA100ZA	Remote annunciator alarm LED
RTS151	Remote test station

Part Number	Description
RTS151KEY	Remote test station with key lock
RTS2	Multi-signaling accessory
AOS	Add-On Strobe
RTS2-AOS	Multi-signaling accessory

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Gamewell FCI FIRE CONTROL INSTRUMENTS

by Honeywell

S3 Series Control Panel

FPL5023P

Small Analog Addressable Fire Alarm Control Panel

Description

The Gamewell-FCI, S3 Series Intelligent Fire Alarm Control Panel provides the latest innovative high-end processing power. It offers a simple, intuitive solution for the small to mid-sized fire alarm applications.

In standalone or network configurations, the S3 Series complies with most fire alarm application requirements. It supports either of the following types of networks.

- Up to 64 nodes using the 7100 Series panel.
- Up to 122 nodes using the S3 Series or E3 Series® panels.

Use either twisted-pair wire or fiber-optic to network panels at a high-speed 625K baud ARCNET network bus.

With flexible Boolean logic, intelligent detection, and Ethernet connectivity, this system provides power and versatility that surpasses comparable, small addressable fire alarm systems.

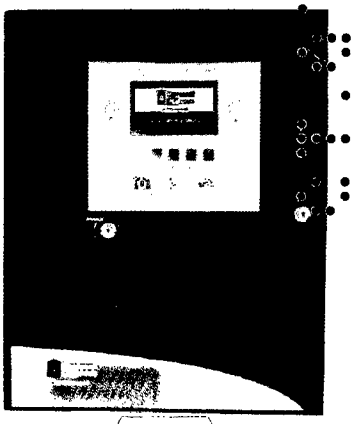
The basic S3 Series consists of an SLP (Smart Loop Panel) main board, LCD-SLP touchscreen display, SLC loop personality modules, and 7 amp power supply. The SLP provides either one or two SLC loops in Class A or B configuration that supports either of the following protocols:

- Up to 318 devices per loop using the System Sensor® protocol. If you add a second loop module, it increases the maximum device count to 636 devices.
- Up to 126 devices per loop using the Apollo protocol. If you add a second loop module, it increases the maximum device count to 252 devices.

Four Class B or two Class A NACs can be wired and synchronized using the System Sensor, Cooper-Wheelock, or Gentex strobes. To retrofit the SLP on the existing audible/visual appliances, the on-board Electronic EOL (EEOL) automatically adjusts to the EOL resistor in the field.

A 4.3" (10.92 cm) color touchscreen display screen shows the following:

- Events on the system
- Status of analog addressable devices
- Complete diagnostic fault codes/messages
- Five programmable function buttons with LED status for accessibility to the following functions:
  - Disable/Enable
  - Bypass Output
  - Lamp Test
  - Trouble Acknowledge
  - Alarm Acknowledge
  - Custom-defined



S3 Series

Features

- Listed per ANSI/UL® Standard 864 9th Edition.
- IBC Seismic Certified.
- Allows one SLC loop (expandable to two loops) that supports either System Sensor or Apollo devices in Class A or Class B (Style 4, 6 or 7).
- System Sensor supports up to 318 intelligent devices and each SLC loop supports the following.
  - up to 159 detectors.
  - up to 159 modules (expandable to 636 maximum per panel).
- Apollo supports up to 126 intelligent detectors and modules per SLC. (Expandable to 252 maximum per panel).
- Includes a high resolution (4.3") (10.92 cm) color touchscreen display.
- Supports a network system of up to 122 nodes (includes E3 Series® panels) or up to 64 nodes (includes 7100 Series).
- Provides 7.0 amp power supply (120VAC or 240VAC).
- Includes four Class B or two Class A built-in Notification Appliance Circuits (NAC). Provides selectable System Sensor, Cooper-Wheelock, or Gentex strobe synchronization.
- Supports up to 32 serial annunciators (LCD, LED-only, LED Switch).

SIGNALING
UL LISTED S1869 7165-1703:0176

THE VMC GROUP
Reference Certificate of Compliance VMA-45894-02C (Revision 1)

ISO 9001 CERTIFIED QUALITY SYSTEMS

GAMEWELL-FCI
12 Clintonville Road, Northford, CT 06472-1610 USA • Tel: (203) 484-7161 • Fax: (203) 484-7118

Application

The S3 Series Fire Alarm and Life Safety System is an easy-to-use intelligent fire alarm solution designed for the small to mid-sized buildings. Analog technology delivers the benefits of a simple system installation, while a user-friendly interface makes panel operation and system maintenance quick and intuitive.

Smart Panel Programming

Using Boolean logic programming, the installer may customize the system to precisely suit the needs of the building owner. Auto-programming allows the installer to instantly locate all the devices on the SLC loop.

Simple, Intuitive Display

The front panel display provides a user-friendly interface for the operator's control. A 4.3" (10.922 cm) color touch-screen displays system status, event details and service modes. On the front of the panel, six LEDs show the following conditions.

- Fire
- Silenced
- Hazard (Gas or CO)
- AC Power
- Supervisory
- Trouble

Five custom programmable switches allow the user quick access to common functions specific to the building like device disable, output bypass and device status.

Perfect for Retrofits

The S3 Series is well-suited for retrofit applications. The SLP provides a simple way to upgrade your fire protection system. It is designed to be an upgrade solution for the legacy FCI 7100 and Gamewell 602 Series panels. An added feature is the SLP's EEOL. Using EEOL, the installers can automatically identify the EOL for existing audible/visual appliances.

Flexibility for Future Growth

The S3 Series can be expanded to add a second SLC loop without replacing the entire system. Using the RPT-E3-UTP Network Repeater, you can network up to 64 nodes (122 nodes with the ANX node expander) using either twisted-pair or fiber-optic. The built-in Ethernet port allows the connection to the Gamewell-FCI's FocalPoint Graphical Workstation.

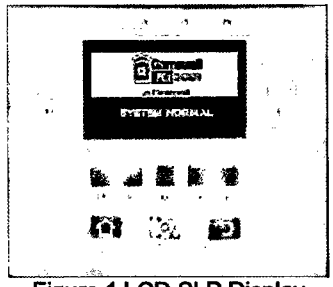


Figure 1 LCD-SLP Display

Features (Continued)

- Offers an Ethernet port for programming, a variety of system reports, and a FocalPoint® Graphic Workstation connectivity.
- Provides two fully-programmable Form-C contacts for Fire, Trouble, and Supervisory.
- TimeCap - Saves time and date up to 48 hours without any power or battery.
- Automatically adjusts to any NAC End-of-Line Resistor (EOL) value (1k-55k ohm) for legacy audible/visual appliances.
- Removable display can be used as a remote annunciator.
- Suitable for pre-action deluge applications.

Optional Accessories

DACT-E3 - Dialer

The Digital Alarm Communication Transmitter sends digital signals over telephone lines to the central station. It connects to the SLP through an RS-485 bus. Using the Contact ID format, the DACT-E3 provides a four-digit account code followed by the code/numbers listed below.

- Three-digit Event Code
- Two-digit Group Number
- Three-digit Contact Number

All codes are used to provide specific point identification. The DACT-E3 is compatible with digital alarm communicator receivers (DACRs) that receive the following signaling formats:

- Contact ID
- SIA
- 3+1
- 4+2

For more information, refer to the following data sheets:
DACT-E3 Data Sheet, P/N: 9020-0610
FML-E3/FSL-E3 Data Sheet, P/N: 9021-60783

RPT-E3-UTP - Network Repeater Card

The Network Repeater allows the SLP fire control panels to connect to the broadband network from remote locations. It connects to other networked units using unshielded, twisted-pair wiring. The RPT-E3-UTP is available with two add-on fiber modules:

- **FML-E3** connects to the network using either 62.5/125 micron multi-mode fiber.
- **FSL-E3** connects to the network using 9/125 micron single-mode fiber.

Refer to the RPT-E3-UTP Data Sheet, P/N: 9020-0609.

LCD-7100 - Remote Annunciator

The Remote serial display features an 80-character display. The LCD-7100 can be surface or flush-mounted on a standard 4-gang electrical box. You can use up to five LCD-7100 remote annunciators per SLP panel. For more information, refer to the LCD-7100 Data Sheet, P/N: 9020-0486.

ASM-16 - Addressable Switch/LED Module

There are 16 programmable switches available to perform any function the application requires. Each ASM-16 switch has 3 LEDs fully programmable in red, yellow, and green. These LEDs can be programmed to operate with a certain button press or operate independently as a status signal (e.g. ON, OFF, Activated, etc).
Up to 16 ASM-16 modules can be connected to the SLP panel. For more information, refer to the ASM-16 Data Sheet, P/N: 9020-0554.

ANU-48 - 48 LED Driver Unit

The ANU-48 provides output for eight remote panel switches and 48 remote LEDs for use in a remotely located UL® Listed annunciator enclosure. Up to 16 ANU-48 modules can be connected to the SLP panel. For more information, refer to the ANU-48 Data Sheet, P/N: 9020-0596.

Figure 2 illustrates the SLP-BB Cabinet Enclosure.

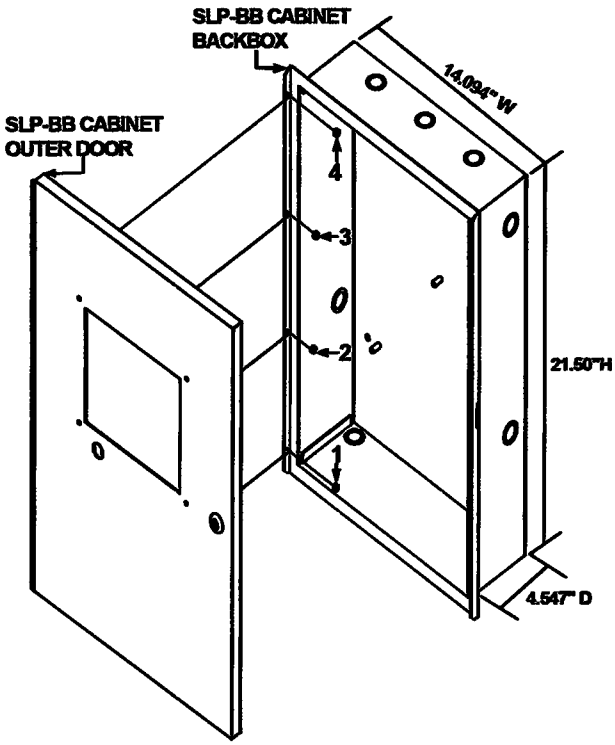


Figure 2 SLP Enclosure

Specifications

Device Loops	Up to two Class A or B, System Sensor units, each loop supporting up to 318 device addresses. Or- Apollo units, each loop supporting up to 126 device addresses per loop.
NAC circuits	4 Class B or 2 Class A (2.0 A each circuit), 6.0 A total
NAC Operating Voltage	24 VDC
NAC Minimum Voltage	19.5 VDC @ 20.4 V battery voltage
SLC Loop Circuit Operating Voltage	24 V peak-to-peak
Input Voltage	120 VAC, 60 Hz 240 VAC 50-60 Hz
Input Current	120 VAC, 2.75 amps max. 240 VAC, 1.4 amps max.
Aux Power 1 (Continuous)	24 VDC nominal at 1.0A
Aux Power 2 (Resettable)	24 VDC nominal at 1.0A
Base Panel Current draw	Standby: 0.111 amps Alarm: 0.243 amps
Operating Temperature	32°-120° F (0°-49°C)
Relative Humidity	93% (non-condensing)
Battery Charger Voltage	+24 VDC
Battery Charger Capacity	55 A/H batteries (cabinet accommodates 12 A/H batteries)
Alarm, Trouble & Supervisory Relay Contacts	Form-C, 2 amps @ 24VDC (resistive)

Cabinet Dimensions:

SLP-BB Dimensions	14.094" W x 21.5" H x 4.547" D (35.79 W x 54.61 H x 11.54 cm)
S3BB-RB Dimensions	19 3/8" W x 19 3/8" H x 4.5" D (49.22 W x 49.22 H x 11.43 D)

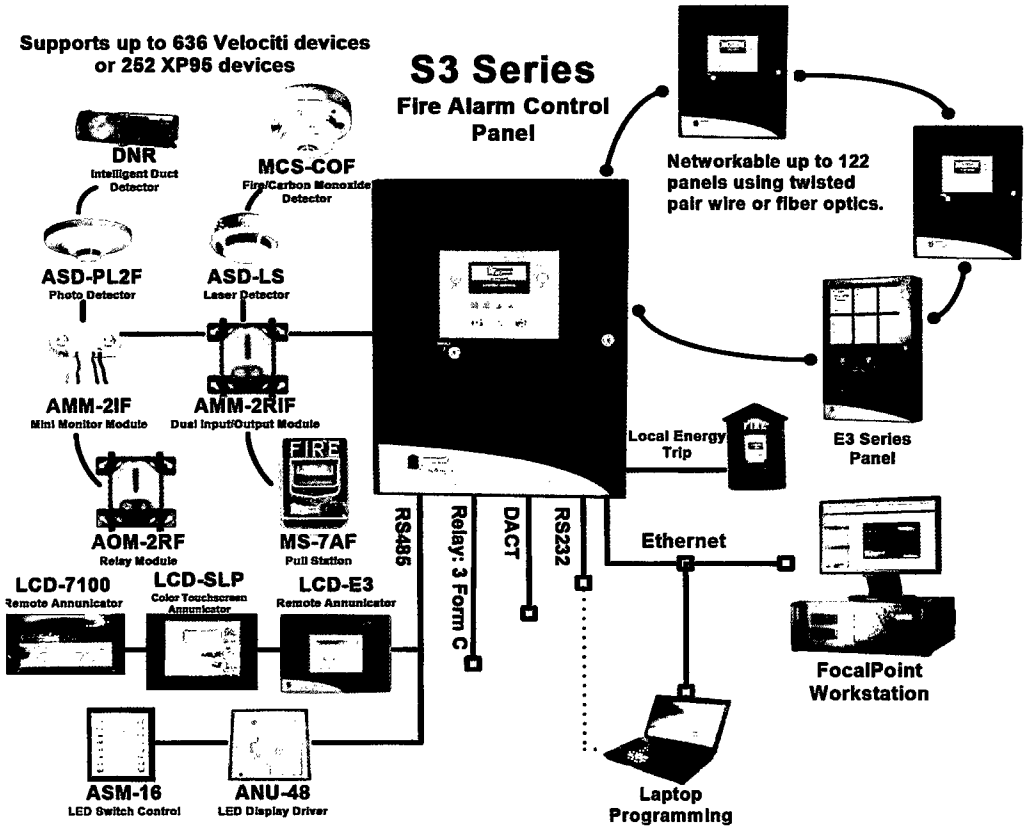


Figure 3 SLP Panel Configuration

Ordering Information

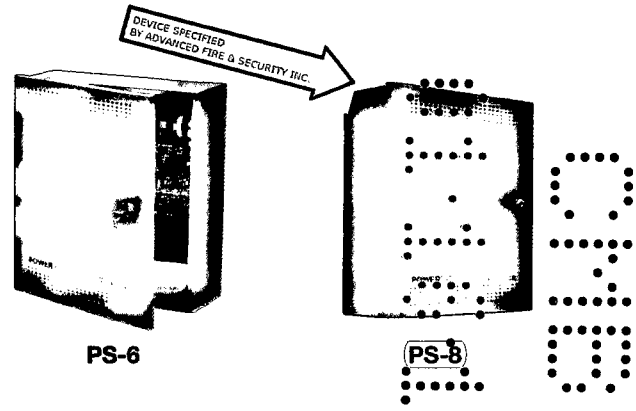
Part Number	Description
SLP-BLK	SLP addressable FACP in black SLP-BB enclosure. Requires either an SLC-PM or an SLC95-PM for SLC loops.
SLP-RED	SLP addressable FACP with red door and black SLP-BB backbox. Requires either an SLC-PM or an SLC95-PM for SLC loops.
SLP-RED-G	SLP addressable FACP 240VAC power supply with red door and black SLP-BB backbox. Requires either an SLC-PM or an SLC95-PM for SLC loops.
SLC-PM	System Sensor Loop Card - 1 loop used for 159 sensors and 159 modules. For use with the SLP-E3 panels only.
SLC95-PM	Apollo Loop Card-1 loop used for 126 sensors and modules. For use with the SLP-E3 panels only.

Ordering Information (Continued)

Part Number	Description
Accessories	
DACT-E3	Digital Dialer Communicator Transmitter for the S3 or E3 Series.
LCD-SLP	LCD Color Touchscreen display with five programmable switches. For use with the S3 Series panels. Remote annunciation requires the E3 Series A2 cabinet. (E3BB-BA2, E3BB-RA2).
RPT-E3-UTP	Network repeater card with twisted-pair fiber connections require either an FML-E3 or an FSL-E3 card.
FML-E3	Multi-mode fiber-optic card for one channel on the RPT-E3-UTP.
FSL-E3	Single-mode fiber-optic card for one channel on the RPT-E3-UTP.
SLP-RB	SLP motherboard For use with the replacement or the retrofit solutions.
FLPS-7-RB	SLP 120VAC 7A power supply. For use with the replacement or the retrofit solutions.
SLP-RETROFIT	SLP Retrofit Kit for the 7100 B-Slim and IF602 panels. Includes the new door and the mounting plate. Requires the following: • SLP-RB • LCD-SLP • SLC-PM/ SLC95-PM • FLPS-7-RB
S3BB-RB	SLP red cabinet with an inner door for the mounting display behind the plexiglass. Requires the following: • SLP-RB • LCD-SLP • SLC-PM/ SLC95-PM • FLPS-7-RB
LCD-7100	Remote Serial LCD Annunciator
ASM-16	Remote Programmable Addressable Switch/LED Module
ANU-48	Remote LED Driver Module

COOPER Notification

POWERPATH™ NAC POWER SUPPLIES



Description

The Wheelock Series PS-6 and PS-8 are 24VDC, filtered and regulated, supervised remote power supply/battery chargers are used for supervision and expanded power driving capability of Fire Alarm Notification Appliance Circuits. The PS-6 provides 6 amps of power distributed across 4 outputs, while the PS-8 provides 8 Amps across 4 output. In addition the PS-8 provides additional room in the chassis for accessories like an Addressable Control Module, with mounting studs.

The Power Supplies may be connected to any 12V or 24V (FWR or DC) Fire Alarm Control Panel (FACP) by using a Notification Appliance Circuit (NAC) or a "Dry Contact". Primary applications include NAC expansion (supports ADA requirements) and auxiliary power to support system accessories. This unit provides filtered and regulated 24VDC, up to four (4) Class "B", two (2) Class "A", or two (2) Class "B" and one (1) Class "A" Notification Appliance Circuits. With the optional plug-in PS-EXP module the unit supports (8) Class "B" or (4) Class "A" Notification Appliance Circuits. Additionally, an auxiliary power output of 2.5 Amps (disconnected upon AC power loss or an alarm condition) or up to 0.240 A of constant power on the PS-8 and 0.075 A of constant power on the PS-6.

The Wheelock Power Supplies can accommodate 7 or 12 AH batteries inside its lockable chassis. Using an external battery cabinet it can charge up to 33 AH batteries (pending UL testing). Two FACP NAC circuits or two "Dry" contact initiating circuits can be connected to the inputs. These inputs can then be directed to control supervision and power delivery to any combination of the four (4) outputs. Each output is rated at 3.0 Amps (Class "B") or (Class "A") and can be programmed to generate a steady or Code 3 Temporal Horn sound and a strobe output under alarm condition. Total load for the PS-6 and PS-8 NAC circuits must not exceed the power supplies rated output.

The Power Suppliesunder non-alarm condition provides independent supervision for Class "A" and Class "B" FACP NAC circuits. In the event of circuit trouble, the FACP will be notified via the POWERPATH steered input (IN1 or IN2). In addition there are two sets of trouble reporting terminals, one used for AC power loss reporting and the other for all troubles. The AC power loss reporting, on the common trouble terminals and on IN1 or IN2, can be delayed for either 30 seconds or 170 minutes. The AC power loss terminals will always report the trouble within 1 second after loss of AC power.

The PS-6 and PS-8 Power Supplies are UL-listed under UL Standard 864, 9th Edition to be used with any 24 volt Listed Regulated notification appliances. They include the capability to synchronize Wheelock strobes and horns and to silence the horn signal when horn/strobes are operating on two wires.

Features

Approvals

- Approvals Include: UL Standard 864, 1481
- Pending: California State Fire Marshal (CSFM), New York City (MEA), Factory Mutual (FM), Chicago (BFP) See Approvals by model in Specification and Ordering Information
- Compliant with NFPA 72

Inputs

- 120VAC, 50/60Hz, 4.25 Amps (PS-6/8) and 5.32 Amps (PS-8) Operating Power in Alarm
- 240VAC, 60Hz, 2.42 Amps (PS-6E and 3.22 Amps (PS-8E) ' Operating Power in Alarm
- 24VDC Battery Backup Connection
- Two (2), 12V or 24V NAC Initiating Circuits (8-33V at 5mA) FWR or DC
- Two (2) "Dry" Contact initiating Circuits
- Accepts two (2) Class "A" or two (2) Class "B" circuit inputs
- Built in battery charger for sealed lead acid or gel type batteries

...Features continued on next page

Outputs

- NAC outputs are 24VDC, 3.0 Amps each, power limited
- 8 Amps on PS-8 and 6 Amps on the PS-6 total alarm current
- Capable of four (4), Class "B" circuits
- Capable of two (2) Class "A" circuits
- Capable of one (1) Class "A" circuit and two (2) Class "B" circuits
- Capable of (8) Class "B" or four (4) Class "A" circuits with optional PS-EXP module
- Temporal (Code 3), constant voltage output, Wheelock Sync output or True input to output follower mode
- Built-in Wheelock synchronization mode that can be fed to any or all of the output circuits
- Input and output can be synchronized with "IN>OUT SYNC" mode (SM, DSM, 2nd POWERPATH™ or FACP with synchronization protocol is required)
- Audible silence capability
- Filtered and electronically regulated output
- 2.5 Amp auxiliary power limited output with reset capability. (Removed upon AC loss or alarm. Automatic reset 30 seconds after AC power returns or the alarm condition is over) or 0.075 Amps (PS-6) or 0.240 Amps (PS-8) of auxiliary power limited output which remains on during AC loss or an alarm condition when configured for 24 hour battery backup

Supervision

- Compatible with 12V or 24V (FWR or DC) FACP
- Signaling appliance circuits are supervised and steered to either IN1 or IN2
- 10K Ohm, 1 Watt (Wheelock Model #MPEOL) End of Line Resistor (EOLR) for supervision of all outputs
- 37 distinguishable trouble diagnostics
- AC loss trouble reported over a separate set of contacts (delay of 1 second)
- All troubles are reported over the common trouble contacts (AC loss can have a delay of 30 seconds or 170 minutes)
- Automatic switchover to standby battery when AC fails
- Thermal and short circuit protection with auto reset
- Input and output status LED indicators
- AC fail supervision
- Battery presence and low battery supervision
- Ground Fault Detection, with diagnostics to indicate which circuit fault is on
- Latching LED's for NAC trouble annunciation and Diagnostic trouble LED's (latching can be disabled)

Power

- Not Battery Dependent
- Automatic switch over to standby batteries when AC fails
- Supports sealed lead acid or gel type batteries
- Fused battery protection
- Thermal and short circuit protection with auto reset
- Supports both 7AH or 12AH batteries in the same cabinet

POWERPATH™ Operating Modes (refer to Installation Manual):

Normal Mode: Provides constant 24 VDC output upon initiation by a voltage to input IN1 or IN2 or by a contact opening on DRY1 or DRY2. The unit returns to standby mode when the input is deactivated.

Wheelock Sync Mode: Provides signals for synchronization of patented Wheelock audible and strobe notification appliances. Audibles can also be silenced in this mode while the strobes continue to flash.

In>Out Sync Mode: Accepts a synchronization signal on the input to provide a coded output or synchronized output. This signal may come from a FACP, another POWERPATH or a Wheelock SM or DSM synchronization module. Caution: Do not use strobes on coded output circuits.

True Input Follower Mode: Accepts a coded signal on the input to provide a coded output with the same timing as the input. The signal may come from a FACP, another POWERPATH or other coded source. Caution: Do not use strobes on coded output circuits.

Temporal Mode: Codes the output voltage in a code-3 temporal pattern to drive audible appliances such as horns, bells or chimes. Caution: Do not use strobes on coded output circuits.

Specifications and Ordering Information

Model Number	Order Code	Input Voltage/Current	Approvals				
			UL	MEA	CSFM	FM	BFP
PS-6	105530	6 amp, red enclosure	X	*	*	*	*
PS-6B	100257	6 amp, black enclosure	X	*	*	*	*
PS-8	105531	8 amp, red enclosure	X	*	*	*	*
PS-8B	105830	8 amp, black enclosure	X	*	*	*	*
PS-EXP	105334	4 class B or 2 class A expansion module	*	*	*	*	*

X= Approved
*= Pending

Input Circuit	**Input Voltage and Current**
Input voltage Range	8 to 33 VDC
Input Current @ 12 VDC	0.005 amps
Input Current @ 24 VDC	0.005 amps
Output Circuit	**Output Voltage and Current**
Four (4) Class B or Two (2) Class A or One (1) Class A and Two (2) Class "B" or 8 Class B or 4 Class A (optional PS-EXP module necessary)	24 VDC @ up to 3 amps per curcuit
Continuous duty up to 3 Amps per circuit, up to 4 Amps maximum per panel	
Standby Current	**0.129 Amps**
Alarm Current	**0.129 Amps**
Primary PS-6 (120 VAC models)	105 to 130 VAC, 50/60 Hz @ 4.25 Amps
Primary PS-8 (120VAC models)	105 to 130 VAC 50/60 Hz @ 5.32 Amps
Primary PS-6E (240 VAC models)	210 to 260 VAC, 50/60 Hz @ 2.42 Amps
Primary PS-8E (240 VAC models)	210 to 260 VAC 50/60 Hz @ 3.22 Amps
Secondary Power Charging Capacity	32 Amp hours @ 0.750 Amps per hour
Enclosure can house up to two 12 AH batteries	
Aux Output	
CP Mode — PS-6 up to 75 mA	PS-8 up to 250 mA
MP Mode — 2.5A during non alarm	

Dimensions		**Comments**
PS-6/PS-6B	17"H x 13"W x 3.5"D	Small profile
PS-8/PS-8B	17"H x 15"W x 5.5"D	Additional room for modules
PS-EXP	4.3"H x 3.7"W x 1"D	Plugs into main pcb on all models

Architects and Engineers Specifications

The power supply shall be **Wheelock POWERPATH™ Series PS-8**, or equivalent. The unit shall be stand alone power supply intended for powering fire alarm notification appliances via its own Notification Appliance Circuit(s) (NAC). The unit shall be UL 864 Listed for power limited operation of outputs and comply with NFPA 70 (NEC), article 760.
The power supply shall support a full 8A of notification power even if the battery is in a degraded mode and only AC power is connected.
The power supply shall be activated by a standard Notification Appliance Circuit (NAC) from any Fire Alarm Control Panel (FACP) or a "Dry contact" opening. The units shall be 8 ampere, 24 VDC, regulated and filtered, supervised remote power supply/charger. It shall operate over the voltage range of 8 to 33 VDC or FWR. The primary application of the unit shall be able to expand fire alarm system capabilities for additional NAC circuits to support ADA requirements and to provide auxiliary power to support system accessories or functions. The power supply shall provide four Class "B", two Class "A", or two Class "B" and one Class "A" NAC circuit(s). Eight Class "B" or Four Class "A" circuits shall be available with an optional PS-EXP module. The PS-8 unit shall supply up to 240 mA of auxiliary power that is available during both non-alarm and alarm or auxiliary power of not less than 2.5A at 24 VDC during non-alarm. The power supply shall be capable of charging batteries of up to 33 ampere hours per NFPA 72 at maximum rate of 0.750 Amps per hour.
Input activation options shall be from not less than two NAC circuits or Dry Contact closures. These inputs shall have the capability of being directed to any combination of the four NAC circuit outputs. Each NAC circuit output shall be rated at 3 amperes for Class "B" applications or 3 amperes each for Class "A". The outputs shall be programmable to generate a steady or Temporal (Code 3) output and or a synchronized strobe or horn output. The power supply shall provide independent loop supervision for either Class "A" or Class "B" FACP NAC circuits and shall have the capability to "steer" all alarm or trouble conditions to either incoming NAC circuit. The units shall have common trouble terminals. The power supply shall be powered from a 120 VAC source with a current consumption of xx amperes max. The unit shall incorporate short circuit protection with auto reset. The power supply shall incorporate a built in battery charger for lead acid or gel type batteries with automatic switchover to battery back up in the event of AC power failure. The charger shall incorporate fused protection for the batteries and have the ability to report low battery and/or no battery condition(s). Standby current for battery back up shall be 0.129 Amps max. The power supply shall have the ability to latch trouble LED's so the circuit in trouble can be identified. The cabinet dimensions shall be 17" H x 15" W x 5.5" D.

The power supply shall be **Wheelock POWERPATH™ Series PS-6**, or equivalent. The unit shall be stand alone power supply intended for powering fire alarm notification appliances via its own Notification Appliance Circuit(s) (NAC). The unit shall be UL 864 Listed for power limited operation of outputs and comply with NFPA 70 (NEC), article 760.
The power supply shall support a full 6A of notification power even if the battery is in a degraded mode and only AC power is connected.
The power supply shall be activated by a standard Notification Appliance Circuit (NAC) from any Fire Alarm Control Panel (FACP) or a "Dry contact" opening. The units shall be 6 ampere, 24 VDC, regulated and filtered, supervised remote power supply/charger. It shall operate over the voltage range of 8 to 33 VDC or FWR. The primary application of the unit shall be able to expand fire alarm system capabilities for additional NAC circuits to support ADA requirements and to provide auxiliary power to support system accessories or functions. The power supply shall provide four Class "B", two Class "A", or two Class "B" and one Class "A" NAC circuit(s). Eight Class "B" or Four Class "A" circuits shall be available with an optional PS-EXP module. The PS-6 unit shall supply up to 200 mA of auxiliary power that is available during both non-alarm and alarm or auxiliary power of not less than 2.5A at 24 VDC during non-alarm. The power supply shall be capable of charging batteries of up to 33 ampere hours per NFPA 72 at a maximum rate of 0.750 Amps per hour.
Input activation options shall be from not less than two NAC circuits or Dry Contact closures. These inputs shall have the capability of being directed to any combination of the four NAC circuit outputs. Each NAC circuit output shall be rated at 3 amperes for Class "B" applications or 3 amperes each for Class "A". The outputs shall be programmable to generate a steady or Temporal (Code 3) output and or a synchronized strobe or horn output. The power supply shall provide independent loop supervision for either Class "A" or Class "B" FACP NAC circuits and shall have the capability to "steer" all alarm or trouble conditions to either incoming NAC circuit. The units shall have common trouble terminals. The power supply shall be powered from a 120 VAC source with a current consumption of xx amperes max. The unit shall incorporate short circuit protection with auto reset. The power supply shall incorporate a built in battery charger for lead acid or gel type batteries with automatic switchover to battery back up in the event of AC power failure. The charger shall incorporate fused protection for the batteries and have the ability to report low battery and/or no battery condition(s). Standby current for battery back up shall be 0.130 Amps max. The power supply shall have the ability to latch trouble LED's so the circuit in trouble can be identified. The cabinet dimensions shall be 17" H x 13" W x 3.5" D.

⚠ WARNING: PLEASE READ THESE SPECIFICATIONS AND INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. FAILURE TO COMPLY WITH ANY OF THESE INSTRUCTIONS, CAUTIONS AND WARNINGS COULD RESULT IN IMPROPER APPLICATION, INSTALLATION AND/OR OPERATION OF THESE PRODUCTS IN AN EMERGENCY SITUATION, WHICH COULD RESULT IN PROPERTY DAMAGE, AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.

NOTE: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Wheelock Inc. standard terms and conditions.

NEMA Member

WE ENCOURAGE AND SUPPORT NICET CERTIFICATION
1 YEAR WARRANTY
Made in USA
S9100 PS-6 & 8 06/08

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Long Branch, NJ 07740
P: 800-631-2148
F: 732-222-8707
www.coopernotification.com

FL Location
7565 Commerce Ct.
Sarasota, FL 34243
P: 941-487-2300
F: 941-487-2389

VA Location
P: 877-459-7726
F: 703-294-6560

7744F/7788F

UL Listed

AES IntelliNet
CORPORATION | For Alarm Monitoring

RF Subscriber Unit

UL Fire, AA Burglary and NFPA-72 Compliant

UL Listed

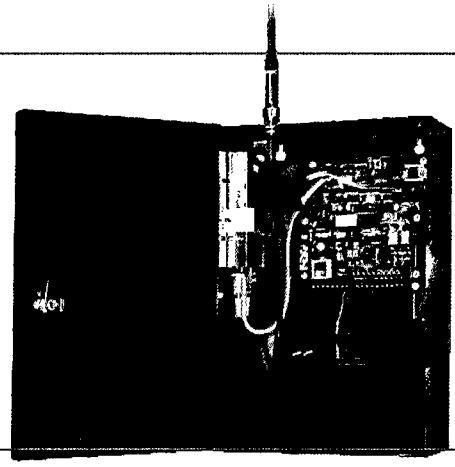
UL Listed Central Station

Remote Station

864 Ed. 9, 827, 1610, 365, 681

CSFM

NFPA RF Section 8.6.3.5



- **Options for Full Data for Fire and Burglary**
- **Available in 7744F & 7788F Zone Configurations**
- **Built-in Power Supply and Battery Charger**
- **Local Annunciation Options on Board**

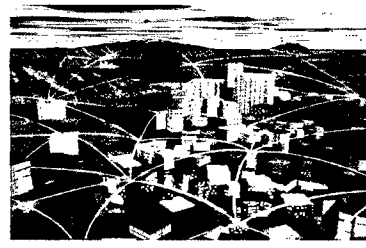
Advanced Wireless Alarm Monitoring

The 7744F/7788F smart subscriber unit links an alarm panel to an alarm monitoring central station. This 2-way transceiver and repeater in one is housed in a full size locking steel cabinet for superior performance. The 7744F/7788F supports a wide range of inputs such as NO/NC/EOL and direct voltage. It automatically senses wire and antenna cuts, and monitors battery and AC power status. Advanced status reporting, self-diagnostics and a built-in power supply make the 7744F/7788F the first choice for all wireless alarm communication needs.

Full Data for Fire and Burglary

Use with the optional Firetap for full fire data or the IntelliTap for full fire and burglary data.

Available Configurations	Available Options
7744F – 4 reversing polarity inputs plus 4 programmable EOL inputs	FireTap 7770
7788F – Programmable EOL inputs with 8 zones	IntelliTap 7067
	NEMA 4 Enclosure
	High Gain Antenna
	Additional Back Up Battery
	Available in Burglary Beige or Fire Red



Wireless mesh networking is an innovative technology adopted by many industries with applications that need to communicate data over a large geographic area with a high level of reliability at a low total cost of ownership.

The advanced design and 2-way communications capability provides easy installation, expansion, and management when compared to alternative communication methods, both wired and wireless.

7744F/7788F
RF Subscriber Unit

Technical Specifications

Radio
Standard CSAA frequency ranges: 450-470 MHz and 130-174 MHz, VHF and UHF. Others available

Standard Output Power
2 watts (requires FCC license)

Power Input
16.5 VAC, 40VA UL listed
Class II transformer required

Voltage
12 VDC nominal

Current
175mA standby; 800mA transmit

Alarm Signal Inputs
- 4 individually programmable Zones: NO/NC/EOL, trouble restore
- RS-232
- Reversing voltage (7744F only) 12 or 24 VDC

Operating Temperature Range
0° to 50°C, 32° to 122°F

Storage Temperature Range
-10° to 60°C, 14° to 140°F

Relative Humidity Range
0-85% RHC non-condensing

Back up Battery
12V, 7.5 AHr

Low Battery Reporting
22.5-minute test cycle

AC Status
Reports to central station after approximately 60 minutes without AC power, reports power restored after approximately 60 minutes of restored power. programmable from 60 to 180 minutes

Antenna Cut (local reporting)

Form 'C' Contact 1 AMP

Size
13.25"H x 8.5"W x 4.3"D
34cm x 21.5cm x 11cm

Weight
6.4 lbs, 2.9 Kilograms (excluding battery)

Colors
Available in standard Burglary Beige or Fire Red
Please specify when ordering

Available Options
- 7788F RF subscriber unit with 8 EOL inputs
- 7744F RF subscriber unit with 4 EOL inputs and 4 reverse polarity inputs
- 7770 - FireTap
- 7067 - IntelliTap
- NEMA 4 Enclosure

Please specify when ordering

Available configurations
- 7788F, 8 EOL inputs
- 7744F, 4 EOL inputs w/4 reverse polarity inputs

AES-*IntelliNet*™ is the industry leader in delivering high quality wireless mesh networks to the fire and security industry in commercial, corporate, government, and educational applications with its broad line of products and advanced network management tools. Users of AES-*IntelliNet* networks have gained significant revenue, communications, and cost advantages while meeting the high standards of reliability required for the fire and security industry. AES-*IntelliNet* alarm monitoring systems are deployed at hundreds of thousands of locations in over 130 countries.

AES CORPORATION | *IntelliNet* For Alarm Monitoring

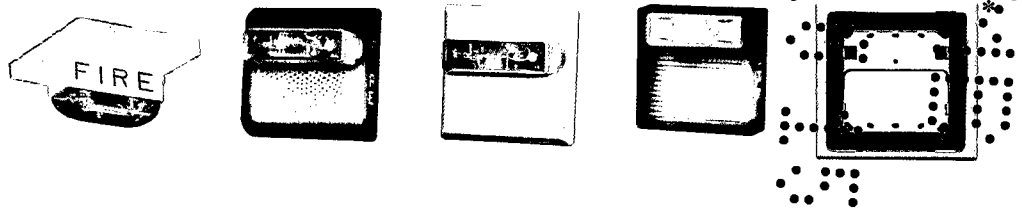
For more information
Call 800-AES-NETS (800-237-6387)

AES Corporation | 285 Newbury Street | Peabody, MA 01960 USA
Tel. +1 978-535-7310 | Fax +1 978-535-7313 | Email info@aes-intellinet.com
Web www.aes-intellinet.com

7744F/7788F/08/09

COOPER Notification

Weatherproof Appliances - Series AH Audibles, AS Audible Strobes, MT Multitone Strobes, RSS Strobes and ET70 Speaker Strobes and Weatherproof Mounting Accessories



Description:

Designed for life safety, performance and reliability, Cooper Notification's Wheelock cost effective weatherpoof notification appliances include:

Weatherproof Appliances	Series
Strobes	RSSWP
Horn Strobes	ASWP
Horns	AH-24WP, AH-12WP
Multitone Horn Strobes	MTWP
Multitone Horns	MT
Speaker Strobes	ET70WP
Speakers	ET-1010

All strobe models are UL dual listed - meeting both UL1638 and UL1971 requirements. As dual listed appliances, these weatherproof strobes, horn strobes and speaker strobes are listed for outdoor applications under UL 1638 as well as under UL 1971, the Standard for Safety Signaling Devices for Hearing Impaired. With an extended temperature range of –31°F to 150°F (-35°C to 66°C), Wheelock weatherproof appliances meet or exceed UL outdoor test requirements for rain, humidity and corrosion resistance while providing multiple strobe intensity options, including the highest strobe ratings available for area coverage per NFPA 72 strobe spacing tables (up to 185 candela for wall mounting and 177 candela for ceiling mounting).

To enable weatherproof mounting, Cooper Notification provides the industry's widest choice of mounting options for surface or unique semi-flush installation. Models are available for surface mounting to Wheelock weatherproof backboxes on walls or ceilings. The optional WP-KIT allows the weatherproof backboxes (IOB, WPBB or WPSBB) to be mounted to a recessed electrical box for concealed conduit installation. For semi-flush installation, the WPA* and WFPA* kits allow a customer to mount the weatherproof appliances to a recessed electrical box without the need for an external weatherproof backbox. See the Backboxes, Plates and Gaskets Table on page three of this document for a summarization of these mounting options and the required accessories.

All models may be synchronized using the Wheelock DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels incorporating the Wheelock Patented Sync Protocol. The horn output of horn strobes can be independently controlled on 2-wire circuits using the Wheelock patented sync protocol. MTWP horn strobe models are 4-wire appliances; the strobes can be synchronized while the audible can be connected to a coded fire alarm system or can be set to produce any of eight selectable tones.

Features:

- Approvals include: UL Standards 1971, 1638, 464 and 1480 California State Fire Marshal (CSFM), New York City (MEA), Factory Mutual (FM), Chicago (BFP) and ULC . See agency approvals by model number on page two of this document
- Compliance with the following requirements: NFPA, UFC, ANSI 117.1, OSHA Part 29, 1910.165, ADA
- Weatherproof with extended temperature range of –40°F to 150°F (-40°C to 66°C)*
- Dual Listed strobe models (UL 1638 and UL 1971)
- Industry's highest strobe candela options
- Synchronize using the Wheelock Sync Modules or panels with built-in Wheelock Patented Sync Protocol
- Models with field selectable tone, dBA and candela settings
- Wall or ceiling mounting options
- Surface of semi-flush mounting
- IN/OUT wiring termination accepting two #12-18 AWG wires at each terminal

The series RSSWP, ASWP, AH-24WP, MTWP-2475W, and MT-12/24 have UL / ULC approval down to -40°F. The ET-1010 and ET70WP have UL approval down to -40°F. The AH-12WP has UL approval down to -31°F.

E5946
S5391
S2652

THE CITY OF NEW YORK DEPARTMENT OF BUILDINGS MEA 151-92-E

7125-0785:131 (ASWP)
7125-0785:146 (ET70WP)
7125-0785:156 (MTWP)
7300-0785:154 (RSSWP)

FM APPROVED

NOTE: All CAUTIONS and WARNINGS are identified by the symbol ⚠. All warnings are printed in bold capital letters.

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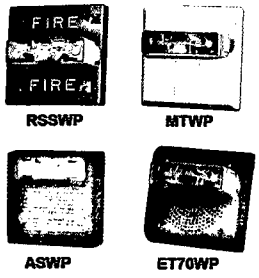
General Notes:

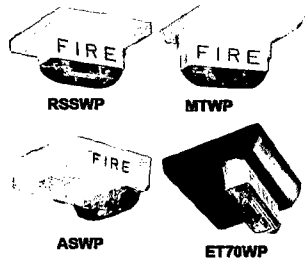
- Strobes are designed to flash at 1 flash per second minimum over their UL Listed Regulated Voltage Range.
- All candela ratings represent minimum effective Strobe intensity based on UL Standards 1971 and 1638 as indicated in candela ratings table.

Wall Mount



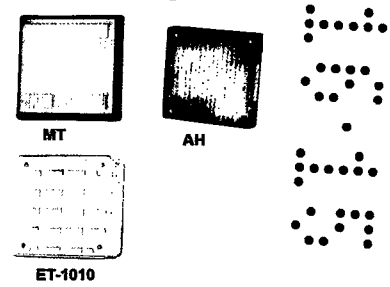
Strobe		Order Code
RSSWP-2475W-FR	Red	9013
RSSWP-2475W-FW	White	3034
RSSWP-24MCWH-FR	Red	5161
RSSWP-24MCWH-FW	White	5165
Audible Strobe		
ASWP-2475W-FR	Red	9012
ASWP-24MCWH-FR	Red	5137
ASWP-24MCWH-FW	White	5140
Multi-tone Strobe		
MTWP-2475W-FR	Red	8420
MTWP-2475W-FW	White	3112
MTWP-24MCWH-FR	Red	5132
MTWP-24MCWH-FW	White	5134
Speaker Strobe		
ET70WP-2475W-FR	Red	9077
ET70WP-2475W-FW	White	3179
ET70WP-24185W-FR	Red	4885
ET70WP-24185W-FW	White	4891
ET70WP-24135W-FR	Red	4872
ET70WP-24135W-FW	White	4875

Ceiling Mount



Strobe		Order Code
RSSWP-2475C-FR	Red	4338
RSSWP-2475C-FW	White	4446
RSSWP-24MCCH-FR	Red	5167
RSSWP-24MCCH-FW	White	5187
Audible Strobe		
ASWP-2475C-FR	Red	4251
ASWP-2475C-FW	White	4502
ASWP-24MCCH-FR	Red	5149
ASWP-24MCCH-FW	White	5157
Multi-tone Strobe		
MTWP-2475C-FR	Red	4457
MTWP-2475C-FW	White	4478
MTWP-24MCCH-FR	Red	5102
MTWP-24MCCH-FW	White	5122
Speaker Strobe		
ET70WP-2475C-FR	Red	4452
ET70WP-2475C-FW	White	4454
ET70WP-24177C-FR	Red	4845
ET70WP-24177C-FW	White	4859
ET70WP-24115C-FR	Red	4550
ET70WP-24115C-FW	White	4732

Wall or Ceiling Mount



Audible		Order Code
AH-24WP-R	Red	7416
AH-12WP-R	Red	7415
Horn		
MT-12/24-R	Red	5023
Speaker		
ET-1010-R	Red	3135
ET-1010-W	White	3137

UL Max. Current	AH	
	24 VDC	12 VDC
High (99) dBA	0.080	0.192
Med (95) dBA	0.043	0.108
Low (90) dBA	0.021	0.058

UL Reverberant dBA @ 10 Feet							
Watts	1/8	1/4	1/2	1	2	4	8
ET-1010	77	80	83	86	87	92	94
ET70WP	78	81	84	87	90	93	95

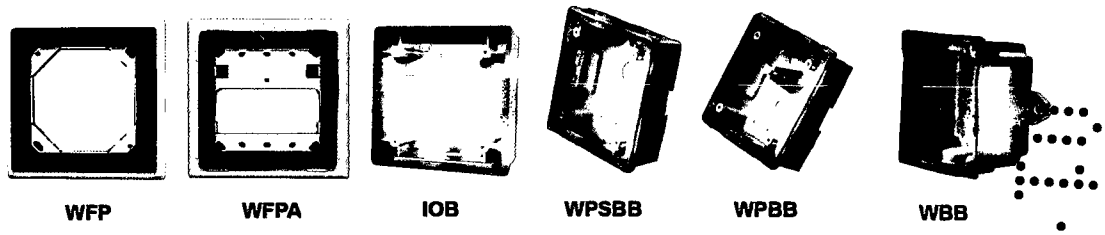
	Candela Ratings						
Series	UL 1971	UL 1638 @ 77°F	UL 1638 @ -40°F	RSS, ET70WP and MTWP UL Max Current (Strobe Only)	ASWP		
					High	Med	Low
2475	30**	180	115	0.138	0.168	0.155	0.150
MCWH	135	135	56	0.300	0.355	0.340	0.335
	185	185	77	0.420	0.480	0.465	0.460
MCCH	115	115	47	0.300	0.355	0.340	0.335
	177	177	73	0.420	0.480	0.465	0.460
24185	185	185	77	0.420			
24177	177	177	73	0.420			

**Wall mount rating only

UL Max. Current (Audible)	MTWP/MT 24 VDC		MT 12 VDC	
dBA	HI	STD	HI	STD
Horn	0.108	0.044	0.177	0.034
Bell	0.053	0.024	0.095	0.020
March Time	0.104	0.038	0.142	0.034
Code 3 Horn	0.091	0.035	0.142	0.034
Code 3 Tone	0.075	0.035	0.105	0.021
Slow Whoop	0.098	0.037	0.142	0.035
Siren	0.104	0.036	0.152	0.030
Hi/Lo	0.057	0.025	0.114	0.026

Model Number	Agency Approvals				
Strobe	**UL**	**MEA**	**CSFM**	**FM**	**BFP**
RSSWP-2475	X	X	X	X	-
RSSWP-24MCWH	X	-	X	-	-
RSSWP-24MCCH	X	-	X	-	-
Audible Strobe					
ASWP-2475	X	X	X	X	X
ASWP-MCWH	X	-	X	-	-
ASWP-MCCH	X	-	X	-	-
Multitone Strobe					
MTWP-2475	X	X	X	X	-
MTWP-MCWH	X	-	X	-	-
MTWP-MCCH	X	-	X	-	-
Horns/Audibles					
AH-24WP	X	X	X	X	X
AH-12WP	X	X	X	X	X
MT-12/24	X	X	X	X	X
Speaker Strobe					
ET70WP-2475	X	-	X	X	-
ET70WP-185	X	-	X	X	-
ET70WP-177	X	-	X	X	-
ET70WP-115	X	-	X	X	-
ET70WP-135	X	-	X	X	-

Mounting Accessories



WFP WFPA IOB WPSBB WPBB WBB

Gasket Kit		Order Code
WP-KIT		4486
Flush Plates		
WFPA-R	Red	4698
WFPA-W	White	4701
WFP-R	Red	4696
WFP-W	White	4697
Backboxes		
IOB-R*	Red	5046
IOB-W*	White	5047
WPSBB-R*	Red	9751
WPSBB-W*	White	3033
WPBB-R*	Red	9014
WPBB-W*	White	4692
WBB-R	Red	2959
WBB-W	White	2960

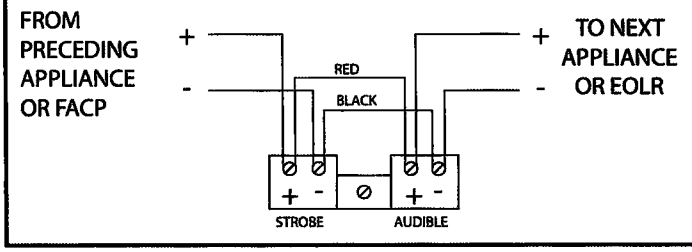
Mounting Options:

	Backboxes, Plates, Gasket Kits		
	Surface Mount		Flush Mount
	Exposed Conduit	Concealed Conduit	
RSSWP Strobes	WPSBB	WPSBB + WP-KIT	WFP
ET70WP Speaker Strobes	IOB	IOB + WP-KIT	WFP
ASWP Horn Strobes	WPBB	WPBB + WP-KIT	WFPA
AHWP Horns	WBB	-	WFP
ET-1010 Speakers	WBB	-	WFP
MTWP Multitone Horn Strobes	IOB	IOB + WP-KIT	WFP
Multitone Horn	IOB	IOB + WP-KIT	WFP

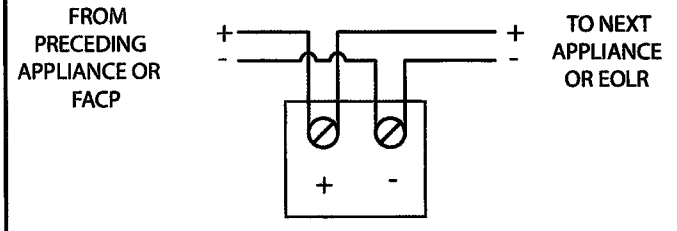
*IOB, WPSBB and WPBB models include weep holes and plug in the event that moisture may have entered the appliance

Wiring Diagrams

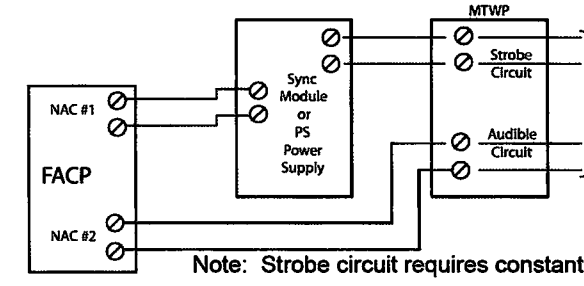
SERIES MTWP AUDIBLE APPLIANCE AND STROBE OPERATE IN UNISON. RED AND BLACK SHUNT-WIRES ARE SUPPLIED.



SERIES RSSWP, ASWP, AHWP, MTWP AND MT-12/24 APPLIANCES

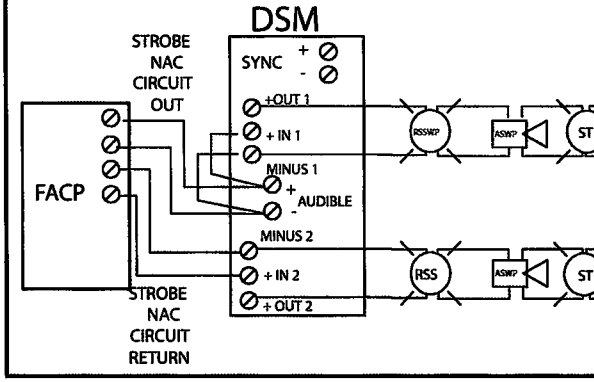


SERIES MTWP APPLIANCES SYNCHRONIZED STROBE OPERATION WITH CODED FACP



Note: Strobe circuit requires constant voltage.

SERIES RSSWP/ASWP APPLIANCES SYNCHRONIZED W/ DSM MODULE SINGLE CLASS "A" NAC CIRCUIT



Note: Models are available in Red or White. Contact Customer Service for Order Code and Delivery.
#Refer to Data Sheet S7000 for Mounting Options

NOTE: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Cooper Wheelock Inc. dba Cooper Notification standard terms and conditions.

ARCHITECTS AND ENGINEERS SPECIFICATIONS

General
Weatherproof notification appliances shall be UL listed for outdoor use. Weatherproof Strobe appliances shall be listed under UL Standard 1638 (Standard for Visual Signaling Appliances) for Indoor/Outdoor use and UL Standard 1971 (Standard for Safety Signaling Devices for Hearing Impaired). The appliances shall be available for optional wall mounting or ceiling mounting to weatherproof backboxes using either exposed conduit or concealed conduit, or semi-flush mounting to a recessed electrical box in walls or ceilings using Wheelock mounting accessories.

Weatherproof Strobes
Weatherproof Strobe appliances shall produce a minimum flash rate of 60 flashes per minute over the UL Regulated Voltage Range of 16 to 33 VDC and shall incorporate a Xenon flashtube. The weatherproof strobes shall be available with UL 1971 candela ratings up to 185 cd for wall mounting and 177 cd for ceiling mounting. UL 1638 candela ratings up to 180 cd at 77°F shall be available. The strobes shall operate over an extended temperature range of –40°F to 150°F (-40°C to 66°C) and be listed for maximum humidity of 95% RH. Strobe inputs shall be polarized for compatibility with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP).

Weatherproof Audibles and Audible/Strobe Combinations Weatherproof horns and multitone audibles shall be listed for Indoor/Outdoor use under UL Standard 464. The horns shall be able to produce a continuous output or a temporal code-3 output that can be synchronized. The horns shall have at least 3 sound level settings. Horn/Strobe combinations shall be able to be synchronized on a single NAC.

Multitone audibles shall be able to produce 8 distinct tones selectable by dip switch and shall have at least 2 sound level settings. Multitone Audible/Strobe combinations shall have independent inputs for the audible and strobe. The strobes shall be able to be synchronized. The audibles shall be able to be coded when operated on a separate NAC.

Weatherproof Speakers and Speaker/Strobes
Weatherproof speakers and speaker/strobes shall be listed for Indoor/Outdoor use under UL Standard 1480. All speakers shall provide field selectable taps for 1/8W to 8W operation for either 25 VRMS or 70 VRMS audio systems and shall incorporate a sealed back construction for extra protection and improved audibility. Speakers without strobes shall be Wheelock Series ET-1010. They shall be listed to produce up to 94 dBA and shall incorporate a vandal resistant grille design. Speaker with strobes shall be Wheelock Series ET70WP. They shall be available for surface or semi-flush mounting to walls or ceilings and shall be listed to produce up to 93 dBA.

Synchronization Modules
When synchronization of strobes or temporal code-3 audibles is required, the appliances shall be compatible with the Wheelock Series DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels with built-in Wheelock Patented Sync Protocol. The strobes and audibles shall not drift out of synchronization at any time during operation.

Series ASWP audibles and strobes shall be able to be synchronized on a 2-wire circuit with the ability to silence the audible if required. The strobes on Series MT multitone audible/strobe appliances shall be able to be synchronized and shall be able to be operated on a separate circuit from the audibles while the audible circuit is connected to a coded or continuous NAC.

Weatherproof Mounting Accessories
Weatherproof mounting options shall include surface mounting or semi-flush mounting to walls or ceilings. Surface mounted appliances shall mount to Wheelock IOB, WBB, WPBB or WPSBB weatherproof backboxes using either exposed conduit or concealed conduit. For concealed conduit the weatherproof backbox shall be mounted to a recessed electrical box with Wheelock's WP-KIT to provide a weatherproof seal for the electrical box. Semi-flush mounted appliances shall mount to a recessed electrical box using Wheelock WFP or WFPA flush plates to provide a weatherproof seal between the electrical box and the appliance.

NEMA Member

WE ENCOURAGE AND SUPPORT NICET CERTIFICATION
3 YEAR WARRANTY

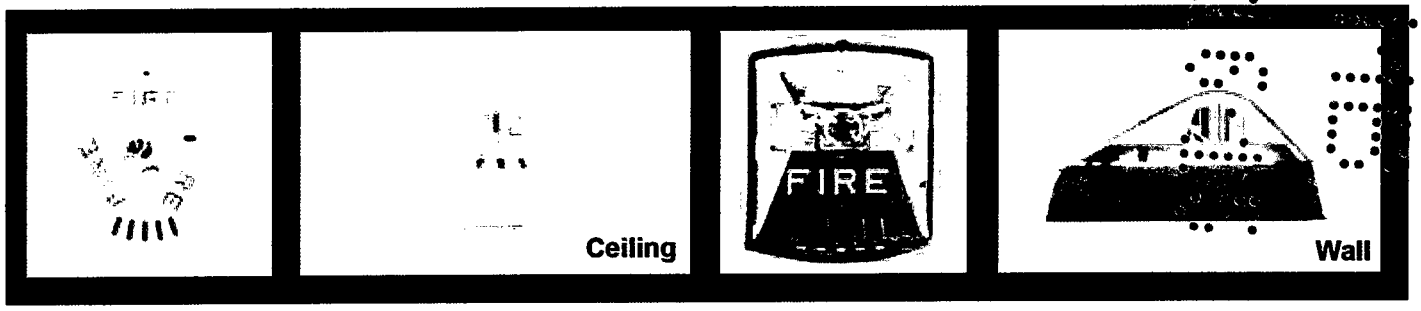
S9004 WP 06/11

NJ Location
273 Branchport Ave.
Long Branch, NJ 07740
P: 800-631-2148
F: 732-222-8707
www.coopernotification.com

COOPER Notification

EXCEDER™

Strobe, Horn Strobe, and Horn Notification Appliances



Description:

The Wheelock® Exceder™ Series of notification appliances feature a sleek modern design that will please building owners with reduced total cost of ownership. Installers will benefit from its comprehensive feature list, including the most candela options in one appliance, low current draw, no tools needed for setting changes, voltage test points, 12/24 VDC operation, universal mounting base and multiple mounting options for both new and retrofit construction.

The Wheelock® Exceder™ Series incorporates high reliability and high efficiency optics to minimize current draw allowing for a greater number of appliances on the notification appliance circuit. All strobe models feature an industry first of 8 candela settings on a single appliance. Models with an audible feature 3 sound settings (90, 95, 99 dB). All switches to change settings, can be set without the use of a tool and are located behind the appliance to prevent tampering. Wall models feature voltage test points to take readings with a voltage meter for troubleshooting and AHJ inspection.

The Wheelock® Exceder™ Series of wall and ceiling notification appliances feature a Universal Mounting Base (UMB) designed to simplify the installation and testing of horns, strobes, and combination horn strobes. The separate universal mounting base can be pre-wired to allow full testing of circuit wiring before the appliance is installed and the surface is finished. It comes complete with a Contact Cover for protection against dirt, dust, paint and damage to the contacts. The Contact Cover also acts as a shunting device to allow pre-wire testing for common wiring issues. The Contact Cover is polarized to prevent it from being installed incorrectly and prevents the appliance from being installed while it is on the UMB. When the Contact Cover is removed the circuit will show an open until the appliance is installed. The UMB allows for consistent installation and easy replacement of appliances if required. Wall models provide an optional locking screw for extra secure installation, while the ceiling models provide a captivated screw to prevent the screw from falling during installation.

Compliance
- UL 1971, UL 464, ULC, CSFM, FM
- ADA/NFPA/ANSI/OSHA
- RoHS

- Save up to 48% in current draw*

- Up to 9 models now in 1 appliance

- Save up to 14% cost of installation**

Sleek Modern Aesthetics

Finger Slide Switches

Voltage Test Points

Multiple Voltages

3 Audible Settings
90, 95, 99 dB

8 Candela Settings ***
Wall - 15/1575/30/75/95/110/135/185
Ceiling - 15/30/60/75/95/115/150/177

Universal Mounting Base ***
Ceiling and Wall
Mounts to 5 Backbox Types

Environmentally Friendly
Low Current Draw

Compatibility and Requirements
- Synchronize using the Wheelock® Sync Modules or panels with built-in Wheelock® Patented Sync Protocol
- Compatible with UL "Regulated Voltage" using filtered VDC or unfiltered VRMS input voltage
- Strobes produce 1 flash per second over the "Regulated Voltage" range

* Compared to competitive models
** Compared to previous models
*** Patented

NOTE: All CAUTIONS and WARNINGS are identified by the symbol ⚠. All warnings are printed in bold capital letters.

⚠ WARNING: PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. VISIT WWW.COOPERNOTIFICATION.COM OR CONTACT COOPER NOTIFICATION FOR THE CURRENT INSTALLATION INSTRUCTIONS. FAILURE TO COMPLY WITH ANY OF THESE INSTRUCTIONS, CAUTIONS OR WARNINGS COULD RESULT IN IMPROPER APPLICATION, INSTALLATION AND/OR OPERATION OF THESE PRODUCTS IN AN EMERGENCY SITUATION, WHICH COULD RESULT IN PROPERTY DAMAGE, AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.

General Notes:

General Notes:

- Strobes are designed to flash at 1 flash per second minimum over their "Regulated Voltage Range".
- All candela ratings represent minimum effective strobe intensity based on UL Standard 1971.
- Series Exceder Strobe products are Listed under UL Standards 1971 and 464 for indoor use with a temperature range of 32°F to 120°F (0°C to 49°C) and maximum humidity of 93% (± 2%) UL 464 (85% UL 1971).
- Series Exceder horns are under UL Standard 464 for audible signal appliances (Indoor use only).

Low Current Draw = Fewer Power Supplies

Strobe Ratings per UL Standard 1971

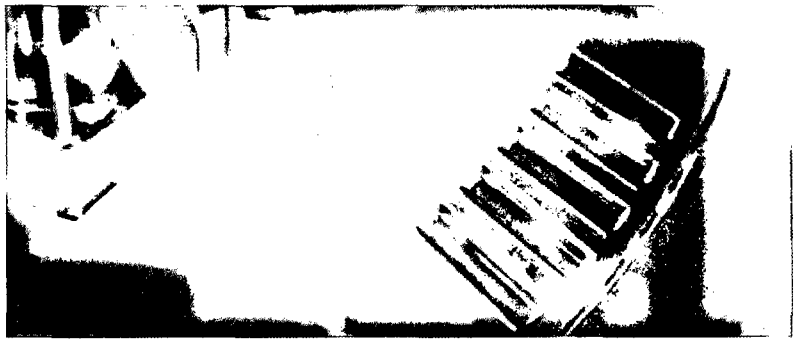
		UL Max Current*													
		24 VDC / 24 FWR												12 VDC	
Model	Regulated Voltage Range VDC	(15)	15/75	(30)	60	75	95	(110)	115	135	150	177	185	15	15/75
ST	8.0-33.0	(0.057)	0.070	(0.085)		0.135	0.163	(0.182)		0.205			0.253	0.110	0.140
STC	8.0-33.0	0.061		0.085	0.103	0.135	0.163		0.182		0.205	0.253		0.110	

Horn Strobe Ratings per UL 1971 & Anechoic at 24 VDC

		UL Max Current* at Anechoic 99 dBA													
		24 VDC												12 VDC	
Model	Regulated Voltage Range VDC	(15)	15/75	30	60	(75)	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	(0.082)	0.095	0.102		(0.148)	0.176	0.197		0.242			0.282	0.125	0.159
HSC	8.0-33.0	0.082		0.102	0.141	0.148	0.176		0.197		0.242	0.282		0.125	
		UL Max Current* at Anechoic 95 dBA													
		24 VDC												12 VDC	
Model	Regulated Voltage Range VDC	15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.073	0.083	0.087		0.139	0.163	0.186		0.230			0.272	0.122	0.153
HSC	8.0-33.0	0.073		0.087	0.128	0.139	0.163		0.186		0.230	0.272		0.122	
		UL Max Current* at Anechoic 90 dBA													
		24 VDC												12 VDC	
Model	Regulated Voltage Range VDC	15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.065	0.075	0.084		0.136	0.157	0.184		0.226			0.267	0.120	0.148
HSC	8.0-33.0	0.065		0.084	0.120	0.136	0.157		0.184		0.226	0.267		0.120	

Horn Ratings per UL Anechoic

Model	Regulated Voltage Range VDC	99 dB	95 dB	90 dB
HN	16-33.0	0.064	0.044	0.022
HNC	16-33.0	0.084	0.044	0.022
HN	8.0-17.5	0.047	0.026	0.017
HNC	8.0-17.5	0.047	0.026	0.017



* UL max current rating is the maximum RMS current within the listed voltage range (16-33 VDC for 24 VDC units). For strobes the UL max current is usually at the minimum listed voltage (16 VDC for 24 VDC units). For audibles the max current is usually at the maximum listed voltage (33 VDC for 24 VDC units). For unfiltered ratings, see installation instructions.

Specification & Ordering Information

Easy to remember model codes

8 candelas on 1 device

1 gang, 2 gang, 4" sq, 3.5" octal & 4" octal boxes

Model	Strobe Candela	Sync w/ DSM or Wheelock Power Supplies	12/24 VDC*	Mounting Options
Horn Strobes				
HSR	15/1575/30/75/95/110/135/185	X	X	UMB**
HSW	15/1575/30/75/95/110/135/185	X	X	UMB**
HSRC	15/30/60/75/95/115/150/177	X	X	UMB**
HSWC	15/30/60/75/95/115/150/177	X	X	UMB**
Strobes				
STR	15/1575/30/75/95/110/135/185	X	X	UMB**
STW	15/1575/30/75/95/110/135/185	X	X	UMB**
STRC	15/30/60/75/95/115/150/177	X	X	UMB**
STWC	15/30/60/75/95/115/150/177	X	X	UMB**
Horn				
HNR		X	X	UMB**
HNW		X	X	UMB**
HNRC		X	X	UMB**
HNWC		X	X	UMB**

*12 VDC models feature 15 & 15/75 settings

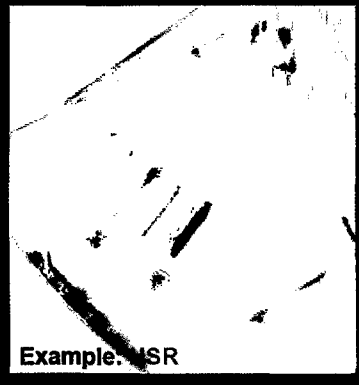
**UMB = Universal Mounting Base

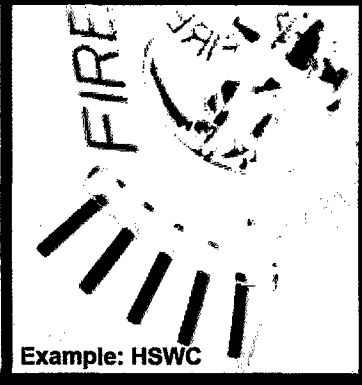
Model Legend

HN = Horn
ST = Strobe
HS = Horn Strobe
C = Ceiling Mount
W = White
R = Red

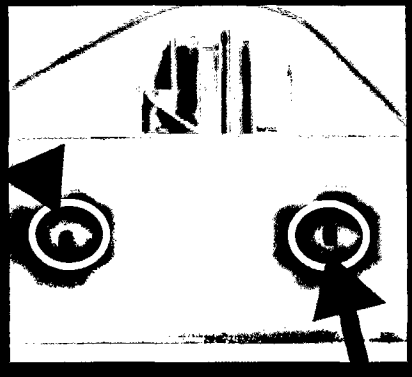
A = Agent Lettering (Strobes only)
AL = Alert Lettering (Strobes only)
N = No Lettering (Strobes only)

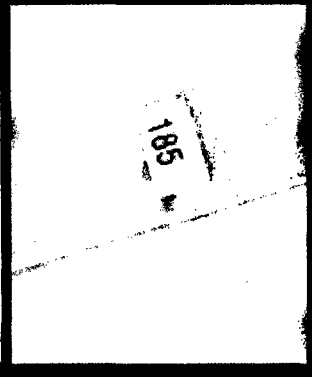
Example 1: STRC = Strobe, Red, Ceiling Mount
Example 2: HSR = Horn Strobe, Red, Wall Mount
Example 3: HSW = Horn Strobe, White, Wall Mount
Example 4: STW-AL = Strobe, White, Wall Mount, Alert Lettering


Example: HSR

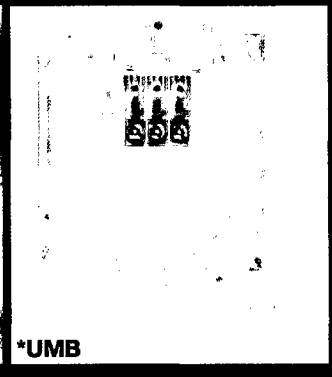


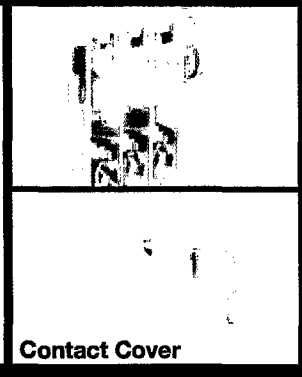
Example: HSWC


Voltage test points for quick troubleshooting and easy spot checking (wall models only)



8 candela settings


*UMB


Contact Cover

Common base for wall and ceiling with 5 mounting options

NOTE: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Cooper Wheelock Inc., dba Cooper Notification standard terms and conditions.

Architects and Engineers Specifications

The notification appliances shall be Wheelock® Exceder™ Series HS Audible Strobe appliances, Series ST Visual Strobe appliances and Series HN Audible appliances or approved equals. The Series HS and ST Strobes shall be listed for UL Standard 1971 (Emergency Devices for the Hearing-Impaired) for Indoor Fire Protection Service. The Series HS and HN Audibles shall be UL Listed under Standard 464 (Fire Protective Signaling). All Series shall meet the requirements of FCC Part 15 Class B. All inputs shall be compatible with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP) with the ability to operate from 8 to 33 VDC. Indoor wall models shall incorporate voltage test points for easy voltage inspection.

The Series HS Audible Strobe and ST Strobe appliances shall produce a flash rate of one (1) flash per second over the Regulated Voltage Range and shall incorporate a Xenon flashtube enclosed in a rugged Lexan® lens. The Series shall be of low current design. Where Multi-Candela appliances are specified, the strobe intensity shall have 8 field selectable settings at 15, 15/75, 30, 75, 95, 110, 135, 185 candela for wall mount and 15, 30, 60, 75, 95, 115, 150, 177 candela for ceiling mount. The selector switch for selecting the candela shall be tamper resistant. The 15/75 candela strobe shall be specified when 15 candela UL Standard 1971 Listing with 75 candela on-axis is required (e.g. ADA compliance). Appliances with candela settings shall show the candela selection in a visible location at all times when installed.

The audible shall have a minimum of three (3) field selectable settings for dBA levels and shall have a choice of continuous or temporal (Code 3) audible outputs.

The Series HS Audible Strobe, ST Strobe and Series HN Audible shall incorporate a patented Universal Mounting Base that shall allow mounting to a single-gang, double-gang, 4-inch square, 3.5-inch octal, 4-inch octal or 100mm European type back boxes. Two wire appliance wiring shall be capable of directly connecting to the mounting base. Continuity checking of the entire NAC circuit prior to attaching any notification appliances shall be allowed. Product shall come with Contact Cover to protect contact springs. Removal of an appliance shall result in a supervision fault condition by the Fire Alarm Control Panel (FACP). The mounting base shall be the same base among all horn, strobe, horn strobe, wall and ceiling models. All notification appliances shall be backwards compatible.

The Series HS and ST wall models shall have a low profile measuring 5.24" H x 4.58" W x 2.19" D. Series HN wall shall measure 5.24" H x 4.58" W x 1.6" D. The Series HSC and STC shall been round and have a low profile with a diameter of 6.68" x 2.63" D. Series HNC ceiling shall have a diameter of 6.68" x 1.50" D.

When synchronization is required, the appliance shall be compatible with Wheelock®'s DSM Sync Modules, Wheelock® Power Supplies or other manufacturer's panels with built-in Wheelock® Patented Sync Protocol. The strobes shall not drift out of synchronization at any time during operation. If the sync protocol fails to operate, the strobe shall revert to a non-synchronized flash-rate and still maintain (1) flash per second over its Regulated Voltage Range. The appliance shall also be designed so that the audible signal may be silenced while maintaining strobe activation when used with Wheelock® synchronization protocol.

Wall Appliances – UL Standard 1971, UL Standard 464, California State Fire Marshal (CSFM), ULC, FM, RoHS
Ceiling Appliances – UL Standard 1971, UL Standard 464, California State Fire Marshal (CSFM), ULC, FM, RoHS

NEMA Member

WE ENCOURAGE AND SUPPORT NICET CERTIFICATION
3 YEAR WARRANTY

Exceder - Spec Sheet 5/13

NJ Location
273 Branchport Ave.
Long Branch, NJ 07740
P: 800-631-2148
F: 732-222-8707
www.coopernotification.com

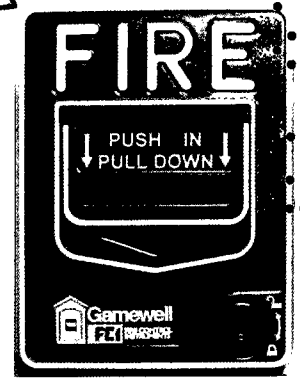
Gamewell FCI FIRE CONTROL INSTRUMENTS

by Honeywell

MS-7AF, MS-7 and MS-7S

DEVICE SPECIFIED BY ADVANCED FIRE & SECURITY INC.

Non-Coded, Manual Fire Alarm Stations



MS-7

Description

The Gamewell-FCI MS-7 Style manual fire alarm stations are available in a wide variety of configurations. The Stations comply with the Americans with Disabilities Act (ADA) 5-lb. maximum pull force requirement. Operating instructions and Braille text are engraved in the handle. All stations have a key lock/reset which is keyed alike with Gamewell-FCI fire alarm control panels and other manual fire alarm stations.

MS-7AF Velociti Addressable Station

The MS-7AF Velociti® Series addressable station is a double action station designed for installation in the signaling line circuit of Gamewell-FCI analog addressable control panels. Activation of the station causes its assigned address to register at the control panel. The door contains an LED which flashes green in normal condition and lights steady red when the station has been activated.* The station features screw terminals.

MS-7ASF Velociti Addressable Station

The MS-7ASF Velociti® Series addressable station is a single action station designed for installation in the signaling line circuit of Gamewell-FCI analog addressable control panels. Activation of the station causes its assigned address to register at the control panel. The door contains an LED which flashes green in normal condition and lights steady red when the station has been activated.* The station features screw terminals.

The Velociti® Series stations use a communication protocol that substantially increases the speed of communication between the sensors and certain Gamewell-FCI analog addressable fire alarm controls. These devices operate in a grouped fashion. If one of the devices in the group has a status change, the panel's microprocessor stops the group poll and focuses on the single device. The net effect is response speed up to five times greater than earlier designs.

MS-7 Double Action Station

The MS-7 double action station is used with conventional-fire alarm control panels. It features a set of single pole contacts and screw terminals for connection to an initiating circuit.

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UL® is a registered trademark of Underwriter's Laboratories Inc.

LEXAN® is a registered trademark of GE Plastics, a subsidiary of General Electric Company.

Features

- Addressable stations compatible with all Gamewell-FCI analog addressable fire alarm controls
- Conventional stations suitable for use with any UL® Listed control panel
- Both single and double action stations available
- Tumbler lock for test and reset keyed alike with Gamewell-FCI controls
- Surface or semi-flush mounting
- Shock and vibration resistant
- Stations (MS-7LOB) Listed for outdoor applications
- Complies with ADA pull force requirements

Only the red LED is operative in panels that do not operate in Velociti mode.

An ISO 9001-2000 Company

SIGNALING UL LISTED 52485 FM APPROVED 3023594 MEA Approved 67-02-E Vol.VIII 07150-0694:251

GAMEWELL-FCI

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MS-7S Single Action Station
The MS-7S single action station is used with conventional fire alarm control panels. It features a set of single pole contacts and wire leads for connection to an initiating circuit.

MS-7SP Double Action Station
The MS-7SP is a double action station similar to the MS-7 station, with the additional feature of both English and Spanish instructions molded into the unit.

MS-7LOB Double Action Station (Listed for Outdoor Applications)
The MS-7LOB station must be mounted on a Model SB-I/O backbox. In retrofit applications, the station is UL Listed for use with the WP-10 backbox. It is intended for use with conventional control panels and has a set of single pole contacts and screw terminals.

Mounting
The MS-7 interior stations may be surface mounted (use backbox SB-I/0) or semi-flush mounted on a standard double-gang, or 4-inch (10.2 cm) square electrical box. An optional trim ring (BG-TR) may also be used for semi-flush mounting.

NYC-Plate
The NYC-Plate provides the backplate for the manual pull station. (See Figure 1).

Figure 1 NYC-Plate

Specifications

Material:	Lexan®
Contact Ratings:	0.25 amps. @ 30 VAC/VDC (resistive)
Dimensions:	5 5/8" H x 4 1/4" W x 1 1/4" D (14 x 10.1 x 3.2 cm)
Operating Temperature (MS-7AF):	32° to 120° F (0° to 49° C)
Relative Humidity (MS-7AF):	10 to 93% (non-condensing)
Alarm Current:	.0030 amp. 0.007 for LED.
Supervisory Current (MS-7AF):	.00030 amps.

Ordering Information

Model	Description
MS-7	Double action station.
MS-7AF**	Velociti addressable double action station.
MS-7ASF	Velociti addressable single action station
MS-7S	Single action station, wire leads.
MS-7SP	Double action station, English and Spanish instructions.
MS-7LOB	Double action station, outdoor use. (Must use SB-I/O - Indoor/ outdoor use backbox).
SB-I/O	Indoor/outdoor use backback-box.
SB-10	Surface backbox.
BG-TR.	Trim ring for semi-flush mount
NYC-Plate	NYC backplate for manual pull station

**For use with Gamewell-FCI analog addressable control panels only.

Gamewell FCI FIRE CONTROL INSTRUMENTS

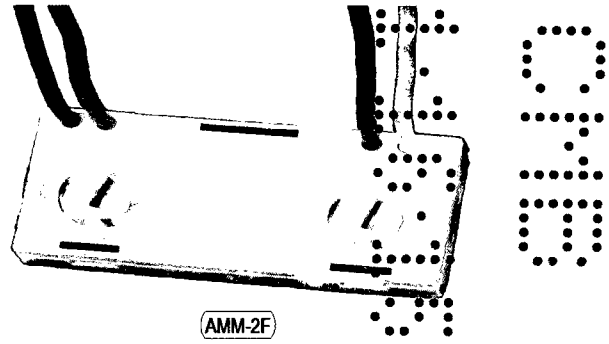
by Honeywell

Velociti® Series

DEVICE SPECIFIED BY ADVANCED FIRE & SECURITY INC.

AMM-2F

Addressable Monitor Module



AMM-2F

Description

The Gamewell-FCI Velociti® Series, addressable monitor module AMM-2F is a single Style B, Class B initiating device circuit (IDC) with a 47KW end-of-line resistor. This module provides an address for any device or group of devices connected to this circuit on the signaling line circuit (SLC) of the Gamewell-FCI addressable series fire alarm control panel. Any initiating device with normally open (N.O.) dry contacts may be made addressable when connected to the AMM-2F module.

The Velociti® Series use a communication protocol that substantially increases the speed of communication between the sensors and certain Gamewell-FCI analog addressable fire alarm controls. These devices operate in a grouped fashion. If one of the devices in the group has a status change, the panel's microprocessor stops the group poll and concentrates on the single device. The net effect is response speed up to five times greater than earlier designs.

The AMM-2F module can be programmed to provide a wide variety of input functions to the Gamewell-FCI addressable series fire alarm control panels. It can be identified as a manual station, heat detector, plenum detector, waterflow switch, tamper switch, N.O. contact, smoke detector, projected beam smoke detector, sub loop, remote zone, etc. It can also serve as a remote system silence, system reset, system acknowledge or drill switch. It is even possible to customize its device type to meet specific job requirements.

The initiating device circuit of the AMM-2F can support a maximum line resistance of up to 40 ohms allowing the use of linear heat detection devices. The compact size facilitates the installation of the module inside manual stations, or mounting boxes of various types of alarm initiating devices.

Ordering Information

Model	Description
AMM-2F	Addressable monitor module, single circuit, Style B, Class B

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Features

- Compact size allows easy installation
- Class B, Style B, initiating circuit
- 40 Ohm line resistance for each initiating device circuit
- Connects to any normally open dry contact device
- Bicolor LEDs flash green whenever the module is addressed, and light steady red on alarm*

*Note: Only the red LED is operative in panels that do not operate in Velociti® mode.

Specifications

Supervisory current:	.000375 amps.
Alarm current:	.00060 amps.
Operating temperature:	32° to 120° F (0° to 49° C)
Relative humidity:	10 to 93% (non-condensing)
End-of-line Resistance:	47K ohms
Dimensions:	1.3" L x 2.5" W x 0.5" D (3.3 x 6.4 x 1.3 cm)

An ISO 9001-2000 Company

SIGNALING UL LISTED S1949 FM APPROVED 3023584 MEA Approved 227-03-E Vol.IV 07300-0694:178

GAMEWELL-FCI
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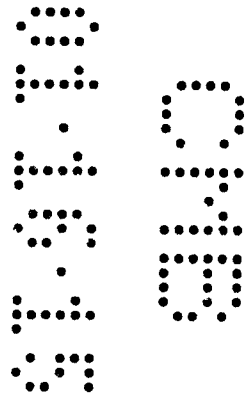

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Gamewell FCI FIRE CONTROL INSTRUMENTS

by Honeywell

Velociti® Series

DEVICE SPECIFIED BY ADVANCED FIRE & SECURITY INC.

AOM-2RF

Description

The Gamewell-FCI Velociti® Series, addressable output relay control module (AOM-2RF) allows an Gamewell-FCI analog addressable fire alarm control to switch discrete relay contacts by code command. The relay provides two (2), isolated sets of Form-C contacts which transfer simultaneously. Circuit connections to the relay contacts are not supervised by the module.

The Velociti® Series use a communication protocol that substantially increases the speed of communication between the sensors and certain Gamewell-FCI analog addressable fire alarm controls. These devices operate in a grouped fashion. If one of the devices in the group has a status change, the panel's microprocessor stops the group poll and concentrates on the single device. The net effect is response speed up to five times greater than earlier designs.

The AOM-2RF Module is designed for installation in the signaling line circuit of any Gamewell-FCI analog addressable fire control panel. The module contains a panel controlled LED. The AOM-2RF is designed to mount in a 4" square junction box 2 1/8" deep.

Relay Contact Ratings

Current Rating	Maximum Voltage	Load Description	Application
3A	30 VDC	Resistive	Non-Coded
2A	30 VDC	Resistive	Coded
0.9A	110 VDC	Resistive	Non-Coded
0.5A	125 VAC	Resistive	Non-Coded
0.5A	30 VDC	Inductive (L/R=5ms)	Coded
1A	30 VDC	Inductive (L/R=2ms)	Coded
0.5A	125 VAC	Inductive (PF=.35)	Non-Coded
0.7A	75 VAC	Inductive	Non-Coded

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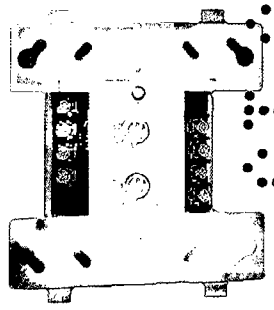
Addressable Output Relay Control Module



AOM-2RF

Features

- Two (2) sets of Form "C" contacts
- Visual rotary, decimal switch addressing (01-159)
- Bicolor LEDs flash green whenever the sensor is addressed, and light steady red on alarm*
- Compact size allows easy installation

Note: Only the red LED is operative in panels that do not operate in Velociti® mode.

Specifications

Supervisory current:	.000375 amps.
Alarm current:	.0065 amps.
Operating temperature:	32° to 120° F (0° to 49° C)
Relative humidity:	10 to 93% relative humidity (non-condensing)
Dimensions:	4 1/2" H x 4" W x 1 1/4" (11.4 x 10.2 x 3.2 cm)

Ordering Information

Model	Description
AOM-2RF	Addressable output relay control module

An ISO 9001-2000 Company

SIGNALING

UL LISTED S1949 FM APPROVED 3023594 MEA Approved 227-03-E Vol.IV 07300-0694:178

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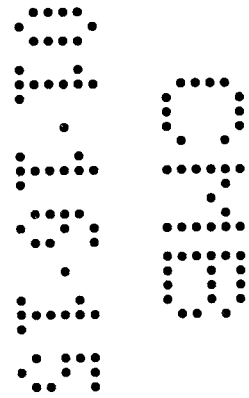
12 Clintonville Road, Northford, CT 06472-1653 USA • Tel: (203) 484-7161 • Fax: (203) 484-7118

www.gamewell-fci.com



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Gamewell FCI FIRE CONTROL INSTRUMENTS

by Honeywell

Velociti® Series

AOM-2SF

DEVICE SPECIFIED BY ADVANCED FIRE & SECURITY INC.

Addressable Output Relay Supervised Control Module

Description

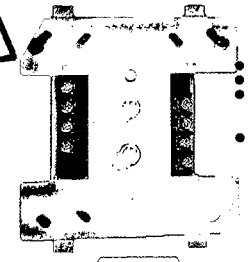
The Gamewell-FCI Velociti® Series addressable output supervised control module (AOM-2SF) allows an Gamewell-FCI analog addressable fire alarm control to switch an external power supply, such as a DC supply or audio amplifier (up to 80 VRMS) to notification appliances. The AOM-2SF notification appliance circuit can be wired either Class A (Style Z) or Class B (Style Y). It also supervises the wiring to the connected loads and reports their status to the panel as NORMAL, OPEN or SHORT CIRCUIT. The module contains a panel controlled LED.

The Velociti® Series use a communication protocol that substantially increases the speed of communication between the sensors and certain Gamewell-FCI analog addressable fire alarm controls. These devices operate in a grouped fashion. If one of the devices in the group has a status change, the panel's microprocessor stops the group poll and concentrates on the single device. The net effect is response speed up to five times greater than earlier designs.

The module is UL Listed as suitable for releasing device service and FM Approved for deluge and preaction service. Refer to the Gamewell-FCI Compatibility Addendum, P/N 9000-0427, for a list of approved, compatible solenoids. The AOM-2SF module is designed for installation in the signaling line circuit of any Gamewell-FCI analog addressable control panel. The signaling line circuits of Gamewell-FCI analog addressable control panels are designed to accommodate up to 159 modules per circuit. The AOM-2SF is designed to mount in a 4" (10.16 cm) square junction box 2 1/8" (5.5 cm) deep.

Relay Contact Ratings

Current Rating	Maximum Voltage	Load Description	Application
3A	30 VDC	Resistive	Non-Coded
2A	30 VDC	Resistive	Coded
0.9A	110 VDC	Resistive	Non-Coded
0.5A	125 VAC	Resistive	Non-Coded
0.5A	30 VDC	Inductive (L/R=5ms)	Coded
1A	30 VDC	Inductive (L/R=2ms)	Coded
0.5A	125 VAC	Inductive (PF=.35)	Non-Coded
0.7A	75 VAC	Inductive	Non-Coded



AOM-2SF

Features

- Compact Size allows easy installation
- Class A, Style Z, or Class B, Style Y notification appliance circuit
- Will accommodate audio amplifiers up to 80 V_{RMS}
- Listed as suitable for releasing device service
- Bicolor LEDS flash green whenever the module is addressed, and lights steady red on alarm*

*Note: Only the red LED is operative in panels that do not operate in Velociti® mode.

Specifications

Supervisory Current:	.000375 amps.
Alarm Current:	.0065 amps.
Operating Temperature:	32° to 120° F (0° to 49° C)
Relative Humidity:	10 to 93% relative humidity (non-condensing)
Dimensions:	4 1/2" H x 4" W x 1 1/4" D (11.4 H x 10.2 W x 3.2 D cm)

Ordering Information

Model	Description
AOM-2SF	Addressable output supervised control module

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SIGNALING UL LISTED S1949 FM APPROVED 3023594 MEA Approved 227-03-E Vol.IV 07300694178

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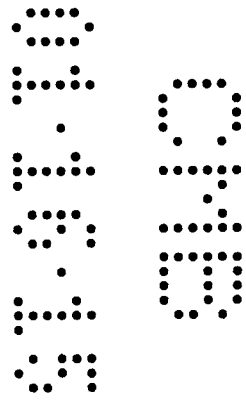

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Gamewell FCI FIRE CONTROL INSTRUMENTS

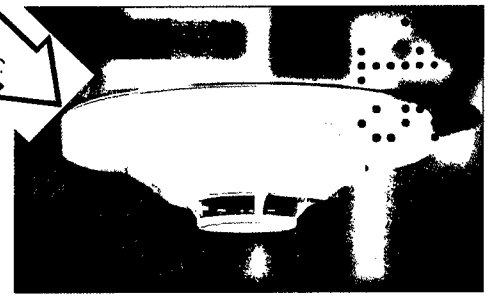
by Honeywell

Velociti® Series

ATD-L2F, ATD-RL2F

Addressable Thermal Sensor

DEVICE SPECIFIED BY ADVANCED FIRE & SECURITY INC.



ATD-L2F

Description

The Gamewell-FCI Velociti® Series, addressable plug-in thermal sensors with integral communication provide features that surpass conventional sensors. Point ID capability allows each sensor's address to be set, providing exact locations for pinpointing alarm locations and for selective maintenance. ATD thermal sensors use an innovative thermistor sensing circuit to produce 135°F/57°C fixed-temperature (ATD-L2F). The ATD-RL2F provides a combination 15°/minute rate-of-rise with 135° fixed thermal detection that is included in a low-profile package. The ATD-HL2F provides fixed high-temperature detection at 190°F/88°C. These thermal sensors provide cost-effective, addressable property protection in a variety of applications.

The Velociti® Series uses a communication protocol that substantially increases the speed of communication between the sensors and Gamewell-FCI analog addressable fire alarm controls. These devices operate in a grouped fashion. If one of the devices in the group has a status change, the panel's microprocessor stops the group poll and concentrates on the single device. The net effect is response speed up to five times greater than earlier designs.

Installation

ATD plug-in sensors use a separate base to simplify installation, service, and maintenance. A special tool allows maintenance personnel to plug-in and remove sensors without using a ladder.

Mount the base on a box which is at least 1.5" (3.8 cm) deep. Suitable mounting base boxes include:

- 4.0" (10.2 cm) square box.
- 3.5" (8.9 cm) or 4.0" (10.2 cm) octagonal box.
- Single-gang box (except relay or isolator base).
- With B501BH or B501BHT base, use a 4.0" (10.2 cm) square box.
- With B224RB or B224BI base, use a 3.5" (8.9 cm) octagonal box, or a 4.0" (10.2 cm) octagonal or square box.

NOTE: Because of the inherent supervision provided by the SLC, end-of-line resistors are not required. Wiring "T-taps" or branches are permitted for Style 4 (Class "B") wiring.

Features

- Sleek, low-profile design
- Visual rotary switch addressing
- Built-in functional test switch activated by an external magnet
- Bicolor LEDs flash green whenever the sensor is addressed, and light steadily red on alarm*
- Optional relay, isolator, or sounder bases
- Low standby current
- Addressable communication
- Stable communication technique with noise immunity
- Optional remote, single-gang LED accessory (RA-400Z)
- Suitable for installation in ducts

Note: *Only the red LED is operative in panels that do not operate in Velociti® mode.

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SIGNALING UL LISTED S2332 FM APPROVED 3023594 MEA Approved 219-02-E Vol.VI 07270-0694:256

GAMEWELL-FCI
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Specifications

Size:	2.1" (5.3 cm) high x 4.1" (10.4 cm) diameter installed in B501 base, 6.1" (15.5 cm) diameter installed in ADB-FLF base
Shipping Weight:	4.8 oz. (137 g)
Operating Temperature:	
ATD-L2F or ATD-RL2F	–4° F to 100° F (–20° C to 38°C)
ATD-HL2	–4° F to 150°F (–20 C to 66°C)
Sensor Spacing:	UL® approved for 50 ft. (15.2 m) center to center FM approved for 25 x 25 ft. (7.6 x 7.6 m) spacing
Relative Humidity:	10 – 93% (non-condensing)
ATD-L2F	Fixed-temperature setpoint 135°F (57°C)
ATD-RL2F	Combination 135° F fixed temperature and 15° (8.3°c) per minute rate-of-rise°
ATD-HL2F	Fixed-temperature setpoint 190°F (88°C)

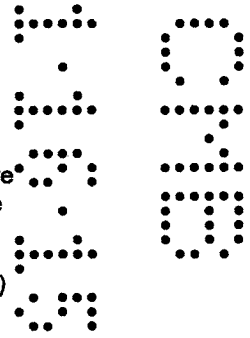
Electrical Specifications

Voltage Range:	15 - 32 volts DC peak
Standby Current:	200 mA @ 24 VDC (without communication)
max. avg.)	.0003 A @ 24 VDC (one communication every 5 seconds with LED enabled)
LED Current (max.)	.0065 A @ 24 VDC (LED lit)
Voltage Range	15 –32 volts DC peak

Specifications

Bases and Options

ADB-FLF	6.1" (15.5 cm) diameter standard base
B501	4.1" (10.4 cm) diameter flangeless base
B501BH or B501BHT	Sounder base assembly (B501BHT produces a Temporal Pattern) includes B501 base
B224RB Relay Base	Up to 14 AWG (2.0 mm2) Relay type: Form-C Rating: 2.0A @ 30 VDC resistive 0.3 A @ 110 VDC inductive 1.0 A @ 30 VDC inductive
B224RB Relay Base Dimensions:	6.2": (15.7 cm) x 1.2" (3.0 cm)
B224BI Isolator Base Dimensions:	6.2" (15.7 cm) x 1.2" (3.0 cm) Maximum 25 devices between isolator bases
RA-400Z	Remote alarm indicator, LED
BCK-200	Black detector covers (box of 10)



Ordering Information

Model	Description
ATD-L2F	Addressable thermal sensor, fixed, 135° F
ATD-RL2F	Addressable thermal sensor, combination fixed,135° F and 15°/minute rate-of-rise.
ATD-HL2F	Addressable thermal sensor, fixed, 190° F

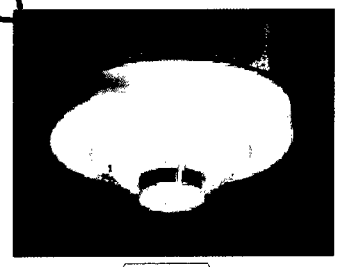
Gamewell FCI FIRE CONTROL INSTRUMENTS

by Honeywell

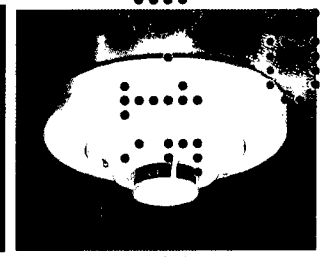
Velociti® Series ASD-PL2F and ASD-PTL2F

DEVICE SPECIFIED BY ADVANCED FIRE & SECURITY INC.

Analog, Addressable Photoelectronic Smoke Sensor



(ASD-PL2F)



ASD-PTL2F

Description

The Gamewell-FCI Velociti® Series, analog addressable plug-in smoke sensors with integral communication provide features that surpass conventional sensors. Sensitivity can be programmed in the control panel software, and is continuously monitored and reported to the panel. Point ID capability allows each sensor's address to be set, providing exact locations for selective maintenance when the chamber contamination reaches an unacceptable level. The ASD-PL2F photoelectric sensor's unique optical sensing chamber is engineered to sense smoke produced by a wide range of combustion sources. Dual electronic thermistors add 135°F (57°C) fixed-temperature thermal sensing on the ASD-PTL2F model.

The Velociti® Series use a communication protocol that substantially increases the speed of communication between the sensors and certain Gamewell-FCI analog addressable fire alarm controls. These devices operate in a grouped fashion. If one of the devices in the group has a status change, the panel's microprocessor stops the group poll and concentrates on the single device. The net effect is a response speed up to five times greater than earlier designs.

Ordering Information

Model	Description
(ASD-PL2F)	Analog, addressable photoelectronic smoke sensor
ASD-PTL2F	Analog, addressable photoelectronic smoke sensor with thermal sensing

Features

- Sleek, low-profile design
- Visual rotary, decimal switch addressing (01-159)
- Built-in functional test switch activated by an external magnet
- Bicolor LEDs flash green whenever the sensor is addressed, and light steady red on alarm*
- Optional relay, isolator, or sounder bases
- Low standby current
- Analog addressable communication
- Stable communication technique with noise immunity
- Optional remote, single-gang LED Indicator (RA400Z)
- Suitable for installation in ducts
- Compatible with Gamewell-FCI analog addressable panels

Note: *Only the red LED is operative in panels that do not operate in Velociti® mode.

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SIGNALING UL LISTED S1913 FM APPROVED 3023594 MEA Approved 219-02-E Vol.VI 07272-0694:263

GAMEWELL-FCI
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Installation

ASD-PL2F plug-in sensors use a separate base to simplify installation, service, and maintenance. A special tool allows maintenance personnel to plug-in and remove sensors without using a ladder.

Mount the base on a box which is at least 1.5" (3.8 cm) deep. Suitable mounting base boxes include:

- 4.0" (10.2 cm) square box
- 3.5" (8.9 cm) or 4.0" (10.2 cm) octagonal box
- Single-gang box (except relay or isolator bases)
- With B501BH or B501BHT base, use a 4.0" (10.2 cm) square box
- With B224RB or B224BI base, use a 3.5" (8.9 cm) octagonal box, or a 4.0" (10.2 cm) octagonal or square box

NOTE: Because of the inherent supervision provided by the SLC, end-of-line resistors are not required. Wiring "T-taps" or branches are permitted for Style 4 (Class "B") wiring.

Sensor Spacing
Gamewell-FCI recommends spacing sensors in compliance with NFPA 72. In low airflow applications with smooth ceilings, space sensors 30 feet (9.1 m). For specific information regarding sensor spacing, placement and special applications, refer to NFPA 72.

Specifications

Size:	2.1" (5.1 cm) high x 4.1" (10.4 cm) diameter installed in B501 base, 6.1" (15.5 cm) diameter installed in ADB-FL base.
Shipping Weight:	5.2 oz. (147 g)
Operating Temperature:	ASD-PL2F: 32° F to 120° F (0° C to 49° C) ASD-PTL2F: 32° F to 100° F (0° C to 38° C)
UL®-Listed Velocity Range:	0-4000 ft./min. (1,219.2 m/min.), suitable for installation in ducts.
Relative Humidity:	10-93% (non-condensing)
Thermal Ratings:	Fixed-temperature setpoint 135° F (57° C)

Electrical Specifications

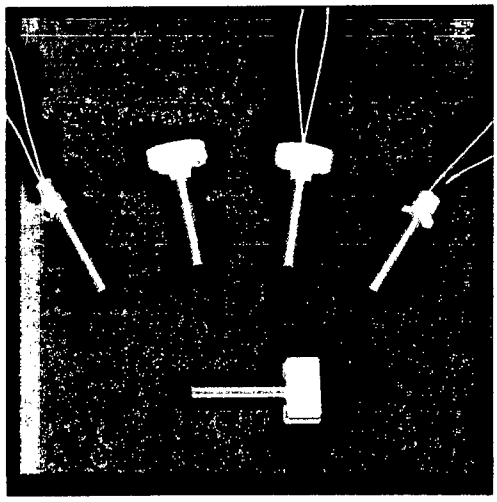
VoltageRange:	15 – 32 volts DC peak
Standby Current:	(max. avg.): .0003 A @ 24 VDC (one communication every 5 seconds with LED enabled)
Maximum Alarm Current:	.0065 A @ 24 VDC (LED) lit).

Bases and Options

ADB-FL	6.1" (15.5 cm) diameter
B501	4.1" (10.4 cm) diameter
B501BH or B501BHT	Sounder base assembly (B501BHT produces a temporal pattern). Includes B501 base
B224RB Relay Base	Screw terminals: Up to 14 AWG (2.0 mm^2) Relay type: Form-C Rating: 2.0A @ 30 VDC resistive; 0.3 A @ 110 VDC inductive; 1.0 A @ 30 VDC inductive. Dimensions: 6.2" x 1.2" (15.7 x 3.0 cm) **Maximum:** 25 devices between isolator bases.
RA400Z	Remote alarm indicator, LED.
BCK-200	Black detector covers (box of 10)

302 Series

Rate-Compensation Heat Detectors



Description

The **Thermotech 302 Series** rate-compensation heat detectors operate within a conrolled range of two to three degrees of their set points, regardless of the speed or rate of temperature rise. These detectors are available in either 135° F or 194° F ratings.

The 302 Series are normally-open devices designed especially for fire detection and alarm systems.

Principles of Operation

The 302 Series rate-compensation heat detectors respond and activate the fire alarm immediately whenever the ambient temperature reaches the preset temperature setting. Under rapid heat rise conditions, the rate-compensation feature enables the detector to respond one to three degrees ahead of the setting. At the same time, however, it does not respond to momentary temperature flucuations below the selected protection level, thus eliminating false alarms. When temperature drops back down below the protection level, the detector automatically resets itself.

Application Information

302 Series detectors have a smooth-ceiling UL rating of 50' x 50' (15.24 x 15.24 meters) and are the only type of heat detectors having such a rating on both fixed temperature and rate compensation.

Features

- Immediate response. The 302 Series activates whenever ambient air temperature reaches a detector's setting,eliminating the thermal time lag inherent in conventional heat detectors.
- Eliminates false alarms. The 302 Series do not respond to momentary temperature fluctuations below the selected temperature.
- Universal application. The 302 Series can be used in all areas for any type of occupancy.
- Self-restoring.
- Hermetically sealed, shockresistant, corrosion resistant, and tamper-proff.

Listings

Listings and approvals below apply to the 302 Series M Rate-Compensation Heat Detectors. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- UL Listed: file S539 & E35018A.
- CSFM approved: file 7270-0021:001.
- FM approved: file

Gamewell FCI FIRE CONTROL INSTRUMENTS
by Honeywell