B0803040 BMS0803060 PLA

CITY OF MIAMI BEACH

City of Miami Beach
Building Department
Shutter Permit
OFFICE COPY

Review Type | Initials | Date
Structural | JOB# | 3700630 | 9/17/08
Electrical | | | 9/17/08
Zoning Build Height 14' | | | 9/17/08

THE-HOME DEPOT AT HOME SERVICE
SHUTTER INFORMATION SHEET

Name: Heriberto Sanchez

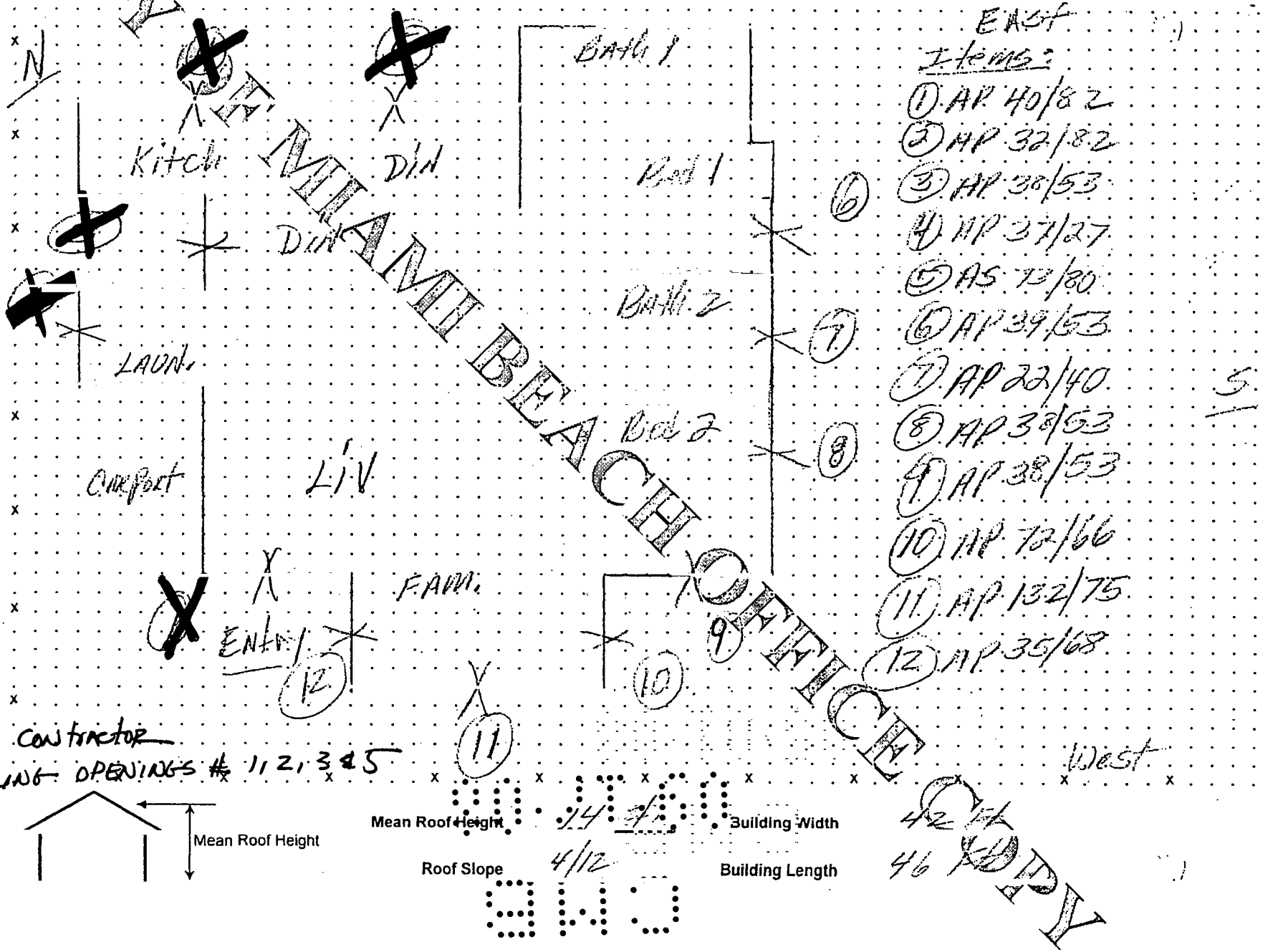
Type Of Anchor Specified 1/4 TAPCON Type Of Construction **Poured Concrete**

No. Open.	Shutter Type P/ A/ W	Shutter Product Approval No	Shutter Length or Spam	Vertical / Horizontal	Opening Size Width IN	Opening Size Height IN	Zone	Edge Distance	Opening Design load (+)	Opening Design load (-)	Glass Distance Separation	Shutter Mounting Detail	Anchor Spacing TOP TRACK	Shutter Mounting Detail	Anchor Spacing BOTTOM TRACK
1	Panel	06-0117.05	58	Vertical	39	53	5	3"	61.0	76.8	2 5/8	Detail # 1	13	Detail # 4	7
2	Panel	06-0117.05	46	Vertical	22	40	5	3"	61.0	76.8	2 5/8	Detail # 1	13	Detail # 4	7
3	Panel	06-0117.05	58	Vertical	35	53	5	3"	61.0	76.8	2 5/8	Detail # 1	13	Detail # 4	7
4	Panel	06-0117.05	44	Vertical	37	27	5	3"	61.0	76.8	2 5/8	Detail # 1	13	Detail # 4	7
5	Panel	06-0117.05	61	Vertical	75	66	5	3"	61.0	76.8	3 5/8	Detail # 1	9	Detail # 4	7
6	Panel	06-0117.05	58	Vertical	39	53	5	3"	61.0	76.8	2 5/8	Detail # 1	13	Detail # 4	7
7	Panel	06-0117.05	46	Vertical	22	40	5	3"	61.0	76.8	2 5/8	Detail # 1	13	Detail # 4	7
8	Panel	06-0117.05	58	Vertical	35	53	5	3"	61.0	76.8	2 5/8	Detail # 1	13	Detail # 4	7
9	Panel	06-0117.05	58	Vertical	38	53	5	3"	61.0	76.8	2 5/8	Detail # 1	13	Detail # 4	7
10	Panel	06-0117.05	72	Vertical	72	66	5	3"	61.0	76.8	3 5/8	Detail # 1	9	Detail # 4	7
11	Panel	06-0117.05	81	Vertical	132	75	5	3"	61.0	76.8	3 5/8	Detail # 1	13	Detail # 4	7
12	Panel	06-0117.05	73	Vertical	35	68	5	3"	61.0	76.8	3 5/8	Detail # 1	13	Detail # 4	7

NOTES:

DELETING OPENINGS # 1, 2, 3, 5. NOT INSTALLED.

CUSTOMER NAME Heriberto Sanchez **WINDOW DIAGRAM SHEET** JOB # 3700630



East

Items:

1. AP 40/62
2. AP 32/82
3. AP 38/53
4. AP 37/27
5. AS 72/80
6. AP 39/53
7. AP 22/40
8. AP 38/53
9. AP 38/53
10. AP 72/66
11. AP 132/75
12. AP 35/68

Change of contractor
NOT INSTALLING OPENINGS # 1, 2, 3 & 5

08-15-09

CMB

opening# 1-12

MIAMI-DADE

BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 372-2901 FAX (305) 375-2908

NOTICE OF ACCEPTANCE (NOA)

MetalTech, Inc.
7635 West 2nd Court
Hialeah, FL 33014

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein. and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: " Maximum Impact" 0.050" Aluminum Storm Panel Shutter

APPROVAL DOCUMENT: Drawing No. 98002, titled "0.050" Maximum Impact Storm Panel", sheets 1 through 7 of 7, prepared by Ramms Engineering, Inc., dated January 10, 1998, last revision dated 01/12/2006, signed & sealed by Robert Monsour, P.E. on 01/12/2006, bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact

LABELING: Each panel shall bear a permanent label with the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises & renews NOA # 04-0621.01** and consists of this page 1, evidence submitted pages E-1 & E-2 as well as approval document mentioned above.

The submitted documentation was reviewed by **Helmy A. Makar, P.E., M.S.**

NOTICE: In addition to the requirements of this NOA, there may be additional restrictions applicable to this property that may be found in the Public Records of this County and there may be additional permits required from other governmental entities such as water management's districts, state agencies, and federal agencies.

The City of Miami Beach assumes no responsibility for accuracy of or results from these tests which are approved subject to compliance with all Federal, State, and Local Laws, Rules, and Regulations.

Helmy A. Makar 10/19/2006

NOA No 06-0117.05
Expiration Date: 10/22/2011
Approval Date: 10/19/2006
Page 1

MetalTech, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVALS

A. DRAWINGS
See NOA 01-0718.09

B. TESTS
See NOA 01-0718.09

C. CALCULATIONS
See NOA 01-0718.09

D. MATERIAL CERTIFICATIONS
See NOA 01-0718.09

E. STATEMENTS
See NOA 01-0718.09

F. OTHER
NOA **01-0718.09.**

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 04-0621.01

A. DRAWINGS
1. None.

B. TESTS
1. None.

C. CALCULATIONS
1. None.

D. QUALITY ASSURANCE
1. By Miami-Dade County Building Code Compliance Office.

E. MATERIAL CERTIFICATIONS
1. None.

F. OTHER
1. NOA # 02-0312.08 cover page states the number of sheets incorrectly "sheets 1 through 18". This NOA #04-0621.01 is issued to revise NOA # 02-0312.08 and correct the number of sheets on the cover page to " sheets 1 through 7 of 7". This is the only change. This file is authorized by Mr. Ted Berman, P.E. with no fee.

Helmy A. Makar, P.E., M.S.
Product Control Examiner
NOA No 06-0117.05
Expiration Date: 10/22/2011
Approval Date: 10/19/2006

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

3. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 98002, titled "0.050" Maximum Impact Storm Panel", sheets 1 through 7 of 7, prepared by Ramms Engineering, Inc., dated January 10, 1998, last revision dated 01/12/2006, signed & sealed by Robert Monsour, P.E. on 01/12/2006.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *Anchor analyses dated January 06, 2006, 41 pages, prepared by Ramms Engineering, Inc., signed & sealed on January 06, 2006 by Robert Monsour, P.E.*

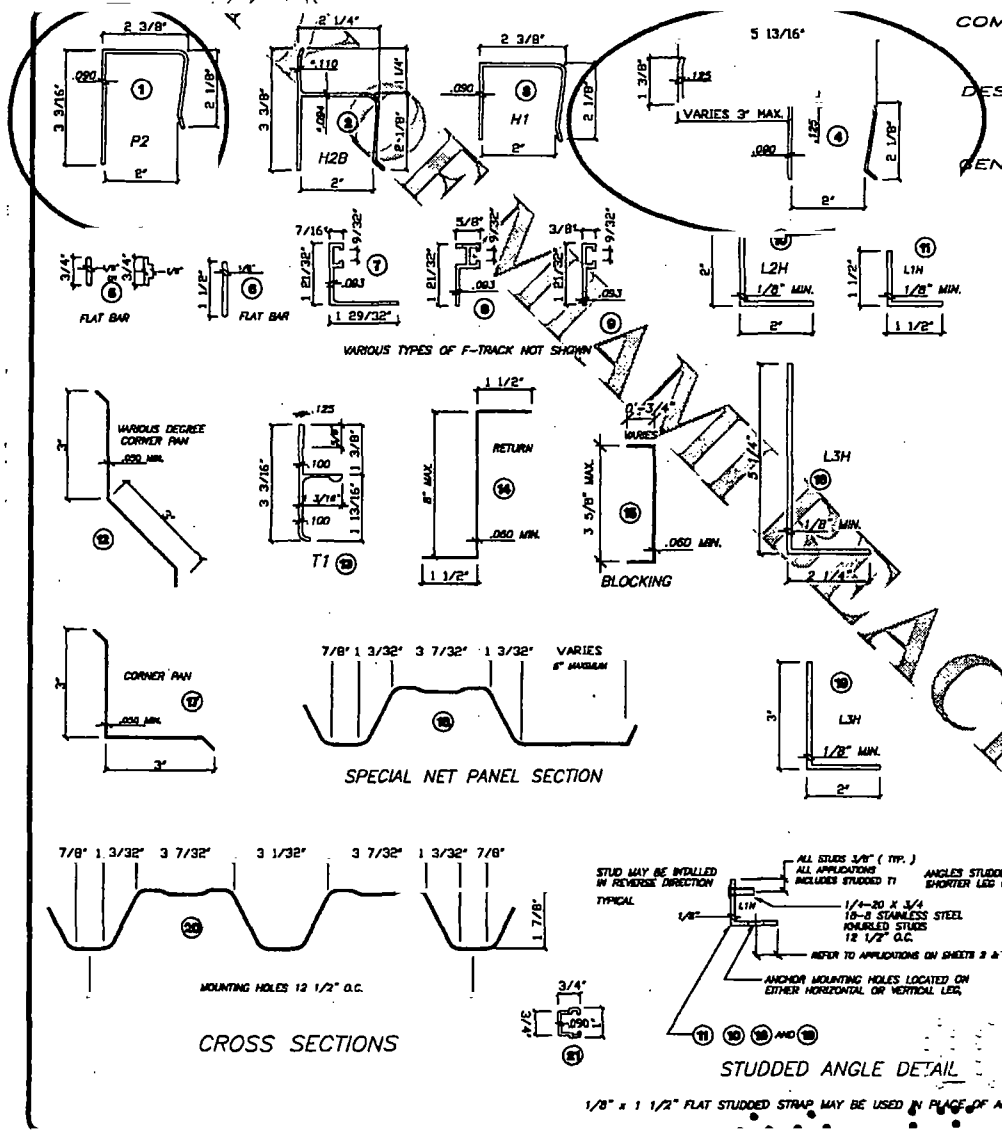
D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *None.*

Helmy A. Makar, P.E., M.S.
Product Control Examiner
NOA No 06-0117.05
Expiration Date: 10/22/2011
Approval Date: 10/19/2006



COMPLIES WITH:

FLORIDA BUILDING CODE
PER SECTION 1609.1.4
TESTED TO TA201, TA202 AND TA203

DESIGN CRITERIA:

WIND LOADS TO BE CALCULATED AS PER ASCE 7

NO INCRESE IN ALLOWABLE STRESS WAS USED IN THE DESIGN OF THIS PRODUCT

GENERAL NOTES:

ALL ALUMINUM EXTRUSIONS TO BE ALLOY 6063-T6 OR EQUAL

STORM PANELS SHALL BE:
.050 5052 H-32 ALUMINUM OR EQUAL
SMOOTH OR EMBOSSED WITH A NOMINAL WIDTH OF 12 1/2"

THE STORM PANEL SHUTTER MAY BE INSTALLED VERTICALLY OR HORIZONTALLY, IN ACCORDANCE TO THE DETAILED SPECIFICATIONS HEREIN.

PANELS MAY BE NOTCHED OR MITERED TO ACCOMMODATE AN OBSTRUCTION

ANCHORAGE OF THE SHUTTER SYSTEM TO CONCRETE OR MASONRY SHALL CONSIST OF THE FOLLOWING OR EQUAL WITH MINIMUM ULTIMATE LOAD VALUES SHOWN

1/4" DIA. RAWL LOK/BOLT ANCHOR (SLEEVED DRIVE ANCHOR)
MIN. TENSILE 1190 – MIN. SHEAR 1530 – 1 1/8" MIN. EMBED. IN CONCRETE
MIN. TENSILE 1200 – MIN. SHEAR 1270 – 1 1/8" MIN. EMBED. IN MASONRY
1/4-20 RAWL CALK-IN ANCHOR (MACHINE SCREW ANCHOR) WITH 1/4-20 BOLTS
MIN. TENSILE 1870 – MIN. SHEAR 1730 – 7/8" MIN. EMBED. IN CONCRETE
MIN. TENSILE 880 – MIN. SHEAR 1340 – 7/8" MIN. EMBED. IN MASONRY
1/4" PERMA-SEAL TAPPER BY RAWL (MASONRY SCREWS VARIOUS HEAD TYPES)
MIN. TENSILE 1520 – MIN. SHEAR 1980 – 1 1/2" MEN. EMBED. IN CONCRETE
MIN. TENSILE 880 – MIN. SHEAR 1270 – 1 1/4" MIN. EMBED. IN MASONRY
1/4" ZAMAC NAILIN BY RAWL (ZAMAC HAMMER DRIVES)
MIN. TENSILE 980 – MIN. SHEAR 1400 – 1 3/8" MIN. EMBED. IN CONCRETE
MIN. TENSILE 730 – MIN. SHEAR 1320 – 1 1/4" MIN. EMBED. IN MASONRY

ANCHORAGE TO WOOD CONSTRUCTION SHALL BE 1/4" STEEL LAGS OR LARGER WITH 1" MIN. THREAD PENETRATION, 1/4-20 BRASS WOOD BUSHINGS OR 1/4" ELCO PANEL MATES WITH 1 7/8" MIN. THREAD PENETRATION.

REFER TO SHEETS 5,6 & 7 OF 7 FOR ANCHOR SPACING AND MINIMUM EMBEDMENTS

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE TO WITHSTAND THE ADDITIONAL LOADS AND INSURE PROPER ANCHORAGE.

EACH PANEL SHALL BEAR A PERMANENT LABEL OR STAMP SHOWING
" METALTECH, INC. HIALEAH, FL " " DADE COUNTY PRODUCT CONTROL APPROVED "

WARNING TO OWNER OR TENANT LOCATED IN EACH HEADER OR ONE PANEL OF EACH OPENING, STATING " STORM PANELS WILL NOT OFFER HURRICANE PROTECTION UNLESS ALL REINFORCING STRAPS OR BOLTS ARE PROPERLY INSTALLED, WHEN REQUIRED "

PERMANENT FASTENER COMPONENTS, EMBEDDED ANCHOR BOLTS, THREADED CONES OR METAL SHIELDS, NOT IN USE, MUST BE PROTECTED AGAINST CORROSION, CONTAMINATION AND DAMAGE AT ALL TIME.

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No. 06-0117.05
Expiration Date 10/22/2011
By Michael Dade County Product Control Division

ROBERT S. MONSOUR, PE
FE-0006024
Ramm ENGINEERING, INC.

12/06

.050

MAXIMUM IMPACT STORM PANEL

BUILDING CODE COMPLIANCE

REVISIONS	BY
09/11/98	SP
01/06/06	SP

RAMM ENGINEERING, INC.
Structural Designs
2110 S. 76th STREET, SUITE 201
TAMPA, FLORIDA 33619
EB 0006024

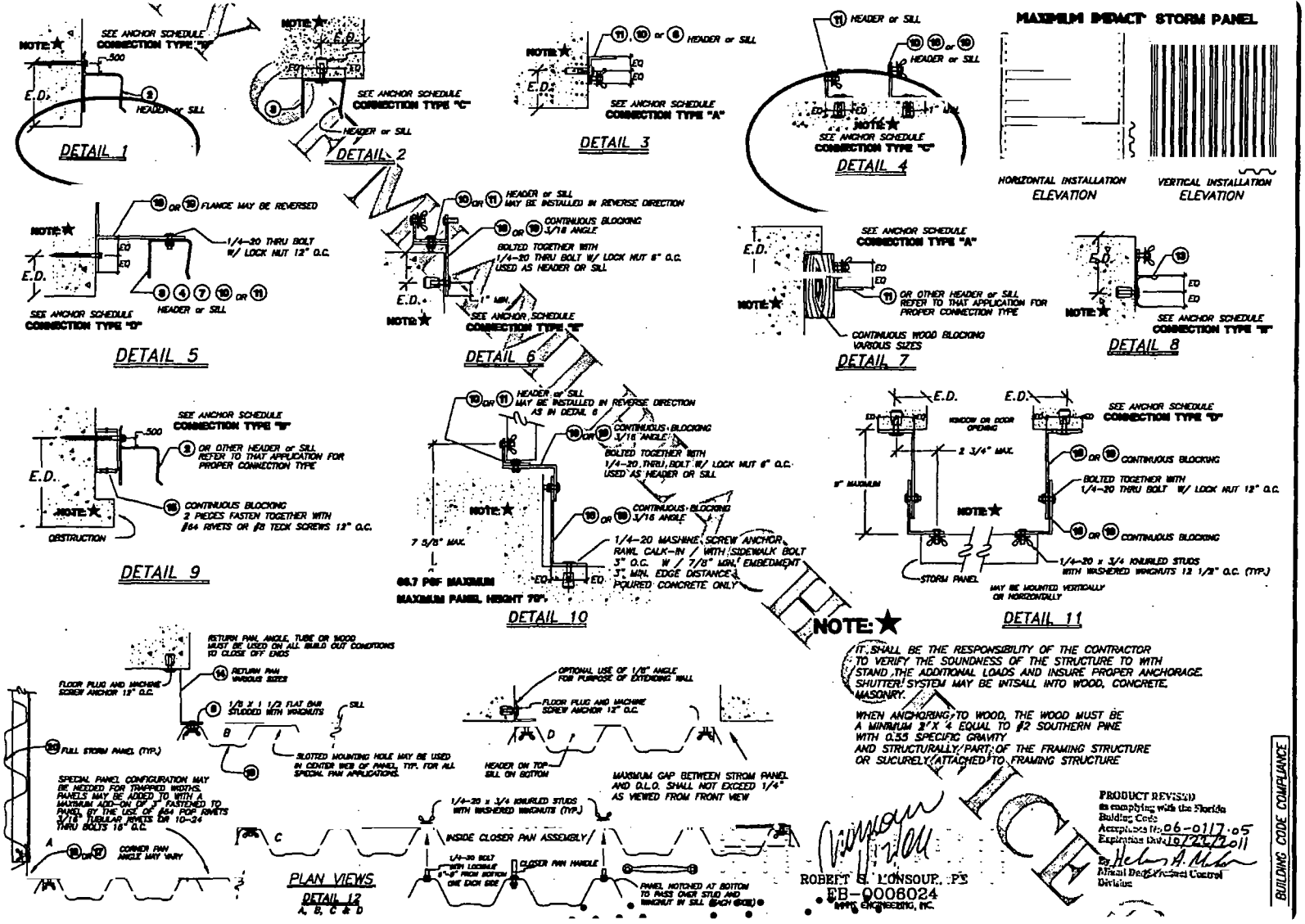
METALTECH, INC.
7935 W. SECOND CT. HIALEAH, FL 33014
EST. 1957

SCP/LRB/RSH
01/10/98
SHOWN
98002
1
7

CITY OF HIALEAH BUILDING DEPARTMENT
APPROVED FOR CODE COMPLIANCE
OFFICE COPY

09-15-08

CWB



PRODUCT REVISED
in complying with the Florida Building Code
Acceptance No. 06-0117.05
Expiration Date 10/22/2011
By Helen A. Malone
Miami-Dade County Product Control Division

ROBERT S. LONSOUP, PE
FB-0006024
RAMMS ENGINEERING, INC.

BUILDING CODE COMPLIANCE

REVISIONS	BY
09/11/98	SP
01/12/06	SP

RAMMS ENGINEERING, INC.
Richard Ramms
3700 S. 28th STREET, SUITE 311
HOLLYWOOD, FLORIDA 33020
CA 0006024

METALTECH, INC.
EST. 1957
7435 W. SECOND CT. HIALEAH, FL. 33014

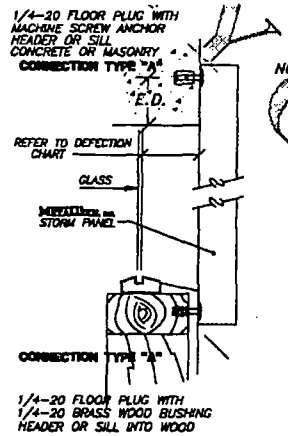
SEP / JRB / RSH
01/15/98
SHOWN
98002
2
7

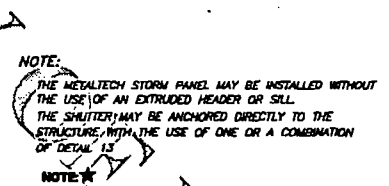
CITY COPY

ONE

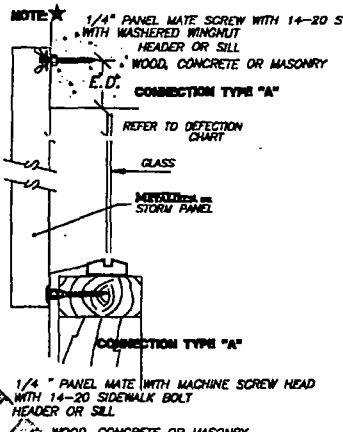
09-15-08

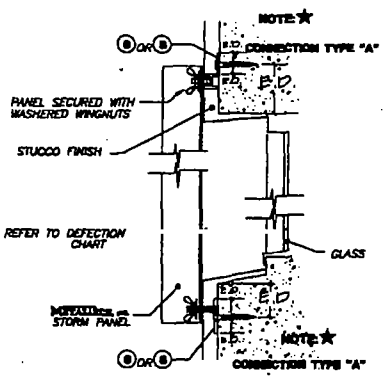
CWB





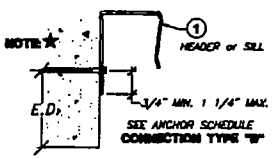
DETAIL 13



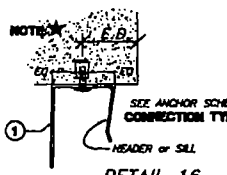


PRESTUCCO INSTALLATION

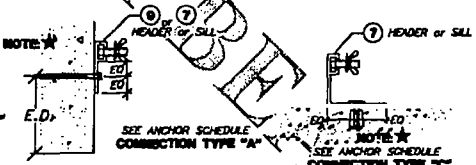
DETAIL 14



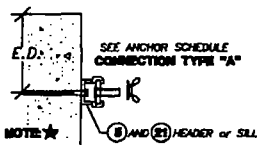
DETAIL 15



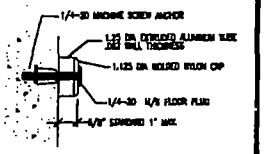
DETAIL 16



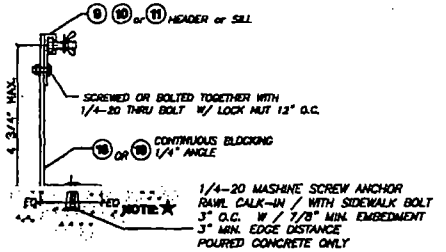
DETAIL 17 DETAIL 18



DETAIL 19



DETAIL 20



69.6 PSF MAXIMUM / PANEL HEIGHT 109" MAXIMUM

DETAIL 21

ADJUSTABLE HEADER OR SILL

NOTE:★

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE TO WITH STAND THE ADDITIONAL LOADS AND INSURE PROPER ANCHORAGE. SHUTTER SYSTEM MAY BE INTSALL INTO WOOD, CONCRETE, MASONRY.

WHEN ANCHORING TO WOOD, THE WOOD MUST BE A MINIMUM 2 X 4 EQUAL TO #2 SOUTHERN PINE WITH 0.55 SPECIFIC GRAVITY AND STRUCTURALLY PART OF THE FRAMING STRUCTURE OR SUCURELY ATTACHED TO FRAMING STRUCTURE

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 06-0117.05
Expiration Date 10/22/2011
By Miami-Dade County Product Control Division

ROBERT S. MONSOUR, PE
EB-0006024
MYS ENGINEERING, INC.

MAXIMUM IMPACT® STORM PANEL

BUILDING CODE COMPLIANCE

REVISIONS	BY
09/11/98	SP
01/12/06	SP

RAMMS ENGINEERING, INC.
Structural Engineers
3150 S. 18th STREET, SUITE 211
BOCA, FLORIDA 33419
EB 0006024

METALTECH, INC.
ESTABLISHED 1957
7430 W. SECOND CT. HIALEAH, FL. 33014

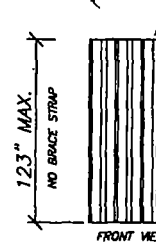
SEP / AMD / RSN
01/10/97
SHOWN
RSN02
3
7

03.15.09

CWB

THE METALTECH STORM PANELS MAY BE INSTALLED WITH OR WITHOUT THE HORIZONTAL BRACE STRAP. REFER TO PANEL DEFLECTION CHARTS.

.050 ALUMINUM MAXIMUM IMPACT STORM PANEL

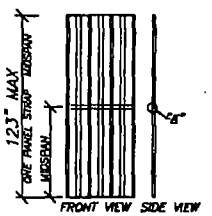


123" MAX. PANEL HEIGHT
NO PANEL STRAP
IS REQUIRED

PANEL DEFLECTION CHART
WITHOUT HORIZONTAL STRAP

PANEL HEIGHT	0"-86"	over 86"-123"
WALL MOUNT	2 5/8"	3 5/8"
INSIDE MOUNT	2 5/8"	3 5/8"
BUILD OUT	2 5/8"	3 5/8"

MINIMUM DISTANCE BETWEEN GLASS AND PANEL



123" MAX. PANEL HEIGHT
ONE PANEL STRAP
LOCATED MIDSPAN

PANEL DEFLECTION CHART
WITH HORIZONTAL STRAP

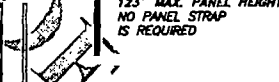
PANEL HEIGHT	0"-107"	over 107"-123"
WALL MOUNT	2 13/16"	3 3/16"
INSIDE MOUNT	2 13/16"	3 3/16"
BUILD OUT	2 13/16"	3 3/16"

MINIMUM DISTANCE BETWEEN GLASS AND PANEL

.050 ALUM

DESIGN PRESSURE	PANEL SPAN
44.40	123"
47.81	120"
51.23	117"
58.06	112"
61.47	110"
66.85	106"
71.46	102"
75.30	97"
81.45	90"
86.83	84"
91.44	80"

HORIZONTAL BRACE STRAP

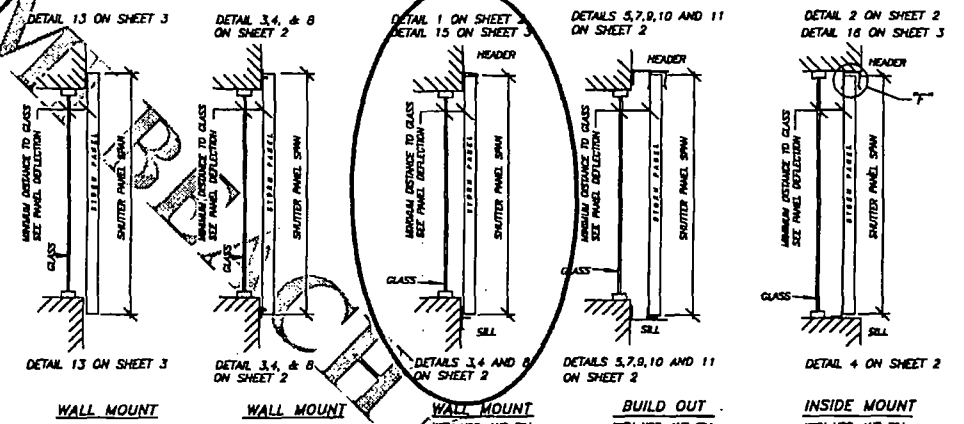


DETAIL "E"

MAXIMUM GAP BETWEEN PANEL AND HEADER IS 1/4" (TYP.)

DETAIL "F"

HEADER AND SILL TYPE MAY VARY, DEPENDING ON APPLICATION



WALL MOUNT
ANCHORING PANEL TOP & BOTTOM NO HDR. OR SILL

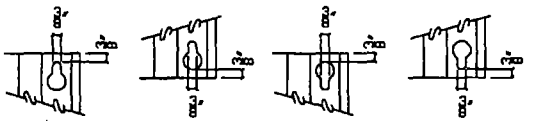
WALL MOUNT
ANCHORING PANEL TOP & BOTTOM WITH STUDDED HDR/SILL

WALL MOUNT
WITH HDR. AND SILL

BUILD OUT
WITH HDR. AND SILL

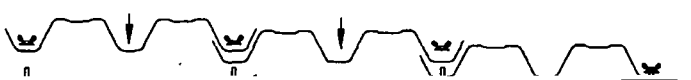
INSIDE MOUNT
WITH HDR. AND SILL

TYPICAL SECTION VIEWS



FASTENER MUST BE IN NARROW PORTION OF KEY HOLE MOUNTING HOLE MAY ALSO BE A 9/16" DIA. CIRCLE

DETAIL "G"



HORIZONTAL BRACE STRAP HEADER AND SILL

PANELS MAY RUN CONTINUOUS BY WIDTH EITHER HORIZONTALLY OF VERTICALLY

EXPLODED ASSEMBLY

PRODUCT REVISED
to comply with the Florida Building Code
Approval No. 06-0117.05
Application Date 10/22/2011
By: Michael Gold-Product Control Division

11/9/06
11:45

ROBERT S. MONSOUR, PE
EB-0006024
RAMMS ENGINEERING, INC.

BUILDING CODE COMPLIANCE

REVISIONS	BY
09/11/98	SP

RAMMS ENGINEERING, INC.
Structural Designs
3300 W. 76th STREET, SUITE 211
HIALEAH, FLORIDA 33018
EB 0006024

METALTECH, INC.
7435 W. SECOND CT. HIALEAH, FL 33014
EST. 1957

STP/REV	
DATE	01/10/06
SHOWN	
CHECKED	

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09.15.08

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ANCHOR SCHEDULE

ANCHOR SPACING vs DESIGN PRESSURE AND CONNECTION TYPE

ANCHOR TYPE	PANEL	E.D.	UP TO 59.6 PSF — POURED CONCRETE CONNECTION TYPE					UP TO 59.6 PSF — CONCRETE BLOCK CONNECTION TYPE				
			A	B	C	D	E	A	B	C	D	E
1/4" RAWL LOK/BOLT (SLEEVE ANCHOR) 1 1/8" MIN. EMBEDMENT	68" SPAN	3"	16	13	8	13	13	16	13	10	13	13
		2"	16	13	7	13	13	16	13	8	13	13
		1 1/4"	16	13	5	13	13	16	13	6	13	13
	88" SPAN	3"	16	13	8	13	13	16	13	7	13	13
		2"	15	11	5	13	13	15	11	6	13	13
		1 1/4"	13	10	4	13	13	13	10	5	13	13
	105" span	3"	14	8	5	8	10	14	7	8	8	10
		2"	12	8	4	8	8	12	6	6	8	9
		1 1/4"	11	6	3	7	8	11	5	4	7	8
	123" span	3"	11	4	4	5	4	12	4	5	5	4
		2"	10	4	4	5	4	10	4	4	5	4
		1 1/4"	9	3	3	4	3	8	3	3	4	3
1/4" RAWL ZAMAC NAILIN DRIVE (HAMMER DRIVE) 1 3/8" MIN. EMBEDMENT IN CONCRETE 1 1/4" MIN. EMBEDMENT IN BLOCK	68" SPAN	3"	16	13	7	13	13	13	13	8	13	13
		2"	15	13	6	13	13	12	12	5	12	12
		1 1/4"	14	13	5	13	13	10	10	4	10	10
	88" SPAN	3"	13	10	6	13	13	10	8	6	10	10
		2"	12	9	5	12	12	9	7	5	8	9
		1 1/4"	11	8	4	11	11	8	6	3	8	8
	105" span	3"	11	5	5	7	8	8	4	4	5	6
		2"	10	6	4	7	7	7	4	3	5	6
		1 1/4"	9	4	3	6	7	7	3	3	4	5
	123" span	3"	9	3	4	4	3	7		3	3	
		2"	8	3	3	4	3	6		3		
		1 1/4"	8	3	3	4	3	6		2		
VARIOUS HEAD TYPES (MASONRY SCREWS) 1/4" RAWL PERMA-SEAL TAPPER 1/4" ELCO PANEL MATES 1 1/2" MIN. EMBEDMENT IN CONCRETE 1 1/4" MIN. EMBEDMENT IN BLOCK	68" SPAN	3"	16	13	11	13	13	16	13	7	13	13
		2"	16	13	9	13	13	14	13	6	13	13
		1 1/4"	16	13	8	13	13	13	13	5	13	13
	88" SPAN	3"	16	13	9	13	13	13	9	5	12	12
		2"	16	13	7	13	13	11	7	4	11	11
		1 1/4"	16	13	6	13	13	10	7	3	10	10
	105" span	3"	16	8	7	11	13	10	5	4	7	8
		2"	16	7	6	10	12	8	4	3	6	7
		1 1/4"	14	7	5	9	10	8	4	3	5	6
	123" span	3"	15	5	6	7	5	8	3	4	4	3
		2"	13	5	5	6	6	8	3	3	4	3
		1 1/4"	12	4	4	5	4	7		3	3	
1/4-20 x 7/8", 1/2" DIA. RAWL CALK-IN (MACHINE SCREW ANCHOR) 7/8" MIN. EMBEDMENT	68" SPAN	3"	16	13	12	13	13	16	13	7	13	13
		2.5"	16	13	10	13	13	14	13	6	13	13
		2"	16	13	8	13	13	13	13	6	13	13
	88" SPAN	3"	16	13	8	13	13	12	9	5	12	12
		2.5"	16	13	8	13	13	11	8	5	11	11
		2"	16	13	6	13	13	10	7	4	10	10
	105" span	3"	16	10	8	13	13	10	5	4	7	8
		2.5"	16	9	7	13	13	9	4	4	6	7
		2"	16	8	5	11	13	8	4	3	5	6
	123" span	3"	16	8	7	8	7	8	3	4	4	3
		2.5"	16	8	6	8	6	8	3	3	4	3
		2"	14	5	4	7	5	7		3	3	3

ANCHOR TYPE	PANEL	E.D.	UPTO 71.5 PSF — POURED CONCRETE CONNECTION TYPE					UPTO 71.5 PSF — CONCRETE BLOCK CONNECTION TYPE				
			A	B	C	D	E	A	B	C	D	E
1/4" RAWL LOK/BOLT (SLEEVE ANCHOR) 1 1/8" MIN. EMBEDMENT	68" SPAN	3"	16	13	7	13	13	15	13	6	13	13
		2"	16	13	5	13	13	13	13	5	11	11
		1 1/4"	14	13	4	13	13	11	11	4	10	10
	88" SPAN	3"	14	8	6	8	10	14	6	6	8	10
		2"	12	8	4	8	9	12	6	5	8	9
		1 1/4"	11	5	3	7	8	11	5	4	7	8
	105" span	3"	11	4	4	5	4	12	4	5	5	4
		2"	10	4	4	5	4	10	4	4	5	4
		1 1/4"	8	3	3	4	3	9	3	3	4	
	123" span	3"										
		2"										
		1 1/4"										
1/4" RAWL ZAMAC NAILIN DRIVE (HAMMER DRIVE) 1 3/8" MIN. EMBEDMENT IN CONCRETE 1 1/4" MIN. EMBEDMENT IN BLOCK	68" SPAN	3"	15	13	6	13	13	11	11	5	11	11
		2"	13	13	5	13	13	10	10	4	10	10
		1 1/4"	12	12	4	12	12	9	9	3	9	9
	88" SPAN	3"	11	5	5	7	8	8	4	4	5	6
		2"	10	5	4	6	7	7	3	3	5	6
		1 1/4"	9	4	3	8	6	7	3	3	4	5
	105" span	3"	9	3	4	4	3	7		3	3	3
		2"	8	3	3	4	3	6		3	3	
		1 1/4"	8	3	3	4	3	6		3		
	123" span	3"										
		2"										
		1 1/4"										
VARIOUS HEAD TYPES (MASONRY SCREWS) 1/4" RAWL PERMA-SEAL TAPPER 1/4" ELCO PANEL MATES 1 1/2" MIN. EMBEDMENT IN CONCRETE 1 1/4" MIN. EMBEDMENT IN BLOCK	68" SPAN	3"	16	13	9	13	13	13	13	6	13	13
		2"	16	13	8	13	13	12	12	5	12	12
		1 1/4"	16	13	6	13	13	10	10	4	10	10
	88" SPAN	3"	16	9	7	11	12	10	5	4	6	7
		2"	15	7	6	10	11	9	4	4	6	6
		1 1/4"	14	7	6	9	10	8	4	3	5	6
	105" span	3"	15	5	6	7	5	8	3	4	4	3
		2"	13	5	5	6	6	8	3	3	4	3
		1 1/4"	12	4	4	5	4	7		3	3	
	123" span	3"										
		2"										
		1 1/4"										
1/4-20 x 7/8", 1/2" DIA. RAWL CALK-IN (MACHINE SCREW ANCHOR) 7/8" MIN. EMBEDMENT	68" SPAN	3"	16	13	10	13	13	13	13	6	13	13
		2.5"	16	13	9	13	13	12	12	5	12	12
		2"	16	13	7	13	13	10	10	4	10	10
	88" SPAN	3"	16	10	8	13	13	10	5	4	6	7
		2.5"	16	8	7	12	13	9	4	4	6	6
		2"	16	8	6	11	12	8	4	3	5	6
	105" span	3"	16	8	7	8	3	8	3	4	4	3
		2.5"	16	6	6	8	3	8	3	3	4	3
		2"	14	5	4	7	3	7		3	3	3
	123" span	3"										
		2.5"										
		2"										

NOTES:

SPANS AND LOADS SHOWN IN THIS SCHEDULE ARE FOR DETERMINING ANCHOR SPACING ONLY. FOR ALLOWABLE SPANS VS. DESIGN LOADS REFER TO SHEET 4.

MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO AND/OR WALL FINISHES.

SHADED AREAS REPRESENT ANCHOR CONDITIONS THAT ARE NOT ACCEPTABLE.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE TO WITH STAND THE ADDITIONAL LOADS AND INSURE PROPER ANCHORAGE. SHUTTER SYSTEM MAY BE INTSALL INTO WOOD, CONCRETE, OR MASONRY .

PRODUCT REVISED
on complying with the Florida
Building Code
Acceptance No. 06-0117.05
Expiration Date 10/22/2011
By
Miami-Dade Permit Council
Division

ROBERT S. MONSOUR, PE
EB-0006024
RAMS ENGINEERING, INC.

BUILDING CODE COMPLIANCE

CITY OF MIAMI BEACH APPROVED

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REVISIONS

	BY
09/11/98	SP
01/06/06	SP

RAMMS ENGINEERING, INC.
Structural Designs
3191 S. 76th STREET, SUITE 211
HIALEAH, FLORIDA 33016
EB 0006024

METALTECH, INC.
EST. 1957
7635 W. SECOND CT. HIALEAH, FL 33014

SCP/JRB
01/10/98
SHOWN
98003
5
7

09.15.09

CWB

ANCHOR SCHEDULE

ANCHOR SPACING vs DESIGN PRESSURE AND CONNECTION TYPE

ANCHOR TYPE	PANEL	E.D.	UP TO 81.5 PSF										UPTO 91.4 PSF									
			POURED CONCTETE CONECTION TYPE					CONCRETE BLOCK CONECTION TYPE					POURED CONCTETE CONECTION TYPE					CONCRETE BLOCK CONECTION TYPE				
			A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
1/4" RAWL LOK/BOLT (SLEEVE ANCHOR) 1 1/8" MIN. EMBEDMENT	68" SPAN	3"	15	10	8	13	13	16	10	7	13	13	13	7	5	9	11	13	7	6	9	11
		2"	14	9	5	13	13	14	9	6	13	13	12	6	4	8	9	12	6	5	8	10
		1 1/4"	12	8	4	12	12	12	8	4	12	12	11	5	3	7	9	11	5	4	7	8
	88" SPAN	3"	12	4	5	8	8	12	5	5	8	5	11	5	4	5	3	11	4	5	5	3
		2"	11	4	4	5	4	11	4	4	5	5	9	3	3	4	3	10	3	4	4	3
		1 1/4"	10	4	3	5	4	10	4	3	5	4	8	3	3	4	3	9	3	3	4	3
	105" span	3"																				
		2"																				
		1 1/4"																				
	123" span	3"																				
		2"																				
		1 1/4"																				
1/4" RAWL ZAMAC NAILIN DRIVE (HAMMER DRIVE) 1 3/8" MIN. EMBEDMENT IN CONCRETE 1 1/4" MIN. EMBEDMENT IN BLOCK	68" SPAN	3"	13	8	5	12	13	9	6	4	9	9	11	5	5	8	8	8	4	4	6	7
		2"	11	7	5	11	11	8	5	4	8	8	10	5	4	7	8	8	4	3	5	6
		1 1/4"	10	7	4	10	10	8	5	3	7	8	9	4	3	6	7	7	3	3	4	5
	88" SPAN	3"	10	4	4	6	4	7	3	3	4	3	9	3	4	4	3	7		3	3	
		2"	9	3	3	4	4	7		3	3	3	8	3	3	3		6		3		
		1 1/4"	8	3	3	4	3	6		3	3		7		3	3		5				
	105" span	3"																				
		2"																				
		1 1/4"																				
	123" span	3"																				
		2"																				
		1 1/4"																				
VARIOUS HEAD TYPES (MASONRY SCREWS) 1/4" RAWL PERMA-SEAL TAPPER 1/4" ELCO PANEL MATES 1 1/2" MIN. EMBEDMENT IN CONCRETE 1 1/4" MIN. EMBEDMENT IN BLOCK	68" SPAN	3"	16	13	8	13	13	11	7	5	11	11	16	8	7	12	13	10	5	4	7	8
		2"	16	11	7	13	13	10	6	4	10	10	16	8	6	10	12	8	4	4	6	7
		1 1/4"	16	10	6	13	13	9	6	3	9	9	14	7	5	9	11	8	4	3	5	6
	88" SPAN	3"	15	6	6	8	8	9	3	4	4	4	14	4	8	8	4	8	3	3	3	3
		2"	14	6	5	7	8	8	3	3	4	3	12	4	5	5	4	7		3	3	
		1 1/4"	12	5	4	6	5	7	3	3	4	3	11	4	4	5	3	6		3		
	105" span	3"																				
		2"																				
		1 1/4"																				
	123" span	3"																				
		2"																				
		1 1/4"																				
1/4-20 x 7/8", 1/2" DIA. RAWL CALK-IN (MACHINE SCREW ANCHOR) 7/8" MIN. EMBEDMENT	68" SPAN	3"	16	13	9	13	13	11	7	5	11	11	16	10	8	13	13	10	5	4	7	8
		2.5"	16	13	7	13	13	10	7	4	10	10	16	9	7	13	13	9	4	4	6	7
		2"	16	12	6	13	13	9	6	3	9	9	16	8	5	12	13	8	4	3	5	6
	88" SPAN	3"	16	7	7	8	8	9	3	4	4	4	16	5	8	7	5	8	3	3	3	3
		2.5"	16	6	6	8	7	8	3	3	4	3	15	5	5	6	5	7		3	3	
		2"	15	8	4	8	8	7	3	3	4	3	13	4	4	6	4	6		3		
	105" span	3"																				
		2.5"																				
		2"																				
	123" span	3"																				
		2.5"																				
		2"																				

NOTES:

SPANS AND LOADS SHOWN IN THIS SCHEDULE ARE FOR DETERMINING ANCHOR SPACING ONLY. FOR ALLOWABLE SPANS VS. DESIGN LOADS REFER TO SHEET 4.

MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO AND/OR WALL FINISHES.

SHADED AREAS REPRESENT ANCHOR CONDITIONS THAT ARE NOT ACCEPTABLE.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE TO WITH STAND THE ADDITIONAL LOADS AND INSURE PROPER ANCHORAGE. SHUTTER SYSTEM MAY BE INTSALL INTO WOOD, CONCRETE OR MASONRY.

PRODUCT REVISED
in compliance with the Florida Building Code
Acceptance No. 06-0117.05
Expiration Date 10/22/2011
By Helen Hall
Miami-Dade Product Control Division

ROBERT S. MONSOUR, PE
EB-0006024
RAMMS ENGINEERING, INC.

BUILDING CODE COMPLIANCE

REVISIONS	BY
09/11/98	SP
01/06/06	SP

RAMMS ENGINEERING, INC.
Structural Designs
8100 S. 76th STREET, SUITE 211
MIAMI, FLORIDA 33166
EB 0006024

METALTECH, INC.
EST. 1957
7835 W. SECOND CT. HIALEAH, FL. 33014

SEP/IRR/RSN
01/10/06
SHOWN
BROOD

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ONE

03.15.09

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ANCHOR SCHEDULE

WOOD APPLICATIONS

ANCHOR TYPE	DIA.	SPAN	UP TO 59.5 PSF CONNECTION TYPE A	B	C	D	E	UP TO 71.5 PSF CONNECTION TYPE A	B	C	D	E	UP TO 81.5 PSF CONNECTION TYPE A	B	C	D	E	UP TO 91.4 PSF CONNECTION TYPE A	B	C	D	E
BRASS WOOD BUSHING 1" MIN. PENETRATION	1/4-20	68" SPAN	14	13	5	13	13	12	12	5	12	12	10	7	4	10	10	9	4	4	8	7
		88" SPAN	11	8	4	11	11	9	4	3	6	7	8	3	3	4	3	7	[illegible]	3	3	[illegible]
		105" SPAN	9	4	4	8	7	8	3	3	4	3	[illegible]									
		123" SPAN	8	3	3	4	3	[illegible]														
WOOD LAGS 1" MINIMUM TREAD PENETRATION	1/4"	68" SPAN	16	13	8	13	13	15	13	8	13	13	14	9	6	13	13	12	6	5	8	8
		88" SPAN	14	11	6	13	13	12	6	5	8	9	10	4	4	5	4	9	3	4	4	3
		105" SPAN	12	8	5	8	9	10	4	4	5	4	[illegible]									
		123" SPAN	10	4	3	5	4	[illegible]														
WOOD LAGS 1" MINIMUM TREAD PENETRATION	5/16"	68" SPAN	16	13	10	13	13	16	13	8	13	13	16	10	7	13	13	14	7	6	9	11
		88" SPAN	16	13	7	13	13	14	7	6	9	10	12	5	5	6	5	11	4	5	6	3
		105" SPAN	14	7	6	9	10	12	4	5	6	4	[illegible]									
		123" SPAN	12	4	5	6	4	[illegible]														
WOOD LAGS 1" MINIMUM TREAD PENETRATION	3/8"	68" SPAN	16	13	11	13	13	16	13	9	13	13	16	12	8	13	13	16	8	7	11	13
		88" SPAN	16	13	9	13	13	16	8	7	10	12	14	5	6	7	6	13	4	6	5	4
		105" SPAN	16	8	7	11	12	14	5	6	8	5	[illegible]									
		123" SPAN	13	5	6	8	5	[illegible]														
WOOD LAGS 1" MINIMUM TREAD PENETRATION	7/16	68" SPAN	16	13	12	13	13	16	13	10	13	13	16	13	9	13	13	16	9	8	12	13
		88" SPAN	16	13	9	13	13	16	8	8	12	13	16	6	7	8	7	14	5	8	6	4
		105" SPAN	16	9	8	12	13	15	5	7	7	8	[illegible]									
		123" SPAN	15	5	7	7	8	[illegible]														
1/4" ELCO PANEL MATES 1 7/8" MIN. THREAD PENETRATION	1/4"	68" SPAN	16	13	8	13	13	15	13	8	13	13	14	9	6	13	13	12	6	5	8	9
		88" SPAN	14	11	6	13	13	12	6	5	8	9	10	4	4	5	4	9	3	4	4	3
		105" SPAN	12	8	5	8	9	10	4	4	5	4	[illegible]									
		123" SPAN	10	4	3	5	4	[illegible]														
1/4" ELCO PANEL MATES 1 7/8" MIN. THREAD PENETRATION	1/4"	68" SPAN	16	13	8	13	13	15	13	8	13	13	14	9	6	13	13	12	6	5	8	9
		88" SPAN	14	11	6	13	13	12	6	5	8	9	10	4	4	5	4	9	3	4	4	3
		105" SPAN	12	8	5	8	9	10	4	4	5	4	[illegible]									
		123" SPAN	10	4	3	5	4	[illegible]														
VERIOUS HEAD TYPES 1/4" MASONRY SCREWS 1 7/8" MIN. THREAD PENETRATION	1/4"	68" SPAN	16	13	8	13	13	15	13	8	13	13	14	9	6	13	13	12	6	5	8	9
		88" SPAN	14	11	6	13	13	12	8	5	8	9	10	4	4	5	4	9	3	4	4	3
		105" SPAN	12	8	5	8	9	10	4	4	6	4	[illegible]									
		123" SPAN	10	4	3	5	4	[illegible]														

NOTES:

SPANS AND LOADS SHOWN IN THIS SCHEDULE ARE FOR DETERMINING ANCHOR SPACING ONLY. FOR ALLOWABLE SPANS VS. DESIGN LOADS REFER TO SHEET 4.

WHEN ANCHORING TO WOOD, THE WOOD MUST BE A MINIMUM 2 X 4 EQUAL TO #2 SOUTHERN PINE 0.55 SPECIFIC GRAVITY AND STRUCTURALLY PART OF THE FRAMING STRUCTURE OR SUCURELY ATTACHED TO FRAMING STRUCTURE.

SHADED AREAS REPRESENT ANCHOR CONDITIONS THAT ARE NOT ACCEPTABLE.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THIS STRUCTURE TO WITH STAND THE ADDITIONAL LOADS AND INSURE PROPER ANCHORAGE. SHUTTER SYSTEM MAY BE INTSALLED INTO WOOD, CONCRETE OR MASONRY.

ROBERT S. MCNOCUR, PE
EB-0006024
RAMMS ENGINEERING, INC.

PRODUCT REVISED
as complied with the Florida
Building Code
Acceptance No. 06-0117.05
Expiration Date: 10/22/2011
By:
Miami-Dade County
Product Control
Division

BUILDING CODE COMPLIANCE

REVISIONS	BY
09/11/98	SP
01/06/06	SP

RAMMS ENGINEERING, INC.
Rashad Ramos
8150 W. 20th STREET, SUITE 211
HIALEAH, FLORIDA 33016
EB 0006024

METALTECH, INC.
EST. 1957
7235 W. SECOND CT. HIALEAH, FL. 33014

SCP/MRD/RSH
01/20/98
SHOWN
98002
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CITY OF MIAMI
APPROVED
NO

08-15-09

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City of Miami Beach
Building Department
Shutter Permit
OFFICE COPY

Review Type	Initials	Date
Building		
Zoning		

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CITY OF MIAMI BEACH

APPROVED FOR PERMIT BY
THE FOLLOWING:

BUILDING:
ZONING:
DRB/HPB:
CONTINGENCY:
PLUMBING:
ELECTRICAL:
MECHANICAL:
FIRE PREVENTION:
ENGINEERING:
PUBLIC WORKS:
STRUCTURAL:
ACCESSIBILITY:
OTHER:

10/5/08

10/9/08

Section 104.5.3

CITY

09-15-09

CWB

ASCE 7-02 - WIND LOAD TABLES - 140, 146, 150 mph - Exposure C - Partially Enclosed Building with mean roof height less than or equal than 60 Feet

WIND PRESSURES IN PSF
140 MPH VELOCITY

Building Height	Roof Slope less than 10 degrees			Roof Slope greater than 10 degrees		
	Positive	Negative		Positive	Negative	
	z4 &-z5	z4	z5	z4 & z5	z4	z5
0-15	52.5	-55.8	-65.5	56.1	-59.7	-70.6
16-20	55.8	-59.2	-69.6	59.6	-63.5	-75.0
21-30	60.7	-64.5	-75.8	64.9	-69.1	-81.7
31-40	64.5	-68.5	-80.6	69.0	-73.4	-86.8
41-50	67.6	-71.8	-84.4	72.3	-77.0	-91.0
51-60	70.3	-74.7	-87.7	75.1	-80.0	-94.5
LOCATION EXAMPLE	BROWARD COUNTY, PALM BEACH AND OTHER COUNTIES					

WIND PRESSURES IN PSF
146 MPH VELOCITY

Building Height	Roof Slope less than 10 degrees			Roof Slope greater than 10 degrees		
	Positive	Negative		Positive	Negative	
	z4 & z5	z4	z5	z4 & z5	z4	z5
0-15	57.1	-60.6	-71.3	61.0	-65.0	-76.8
16-20	60.7	-64.4	-75.7	64.8	-69.0	-81.6
21-30	66.1	-70.2	-82.5	70.6	-75.2	-88.8
31-40	70.2	-74.5	-87.6	75.0	-79.9	-94.4
41-50	73.6	-78.1	-91.8	78.6	-83.7	-98.9
51-60	76.4	-81.2	-95.4	81.7	-87.0	-102.8
LOCATION EXAMPLE	MIAMI-DADE COUNTY					

WIND PRESSURES IN PSF
150 MPH VELOCITY

Building Height	Roof Slope less than 10 degrees			Roof Slope greater than 10 degrees		
	Positive	Negative		Positive	Negative	
	z4 & z5	z4	z5	z4 & z5	z4	z5
0-15	60.3	-64.0	-75.2	64.4	-68.6	-81.0
16-20	64.0	-68.0	-79.9	68.4	-72.9	-86.1
21-30	69.7	-74.1	-87.0	74.5	-79.4	-93.8
31-40	74.1	-78.7	-92.5	79.2	-84.3	-99.6
41-50	77.6	-82.5	-96.9	83.0	-88.4	-104.4
51-60	80.7	-85.7	-100.7	86.3	-91.8	-108.5
LOCATION EXAMPLE	MONROE COUNTY					

GENERAL NOTES:

1- THESE TABLES MAY BE USED TO CALCULATE THE WINDLOAD FOR *COMPONENTS AND CLADDING (HURRICANE SHUTTERS, WINDOWS AND DOORS* APPLICABLE TO A SPECIFIC PROJECT. THE CONTRACTOR MUST PROPERLY SELECT THE DESIGN PRESSURE ACCORDINGLY WITH THE EXISTING CONDITION AND THIS INFORMATION BE VERIFIED BY THE CITY AUTHORITIES.

2- PLEASE, NOTE THAT A SPECIFIC PROJECT CONDITION IS NOT ANALYZED OR CERTIFIED BY THIS ENGINEER. THE SIGNATURE AND SEAL INDICATED ON THIS DRAWING IS ONLY APPLICABLE TO THE GENERIC WINDLOAD CHART BASED ON ASCE 7-02 PUBLICATIONS.

3- DO NOT USE THIS SHEET IF THE SITE CONDITION IS NOT COVERED BY THE TABLES OR A SITE SPECIFIC EVALUATION IS REQUIRED BY THE CITY OFFICIALS.

4- IMPORTANCE FACTOR I=1.0 - (Category II Buildings -Tables 1.1 AND 6.5.5)

5- EXPOSURE C (Section 6.5.6.1 - Open Terrain with scattered obstructions with heights less than 30')

6- BUILDING CONSIDERED PARTIALLY ENCLOSED - Not all glazing in the lower 60 ft are impact resistant or protected with an impact resistant covering. (Section 6.5.9 - Internal pressure GCpi=.55 - Table 6.7)

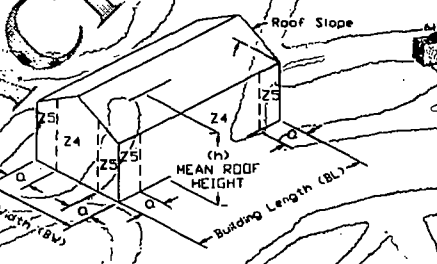
7- BASIC WIND SPEED - V=140, 146, 150 MPH

8- TOPOGRAPHIC FACTOR Kzt= 1 - (Section 6.5.7 - FLAT TERRAIN)

9- DIRECTIONALITY FACTOR Kd = .85 (Section 6.5.4.4 - Wind Directionality Factor)

10- TRIBUTARY AREA: 10 SQF

11- EDGE STRIP (a): The smaller of 10% of the least horizontal dimension or 40% of the Mean roof height, but not less than the larger of 4% of the least horizontal dimension or 3 ft.



a <= BW x 0.1 or a <= h x 0.4
BW less or equal than BL
a must not be less than
a = 3 feet or a= 0.04 x BW

ENGCO, Inc.
Engineering Services - CA 8116
6971 W. SUNRISE BLVD. 104
PLANTATION - FLORIDA 33313
Tel: (954) 585-0304 Fax: (954) 585-0305
E-mail: Engco@AOL.com

FEB 2 6 2008

PEDRO DE FIGUEIREDO
PE52609
NOT VALID W/OUT SEAL

7/10/2007

90.21.60

GNO

Residence

Lot 3, Block 1

Proposed

08-15-08

CMB

City of Miami Beach
Building Department
Shutter Permit
OFFICE COPY

Review Type	Initials	
Structural		
Electrical		09/17/08
Zoning		9/17/08

CITY OF MIAMI BEACH **B0902546 APP**
Building Department
1700 Convention Ctr Drive, 2nd Floor
Miami Beach, Florida 33139
Inspections: (305) 673-7370
Office: (305) 673-7610

Bldg Small Work Permit

04-13-2009

Activity Number: B0902546

Status: APPROVED Issued By: BUILSANK

Site Address: 10 CENTURY LA MBCH
Parcel #: 32330020100

Applied: 04/13/2009
Approved: 04/13/2009
Completed:
To Expire: 10/10/2009

Valuation: $1,870.00

Applicant: OCEAN SHUTTERS MANUFACTURING INC
HERIBERTO SANCHEZ
3561 N E 13TH AV
FT LAUDERDALE 33334
954-489-9797

Property Owner:
10 CENTURY LN
MIAMI BEACH FL 331398803

Description: INTALL 2 ACCORDION HURRICANE SHUTERS.
Inspector Area: S Class Code: R3

DETAIL LIST

Alteration/Repair Fees		
Alteration Bulding/Structures - Per Costs:	$0.00	$63.00
Awning, Canopy, Patio Cover - Per Costs:	$0.00	$0.00
Area Under Roof - RADON - Per Sq.Ft.:	0	$0.00
Walk-Thru - Per Valuation:	$0.00	$15.00
Repairs to Building/Structure - Per Costs:	$0.00	$0.00
Roofing or Re-roofing - Per Sq.Ft.:	0	$0.00
Window/Doors - Per # of:	0	$0.00
Signs 36-4 (Writer/Erect) - Per Sq.Ft.:	0	$0.00
Fence and/or Wall - Per Linear Feet:	0	$0.00
Partial Demo (Struct, Sign, Wall) - Per Costs:	$0.00	$0.00
Swimming Pool - Per Gallon:	0	$0.00
Painting - Per Costs:	$0.00	$0.00
Sandblasting - Per Costs:	$0.00	$0.00
Paving - Per Sq.Ft.:	0	$0.00
Concrete Slab - No Paving - Per Sq.Ft.:	0	$0.00
Trees - Per # of:	0	
Hedges - Per Linear Feet:	0	
Groundcover - Per Sq.Ft.:	0	
Landscaping Fee:		$0.00
Other Fees:		$0.00
Penalty Fee (If Applicable):		$0.00

PAID
APR 13 2009
CITY OF MIAMI BEACH
BUILDING DEPARTMENT

[BSBLDPRM]

Activity Number: B0902546

Fire Safety Fees		
New Building or Addition - Per Sq.Ft.:	0	$0.00
Storage/Industrial Bldg - E & F Occup - Per Sq.Ft.:	0	$0.00
Greenhouse/Argiculture on Premises - Per Sq.Ft.:	0	$0.00
Screen Enclsoure/Trail on Premises - Per Sq.Ft.:	0	$0.00
SS Underground Tanks/App Shelter - Per #:	0	$0.00
Construction not shown Above - Per Costs:	$0.00	$0.00
Alt/Repair Building/Structure - Per Costs:	$0.00	$0.00
Marine Structure Fee		
Dock Area - Per Sq.Ft.:	0	$0.00
Seawall - Per Linear Feet:	0	$0.00
Boat Lifts, Davits, Hoist - Per # of:	0	$0.00
Batter, Mooring, Dock Piles - Per # of:	0	$0.00
Marine Structure Alt/Repair - Per Costs:	$0.00	$0.00
SFBC Compliance Surcharge		
New Const/Add - Res/Mult-Fam/Comm - Per Sq.Ft.:	0	$0.00
New Const/Add - Strg/Ind/Msc - Per Sq.Ft.:	0	$0.00
Cost for Other Construction:		$0.00
Training Fee		
Training Fee:		$2.00
Sanitation Fee:		$20.00
Additional Fees		
1st Reinspection:		$0.00
Continued Reinspections - Per # of:	0	$0.00
Building Joint Inspections - Per # of:	0	$0.00
Change of Contractor Per # of:	0	$0.00
Permit Extension - Per # of:	0	$0.00
Residential Card:		
Commercial Card:		
Permit Card Replacements:		$0.00
Lost Plan Fee - SF:		$0.00
Lost Plan Fee - Other:		$0.00
Overtime Inspection Fees:		$0.00
Total of All Fees:		$101.20
Total of Payments:		$101.20
Balance Due:		$0.00

MIAMIBEACH

BUILDING DEPARTMENT
1700 Convention Center Drive
Miami Beach, FL 33139
Office: 305-673-7610 Fax: 305-673-7857

#5101 20

WORK PERMIT APPLICATION

FLORIDA BUILDING CODE IN EFFECT

Date _____ Permit # B0902546

Folio # 02-3233-002-0100 **Job Address** 10 Century Lane Miami Bch, FL 33139

If subsidiary or revision: provide the Master building permit number here B: _____

IS THIS PERMIT ASSOCIATED WITH A VIOLATION? If so; BV # _____

Is this a City Owned Property? ☐ Yes ☒ No **HISTORIC DISTRICT** ☐ Yes ☒ No

Type of Property: ☒ Single Family ☐ Commercial ☐ Multi-Family/Condo ☐ ***Condo Conversion**

Type of Permit: ☒ Building ☐ Electrical ☐ Plumbing ☐ Mechanical

Type of Improvement: ☐ New Construction ☒ Renovation ☐ Demolition – Year Built _____

Type of Change: ☐ Change of Contractor ☐ Change of Architect/Engineer ☐ Revision

Description of Work: # of Units _____ # of Stories _____

INSTALL 2 Accordion Hurricane Shutters.

☐ **New Construction/Addition:** Job Value $ _____ Sq Ft _____

☒ **Alteration/Remodel/Renovation:** Job Value $ 1870 - Sq Ft 80.03

☐ **OTHER - Job Value $** _____ Sq Ft _____ Linear Ft _____ Pool/Spa Gallonage _____

Owner' Name Heriberto Sanchez **Drivers License No.** S522-320-63-047-0

Address 10 Century Lane Unit # _____

City/State/Zip Miami Bch Phone 786-274-8332 Email _____

Tenant's Name N/A Address _____

City/State/Zip _____ Phone _____ Email _____

Fee Simple Title Holder's Name (if other than owner) N/A

Address _____

City/State/Zip _____ Phone _____ Email _____

Contractor Ocean Shutters Mfg. Inc **License No.** CGC1516573 Cell # _____

Address 1031 SW 30th Avenue

City/State/Zip Deerfield Bch, FL 33442 Office # 954-489-9797 Email liz@oceanshuttersmfg.com

Architect N/A **License No.** _____ Cell # _____

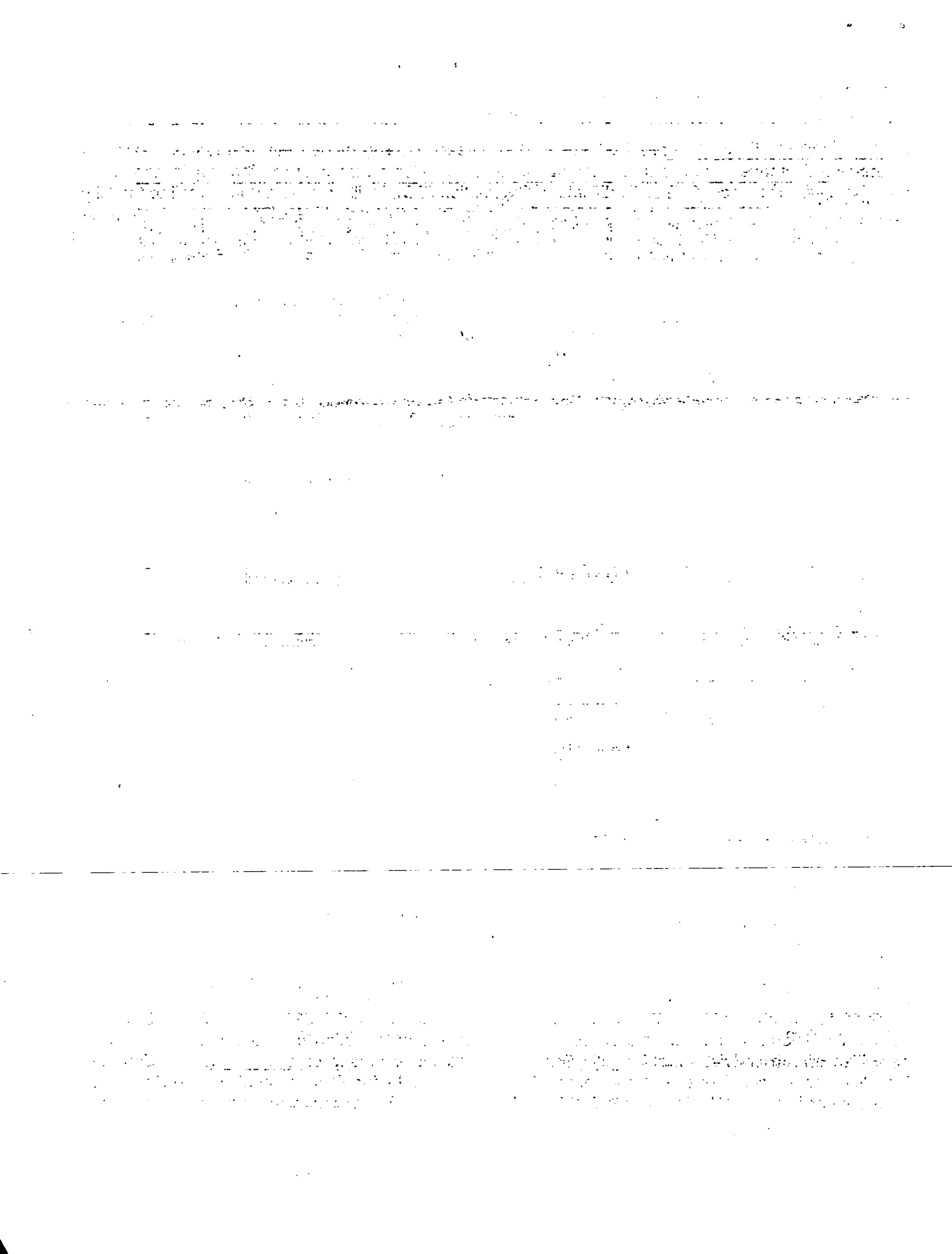
Address _____

City/State/Zip _____ Office # _____ Email _____

Engineer N/A **License No.** _____ Cell # _____

Address _____

City/State/Zip _____ Office # _____ Email _____



Bonding Company Name N/A

Address _____

City/State/Zip _____ Phone _____

Mortgage Lender's Name N/A

Address _____

City/State/Zip _____ Phone _____

This application is hereby made to obtain a permit to do the work and installations as indicated. I certify that all work will be performed to meet the standards of all laws and construction regulations in this jurisdiction. I understand that a separate permit must be secured for Electrical Work, Plumbing, Signs, Wells, Pools, Furnaces, Boilers, Heaters, Tanks, and Air Conditioners, Etc.

***CONDO CONVERSIONS are a change use of the building and require a new certificate of occupancy. If this application implies a condo conversion, it shall be clearly stated in the description and on the plans; otherwise, the certificate of occupancy will be denied.**

OWNER'S AFFIDAVIT: I certify that all the foregoing information is accurate and that all work will be done in compliance with all applicable laws regulating construction and Zoning.

NOTICE: In addition to the requirements of this permit, there may be additional restrictions applicable to this property that may be found in the public records of this county, and there may be additional permits required from other governmental entities such as water management districts, state agencies or federal agencies.

Under penalties of perjury, I declare that to the best of my knowledge, the facts stated in this document are true. Any information found to be false may cause the revocation and/or denial of the permit and/or certificate of occupancy.

If the contractor is going to be hired by the tenant, check here. ☐

Signature of Owner or Agent	Signature of Tenant	Signature of Qualifier
Herberto Sanchez		John Fitch
Printed Name of Owner or Agent	Printed Name of Tenant	Printed Name of Qualifier
Date 4/7/09	Date	Date 4/7/09
Signature of Notary Public	Signature of Notary Public	Signature of Notary Public
Identification FL. D/L	Identification	Identification Known
Sworn to and subscribed before me this 7th day of April 20 09	Sworn to and subscribed before me this ___ day of _____ 20 ___	Sworn to and subscribed before me this 7th day of April 20 09
(SEAL)	(SEAL)	(SEAL)

MILDRED ACEVEDO Notary Public - State of Florida My Commission Expires Apr 16, 2010 Commission # DD 540869 Bonded By National Notary Assn.

MILDRED ACEVEDO Notary Public - State of Florida My Commission Expires April 16, 2010 Commission # DD 540869 Bonded By National Notary Assn.

~~***If you are applying for this permit as Owner/Builder, please sign below only****~~

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT. NOTICE OF COMMENCEMENT SHOULD BE FILED AT: 22 NW 1ST STREET, MIAMI, FL

STATE OF FLORIDA **COUNTY OF** Miami Dade

Herberto Sanchez — Herberto Sanchez

Print Owner's Name — Owner's Signature

Sworn to and subscribed before me this 18 day of March 20 09, by: Herberto Sanchez

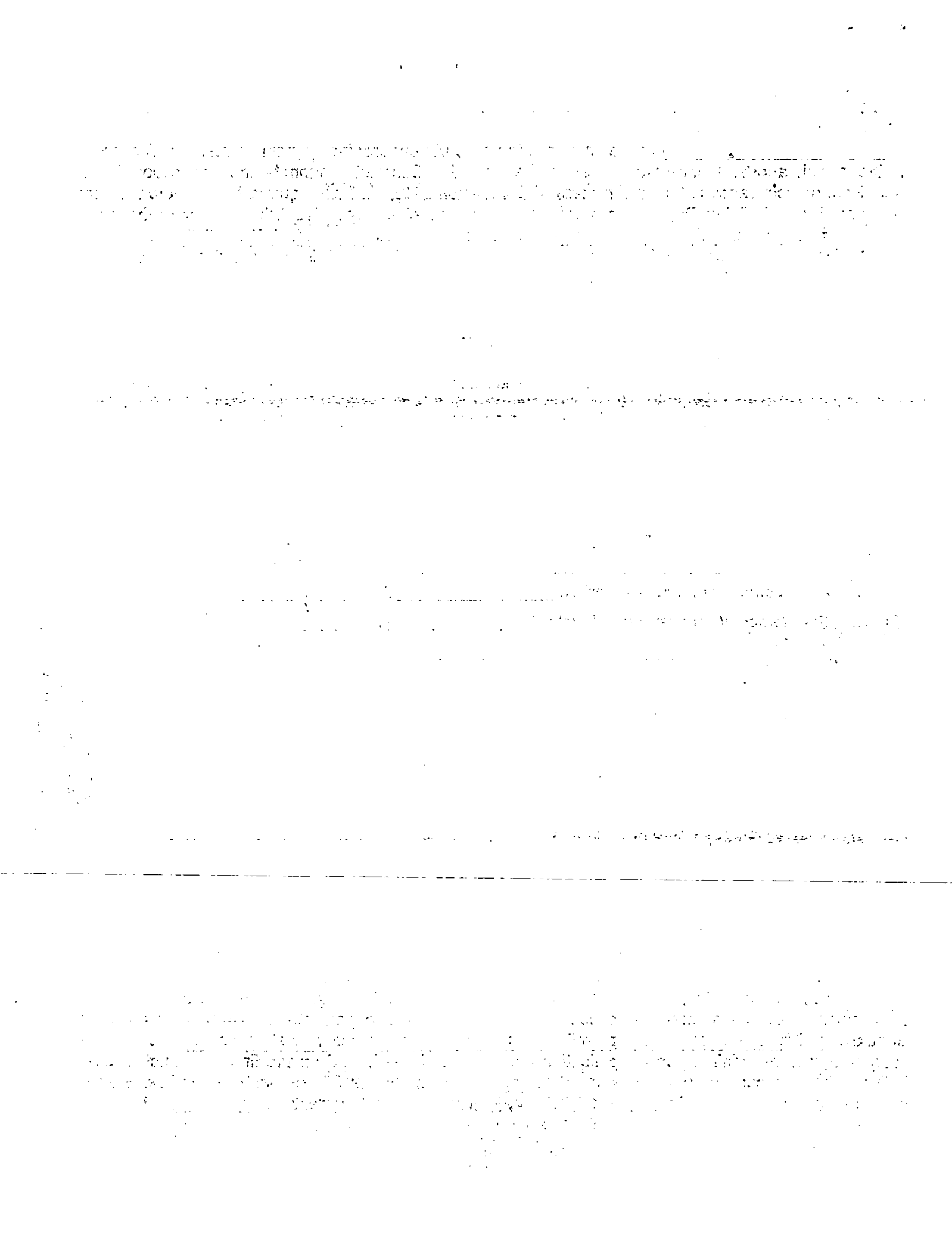
( ) Personally Known (X) Produced Identification - Type of Identification Florida Driver License # S522320630470 Exp. 2/1/12

Ilena Su Chan

Signature of Notary Public (Seal)

ILENA SU CHAN Notary Public, State of Florida Commission# DD813137 My comm. expires Aug. 10, 2012

Application Approved By: _____ (Permit Clerk)



PART TWO: OWNER AFFIDAVIT: TO BE SUBMITTED PRIOR TO PERMIT ISSUANCE.

I Heriberto Sanchez am the Owner of the property undergoing an improvement as described in the permit above. I understand that at the time the Contractor submits the application for a Certificate of Occupancy (CO) or Certificate of Completion (CC), I will be required to submit to the City of Miami Beach Building Department verification of construction cost. The City will accept the most current "AIA Document G702/G703" Application for Payment approved at the time the application for the Certificate of Occupancy (CO) or Certificate of Completion (CC) is submitted to the Building Department as verification of construction cost.

I understand that as the Owner of said property and improvement, I am responsible to pay the City of Miami Beach any difference between the permit fee based on the construction cost and/ or square footage submitted with the original permit application and the permit fee based on the final construction cost including general conditions and/or final square footage as certified by the Owner, Architect and Contractor on the most current "AIA Document G702/G703" Application for Payment approved at the time the application for the Certificate of Occupancy (CO) or Certificate of Completion (CC) is submitted to the Building Department.

Heriberto Sanchez
Signature of Owner

STATE OF FLORIDA

COUNTY OF Miami Dade

Sworn to and subscribed before me this 18 day of March 20 09 by: Heriberto Sanchez

[ ] Personally known [X] Procured Identification – Type of Identification Florida Driver License # S522320630470 Exp. 2/7/12

Ilena
Signature of Notary Public

ILENA SU CHAN
Notary Public, State of Florida
Commission# DD813137
My comm. expires Aug. 10, 2012

***Note:** It is the intention of the City of Miami Beach to use the Architect's Estimate of Construction Cost as a "Good Faith" estimate for the purpose of calculating the initial permit fee. The City agrees to hold the Architect and/or Owner harmless from any liability, professional or otherwise due to any difference in the Architect's estimate of construction cost and the construction cost as submitted by the Owner and/or Contractor at the time of Completion. The Owner will be* responsible to pay the City of Miami Beach any difference between the permit fee based on the construction cost and/or square footage submitted with the original permit application and the permit fee based on the final construction cost including general conditions and/or square footage as certified by the Owner, Architect and Contractor on the most current "AIA Document G702/G703" Application for Payment approved at the time the application for the Certificate of Occupancy (CO) or Certificate of Completion (CC) is submitted to the Building Department.

KNEZEVICH ASSOCIATES
CONSULTING ENGINEERS

V. JOHN KNEZEVICH, P.E.

February 2, 2009

Ms. Lucille Marino
Association of Shutter Professionals
1031 SW 30th Avenue
Deerfield Beach, FL 33442

Re: Pro-Tech - Pro Series I Accordion Shutter

Dear Ms. Marino:

Friday, January 30, 2009, the following Impact tests, on Centermate Locks, were successfully performed on 104" tall samples, in accordance with TAS 201 of the Florida Building Code (FBC), at Construction Testing Corporation (CTC), located in Hollywood, FL. (CTC is a Miami-Dade and FBC approved testing facility):

1. Twist-Push Button Lock on the inside of the test sample's In-Blade Centermate
2. Thumb Screw Lock on the inside of the test sample's In-Blade Centermate

In accordance with previous approved testing, any installation greater than 104" will require two (2) of one of the above locks in an In-Blade type Centermate. Each lock would be located at a distance that is 1/3 from the top and 1/3 from the bottom of the installation.

As a result of the above testing, the Twist-Push Button Lock and the Thumb Screw Lock may be used on the inside of the subject accordion when installed in the High Velocity Hurricane Zone or any other area recognizing the FBC or the Miami-Dade Product Approvals.

If there are any further questions, please contact me at 954-821-6933.

Sincerely,
KNEZEVICH ASSOCIATES

V. John Knezevich, PE
Florida license No. 10983
COA No. 27989

2590 SW 105th Terrace ■ Davie, Florida 33324 ■ 954.821.6933 ■ Fax: 954.452.7960 ■ VJK@Knezevich.com

MIAMI-DADE COUNTY
BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908
www.miamidade.gov

NOTICE OF ACCEPTANCE (NOA)

AllGuard, Inc.
6245 Powerline Road
Ft. Lauderdale, Florida 33309

SCOPE:
This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: " ASP / Pro Series I " Aluminum Accordion Shutter

APPROVAL DOCUMENT: Drawing No. 07-376, titled " Pro Series I Accordion Shutter ", sheets 1 through 6 of 6, prepared by Thornton Tomasetti, dated February 20, 2007, last revision #2 dated July 03, 2007, signed and sealed by J.W. Knezevich, P.E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and the approval date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1, evidence submitted page E-1 as well as approval document mentioned above. The submitted documentation was reviewed by **Helmy A. Makar, P.E., M.S.**

09/13/2007

NOA No. 07-0606.06
Expiration Date: 09/13/2012
Approval Date: 09/13/2007
Page 1

AllGuard, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 07-376, titled " Pro Series I Accordion Shutter ", sheets 1 through 6 of 6, prepared by Thornton Tomasetti, dated February 20, 2007, last revision #2 dated July 03, 2007, signed and sealed by J.W. Knezevich, P.E.*

B. TESTS

1. *See Association's generic approval under 07-2878.*

C. CALCULATIONS

1. *See Association's generic approval under 07-2878.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *See Association's generic approval under 07-2878.*

F. STATEMENTS

1. *Release letter issued by the Association of Shutter Professionals, Inc., dated May 01, 2007, certifying this product to meet the criteria of product tested and approved, and allowing AllGuard, Inc. to use the test results approved under Miami-Dade County Approval No. 07-2878, signed by Mr. Scott Grushoff.*
2. *Acknowledgment letter by AllGuard, Inc., dated May 01, 2007, signed by Mr. John DelGardo.*
3. *Letter by Tilteco Inc., dated May 17, 2007, certifying that the drawing (No. 07-376) prepared for AllGuard, Inc., signed and sealed by Mr. John W. Knezevich, P.E., is engineering wise identical to ASP's generic drawing (No. 06-471).*

Helmy A. Makar, P.E., M.S.
Product Control Examiner
NOA No. 07-0606.06
Expiration Date: 09/13/2012
Approval Date: 09/13/2007

CONTRACTOR:	OCEAN SHUTTERS MANUFACTURING, INC.
ADDRESS:	1031 S.W. 30th AVENUE
	DEERFIELD BEACH, FL 33442
PHONE:	TOLL FREE: 1-888-489-9797

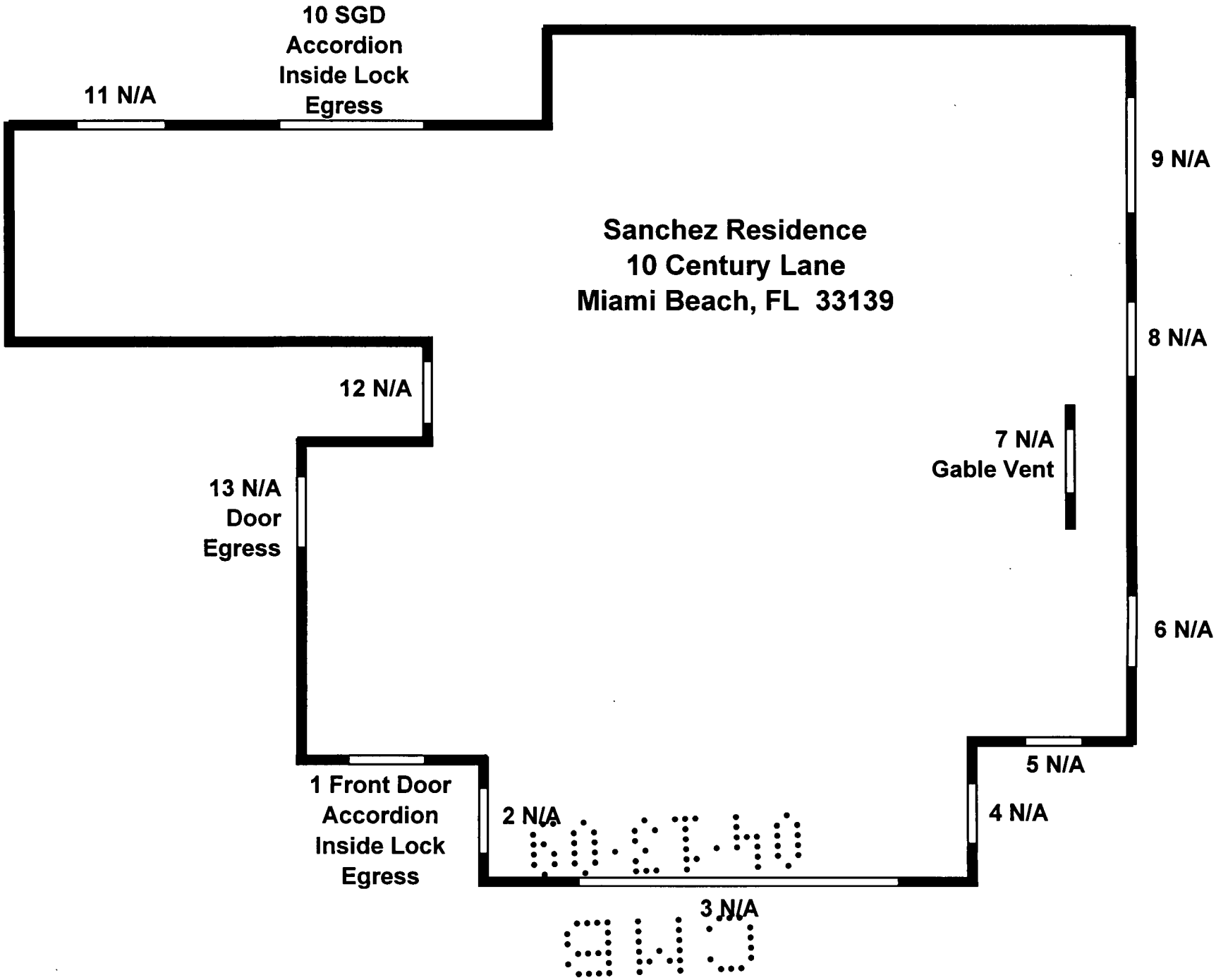
JOB NAME:	Heriberto Sanchez		*DATE:*	3/24/09	
JOB ADDRESS:	10 Century Lane		*CITY:*	Miami Beach	
JOB NUMBER:	0936124H		*ZIP:*	33139	
# OF OPENINGS:	2			*INT. ROUTE:*	80.03
WIND SPEED:	146 MPH EXPOSURE	"C"			
MEAN ROOF HEIGHT:	14' *PSF'S:*	*WORST CASE=*	-62.2/+46.5		
MAX SPAN:	11'10"/142"				

PRO SERIES I ACCORDION WORKSHEET

OPENING #	CLEAR OPENING	TRACK	ANGLE	SQUARE FOOT
1	40 x 88.75	48.125	93.75	31.33
10	71.5 x 80	82.5	85	48.70
			TOTAL	80.03

NOTICE: In addition to the requirement of this permit, there may be additional restrictions applicable to this property that may be found in the Public Records of this County, and there may be additional permits required from other governmental entities such as water management's districts, state agencies, or federal agencies.

The City of Miami, agencies assumes no responsibility for accuracy of or results from these plans which are approved subject to compliance with all Federal, State, and Local Laws, Rules, and Regulations.


10 SGD
Accordion
Inside Lock
Egress
11 N/A
9 N/A
Sanchez Residence
10 Century Lane
Miami Beach, FL 33139
8 N/A
12 N/A
7 N/A
Gable Vent
13 N/A
Door
Egress
6 N/A
5 N/A
1 Front Door
Accordion
Inside Lock
Egress
2 N/A
4 N/A
3 N/A

2007 FLORIDA BUILDING CODE & ASCE 7-05
DESIGN LOADS FOR COMPONENTS AND CLADDING

WIND VELOCITY=146 MPH
EXPOSURE 'C'

MRH=0-60'
BASED ON Kd=0.85
SEE TABLE NOTES FOR ALT Kd

INTERIOR **ZONE 4** PRESSURES

Mean Roof Height	DESIGN PRESSURES (PSF) - Zone 4 Tributary Area (Sq Ft)							
	10	15	20	25	30	35	40	45	50
0 - 15 ft	-50.4	-49.2	-48.3	-47.6	-47.1	-46.6	-46.2	-45.9	-45.5
	+46.5	+45.2	+44.4	+43.7	+43.1	+42.7	+42.3	+41.9	+41.6
16 ft	-51.1	-49.8	-49.0	-48.3	-47.7	-47.3	-46.8	-46.5	-46.2
	+47.1	+45.9	+45.0	+44.3	+43.7	+43.3	+42.9	+42.5	+42.2
18 ft	-52.4	-51.1	-50.2	-49.5	-48.9	-48.4	-48.0	-47.7	-47.3
	+48.3	+47.0	+46.1	+45.4	+44.8	+44.3	+43.9	+43.6	+43.2
20 ft	-53.5	-52.2	-51.3	-50.6	-50.0	-49.5	-49.1	-48.7	-48.4
	+49.4	+48.1	+47.1	+46.4	+45.8	+45.3	+44.9	+44.5	+44.2
22 ft	-54.6	-53.3	-52.4	-51.6	-51.0	-50.5	-50.1	-49.7	-49.4
	+50.4	+49.0	+48.1	+47.4	+46.8	+46.3	+45.8	+45.4	+45.1
24 ft	-55.6	-54.3	-53.3	-52.6	-52.0	-51.5	-51.0	-50.6	-50.3
	+51.3	+49.9	+49.0	+48.2	+47.6	+47.1	+46.7	+46.3	+45.9
26 ft	-56.6	-55.2	-54.2	-53.5	-52.9	-52.3	-51.9	-51.5	-51.1
	+52.2	+50.8	+49.8	+49.1	+48.4	+47.9	+47.5	+47.1	+46.7
28 ft	-57.5	-56.1	-55.1	-54.3	-53.7	-53.2	-52.7	-52.3	-51.9
	+53.0	+51.6	+50.6	+49.8	+49.2	+48.7	+48.2	+47.8	+47.4
30 ft	-58.3	-56.9	-55.9	-55.1	-54.5	-53.9	-53.5	-53.1	-52.7
	+53.8	+52.3	+51.3	+50.6	+49.9	+49.4	+48.9	+48.5	+48.1
32 ft	-59.1	-57.7	-56.7	-55.9	-55.2	-54.7	-54.2	-53.8	-53.4
	+54.5	+53.1	+52.0	+51.3	+50.6	+50.1	+49.6	+49.2	+48.8
34 ft	-59.9	-58.4	-57.4	-56.6	-55.9	-55.4	-54.9	-54.5	-54.1
	+55.2	+53.7	+52.7	+51.9	+51.3	+50.7	+50.2	+49.8	+49.4
36 ft	-60.6	-59.1	-58.1	-57.3	-56.6	-56.1	-55.6	-55.1	-54.8
	+55.9	+54.4	+53.3	+52.5	+51.9	+51.3	+50.8	+50.4	+50.0
38 ft	-61.3	-59.8	-58.7	-57.9	-57.3	-56.7	-56.2	-55.8	-55.4
	+56.5	+55.0	+54.0	+53.1	+52.5	+51.9	+51.4	+51.0	+50.6
40 ft	-62.0	-60.5	-59.4	-58.6	-57.9	-57.3	-56.8	-56.4	-56.0
	+57.1	+55.6	+54.5	+53.7	+53.0	+52.5	+52.0	+51.5	+51.1
42 ft	-62.6	-61.1	-60.0	-59.2	-58.5	-57.9	-57.4	-57.0	-56.6
	+57.7	+56.2	+55.1	+54.3	+53.6	+53.0	+52.5	+52.1	+51.7
44 ft	-63.2	-61.7	-60.6	-59.7	-59.1	-58.5	-58.0	-57.5	-57.1
	+58.3	+56.7	+55.7	+54.8	+54.1	+53.5	+53.0	+52.6	+52.2
46 ft	-63.8	-62.3	-61.2	-60.3	-59.6	-59.0	-58.5	-58.1	-57.7
	+58.8	+57.3	+56.2	+55.3	+54.6	+54.0	+53.5	+53.1	+52.7
48 ft	-64.4	-62.8	-61.7	-60.8	-60.1	-59.6	-59.0	-58.6	-58.2
	+59.4	+57.8	+56.7	+55.8	+55.1	+54.5	+54.0	+53.6	+53.1
50 ft	-64.9	-63.4	-62.2	-61.4	-60.7	-60.1	-59.5	-59.1	-58.7
	+59.9	+58.3	+57.2	+56.3	+55.6	+55.0	+54.5	+54.0	+53.6
52 ft	-65.5	-63.9	-62.8	-61.9	-61.2	-60.6	-60.0	-59.6	-59.2
	+60.4	+58.8	+57.6	+56.8	+56.1	+55.4	+54.9	+54.5	+54.0
54 ft	-66.0	-64.4	-63.3	-62.4	-61.7	-61.0	-60.5	-60.1	-59.6
	+60.8	+59.2	+58.1	+57.2	+56.5	+55.9	+55.4	+54.9	+54.5
56 ft	-66.5	-64.9	-63.7	-62.9	-62.1	-61.5	-61.0	-60.5	-60.1
	+61.3	+59.7	+58.5	+57.7	+56.9	+56.3	+55.8	+55.3	+54.9
60 ft	-67.5	-65.8	-64.7	-63.8	-63.0	-62.4	-61.9	-61.4	-61.0
	+62.2	+60.6	+59.4	+58.5	+57.8	+57.1	+56.6	+56.1	+55.7

EXTERIOR **ZONE 5** PRESSURES

Mean Roof Height	DESIGN PRESSURES (PSF) - Zone 5 Tributary Area (Sq Ft)							
	10	15	20	25	30	35	40	45	50
0 -15 ft	-62.2	-59.8	-58.0	-56.7	-55.6	-54.6	-53.8	-53.1	-52.5
	+46.5	+45.2	+44.4	+43.7	+43.1	+42.7	+42.3	+41.9	+41.6
16 ft	-63.1	-60.6	-58.8	-57.5	-56.3	-55.4	-54.6	-53.9	-53.2
	+47.1	+45.9	+45.0	+44.3	+43.7	+43.3	+42.9	+42.5	+42.2
18 ft	-64.6	-62.1	-60.3	-58.9	-57.8	-56.8	-55.9	-55.2	-54.5
	+48.3	+47.0	+46.1	+45.4	+44.8	+44.3	+43.9	+43.6	+43.2
20 ft	-66.1	-63.5	-61.6	-60.2	-59.0	-58.1	-57.2	-56.4	-55.8
	+49.4	+48.1	+47.1	+46.4	+45.8	+45.3	+44.9	+44.5	+44.2
22 ft	-67.4	-64.8	-62.9	-61.4	-60.2	-59.2	-58.4	-57.6	-56.9
	+50.4	+49.0	+48.1	+47.4	+46.8	+46.3	+45.8	+45.4	+45.1
24 ft	-68.7	-66.0	-64.1	-62.6	-61.4	-60.3	-59.4	-58.7	-58.0
	+51.3	+49.9	+49.0	+48.2	+47.6	+47.1	+46.7	+46.3	+45.9
26 ft	-69.8	-67.1	-65.1	-63.6	-62.4	-61.4	-60.4	-59.6	-58.9
	+52.2	+50.8	+49.8	+49.1	+48.4	+47.9	+47.5	+47.1	+46.7
28 ft	-70.9	-68.2	-66.2	-64.6	-63.4	-62.3	-61.4	-60.6	-59.9
	+53.0	+51.6	+50.6	+49.8	+49.2	+48.7	+48.2	+47.8	+47.4
30 ft	-72.0	-69.2	-67.1	-65.6	-64.3	-63.2	-62.3	-61.5	-60.7
	+53.8	+52.3	+51.3	+50.6	+49.9	+49.4	+48.9	+48.5	+48.1
32 ft	-73.0	-70.1	-68.1	-66.5	-65.2	-64.1	-63.1	-62.3	-61.6
	+54.5	+53.1	+52.0	+51.3	+50.6	+50.1	+49.6	+49.2	+48.8
34 ft	-73.9	-71.0	-68.9	-67.3	-66.0	-64.9	-64.0	-63.1	-62.4
	+55.2	+53.7	+52.7	+51.9	+51.3	+50.7	+50.2	+49.8	+49.4
36 ft	-74.8	-71.9	-69.8	-68.1	-66.8	-65.7	-64.7	-63.9	-63.1
	+55.9	+54.4	+53.3	+52.5	+51.9	+51.3	+50.8	+50.4	+50.0
38 ft	-75.7	-72.7	-70.6	-68.9	-67.6	-66.5	-65.5	-64.6	-63.8
	+56.5	+55.0	+54.0	+53.1	+52.5	+51.9	+51.4	+51.0	+50.6
40 ft	-76.5	-73.5	-71.3	-69.7	-68.3	-67.2	-66.2	-65.3	-64.5
	+57.1	+55.6	+54.5	+53.7	+53.0	+52.5	+52.0	+51.5	+51.1
42 ft	-77.3	-74.2	-72.1	-70.4	-69.0	-67.9	-66.9	-66.0	-65.2
	+57.7	+56.2	+55.1	+54.3	+53.6	+53.0	+52.5	+52.1	+51.7
44 ft	-78.0	-75.0	-72.8	-71.1	-69.7	-68.5	-67.5	-66.6	-65.8
	+58.3	+56.7	+55.7	+54.8	+54.1	+53.5	+53.0	+52.6	+52.2
46 ft	-78.8	-75.7	-73.5	-71.8	-70.4	-69.2	-68.2	-67.3	-66.5
	+58.8	+57.3	+56.2	+55.3	+54.6	+54.0	+53.5	+53.1	+52.7
48 ft	-79.5	-76.3	-74.1	-72.4	-71.0	-69.8	-68.8	-67.9	-67.1
	+59.4	+57.8	+56.7	+55.8	+55.1	+54.5	+54.0	+53.6	+53.1
50 ft	-80.2	-77.0	-74.8	-73.0	-71.6	-70.4	-69.4	-68.5	-67.6
	+59.9	+58.3	+57.2	+56.3	+55.6	+55.0	+54.5	+54.0	+53.6
52 ft	-80.8	-77.6	-75.4	-73.6	-72.2	-71.0	-69.9	-69.0	-68.2
	+60.4	+58.8	+57.6	+56.8	+56.1	+55.4	+54.9	+54.5	+54.0
54 ft	-81.5	-78.3	-76.0	-74.2	-72.8	-71.6	-70.5	-69.6	-68.7
	+60.8	+59.2	+58.1	+57.2	+56.5	+55.9	+55.4	+54.9	+54.5
56 ft	-82.1	-78.9	-76.6	-74.8	-73.3	-72.1	-71.0	-70.1	-69.3
	+61.3	+59.7	+58.5	+57.7	+56.9	+56.3	+55.8	+55.3	+54.9
60 ft	-83.3	-80.0	-77.7	-75.9	-74.4	-73.2	-72.1	-71.1	-70.3
	+62.2	+60.6	+59.4	+58.5	+57.8	+57.1	+56.6	+56.1	+55.7

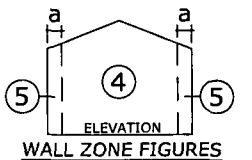
INSTRUCTIONS FOR TABLE USE:

1. TABLES ARE INTENDED TO DEPICT THE 'WORST CASE' PRESSURES. 'WORST CASE' IS DEFINED AS THE CRITICAL CONDITION OF ANY UNKNOWN VARIABLE AS DESCRIBED BELOW. USE OF CRITICAL CONDITIONS REQUIRED FOR USE WITH THESE TABLES.
2. FOR SITUATIONS THAT REQUIRE Kd=1.0, TABLE VALUES ARE UNDER-DESIGNED BY A FACTOR OF 1.18. VERIFY Kd REQUIREMENTS WITH LOCAL MUNICIPALITY PRIOR TO TABLE USE.
3. USE OF TABLES VALID ONLY FOR BUILDINGS LESS THAN 60' MEAN ROOF HEIGHT.
4. TABLES VALID FOR ALL ROOF SLOPES. REDUCTIONS FOR ROOF SLOPES LESS THAN 10° SHALL BE PERFORMED BY AN ENGINEER AS A SITE SPECIFIC CONDITION.
5. IDENTIFY THE BUILDING MEAN (AVERAGE) ROOF HEIGHT. IF THE MEAN ROOF HEIGHT CANNOT BE IDENTIFIED, USE THE PEAK ROOF HEIGHT.
6. ALWAYS ROUND UP ROOF HEIGHTS TO NEXT TABLE VALUE OR TO A CONSERVATIVE ASSUMPTION.
7. CALCULATE THE TRIBUTARY AREA OF THE OPENING IN QUESTION (HEIGHT * WIDTH) OR THE SPAN LENGTH (HEIGHT) MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH (HEIGHT ² / 3). USE THE AREA BETWEEN STRUCTURAL OPENINGS ONLY- THIS INCLUDES AREAS BETWEEN STRUCTURAL MULLS. IF THE TRIBUTARY AREA OF AN OPENING CANNOT BE IDENTIFIED, THE MOST CRITICAL (10 SQUARE FEET) SHALL BE USED. ALWAYS ROUND TRIBUTARY AREA DOWN TO THE LESSER TABLE VALUE. FOR LARGER TRIBUTARY AREAS THAN PUBLISHED, USE THE LARGEST PUBLISHED VALUE.
8. IDENTIFY THE ZONE OF THE OPENING AS INTERIOR (ZONE 4) OR EXTERIOR (ZONE 5) PER THE FIGURE OR INFORMATION BY OTHERS. ANY QUESTIONABLE OPENING IS TO BE CONSIDERED THE MORE CRITICAL (EXTERIOR) ZONE.
9. READ OFF POSITIVE AND NEGATIVE PRESSURES FOR USE AS REQUIRED BY THE LOCAL MUNICIPALITY IN ACCORDANCE WITH CODE.

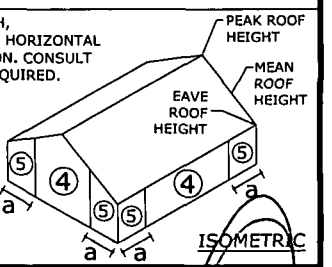
GENERAL NOTES:

1. THESE CHARTS ARE NOT VALID AS A SITE-SPECIFIC DRAWING. THESE TABLES ARE ONLY VALID WHEN SIGNED & RAISED SEALED BY FRANK L. BENNARDO, P.E.
2. THIS SPECIFICATION IS INTENDED TO ILLUSTRATE DESIGN WIND PRESSURES AS LISTED. USE OF THESE TABLES AND CORRESPONDING WIND VELOCITY, EXPOSURE, AND OTHER COEFFICIENTS LISTED HEREIN SHALL BE DICTATED AND VERIFIED BY THE GOVERNING BUILDING DEPARTMENT AND PERMIT HOLDER. NO WARRANTY FOR APPLICABILITY OF TABLE VALUE USE IS OFFERED HEREIN.
3. *THIS SPECIFICATION IS NOT INTENDED TO OFFER ANY PRODUCT APPROVED* CERTIFICATION. REFER TO ANY SEPARATELY SUBMITTED TEST CRITERIA AND OTHER APPROVALS FOR DESIGN & INSTALLATION INFORMATION AND APPLICABILITY OF THESE TABLE VALUES WHICH IS TO BE VERIFIED BY OTHERS IN ACCORDANCE WITH GOVERNING CODES.
4. DESIGN IS BASED ON THE 3 SECOND GUST (WIND VELOCITY) FOR A CATEGORY II (GENERAL RESIDENTIAL & COMMERCIAL CONSTRUCTION) USING AN IMPORTANCE FACTOR I=1.0. THESE TABLES NOT FOR USE WITH ESSENTIAL FACILITIES OR ASSEMBLY OCCUPANCIES. TOPOGRAPHIC FACTOR Kzt=1.0 FOR FLAT TERRAIN USE ONLY. THESE TABLES NOT VALID FOR HILLY TERRAIN. INTERNAL PRESSURE COEFFICIENT (GCpi=+/-0.18) ENCLOSED BUILDING ONLY. VERIFY USE OF Kd=0.85 (DIRECTIONALITY FACTOR) WITH LOCAL BUILDING DEPARTMENT. HVHZ = HIGH VELOCITY HURRICANE ZONE. TABLES ARE FOR WALLS AND VERTICAL SURFACES ONLY.
5. ADHERE TO ALL LOCAL IMPACT PROTECTION SYSTEM ORDINANCES.
6. NO CERTIFICATION IS OFFERED FOR THE INTEGRITY OF THE HOST STRUCTURE.
7. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.

a= 10% OF LEAST HORIZONTAL DIMENSION OR 40% OF MRH, WHICHEVER IS SMALLER, BUT NOT LESS THAN 4% OF LEAST HORIZONTAL DIMENSION OR 3FT (1m). USE ZONE 5 IF AT ALL IN QUESTION. CONSULT AN ENGINEER FOR A MORE SPECIFIC INTERPRETATION IF REQUIRED.



WALL ZONE FIGURES



ISOMETRIC

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CL	FLB	04/19/06
REVISE FOR 07 FBC	TSB	FLB	02/23/09
-	-	-	-
-	-	-	-
-	-	-	-

2007 FLORIDA BUILDING CODE
ASCE 7-05, MRH = 0- 60 FT
DESIGN LOADS FOR
COMPONENTS & CLADDING

ENGINEERING EXPRESS®
160 SW 12th AVENUE, #106
DEERFIELD BEACH, FL 33442
PH: (954) 354-0660 FAX: (954) 354-0443
WWW.ENGEXP.COM
CERT OF AUTH #9885

VALID FOR 1 JOB ONLY
VALID ONLY WITH RAISED ENGINEER SEAL

03/02/2009

FRANK L. BENNARDO, P.E.
#PE0046549

SKU 5161

SCALE: N.T.S.
PAGE DESCRIPTION:

1 OF 1

04-13-09

CWB

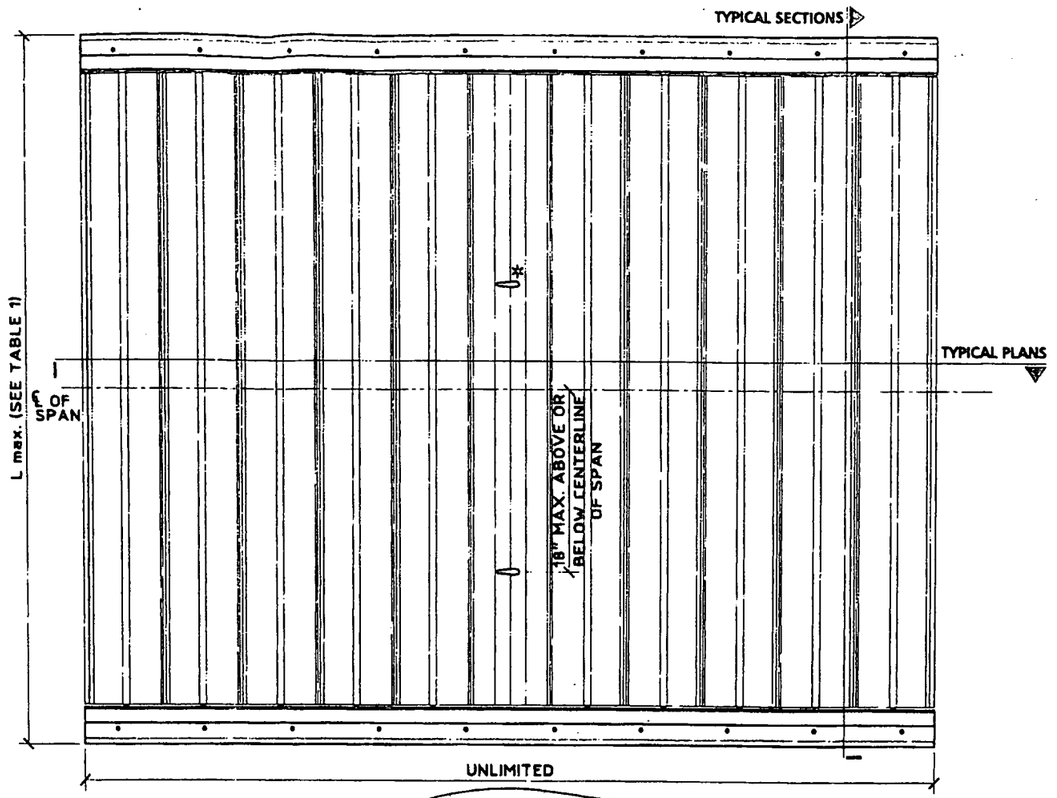
GENERAL NOTES:

1. THESE PRODUCT EVALUATION DOCUMENTS REPRESENT A SHUTTER SYSTEM ANALYZED WITH THE PROVISION SET FOR THE ISSUANCE OF A NOTICE OF ACCEPTANCE (NOA) BY MIAMI-DADE COUNTY PRODUCT CONTROL DIVISION FOR THE HIGH VELOCITY HURRICANE ZONE (HVHZ) OF THE FLORIDA BUILDING CODE 2004 WITH 2005 & 2006 SUPPLEMENTS.
2. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS PRODUCT. WIND LOAD DURATION FACTOR Cd = 1.6 WAS USED FOR WOOD SCREW DESIGN.
3. DETERMINE THE POSITIVE AND NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH ASCE 7-02, A DIRECTIONALITY FACTOR OF Kd =0.85 SHALL BE USED.
4. THESE PRODUCT EVALUATION DOCUMENTS ARE GENERIC AND DO NOT INCLUDE INFORMATION FOR SITE-SPECIFIC APPLICATION OF THIS SHUTTER SYSTEM.
5. USE OF THESE PRODUCT EVALUATION DOCUMENTS SHALL COMPLY WITH CHAPTER 61G15-23 OF THE FLORIDA ADMINISTRATIVE CODE.
6. THESE PRODUCT EVALUATION DOCUMENTS ARE INTENDED FOR USE ONLY BY A LICENSED CONTRACTOR, PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT AND ARE SUITABLE TO BE APPLIED BY THE CONTRACTOR PROVIDED THE CONTRACTOR DOES NOT DEVIATE FROM THE CONDITIONS DETAILED HEREIN AND THE CONTRACTOR VERIFIES THAT THE EXISTING STRUCTURE DOES NOT DEVIATE IN EITHER FORM OR MATERIAL FROM THE STRUCTURAL SUBSTRATES DETAILED HEREIN. CONTRACTOR SHALL VERIFY EXISTING STRUCTURE CAN WITHSTAND SUPERIMPOSED LOAD OF SHUTTER.
7. ANY MODIFICATIONS OR ADDITIONS TO THESE PRODUCT EVALUATION DOCUMENTS WILL VOID THE PRODUCT EVALUATION DOCUMENTS.
8. WHEN THE SITE CONDITIONS DEVIATE FROM THESE PRODUCT EVALUATION DOCUMENTS, THE BUILDING OFFICIAL MAY ELECT ONE OF THE FOLLOWING OPTIONS:
   A) REQUIRE THAT SITE SPECIFIC DOCUMENTS BE PREPARED, SIGNED, DATED AND SEALED BY A LICENSED ENGINEER OR REGISTERED ARCHITECT, WHICH DETAIL AND JUSTIFY THE DEVIATION. SAID DOCUMENTS SHALL BE SUBMITTED TO THE PRODUCT ENGINEER FOR REVIEW AS A CONDITION TO THE BUILDING OFFICIAL GRANTING HIS/HER APPROVAL.
   B) REQUIRE THAT A ONE-TIME SITE SPECIFIC APPROVAL BE APPLIED FOR AND SECURED FROM THE MIAMI-DADE COUNTY PRODUCT CONTROL DIVISION

   WHEN THE SITE CONDITION DEVIATIONS OCCUR WITHIN THE HIGH VELOCITY HURRICANE ZONE AREAS ONLY OPTION "B" SHALL BE ACCEPTED BY THE BUILDING OFFICIAL.
9. EACH SHUTTER ASSEMBLY SHALL BE PERMANENTLY LABELED AT THE BOTTOM END OF THE LOCKING SLAT AS FOLLOWS:

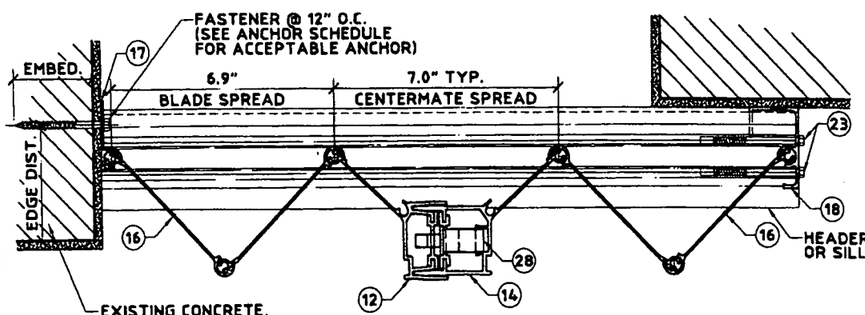
   ALLGUARD, INC.
   FORT LAUDERDALE, FLORIDA
   MIAMI-DADE COUNTY PRODUCT APPROVED

10. ALL EXTRUSIONS SHALL BE 6063-T6 ALUMINUM ALLOY, U.O.N.
11. ALL BOLTS AND WASHERS SHALL BE GALVANIZED OR STAINLESS STEEL WITH A MINIMUM TENSILE STRENGTH OF 60 K.S.I., U.O.N. POP RIVETS SHALL BE 3/16" DIA. 5052 ALUMINUM ALLOY, U.O.N.
12. TOP AND BOTTOM DETAILS MAY BE INTERCHANGED AS FIELD CONDITIONS REQUIRE.

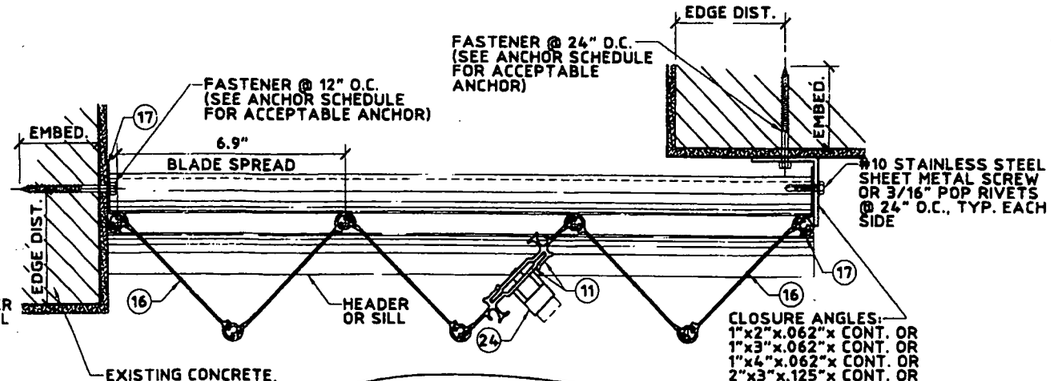


* FOR SPANS GREATER THAN 104", USE (2) LOCKS AT 1/3 & 2/3 OF SPAN

TYPICAL ELEVATION
SCALE: 1" = 1'-0"



TYPICAL EVEN NO. OF BLADES PLAN VIEW
SCALE: 3" = 1'-0"



TYPICAL ODD NO. OF BLADES PLAN VIEW
SCALE: 3" = 1'-0"

United States Patent Number 6,122,868

Approved as complying with the Florida Building Code
Date 09/13/2007
NOA# 07-0606.06
Miami Dade Product Control Division
By

Thornton Tomasetti
330 N. Andrews Ave., Suite 450 • Ft. Lauderdale, FL 33301
T 954.522.3690 • F 954.522.3691 • COA # 7519
Website: www.ThorntonTomasetti.com

Pro Series I Accordion Shutter

AllGuard, Inc.
6942 Dowerlea Road, Suite 107
Port Lauderdale, FL 33309
Tel: (954) 491-4583
Fax: (954) 491-4595

J.W. Knezevich
Professional Engineer
FL License No.: # 0041961

JUL 11 2007

revisions			
no	date	by	description
1	07/02/2007	TG	1ST BLADE, MAT & FRAME CONNECTION DETAILS ADDED

ASP I.D. # 07071106471D

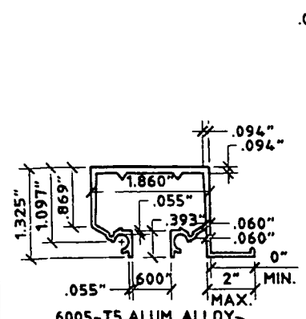
date 02/20/2007
scale AS NOTED | drawn by MCR
design by TLF | checked by JWK
drawing no. 07-376
sheet 1 of 6

City of Miami Beach
Department
Shutter Permit
OFFICE COPY

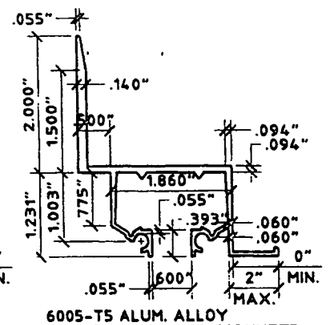
Review Type	Initials	Date
Structural		
Electrical		04/03/09
Zoning		4/13/2009

04.13.00

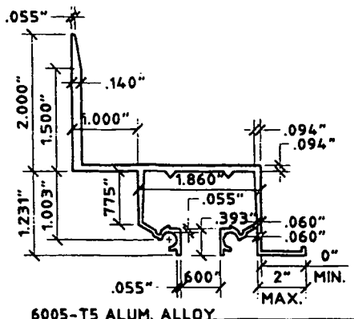
CWB



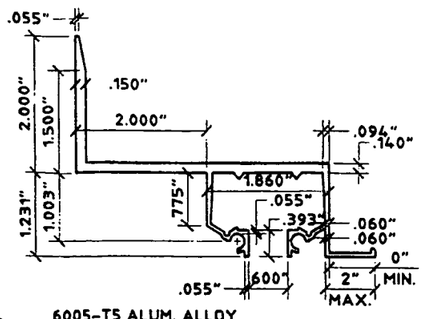
6005-T5 ALUM. ALLOY
1 TRAP MOUNT TRACK
SCALE: HALF SIZE



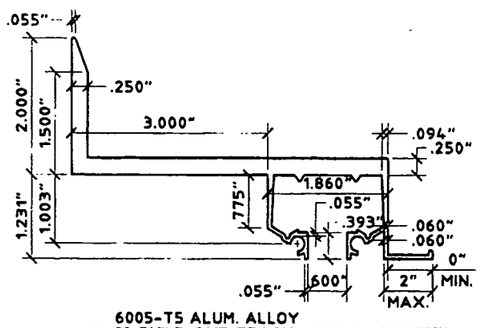
6005-T5 ALUM. ALLOY
2 1/2" TRACK - WALL MOUNTED
SCALE: HALF SIZE



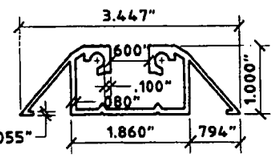
6005-T5 ALUM. ALLOY
3 1" BUILD-OUT TRACK - WALL MOUNTED
SCALE: HALF SIZE



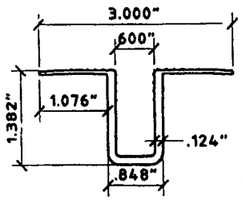
6005-T5 ALUM. ALLOY
4 2" BUILD-OUT TRACK - WALL MOUNTED
SCALE: HALF SIZE



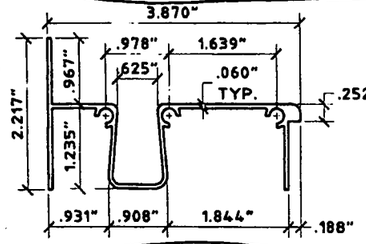
6005-T5 ALUM. ALLOY
5 3" BUILD-OUT TRACK - WALL MOUNTED
SCALE: HALF SIZE



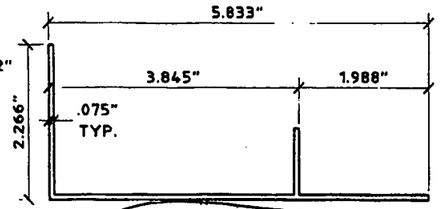
6 SILL - WALKOVER
SCALE: HALF SIZE



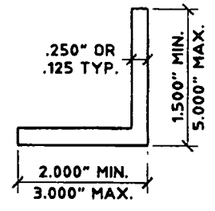
7 RECESSED SILL
SCALE: HALF SIZE



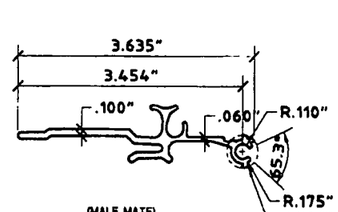
8 SILL - TOP ADJ.
SCALE: HALF SIZE



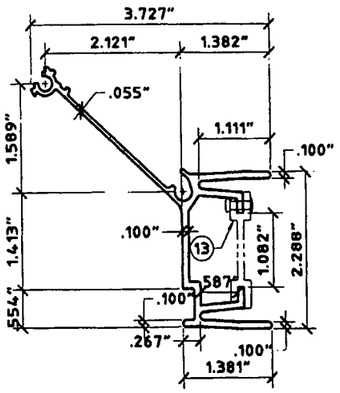
9 SILL - BOTT. ADJ.
SCALE: HALF SIZE



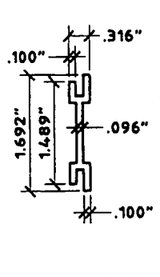
10 ANGLE
SCALE: HALF SIZE



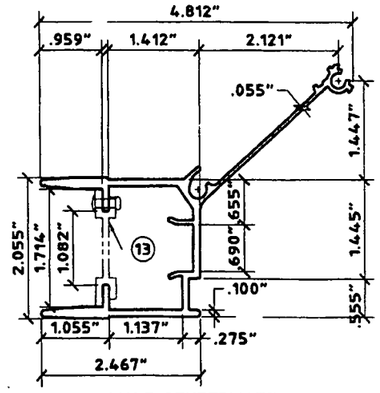
(MALE MATE)
11 INBLADE MATE
SCALE: HALF SIZE



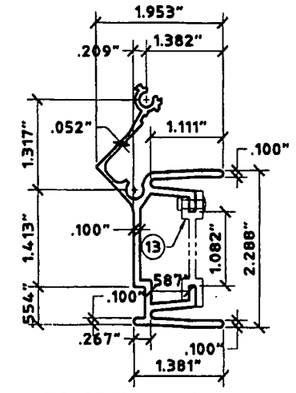
12 FEMALE CENTERMATE
SCALE: HALF SIZE



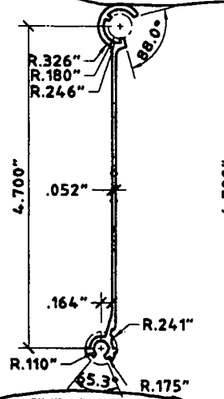
13 CENTERMATE INSERT
SCALE: HALF SIZE



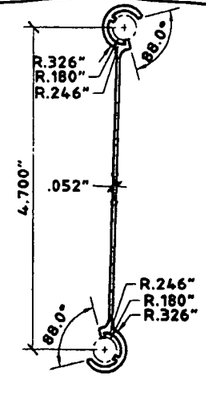
14 MALE CENTERMATE
SCALE: HALF SIZE



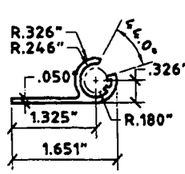
15 ALT. FEMALE CENTERMATE
SCALE: HALF SIZE



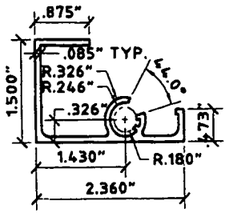
16a TYP. SLAT
SCALE: HALF SIZE



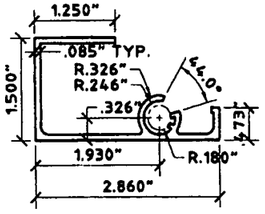
16b ALT. SLAT
SCALE: HALF SIZE



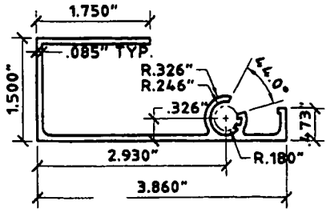
17 STARTER CHANNEL
SCALE: HALF SIZE



18 1/2" CLOSURE CHANNEL
SCALE: HALF SIZE



19 1" CLOSURE CHANNEL
SCALE: HALF SIZE



20 2" CLOSURE CHANNEL
SCALE: HALF SIZE

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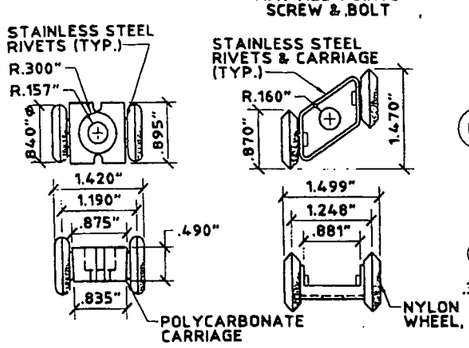
J.W. Knezevich
Professional Engineer
FL License No.: PE 0041961
JUL 11 2007

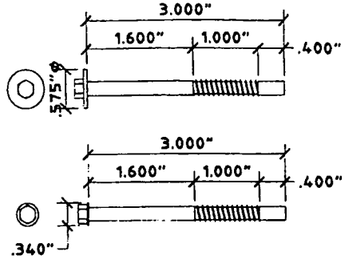
revisions			
NO	date	by	description
1	05/02/2007	TLF	FIT BUSH., MAT BUSHING, SLANG AND DIMENSION
2	07/02/2007	TLF	COUNTY COMMENTS

ASP I.D. # 07071106471D

date 02/20/2007
scale AS NOTED
drawn by MCR
design by TLF
checked by JWK
drawing no. 07-376
sheet 2 of 6

MFR: ALL-POINTS SCREW & BOLT





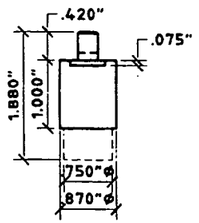
TYP. AT EVERY OTHER INSIDE JOINT AT TOP.
(21) ROLLER ASSEMBLY
SCALE: HALF SIZE

TYP. AT EVERY OTHER INSIDE JOINT AT TOP.
(22) ROLLER ASSEMBLY
SCALE: HALF SIZE

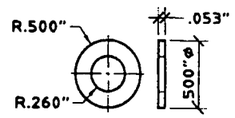
#14 SCREW WITH #10 SCREW HEAD, 410 HT STAINLESS STEEL (WITH FLUOROCARBON COATING)
(23) #14 SCREW WITH #10 HEAD
SCALE: HALF SIZE

(24) NOT USED

MFR: ALL-POINTS SCREW & BOLT

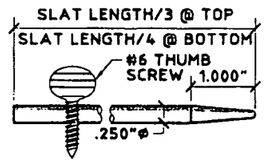


(25) CF PUSH LOCK
SCALE: HALF SIZE



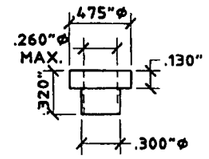
(410 STAINLESS STEEL)

(26) WASHER
SCALE: FULL SIZE

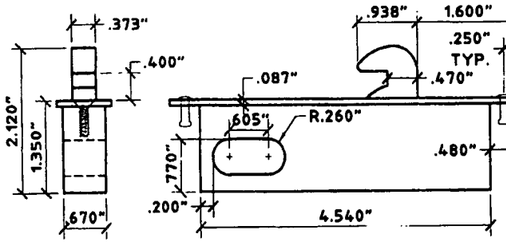


(LOCKING PINS ARE OPTIONAL AND ARE NOT REQUIRED)

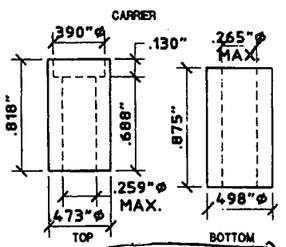
(27) LOCKING PIN
SCALE: HALF SIZE



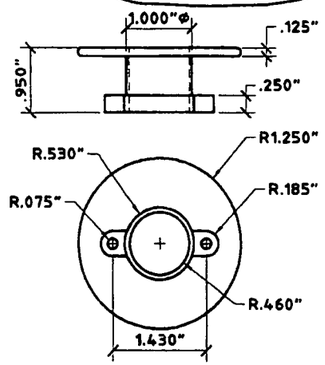
MFR: MBC ARCHITECTURAL HARDWARE



(28) BOX LOCK - STAINLESS STEEL
SCALE: HALF SIZE

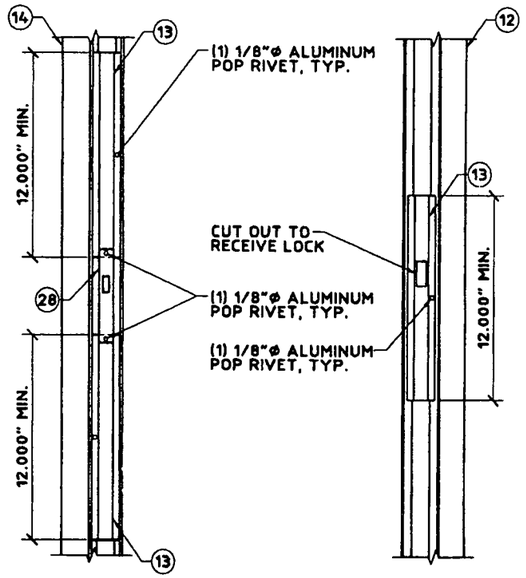


(29) NYLON BUSHINGS
SCALE: FULL SIZE



(PUSH LOCK COVER IS OPTIONAL AND IS NOT REQUIRED)

(30) PUSH LOCK COVER
SCALE: FULL SIZE



LOCK TO MALE CENTERMATE CONNECTION DETAIL
SCALE: 1-1/2" = 1'-0"

COMPONENT (13) MAY BE TWO PIECES ABOVE AND BELOW LOCK OR ONE CONTINUOUS PIECE WITH CUT OUT FOR LOCK

LOCK STRIKE PLATE TO FEMALE CENTERMATE CONNECTION DETAIL
SCALE: 1-1/2" = 1'-0"

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Miami Dade Product Control Division
By

United States Patent Number 6,122,868

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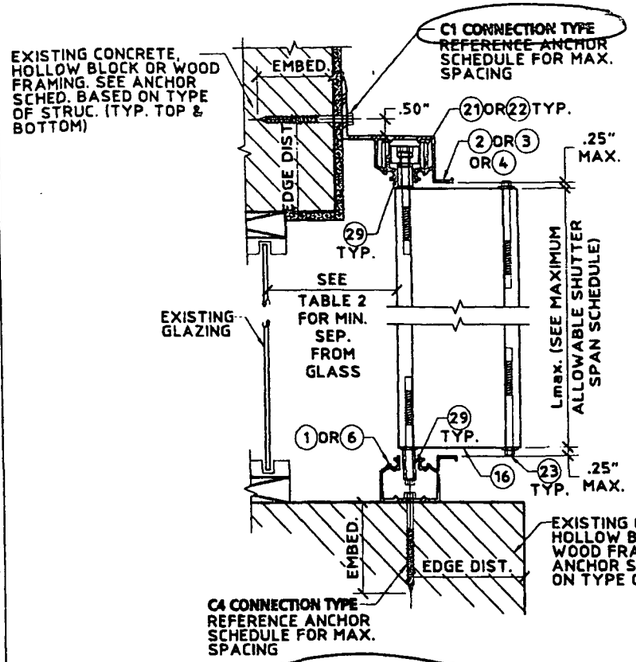
JUL 11 2007

revisions

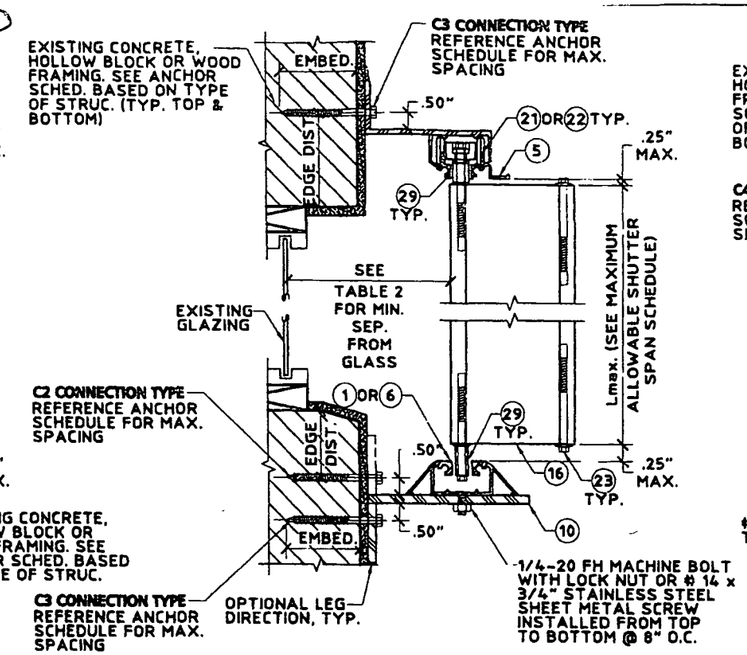
no	date	by	description
1	05/07/2007	TLF	1/2 BLADE, HAT BUSHING, &ANCLAND DIMENSION
2	07/03/2007	TLF	COUNTY COMMENTS

ASP I.D. # 07071106471D

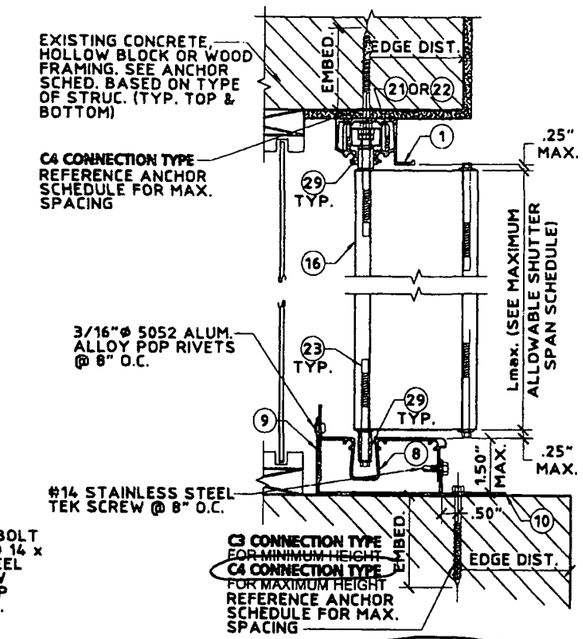
date 02/20/2007
scale AS NOTED
drawn by MCR
design by TLF
checked by JWK
drawing no. 07-376
sheet 3 of 6



A WALL/TRAP MOUNT SECTION
SCALE: 3" = 1'-0"



B WALL MOUNT SECTION
SCALE: 3" = 1'-0"



C TRAP MOUNT SECTION
SCALE: 3" = 1'-0"

D TRAP MOUNT SECTION
SCALE: 3" = 1'-0"

E BUILD-OUT MOUNT SECTION
SCALE: 3" = 1'-0"

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JUL 11 2007

ASP I.D. # 07071106471D

revisions			
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1	10/30/2007	TLF	1/4" BLADE, HAT BUSHING, AMNGUARD EMBOSSION
2	12/03/2007	TLF	COUNTY COMMENTS

date 02/20/2007
scale AS NOTED
drawn by MCR
design by TLF
checked by JWK
drawing no. 07-376
sheet 4 of 6

04-13-08

CWB

TABLE 1

MAXIMUM ALLOWABLE SHUTTER SPAN SCHEDULE

DESIGN WIND LOAD (W) (P.S.F.)	ALL MOUNTING CONDITIONS	
	USE WITH INBLADE CENTERMATE (11)	USE WITH STANDARD CENTERMATES (13) & (14) (12)
	Lmax (FT-IN)	Lmax (FT-IN)
47.00	13' - 6"	13' - 6"
50.00	13' - 3"	13' - 3"
55.00	12' - 10"	12' - 11"
60.00	12' - 3"	12' - 6"
65.00	11' - 10"	12' - 0"
70.00	11' - 4"	11' - 7"
75.00	11' - 0"	11' - 2"
80.00	10' - 8"	10' - 10"
85.00	10' - 4"	10' - 6"
90.00	10' - 0"	10' - 3"
95.00	9' - 9"	9' - 11"
100.00	9' - 6"	9' - 8"
105.00	9' - 3"	9' - 6"
110.00	9' - 1"	9' - 3"
115.00	8' - 10"	9' - 0"
120.00	8' - 8"	8' - 10"
125.00	8' - 6"	8' - 8"
130.00	8' - 4"	8' - 6"
135.00	8' - 2"	8' - 2"
140.00	7' - 11"	7' - 11"
145.00	7' - 7"	7' - 7"
150.00	7' - 4"	7' - 4"
155.00	7' - 1"	7' - 1"
160.00	6' - 11"	6' - 11"
165.00	6' - 8"	6' - 8"
170.00	6' - 6"	6' - 6"
175.00	6' - 4"	6' - 4"
180.00	6' - 2"	6' - 2"
185.00	6' - 0"	6' - 0"
190.00	5' - 10"	5' - 10"
195.00	5' - 8"	5' - 8"
200.00	5' - 6"	5' - 6"

TABLE 2

MINIMUM SHUTTER SEPARATION FROM GLASS SCHEDULE

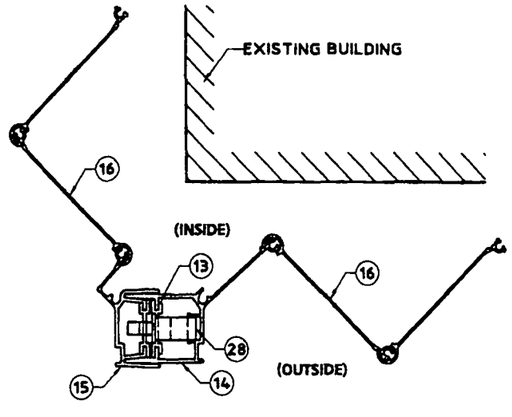
POSITIVE DESIGN LOAD (W) (P.S.F.)	ACTUAL SHUTTER SPAN (L) (FT-IN)	MINIMUM SEPARATION FOR INSTALLATIONS LESS THAN 30'-0" ABOVE GRADE (IN.)	MINIMUM SEPARATION FOR INSTALLATIONS GREATER THAN 30'-0" ABOVE GRADE (IN.)
30.00	5' - 0"	2-3/8"	1"
30.00	8' - 7"	2-3/8"	1-1/4"
30.00	10' - 0"	3"	1-3/8"
30.00	13' - 6"	3"	2-1/4"
50.00	5' - 0"	2-3/8"	1"
50.00	8' - 7"	2-3/8"	1-3/8"
50.00	10' - 0"	3"	1-5/8"
50.00	13' - 3"	3"	3"
70.00	5' - 0"	2-3/8"	1"
70.00	8' - 7"	2-3/8"	1-1/2"
70.00	10' - 0"	3"	1-3/4"
70.00	11' - 7"	3"	2-5/8"
90.00	5' - 0"	2-3/8"	1-1/8"
90.00	8' - 7"	2-3/8"	1-5/8"
90.00	9' - 0"	3"	1-3/4"
90.00	10' - 3"	3"	2-1/4"
120.00	5' - 0"	2-3/8"	1-1/8"
120.00	7' - 6"	2-3/8"	1-1/2"
120.00	8' - 7"	2-3/8"	1-3/4"
120.00	8' - 10"	3"	2"

TABLE 1 NOTE:

FOR DESIGN WIND LOADS BETWEEN TABULATED VALUES USE NEXT HIGHER LOAD OR LINEAR INTERPOLATION MAY BE USED TO DETERMINE ALLOWABLE SPANS.

TABLE 2 NOTE:

ENTER TABLE 2 WITH POSITIVE DESIGN WIND LOAD TO DETERMINE MINIMUM STORM SHUTTER SEPARATION FROM GLASS.



(H) 90° CORNER DETAIL
SCALE: 3" = 1'-0"

(G) NOT USED

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design by TLF
checked by JWK
drawing no. 07-376
sheet 5 of 6

ANCHOR SCHEDULE

FASTENER MAXIMUM SPACING (INCHES) REQUIRED FOR VARIOUS DESIGN LOADS AND SPANS

EXIST. STRUC.	ANCHOR TYPE	LOAD (W) P.S.F. MAX. (SEE NOTE 1)	MIN. 2" EDGE DISTANCE															MIN. 3" EDGE DISTANCE													
			SPANS UP TO 6'-0" (SEE NOTE 1)					SPANS UP TO 10'-0" (SEE NOTE 1)					SPANS UP TO 13'-6" (SEE NOTE 1)					SPANS UP TO 6'-0" (SEE NOTE 1)					SPANS UP TO 10'-0" (SEE NOTE 1)					SPANS UP TO 13'-6" (SEE NOTE 1)				
			CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)				
			C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5
CONCRETE	1/4"ø ITW TAPCON WITH 1-3/4" MIN. EMBEDMENT (MIN. 3,192 P.S.I. CONCRETE)	45.0	16	16	16	16	16	13	16	12	10	10	10	12	9	7	7	16	16	16	16	16	14	16	12	12	12	10	12	9	8	9
		60.0	16	16	15	12	13	10	12	9	7	7	7	9	6	5	5	16	16	16	15	16	10	12	9	9	9	8	9	7	6	7
		75.0	13	16	12	10	10	8	9	7	6	6	6	7	5	4	4	14	16	12	12	12	8	10	7	7	7	6	7	5	5	5
		170.0	6	7	5	4	4	5	6	5	4	4	5	6	5	4	4	6	7	5	5	5	5	6	5	4	5	5	6	5	4	5
		200.0	5	6	5	4	4	5	6	5	4	4						5	6	5	4	5	5	6	5	4	5					
	1/4"ø ELCO ULTRACON WITH 1-3/4" MIN. EMBEDMENT (MIN. 3,320 P.S.I. CONCRETE)	45.0	16	16	14	16	16	9	11	8	10	10	7	8	6	7	7	16	16	16	16	16	12	14	10	12	13	9	10	8	9	9
		60.0	12	14	10	12	13	7	8	6	7	8	5	6	4	5	5	15	16	13	15	16	9	10	8	9	10	6	7	6	6	7
		75.0	9	11	8	10	10	5	6	5	6	6	4	5	3	4	4	12	14	10	12	13	7	8	6	7	8	5	6	4	5	5
		170.0	4	5	3	4	4	3	4	3	4	4	3	4	3	4	4	5	6	4	5	5	4	5	4	5	5	4	5	4	5	5
		200.0	3	4	3	4	4	3	4	3	4	4						4	5	4	5	5	4	5	4	5	5					
	1/4"ø ELCO ULTRACON WITH HEX FLANGES WITH 1-3/4" MIN. EMBEDMENT (MIN. 3,320 P.S.I. CONCRETE)	45.0	16	16	14	16	16	9	11	8	10	10	7	8	6	7	7	16	16	16	16	16	12	14	10	12	13	9	10	8	9	9
		60.0	12	14	10	12	13	7	8	6	7	8	5	6	4	5	5	15	16	13	15	16	9	10	8	9	10	6	7	6	6	7
		75.0	9	11	8	10	10	5	6	5	6	6	4	5	3	4	4	12	14	10	12	13	7	8	6	7	8	5	6	4	5	5
		170.0	4	5	3	4	4	3	4	3	4	4	3	4	3	4	4	5	6	4	5	5	4	5	4	5	5	4	5	4	5	5
		200.0	3	4	3	4	4	3	4	3	4	4						4	5	4	5	5	4	5	4	5	5					
	1/4"ø ELCO CRETE FLEX WITH 2" MIN. EMBEDMENT (MIN. 3,350 P.S.I. CONCRETE)	45.0	16	16	16	16	16	14	16	12	14	15	10	12	9	10	11	16	16	16	16	16	15	16	14	16	16	11	13	10	12	13
		60.0	16	16	15	16	16	10	12	9	10	11	7	9	6	7	8	16	16	16	16	16	11	13	10	12	13	8	10	7	9	9
		75.0	14	16	12	14	15	8	9	7	8	9	6	7	5	6	6	15	16	14	16	16	9	11	8	9	10	7	8	6	7	7
		170.0	6	7	5	6	6	5	6	5	5	6	5	6	5	5	6	6	8	6	7	7	6	7	5	6	7	6	7	5	6	7
		200.0	5	6	5	5	6	5	6	5	5	6						6	7	5	6	7	6	7	5	6	7					
	5/16"ø ITW XL TAPCON WITH 1-3/4" MIN. EMBEDMENT (MIN. 2,900 P.S.I. CONCRETE)	45.0	16	16	16	16	16	16	16	16	16	16	14	16	12	14	15	16	16	16	16	16	16	16	16	16	16	14	16	13	15	16
		60.0	16	16	16	16	16	14	16	12	14	15	10	12	9	10	11	16	16	16	16	16	14	16	13	16	16	11	12	9	11	12
		75.0	16	16	16	16	16	11	13	10	11	12	8	10	7	8	9	16	16	16	16	16	11	13	10	12	13	8	10	7	9	10
		170.0	8	9	7	8	9	7	9	6	7	8	7	9	6	7	8	8	10	7	9	10	8	9	7	8	9	8	9	7	8	9
		200.0	7	9	6	7	8	7	9	6	7	8						8	9	7	8	9	8	9	7	8	9					
	* 1/4"x20x1" ALL POINTS SOLID-SET ANCHOR BOLT & SPECIALTY CO. WITH 7/8" EMBED. (MIN. 3,000 P.S.I. CONCRETE)	45.0	16	16	16	16	16	10	12	9	11	12	8	9	7	8	8	16	16	16	16	16	13	16	12	14	15	10	11	9	10	11
		60.0	13	15	12	14	15	8	9	7	8	9	6	7	5	6	6	16	16	15	16	16	10	12	9	10	11	7	8	6	8	8
		75.0	10	12	9	11	12	6	7	5	6	7	4	5	4	4	5	13	16	12	14	15	8	9	7	8	9	6	7	5	6	6
		170.0	4	5	4	4	5	4	5	3	4	4	4	5	3	4	4	6	7	5	6	6	5	6	4	5	6	5	6	4	5	6
		200.0	4	5	3	4	4	4	5	3	4	4						5	6	4	5	6	5	6	4	5	6					
HOLLOW CONCRETE BLOCK	1/4"ø ITW TAPCON WITH 1-1/4" MIN. EMBEDMENT	45.0	7	8	6	8	8	4	4	3	4	5	3	3		3	3	8	9	7	9	10	4	5	4	5	6	3	4	3	4	4
		60.0	5	6	4	6	6	3	3		3	3						6	7	5	7	7	3	4	3	4	4		3		3	3
		75.0	4	4	3	4	5					3						4	5	4	5	6		3		3	3					
		170.0																														
		200.0																														
	1/4"ø ELCO ULTRACON WITH HEX FLANGES WITH 1-1/4" MIN. EMBEDMENT	45.0	7	8	6	9	10	4	5	3	5	6	3	3		4	4	9	10	8	12	13	5	6	4	7	8	4	4	3	5	5
		60.0	5	6	4	7	8	3	3		4	4				3	3	6	8	6	9	10	4	4	3	5	6	3	3		4	4
		75.0	4	5	3	5	6		3		3	3						5	6	4	7	8	3	3		4	4				3	3
		170.0																			3	3					3				3
		200.0																			3						3					
	1/4"ø ELCO CRETE FLEX WITH 1-1/4" MIN. EMBEDMENT	45.0	11	13	10	13	14	7	8	6	7	8	5	6	4	5	6	12	14	10	13	14	7	8	6	8	8	5	6	4	5	6
		60.0	8	10	7	9	10	5	6	4	5	6	3	4	3	4	4	9	10	8	10	10	5	6	4	6	6	4	4	3	4	4
		75.0	7	8	6	7	8	4	4	3	4	5	3	3		3	3	7	8	6	8	8	4	5	3	4	5	3	3		3	3
		170.0	3	3		3	3		3		3	3		3		3	3	3	3		3	3		3		3	3		3		3	3
		200.0		3		3	3		3		3	3							3		3	3		3		3	3					
	1/4"ø ITW MAXI SET TAPCON WITH 1-1/4" MIN. EMBEDMENT	45.0	5	6	4	6	7	3	3		4	4				3	3	6	7	5	8	9	3	4	3	5	5		3		3	4
		60.0	3	4	3	5	5				3	3						4	5	4	6	6		3		3	4					3
		75.0	3	3		4	4											3	4	3	5	5				3	3					
		170.0																														
		200.0																														
	* 1/4"x20x1" ALL POINTS SOLID-SET ANCHOR BOLT & SPECIALTY CO. WITH 7/8" EMBED.	45.0	15	16	13	12	13	9	10	8	7	8	6	7	5	5	6	16	16	14	16	16	9	11	8	10	11	7	8	6	7	8
		60.0	11	13	10	9	10	6	7	6	5	6	5	5	4	4	4	12	14	11	12	13	7	8	6	7	8	5	6	4	5	6
		75.0	9	10	8	7	8	5	6	4	4	4	4	4	3	3	3	9	11	8	10	11	5	7	5	6	6	4	5	3	4	4
		170.0	3	4	3	3	3	3	4	3	3	3	3	4	3	3	3	4	5	3	4	4	4	4	3	4	4	4	4	3	4	4
		200.0	3	4	3	3	3	3	4	3	3	3						4	4	3	4	4	4	4	3	4	4					

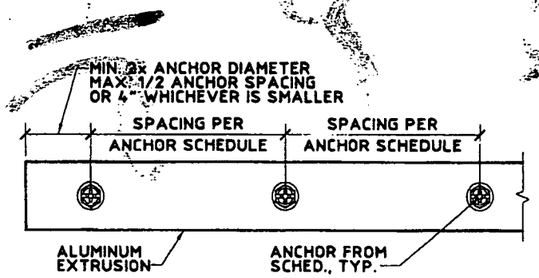
ANCHOR SCHEDULE

FASTENER MAXIMUM SPACING (INCHES) REQUIRED FOR VARIOUS DESIGN LOADS AND SPANS

EXIST. STRUC.	ANCHOR TYPE	LOAD (W) P.S.F. MAX. (SEE NOTE 1)	MIN. 3/4" EDGE DISTANCE														
			SPANS UP TO 6'-0" (SEE NOTE 1)					SPANS UP TO 10'-0" (SEE NOTE 1)					SPANS UP TO 13'-6" (SEE NOTE 1)				
			CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)				
			C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5
WOOD	2" MIN. 1/4"ø x MIN. 3" LONG LAG SCREW WITH MIN. 2" EMBED. SHEAR PARALLEL TO WOOD GRAIN	45.0	16	16	16	15	16	16	16	16	9	9	13	15	12	6	7
		60.0	16	16	16	11	12	13	16	12	7	7	10	11	9	5	5
		75.0	16	16	16	9	9	11	12	9	5	5	8	9	7	4	4
		170.0	8	9	7	4	4	7	8	6	3	3	7	8	6	3	3
		200.0	7	8	6	3	3	7	8	6	3	3					

ANCHOR NOTES:

1. SPANS AND LOADS SHOWN HERE ARE FOR DETERMINING ANCHOR SPACING ONLY. ALLOWABLE SHUTTER SPANS FOR SPECIFIC LOADS MUST BE LIMITED TO THOSE SHOWN IN TABLE 1.
2. ENTER ANCHOR SCHEDULE BASED ON THE EXISTING STRUCTURE MATERIAL, ANCHOR TYPE AND EDGE DISTANCE. SELECT DESIGN LOAD GREATER THAN OR EQUAL TO NEGATIVE DESIGN LOAD ON SHUTTER AND SELECT SPAN GREATER THAN OR EQUAL TO SHUTTER SPAN.
3. SEE MOUNTING SECTION DETAILS FOR IDENTIFICATION OF CONNECTION TYPE.
4. EXISTING STRUCTURE MAY BE CONCRETE, HOLLOW BLOCK OR WOOD FRAMING. REFERENCE ANCHOR SCHEDULE FOR PROPER ANCHOR TYPE BASED ON TYPE OF EXISTING STRUCTURE.
5. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
6. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES WALL FINISH OR STUCCO.
7. WHERE EXISTING STRUCTURE IS POST-TENSIONED CONCRETE CONTRACTOR SHALL LOCATE CABLES PRIOR TO ANCHORING AND COORDINATE ANCHORAGE SUCH THAT CABLES ARE NOT DAMAGED.
8. WHERE EXISTING STRUCTURE IS WOOD FRAMING, WOOD FRAMING CONDITIONS VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT PLYWOOD. FASTENING TO PLYWOOD IS ACCEPTABLE ONLY FOR SIDE CLOSURE PIECES.
9. WHERE LAG SCREWS FASTEN TO NARROW FACE OF STUD FRAMING, FASTENER SHALL BE LOCATED IN CENTER OF NOMINAL 2" x 4" (MIN.) WOOD STUD. 3/4" EDGE DISTANCE IS ACCEPTABLE FOR WOOD FRAMING. WOOD STUD SHALL BE "SOUTHERN PINE" G=0.55 OR GREATER DENSITY. LAG SCREWS SHALL HAVE PHILLIPS PAN HEAD OR HEX HEAD.
10. MACHINE SCREWS SHALL HAVE MINIMUM OF 1/2" ENGAGEMENT OF THREADS IN BASE ANCHOR AND MAY HAVE EITHER A PAN HEAD, TRUSS HEAD, OR WAFER HEAD (SIDEWALK BOLT), U.O.N.
11. ▨ DESIGNATES ANCHOR CONDITIONS WHICH ARE NOT ACCEPTABLE USES.
12. * DESIGNATES ANCHORS WHICH ARE REMOVABLE BY REMOVING MACHINE SCREW, NUT OR WASHERED WINGNUT.



Approved as complying with the Florida Building Code
Date 09/13/2007
NOA# 07-0606.06
Miami Dade Product Control Division
By

United States Patent Number 6,122,868

Thornton Tomasetti
330 N. Andrews Ave., Suite 450 • Ft. Lauderdale, FL 33301
T 954.522.3690 • F 954.522.3691 • COA # 7519
Website: www.ThorntonTomasetti.com

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J.W. Knezevich
Professional Engineer
FL License No.: PE 0041961

JUL 11 2007

revisions			
no	date	by	description
1	8/20/2007	TLF	5/8" BLADE, MAT BUSHING, ALUM CAM DIMENSION
2	8/20/2007	TLF	COUNTY COMMENTS

ASP I.D. # 07071106471D

date	02/20/2007
scale	AS NOTED
drawn by	MCR
design by	TLF
checked by	JWK
drawing no.	07-376
	sheet 6 of 6

Boardwalk
Architecture
Office

City of Miami Beach
Building Department
Shutter Permit
OFFICE COPY

Review Type
Structural
Electrical
Zoning

Initials
Date 04/13/09
4/13/2009

B1003267
OWNER LTR

Maria Ugarte
9 Century Lane
Miami Beach, FL
33139

A quien pueda interesar:

Por la presente les notifico que no queremos que el vecino cambie la orientacion de la verja. Nosotras estamos bien como esta instalada, y no queremos mas molestias ni ocasionarle gastos. Preferimos no tener gente que puedan ocasionar danos a nuestro jardin que tiene matas que cubren la verja. De todos modos hay una verja existente que bordea nuestros lotes, asi que no importa de que lado sea la suya.

Cordialmente,

Maria Ugarte

To Whom It May Concern:

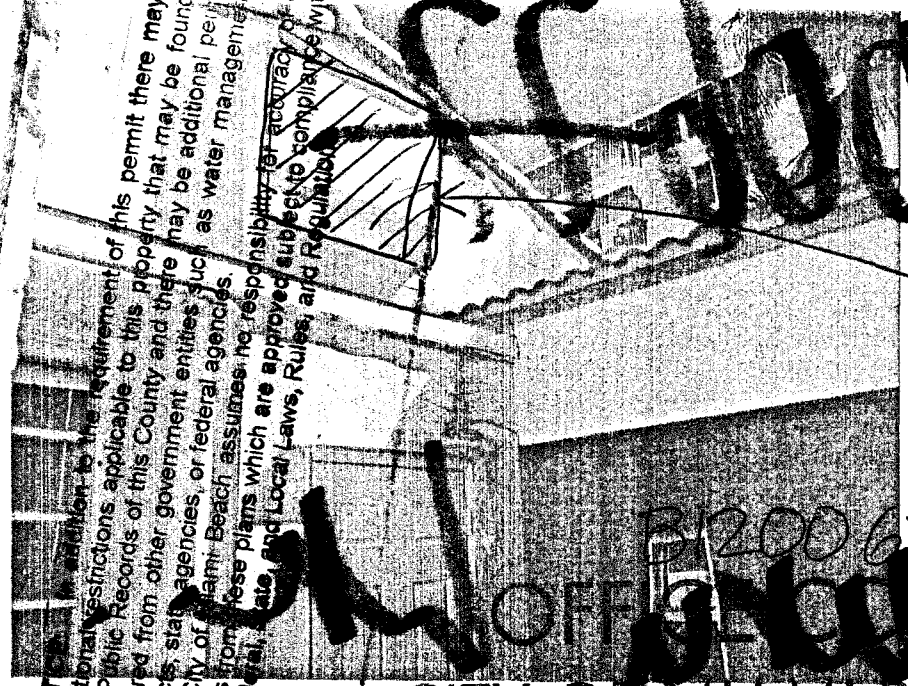
I wish to inform you that we do no wish to change to orientation of the fence. We are fine with the way it has been installed and do no wish to create more complications and costs. We would also avoid having people to damage our existing garden that has plants that cover the fence. Regardless there is an existing fence that separates our lots, so it's not important to us which way it's facing.

Cordially,

Maria Ugarte

B1200677

ADDRESS: 10 CENTURY LA.



111 feet

REMOVE 43" x 42½" COVERING & BLOCK-UP WITH 8" CMU.

APPLY STUCCO FINISH TO MATCH EXISTING & TO MATCH EXISTING IN THE INT. TOO

B1200677

OFFICE COPY

NOTICE: In addition to the requirement of this permit there may be additional restrictions applicable to this property that may be found in the Public Records of this County and there may be additional permits required from other governmental entities such as water management districts, state agencies, or federal agencies. The City of Miami Beach assumes no responsibility for acquiring additional permits and approvals with respect to the property. Issuance of this permit does not relieve the owner or contractor from complying with all Federal, State, and Local Laws, Rules, and Regulations.

CITY OF MIAMI BEACH

APPROVED FOR PERMIT BY THE FOLLOWING

Roof geometry, Unprotected opening; Non-hip roof Covering on opening under gable above door is unknown and undocumented

BUILDING: 11/14/11

ZONING: 11/14/11

DRB/HPB:

CONCURRENCY:

PLUMBING:

ELECTRICAL:

MECHANICAL:

FIRE PREVENTION:

ENGINEERING:

PUBLIC WORKS: 11.14.11

STRUCTURAL: AV 11/14/11

ELEVATOR:

PUBLIC WORKS
PLAN REVIEW NOTICE

Phone 305-673-7080 Fax 305-673-7028

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/roadway bonds (Public Works Inspection of the right-of-way will be required prior to final sign-off on the C.C. / T.C.O. or the release of bonds.)

Approved/Reviewed By: _____ **Date:** 11-14-11

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to convey

Elevate