

Owner **RODGERS** Mailing Address **[REDACTED]** Permit No. **13112** Date **Oct. 10-1939**
 Lot **23** Block **4-A** Subdivision **Sunset Island** Address **1649 West 22nd street**
 General Contractor Owner **10,036** Address **3228-01-1920**
 Architect Address **7 ft Block wall approx. 112' long**
 Front Depth Height Address **Footings 8 X 18- 4 1/2 sq Steel**
 Type of construction Cost **\$300.00-wall** Stories **Wall to be approx 66 ft from front line**
 Foundation Use **Use** Roof

Plumbing Contractor Address Date
 Plumbing Fixtures Rough approved by Date
 Gas Stoves
 Gas Heaters Address Date
 Final approved by Date
 Sewer connection Septic tank Make Date

final OK --7/22---- Lyon Electric # 13034 - Boat service- 1 center & 1 service- July 21-1939
 Electrical Contractor Address Date

Switch Range Motors Fans Temporary service
 OUTLETS Light HEATERS Water
 Receptacles Space Centers of Distribution
 Electrical Contractor Address Date
 No. fixtures set Final approved by Date
 Date of service

Alterations or repairs #44752 Owner "For Sale" Sign as Per ordinance #1024: \$10 6/1/51 Date

ALTERATIONS & ADDITIONS

Building Permits: #86747 - Keyes Co. - for sale sign \$10.00 - 5/21/71 #197-198

#25299 5/7/84 Dock 7 Marine Const seal craks in seawall \$800.

File #1698 - ZBA Meeting of September 6, 1985: Applicant requests the following variance in order to be able to construct a new one-family residence in a lot that does not meet the minimum required lot frontage:

1. Applicant wishes to waive 8'-7" of the minimum required 60' lot width (at the required 20' front yard setback line), in order to construct a new one-family house at the subject property located in a RS-3 zoning district.

GRANTED.

#28268 4/9/86 Gonzalez Bros Marine - new cap, base davits \$3,000.

Plumbing Permits:

Electrical Permits:

Owner Julian L. Mesa

Lot 23 Block B4A

General Contractor Eugenio Gonzalez

Architect Miguel Gonzalez

Zoning Regulations: Use I

Building Size: Front 40 Ft.

Certificate of Occupancy No.

Type of Construction CBS

10036
Subdivision Sunset Island
#4

Permit No. 92482

Cost \$150,000.00

Address 1649 W. 22nd Street

Bond No.

Engineer

Lot Size Irregular

Height 32'

Use

Stories 2 story CBS
Single family resid.

Foundation SPL Piling

Roof Tile

Date 2-5-88

PLUMBING Contractor

Sewer Connection

Date

Temporary Water Closet

Water Closets

Lavatories

Bath Tubs

Showers

Urinals

Sinks

Dish Washing Machine

Laundry Trays

Laundry Washing Machines

Drinking Fountains

Floor Drains

Grease Traps

Safe Wastes

AIR CONDITIONING Contractor

SEPTIC TANK Contractor

OIL BURNER Contractor

SPRINKLER Contractor

Swimming Pool Traps

Steam or Hot Water Boilers

ROUGH APPROVAL

FINAL APPROVAL

GAS Contractor

Gas Ranges

Gas Water Heaters

Gas Space Heaters

Gas Refrigerators

Gas Steam Tables

Gas Broilers

Down Spouts

Wells

Date

Gas Frylators

Gas Pressing Machine

Gas Vents for Stove

GAS Rough APPROVAL

GAS FINAL APPROVAL

ELECTRICAL Contractor

OUTLETS

Switches

Lights

Receptacles

HEATERS

Water

Space

FIXTURES

Ranges

Irons

Refrigerators

Fans

Motors

Appliances

Electrical Contractor

Date

Temporary Service

Neon Transformers

Sign Outlets

Meter Change

Centers of Distributions

Service

Violations

Date

FINAL APPROVAL

By

Date

LOT: _____ BLOCK: _____ SUBDIVISION: _____ ADDRESS: _____

ALTERATIONS & ADDITIONS

BUILDING PERMITS

FROM: JUD KURLANCHEE ^(K)
PLANNING & ZONING DIRECTOR

SUBJECT: PLANNING & ZONING DEPARTMENT RECOMMENDATION:
FEBRUARY 5, 1988 MEETING

FILE NO. 1878

JULIAN L. MESA
1649 WEST 22 STREET

As indicated on the building card, the Board approved this variance on September 6, 1985. The applicant is presently before the Board as the Ordinance required that a building permit be issued by September 6, 1987 or the variance is null and void. As indicated in the hardship letter, the applicant is now in a position to construct the residence. As such, the Department recommends approval of the request as the parcel is pie-shaped and was originally platted with a lot width that is less than the specifications listed in the Zoning Ordinance.

PLUMBING PERMITS

ELECTRICAL PERMITS

CUMULATIVE COST OF CONSTRUCTION OF PERMITS ISSUED

DATE	PROCESS	DESCRIPTION	WORK	CUMULATIVE	APPRAISED BLDG.			BUILDING
ISSUED	NO.	OF WORK	COST	WORK COST	VALUE BEFORE REMODEL	%	COMMENTS	PERMIT NO.
11-21-88		REEROOF 3200 sq ft.	\$4,500.00					5282, 275

FEB '88

10. FILE NO. 1878

10036

JULIAN L. MESA
1649 WEST 22nd STREET
LOT 23, BLOCK 4A
THIRD REVISED PLAT
SUNSET ISLAND NO. 4
PB 40/8

FEB 5 1988

APPLICANT REQUESTS THE FOLLOWING VARIANCE IN ORDER TO BE ABLE TO CONSTRUCT A NEW ONE-FAMILY RESIDENCE IN A LOT THAT DOES NOT MEET THE MINIMUM REQUIRED LOT FRONTAGE:

CONTINUED ON NEXT PAGE ...

PAGE SIX OF SEVEN

FILE NO. 1878 (continued)

JULIAN L. MESA
1649 WEST 22nd STREET

1. Applicant wishes to waive 8'-7" of the minimum required 60 ft. lot width (at the required 20 ft. front yard setback line), in order to construct a new one-family house at the subject property located in a RS-3 zoning district.

APPROVED.

BUILDING PERMITS: #92482 - 3-30-88 - Eugenio Gonzalez - New single family residence, with pool, deck, pool house and fence - \$150,000.00
#SB880275 - 11-21-88 - Azusa Roofing - Reroof 3200 sq. ft. - \$4,500.00
#M8800200 - Aven Air Conditioning - 20kw Central heating, 2-5ton A/C central, duct work, mechanical ventilation, double fine, mandatory 303.3 - 11-29-88
#B8800103 - 12-13-88 - Julian Mesa (owner) - Add a terrace to the house - \$4,800.00
#BM891062 - Aven Air Conditioning - 2-20kw Central heating, 2-10ton a/c central, duct work - 8-11-89
#5563 - Temporary Certificate of Occupancy - Julian L. Messa - 9-8-89

ELECTRICAL PERMITS: #83175 - D.O. & Son Corp. - 1 Service temporary - 5-2-88
#83309 - D.O. & Sons Corp. - 38 Switch outlets, 68 light outlets, 50 receptacles, 5 appliance outlets, 1 range top, 1 water heater, 1 motors, 2 3ton A/C, 2 strip heater 10kw, 68 fixtures, 1 dryer - 5-25-88
#BE891647 - D O Son Corp. - Temporary for testing - 9-13-89

PLUMBING PERMITS: #P8801080 - Manny & Lou Plumbing - 1 Bath tub, 2 bidet, 1 dishwasher, 6 lavatory, 1 clothes washer, 2 shower, 1 sink, pot, 1 sink, slop, 4 water closet, 1 whirlpool, 1 heater-new installation, 1 sewer connections - 7-5-88
#P8801173 - Jwm Plumbing - 1 Pool piping - 8-8-88

COASTAL CONTROL ZONE

CUMULATIVE COST OF CONSTRUCTION OF PERMITS ISSUED

DATE	PROCESS	DESCRIPTION	WORK	CUMULATIVE	APPRAISED BLDG.			BUILDING
ISSUED	NO.	OF WORK	COST	WORK COST	VALUE BEFORE REMODEL	%	COMMENTS	PERMIT NO.
3-31-88	004	New Single Family Residence w/ pool, deck & pool house & fence.	\$150,000.00					92482
12-13-88		Add a terrace to the house	\$4,800.00					88800103

12

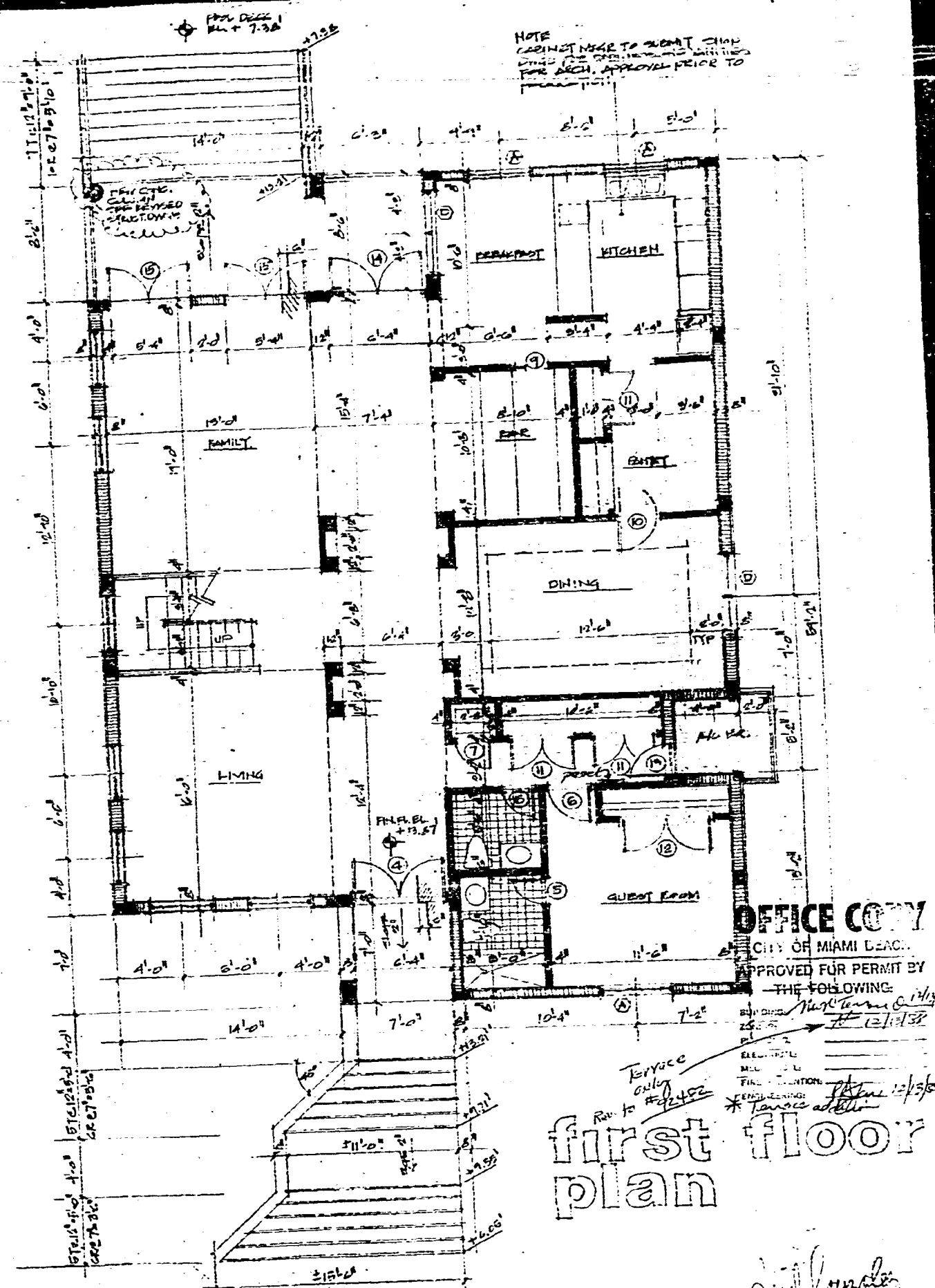
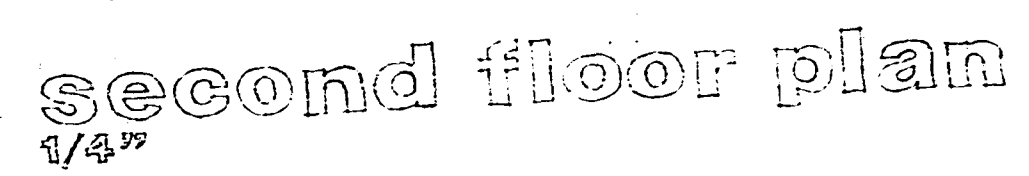
PERMIT #

B77-00103

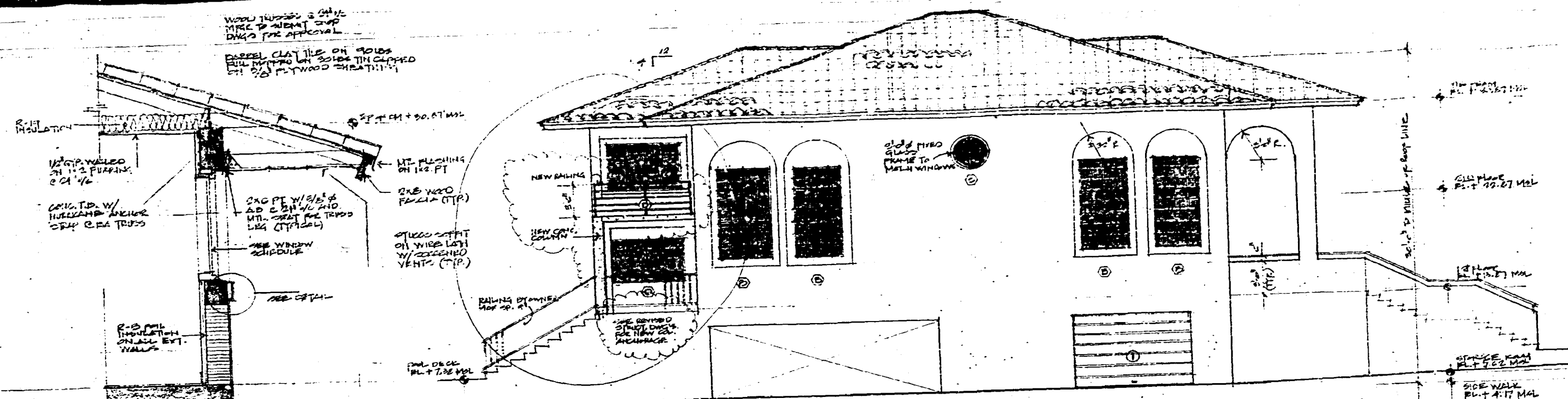
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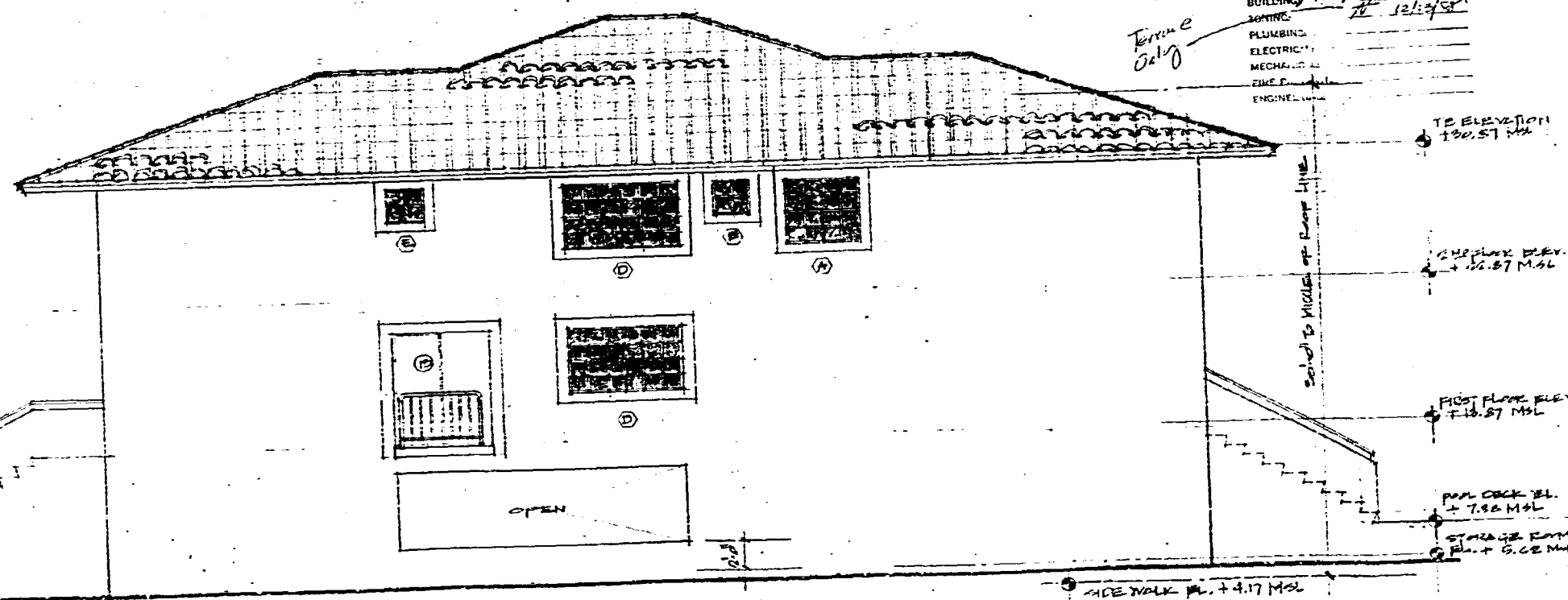


left elevation

OFFICE COPY

CITY OF MIAMI BEACH
APPROVED FOR PERMIT BY
THE FOLLOWING:

BUILDING: *Mark James* 12/1/10
PLUMBING: *Mark James*
ELECTRICAL: *Mark James*
MECHANICAL: *Mark James*
ENGINEER: *Mark James*

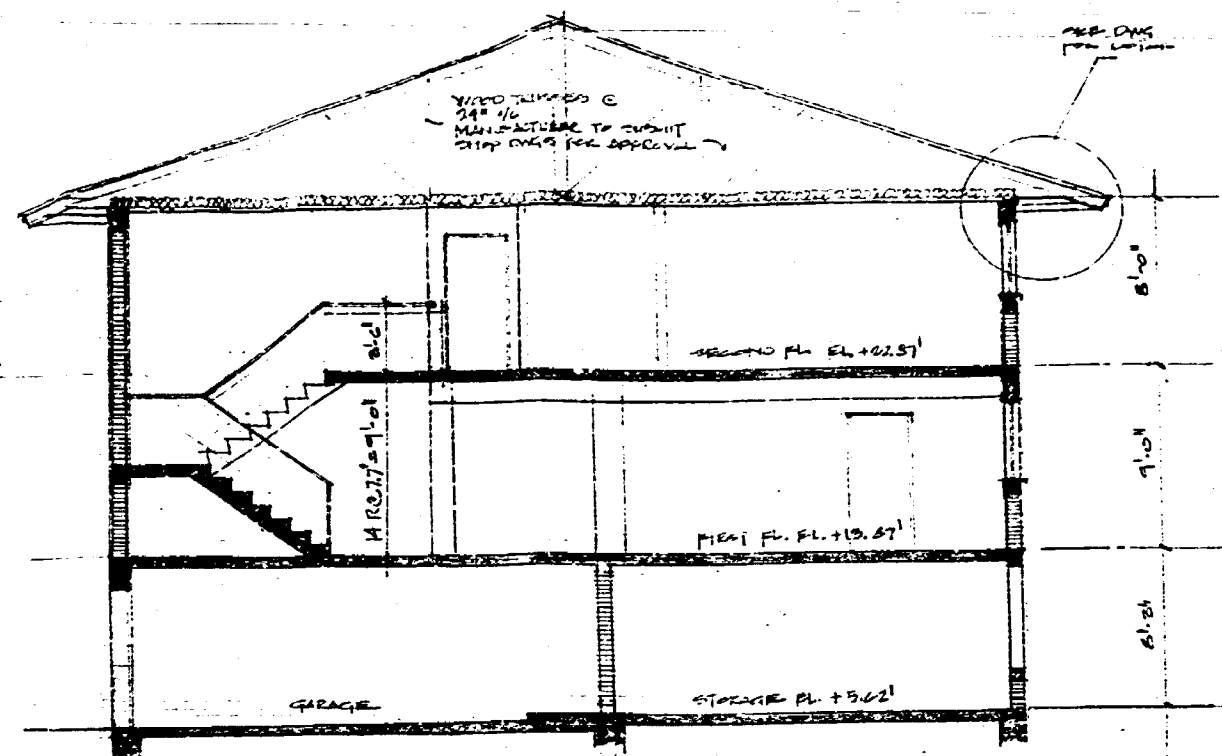


right elevation

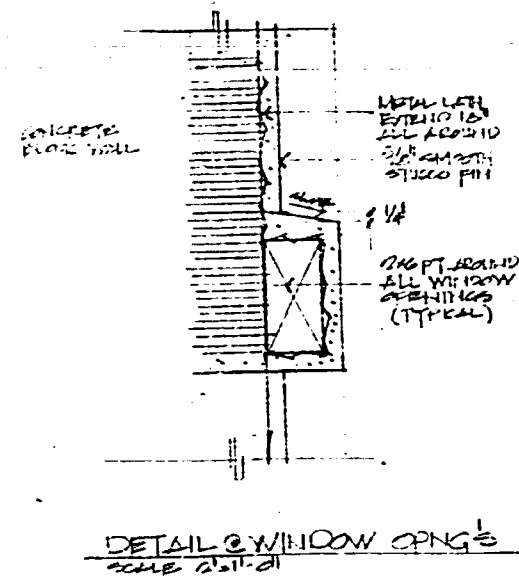
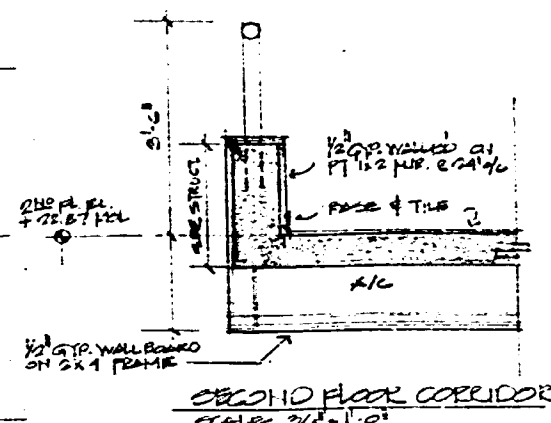
MIGUEL ANGEL GONZALEZ
ARCHITECTS

ELEVATIONS
WALL SECTION

12



section a-a



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CITY OF MIAMI BEACH

APPROVED FOR PERMIT BY

THE FOLLOWING:

BUILDING *Miguel Angel Gonzalez*

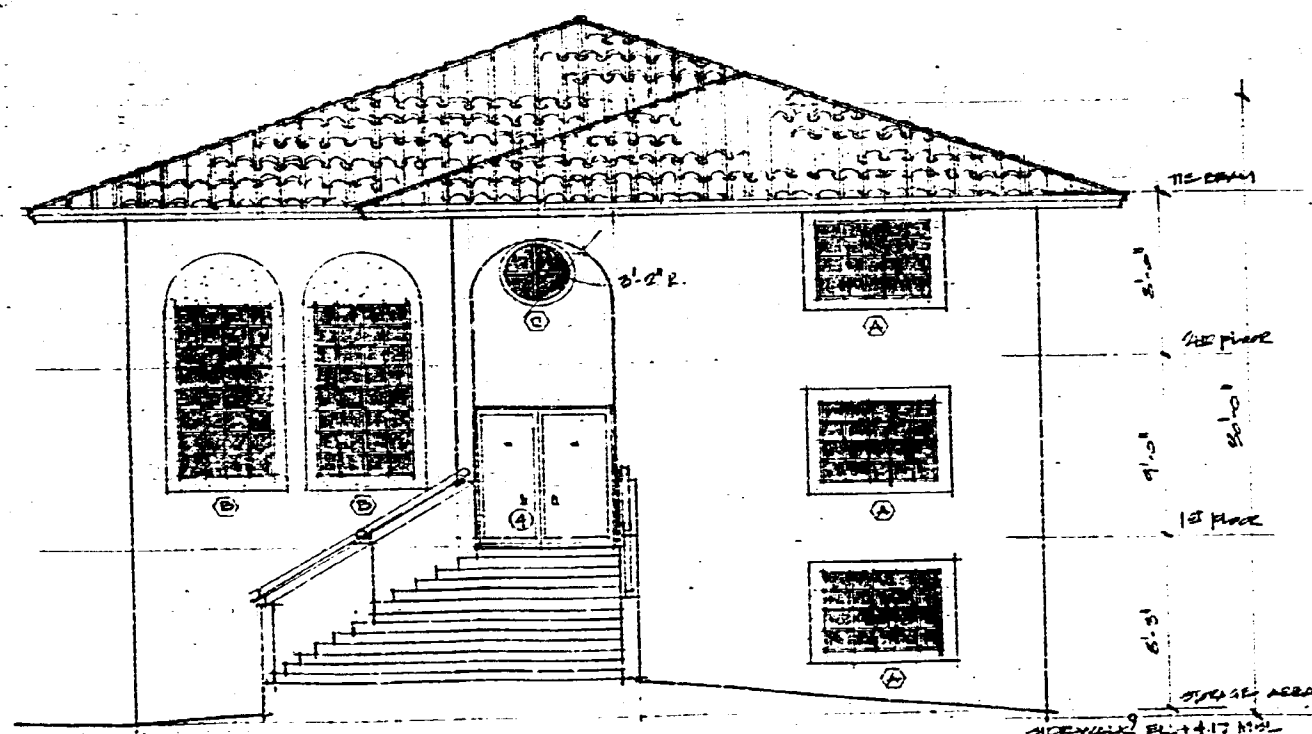
ZONING *R-1*

ELECT. *12/1/88*

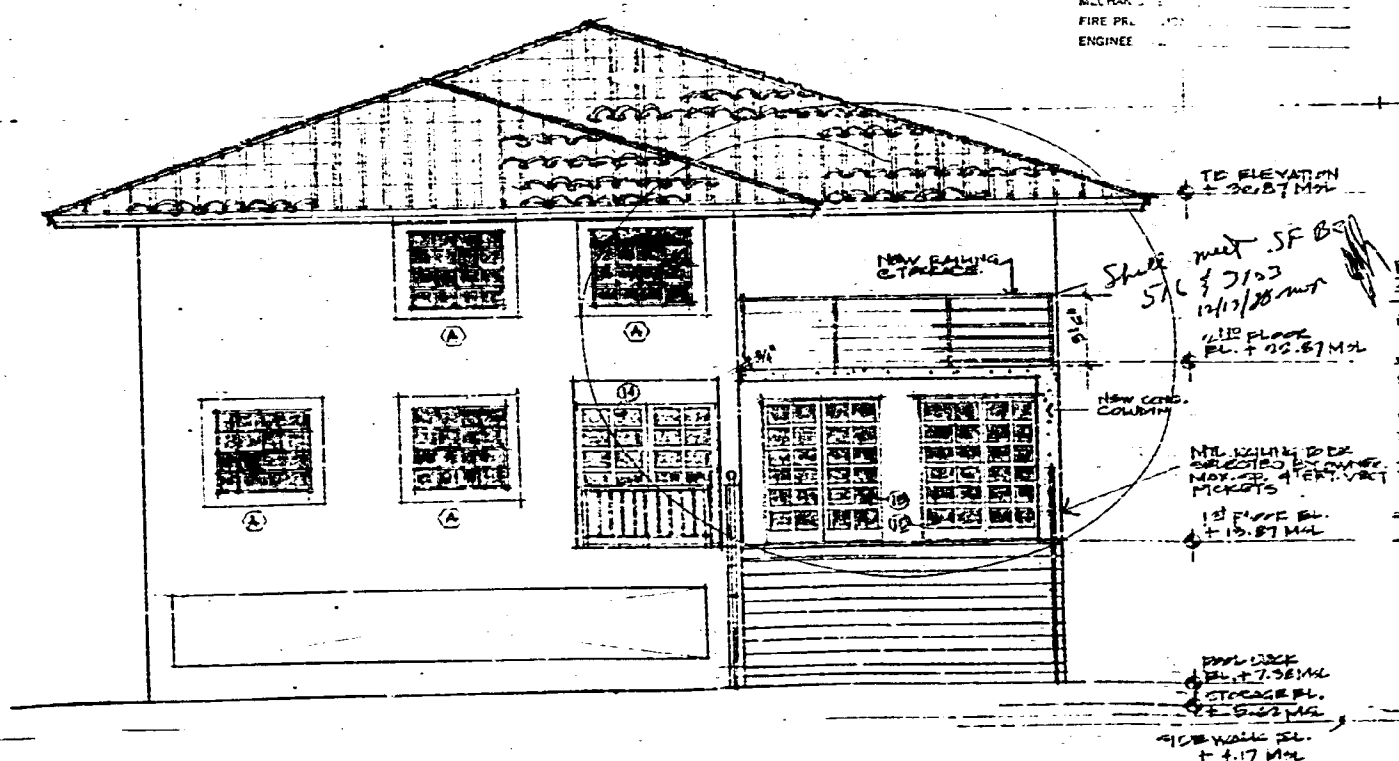
MCHAN. *12/1/88*

FIRE PRO. *12/1/88*

ENGINEER *12/1/88*



front elevation

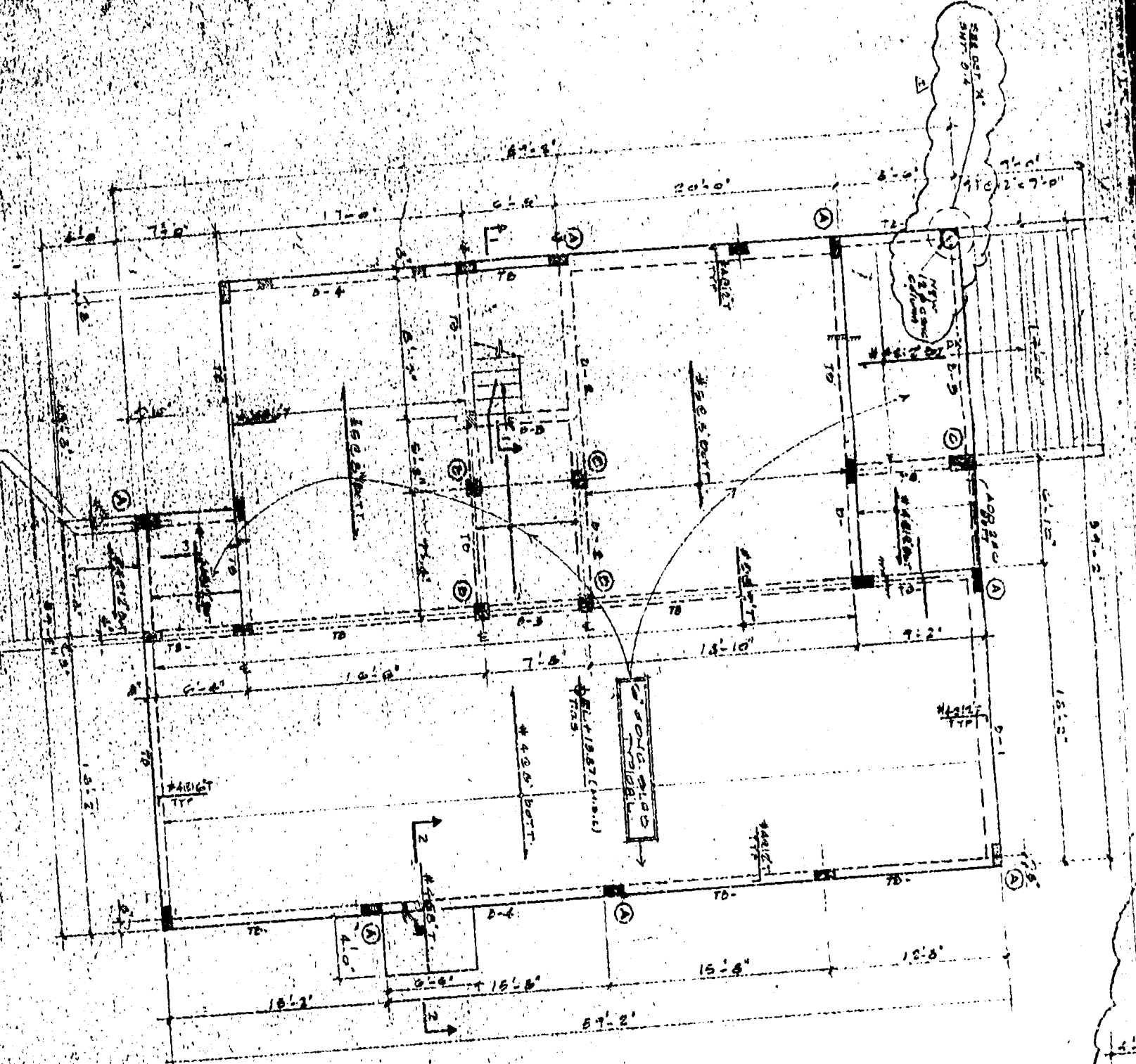


rear elevation

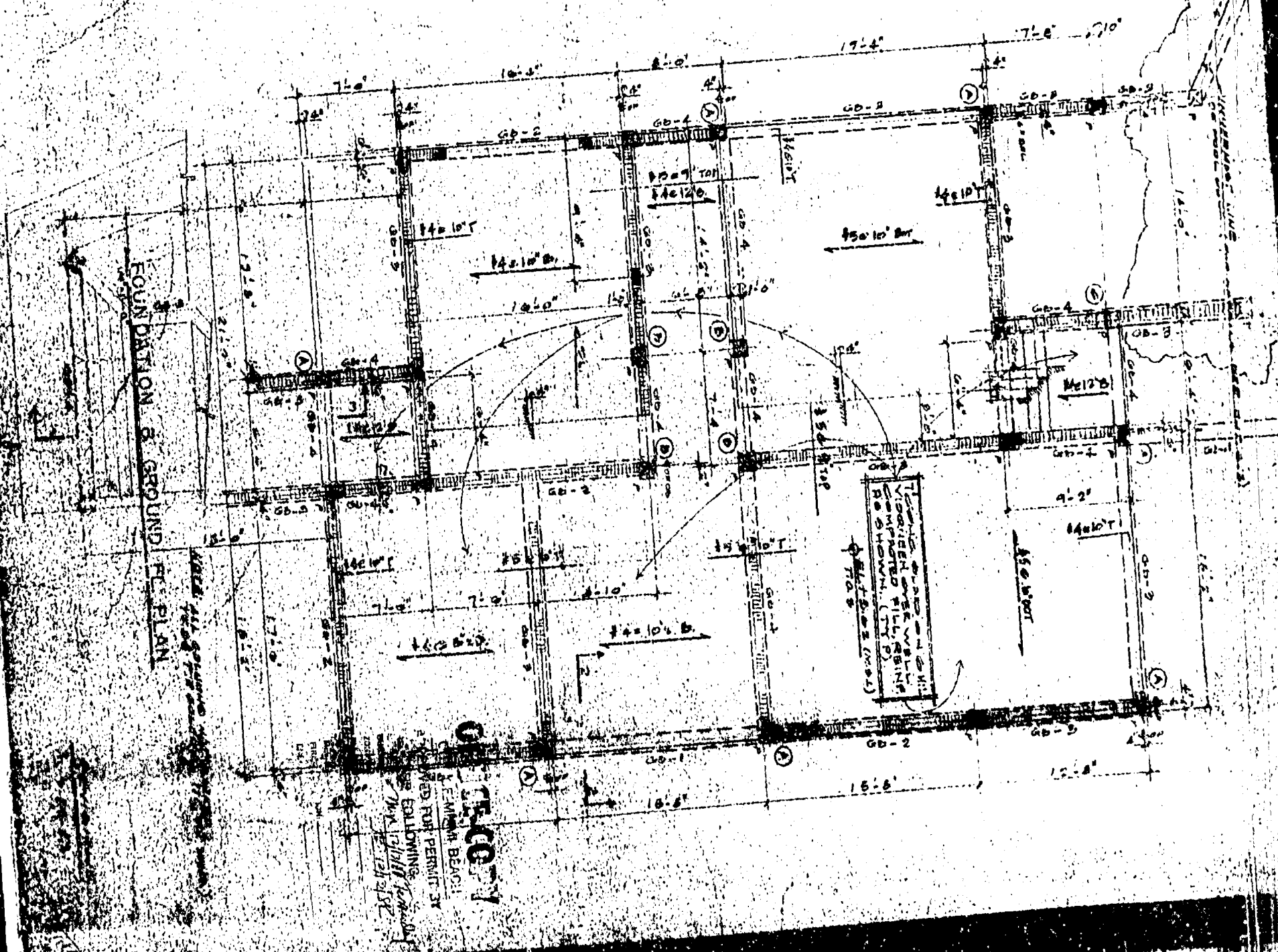
MIGUEL ANGEL GONZALEZ, ARCHITECT, 1215 S.W. 15TH AVE., MIAMI, FL 33135

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FIRST FLOOR PLAN

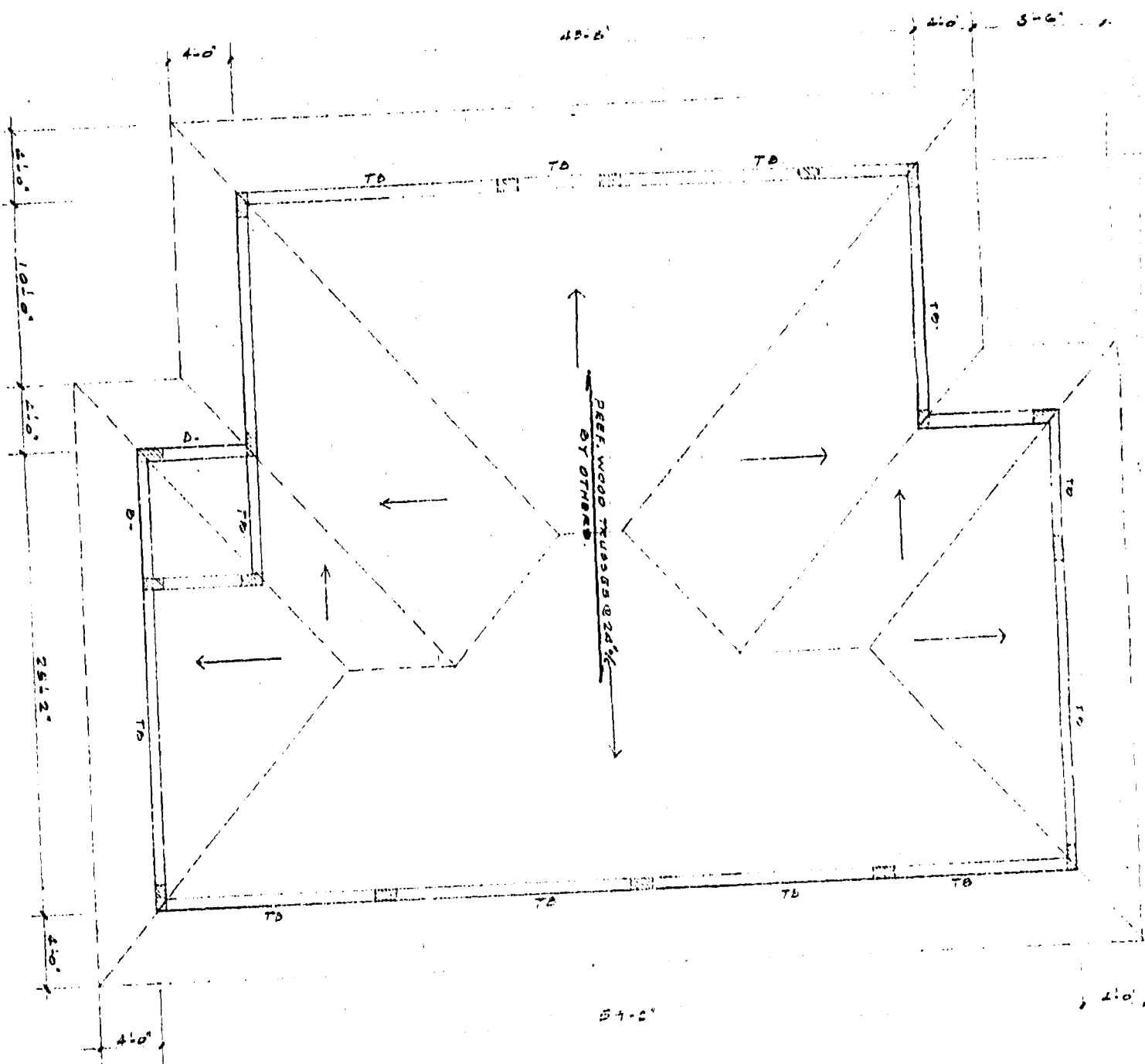


FOUNDATION & SECOND FLOOR PLAN

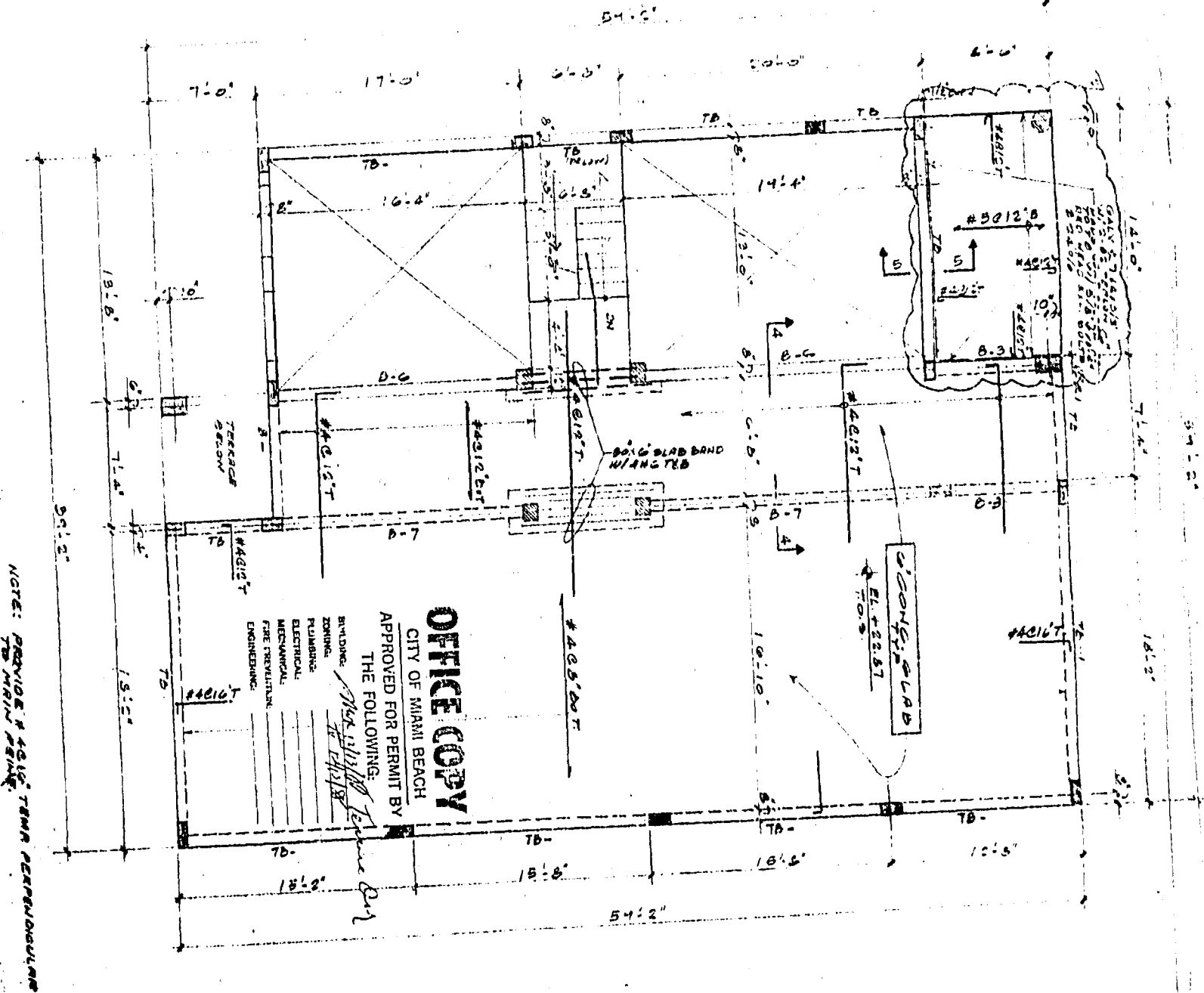


MIGUEL ANGEL GONZALEZ MR. AND MRS. J. MESA RESIDENCE
PLANNERS PLANNERS
SUNSET ISLAND MIAMI BEACH FLORIDA

ROOF FRAMING PLAN



SECOND FL FRAMING PLAN



NOTE: PROVIDE 4\"

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CITY OF MIAMI BEACH

APPROVED FOR PERMIT BY

THE FOLLOWING:

PLUMBING

ELECTRICAL

Mechanical

Structural

Foundation

Other

Remarks

Drawn by

Checked by

Approved by

Date

Scale

Sheet

Total

Project

Location

Client

Architect

Engineer

Surveyor

Inspector

Recorder

Witness

Other

GOMEZ-PINA
CONSULTING ENGINEERS
2310 SW 8th Ave # 201, MIAMI, FL
TEL 203 251-1980

MIGUEL ANGEL GONZALEZ
ARCHITECTS
8255 SOUTHWEST 5TH STREET MIAMI, FLORIDA 33146 223-8638

MR. AND MRS. J. MESA RESIDENCE
SUNSET BLVD MIAMI BEACH FLORIDA

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B8800103

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PERMIT #

B78-00103

ADDRESS :

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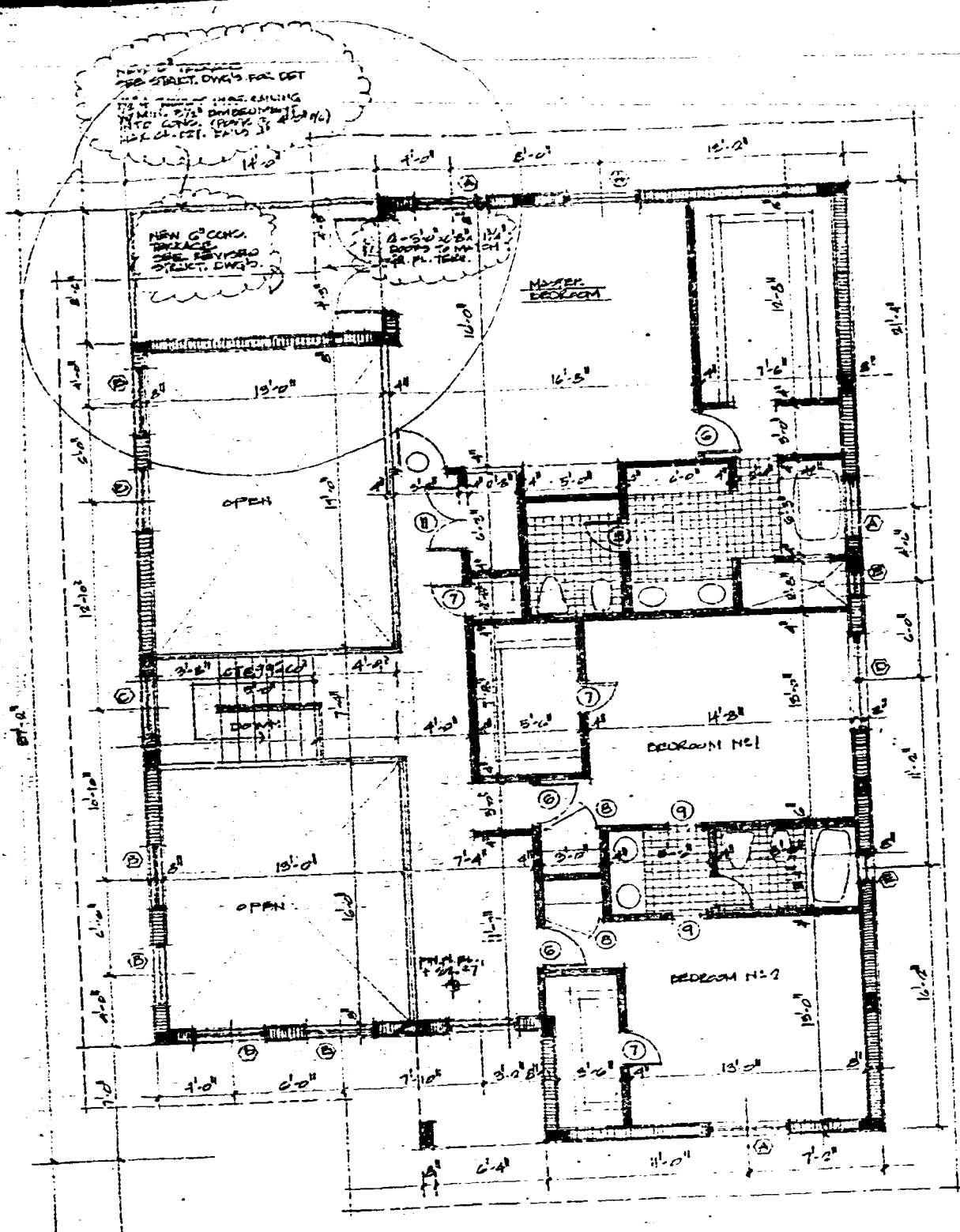
PERMIT #

B77-00103

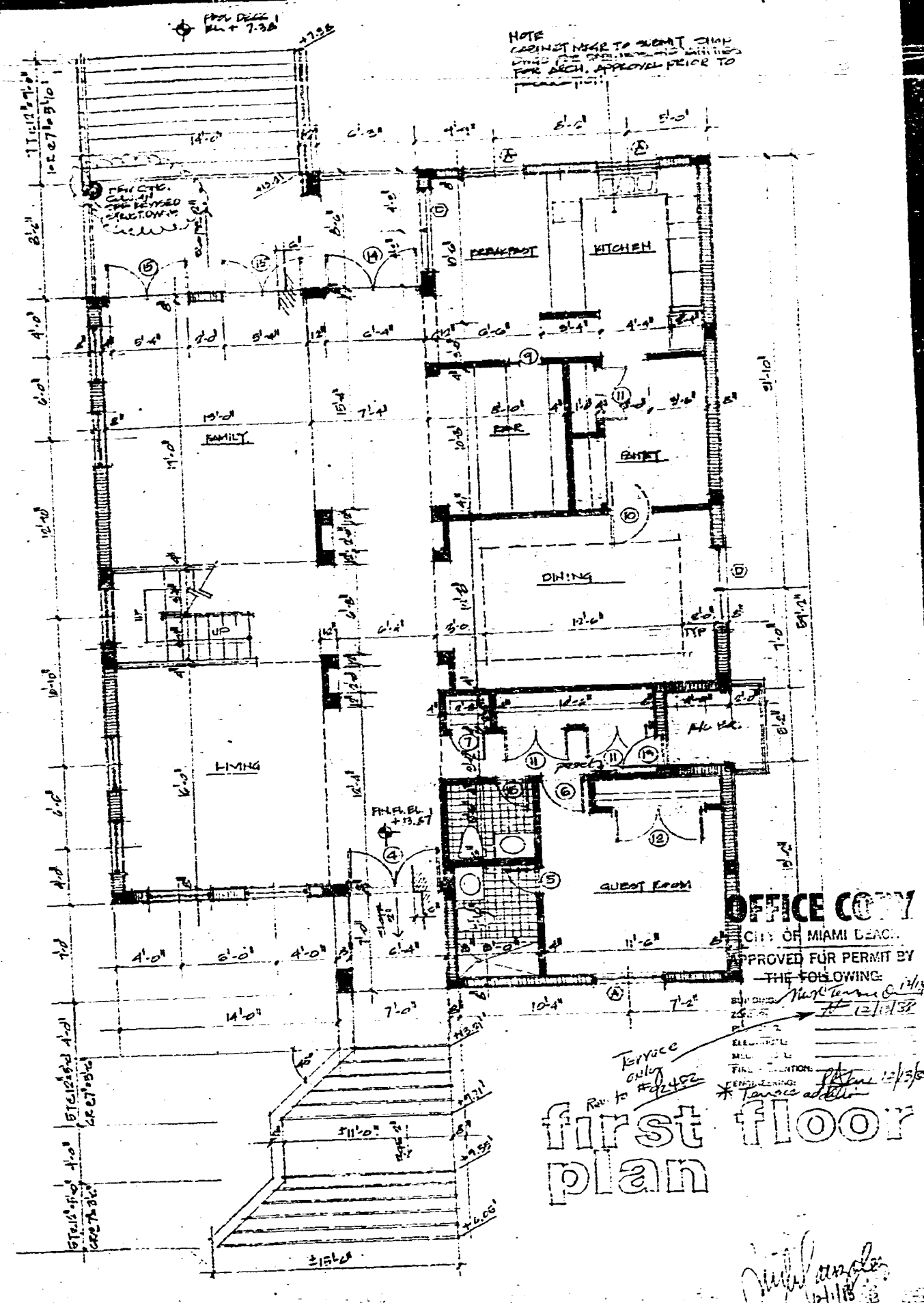
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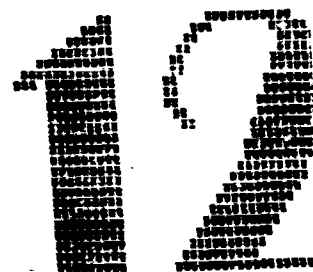
second floor plan
1/4"



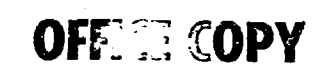
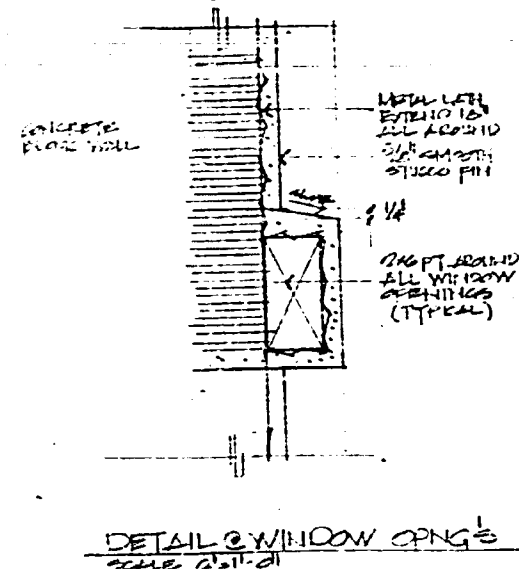
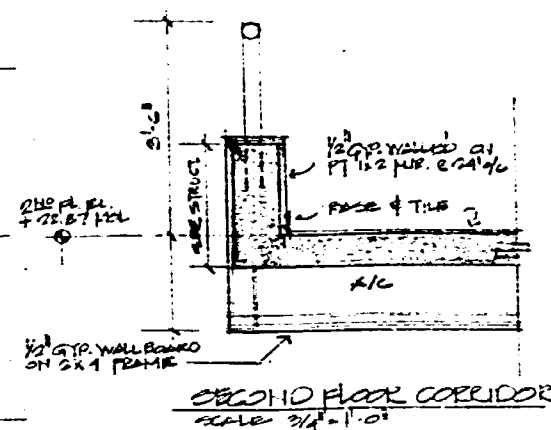
first floor plan

MIGUEL ANGEL GONZALEZ ARCHITECT AND SECOND FLOOR PLANS

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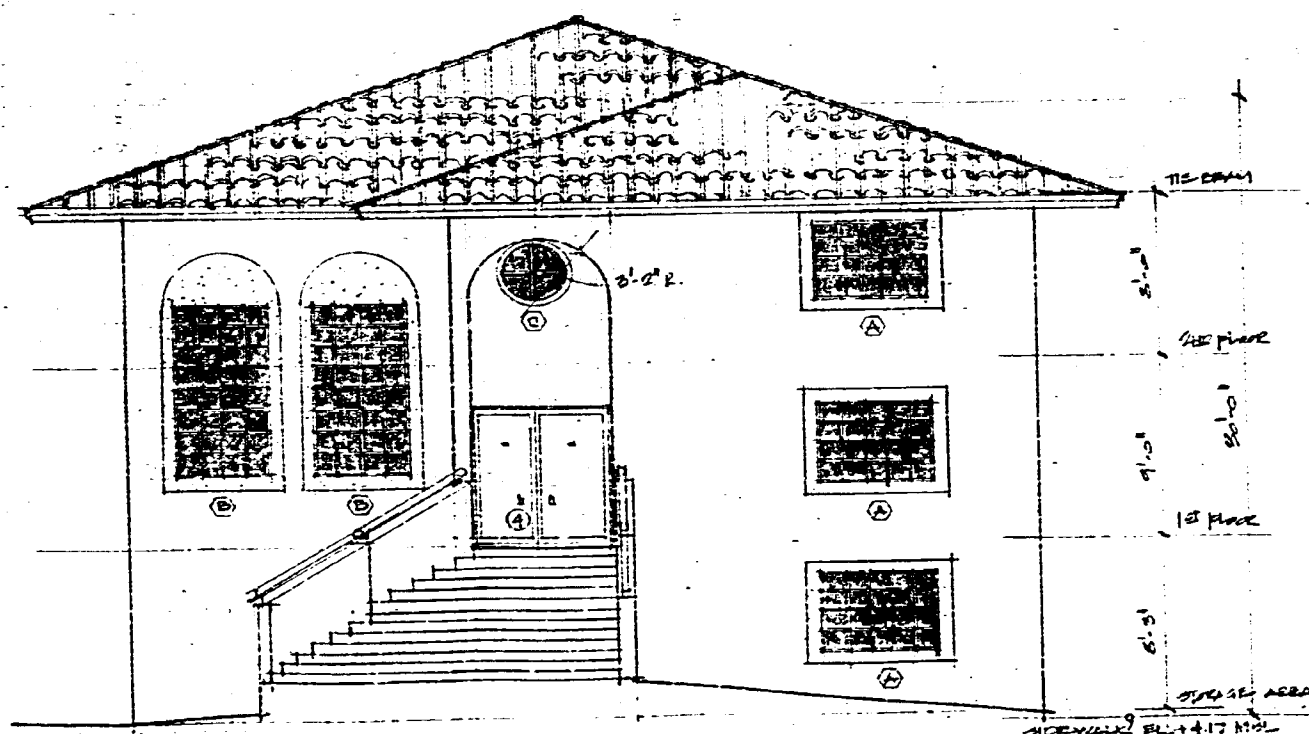


MR. AND MRS. J. MARGARET HENDERSON
 21981 15TH AVE. N.W. S.W. 10TH PL.
 PLANNERS
 ARCHITECTS

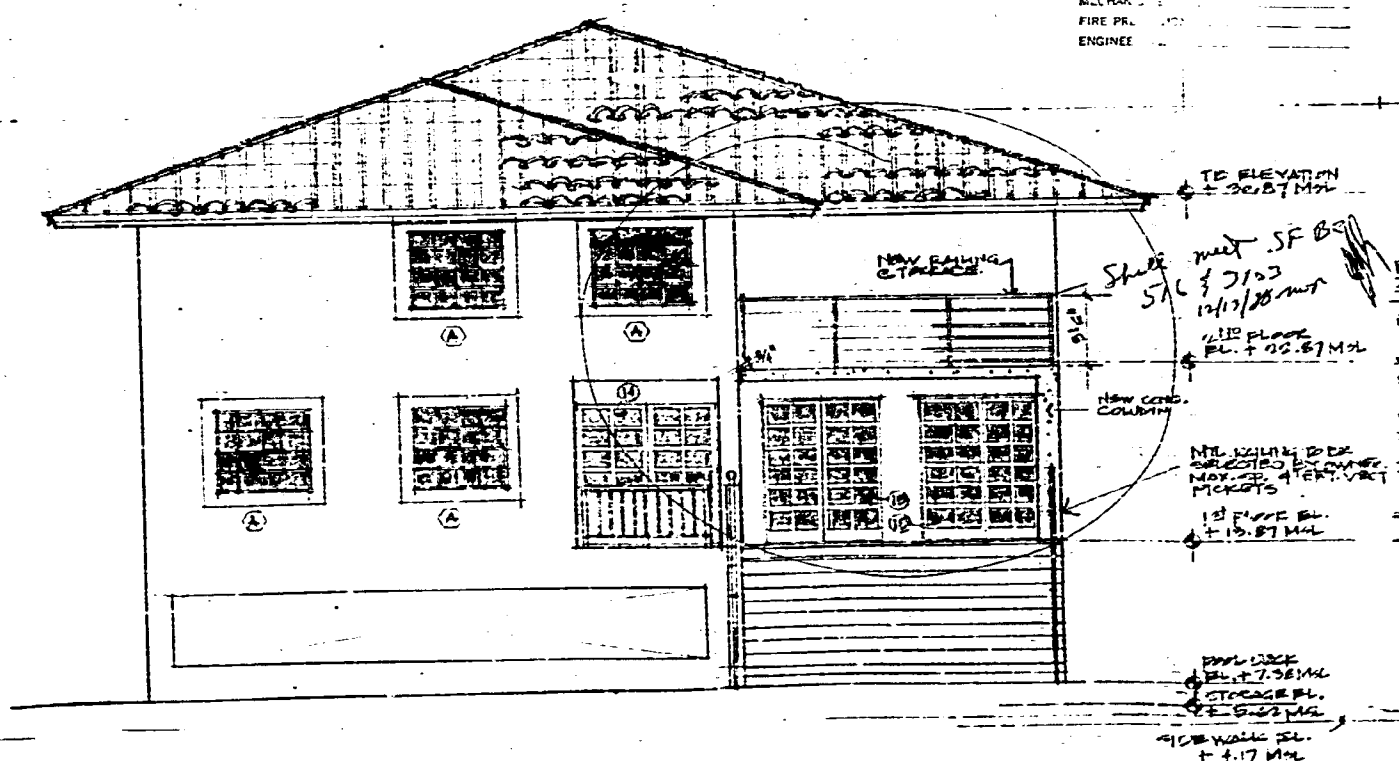


OFFICE OF MIAMI BEACH
APPROVED FOR PERMIT BY
THE FOLLOWING:

BUILDING	<i>My client, James D</i>
ZONING	<i>7-12498</i>
PLUMBING	_____
ELECTRICAL	_____
MECHANICAL	_____
FIRE PROTECTION	_____
ENGINEER	_____



front elevation

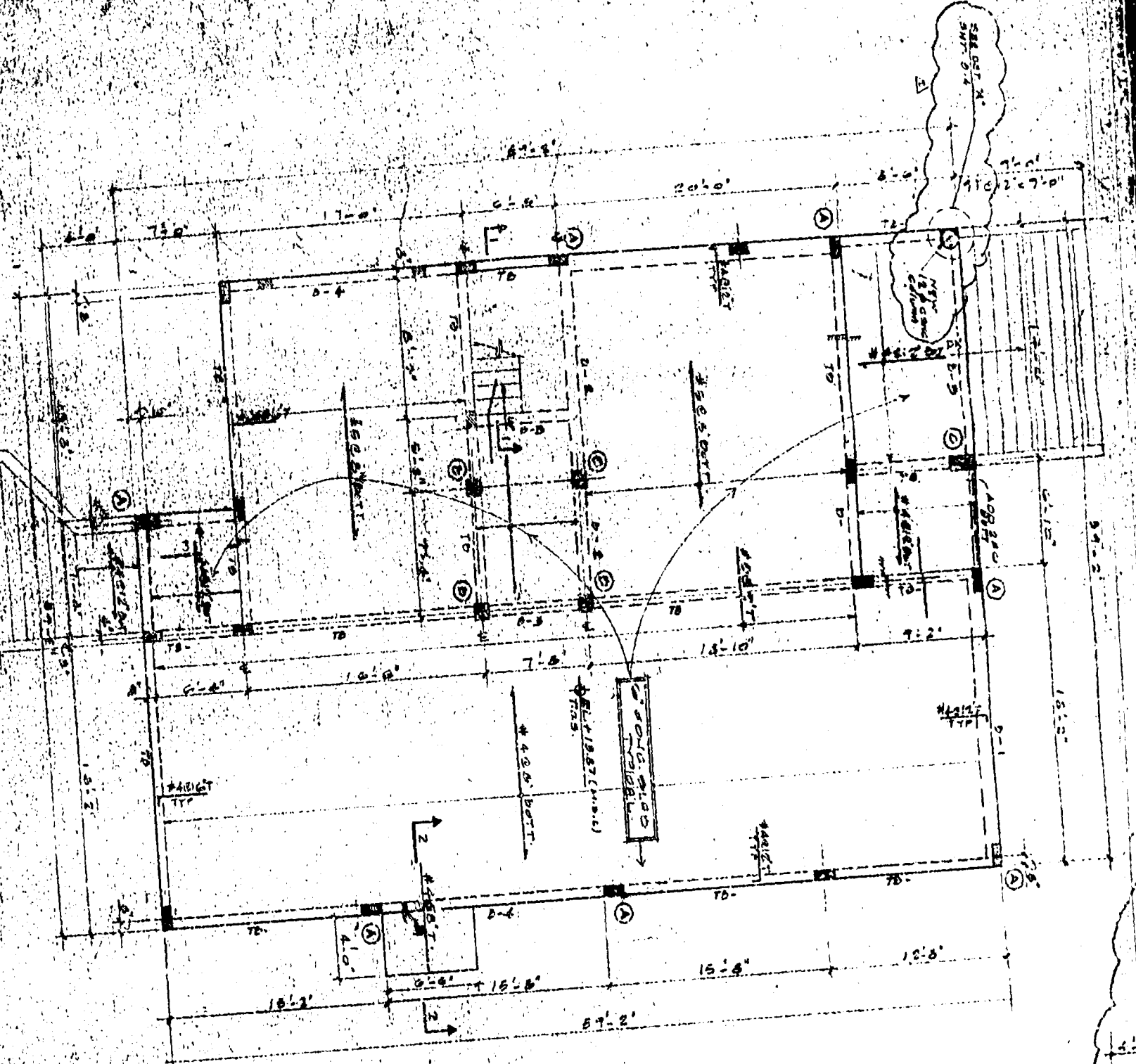


rear elevation

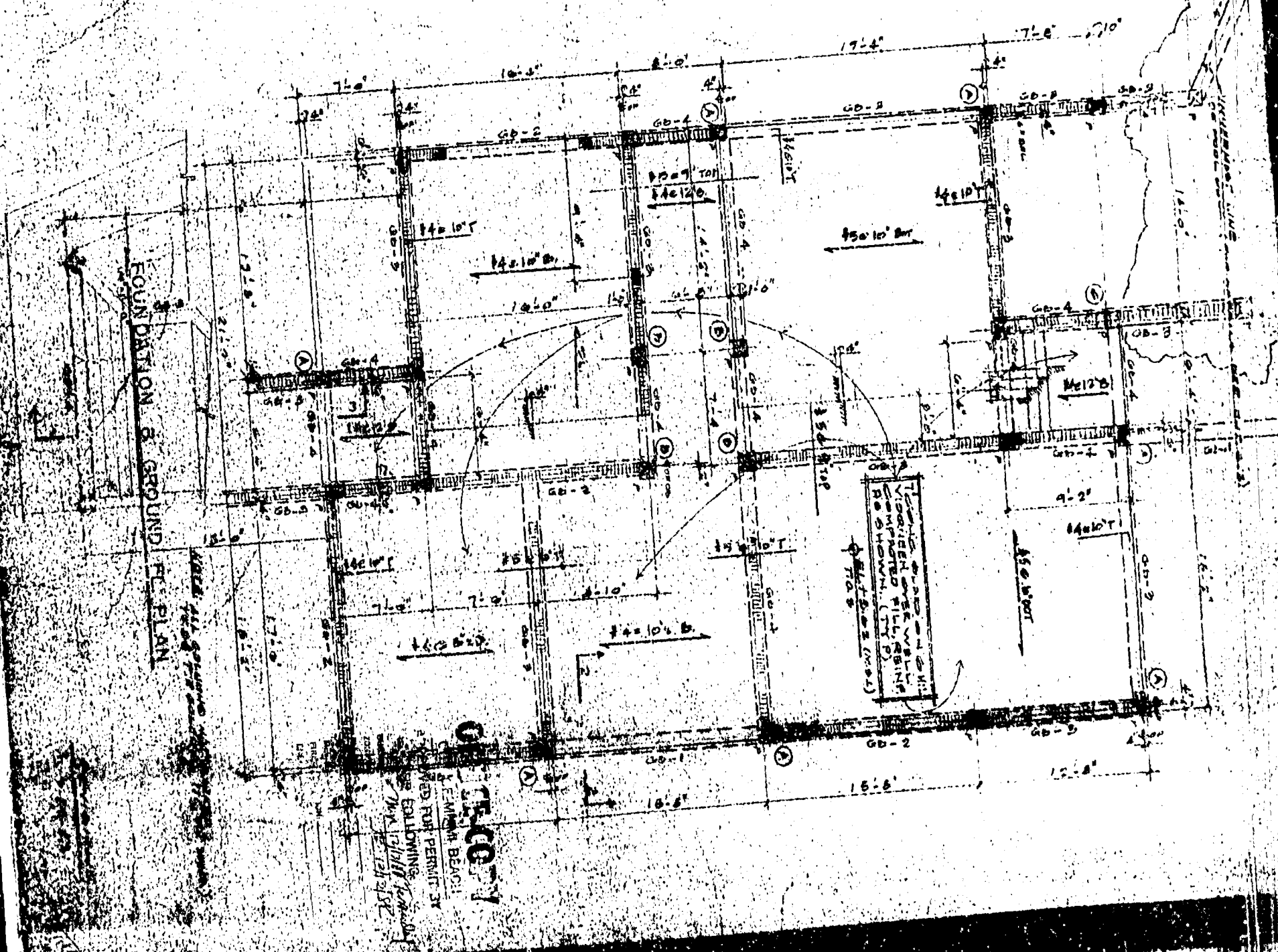
ELEVATIONS
BUILDING SECTION

MITIGUEL ANGEL GONZALEZ, ARCHITECTS
MR. AND MRS. JAMES RESIDENCE
DUNN, BEACH, MIAMI BEACH, FLORIDA

FIRST FLOOR PLAN



FOUNDATION & SECOND FLOOR PLAN



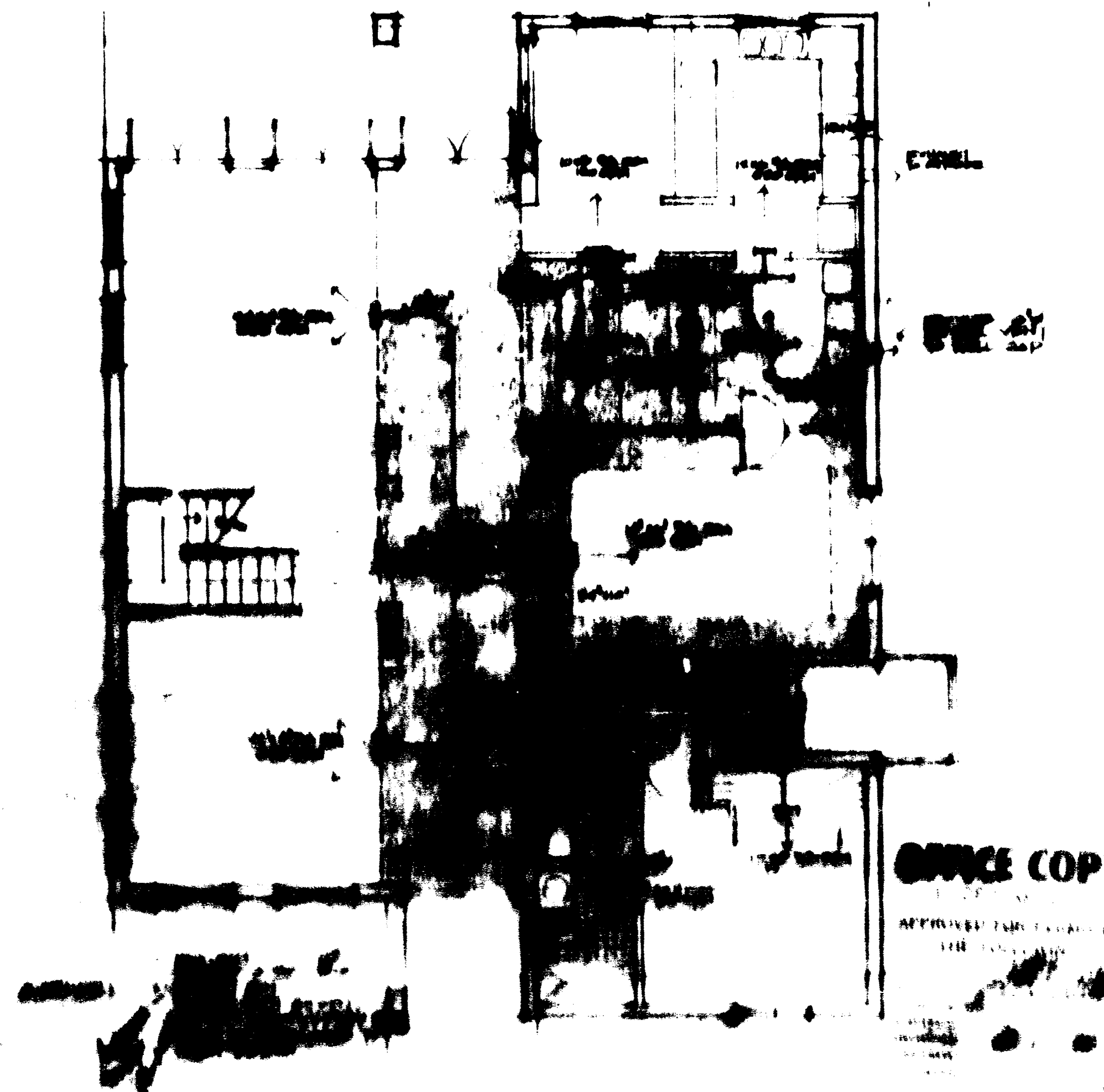
MIGUEL ANGEL GONZALEZ MR. AND MRS. J. MESA RESIDENCE
PLANNERS PLANNERS
SUNSET ISLAND MIAMI BEACH FLORIDA

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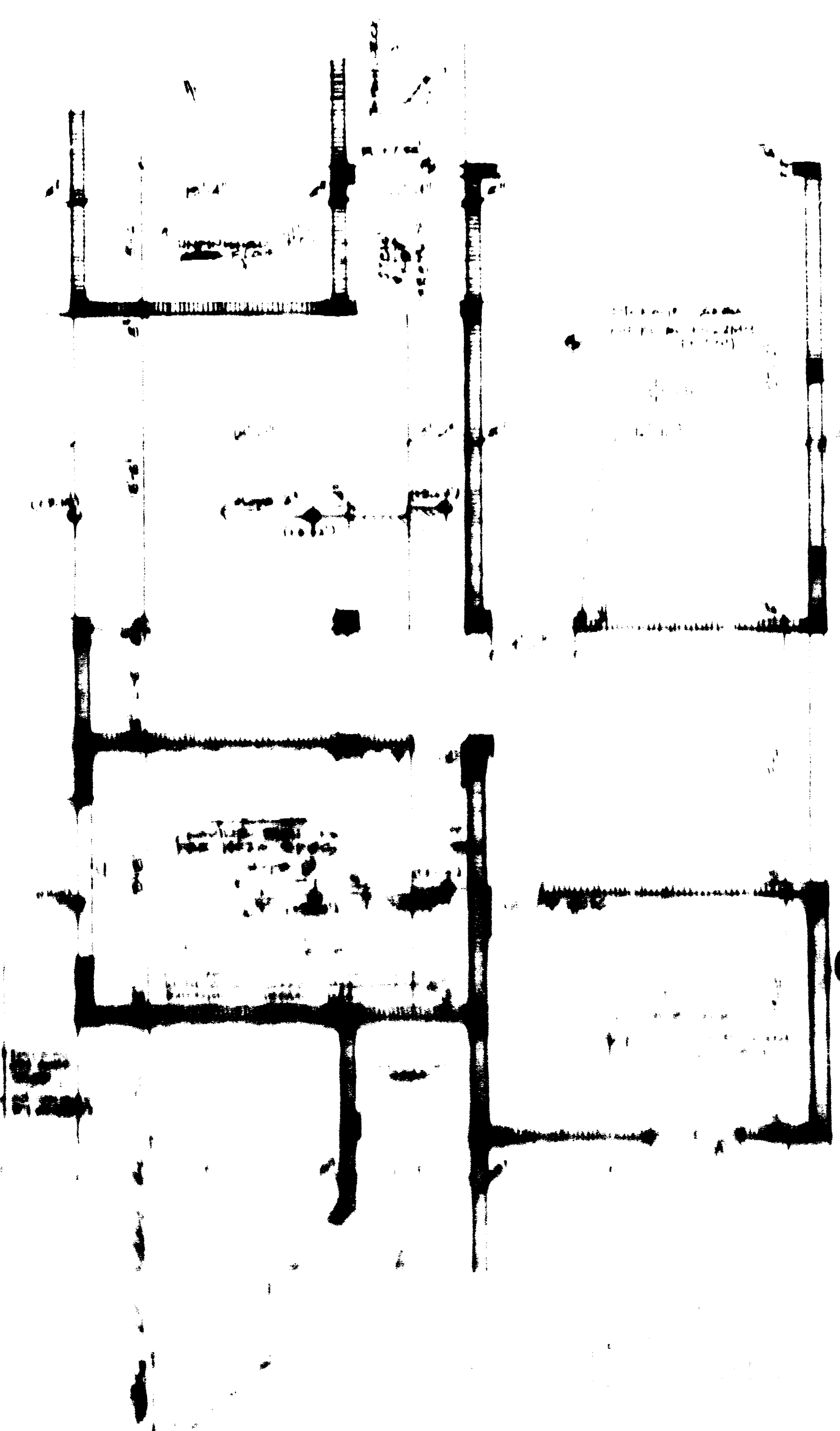
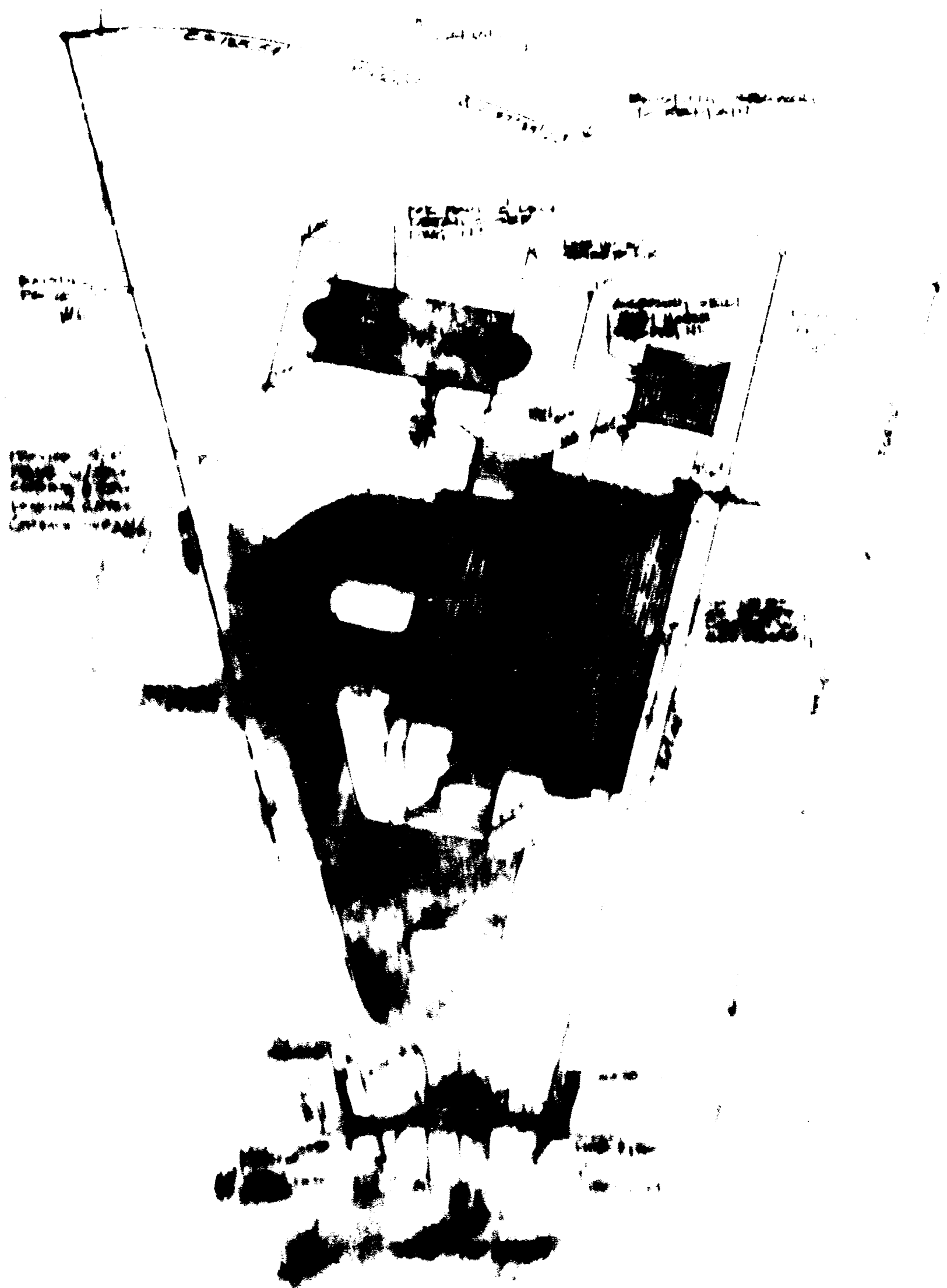
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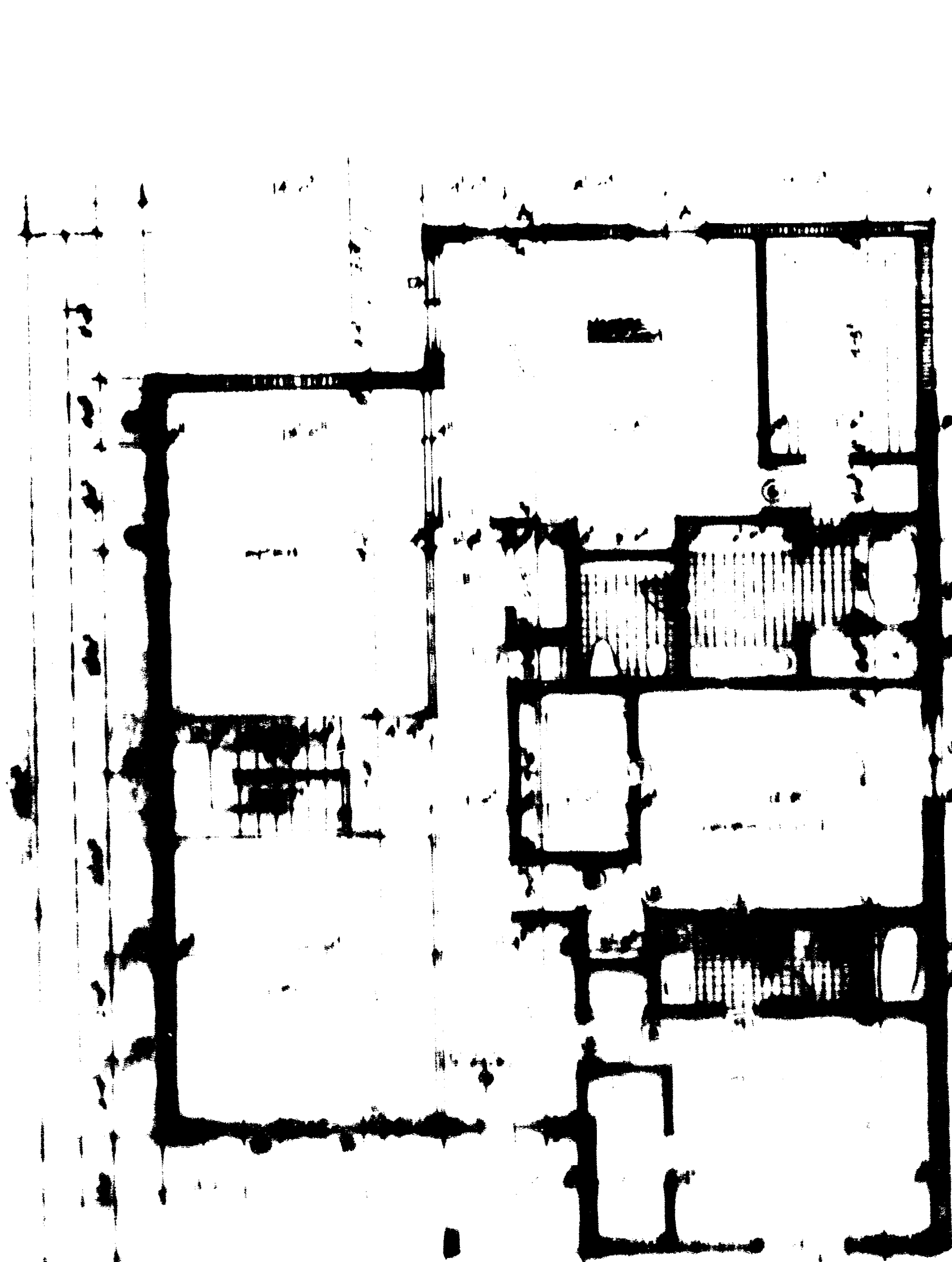


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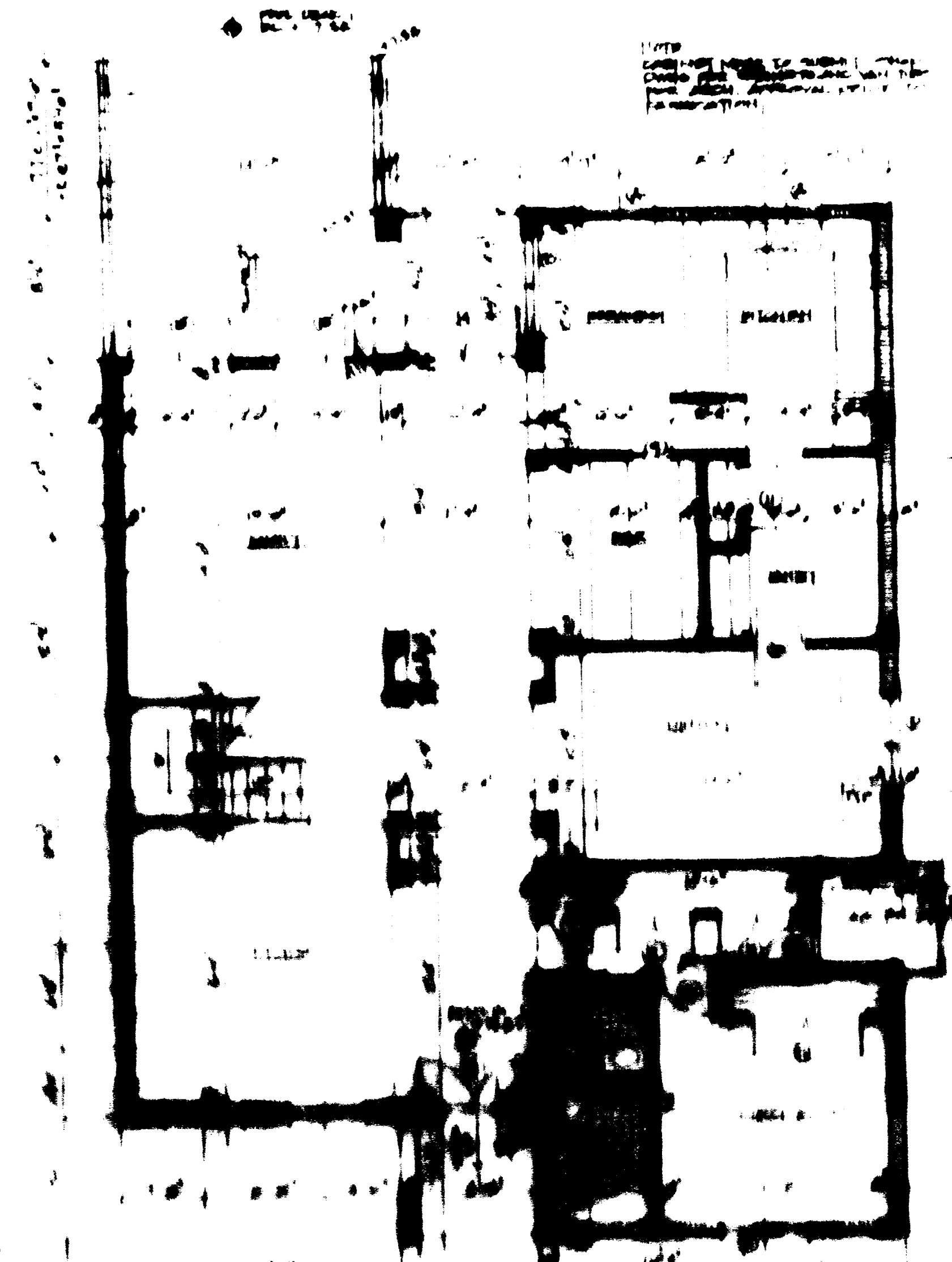
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WIGGEL ANGEL CONRALEZ
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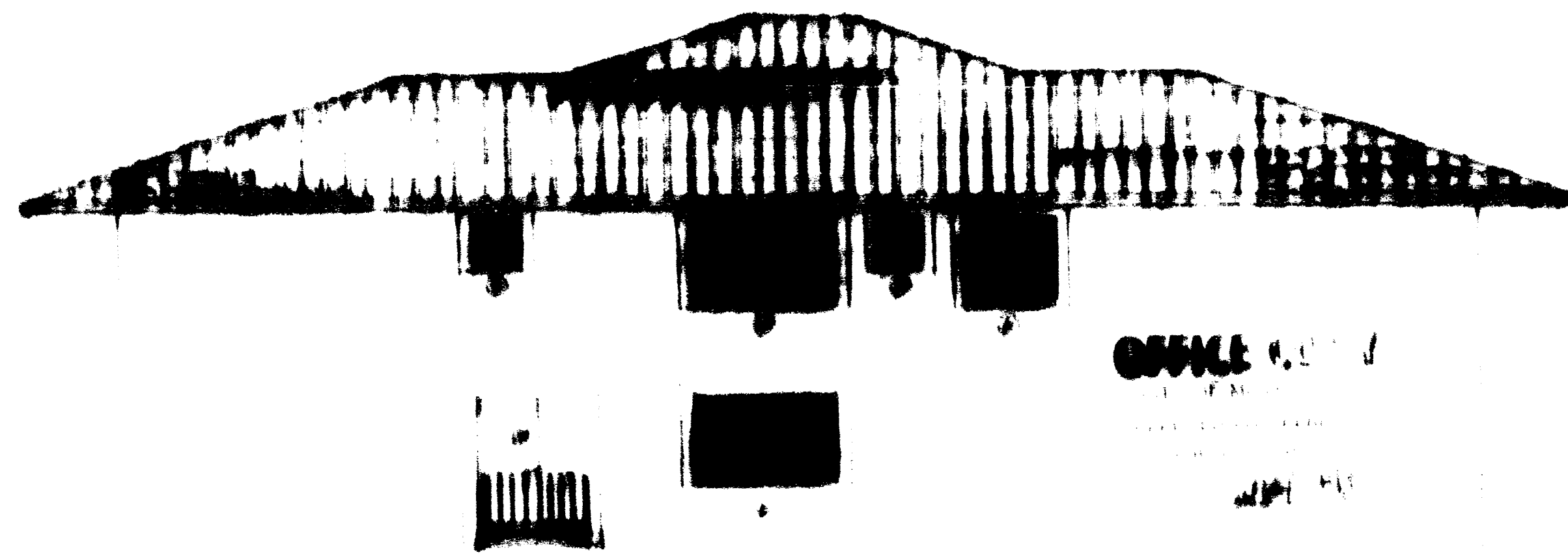
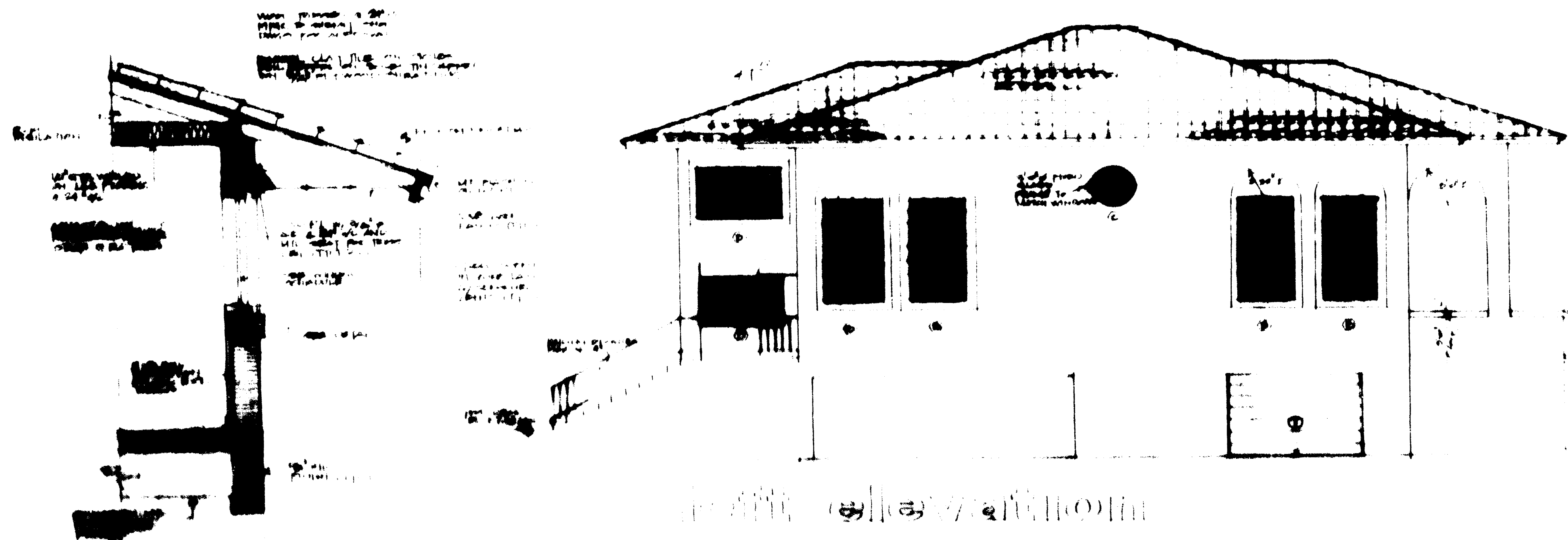


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of the
Attorney General
Washington, D.C.
1944



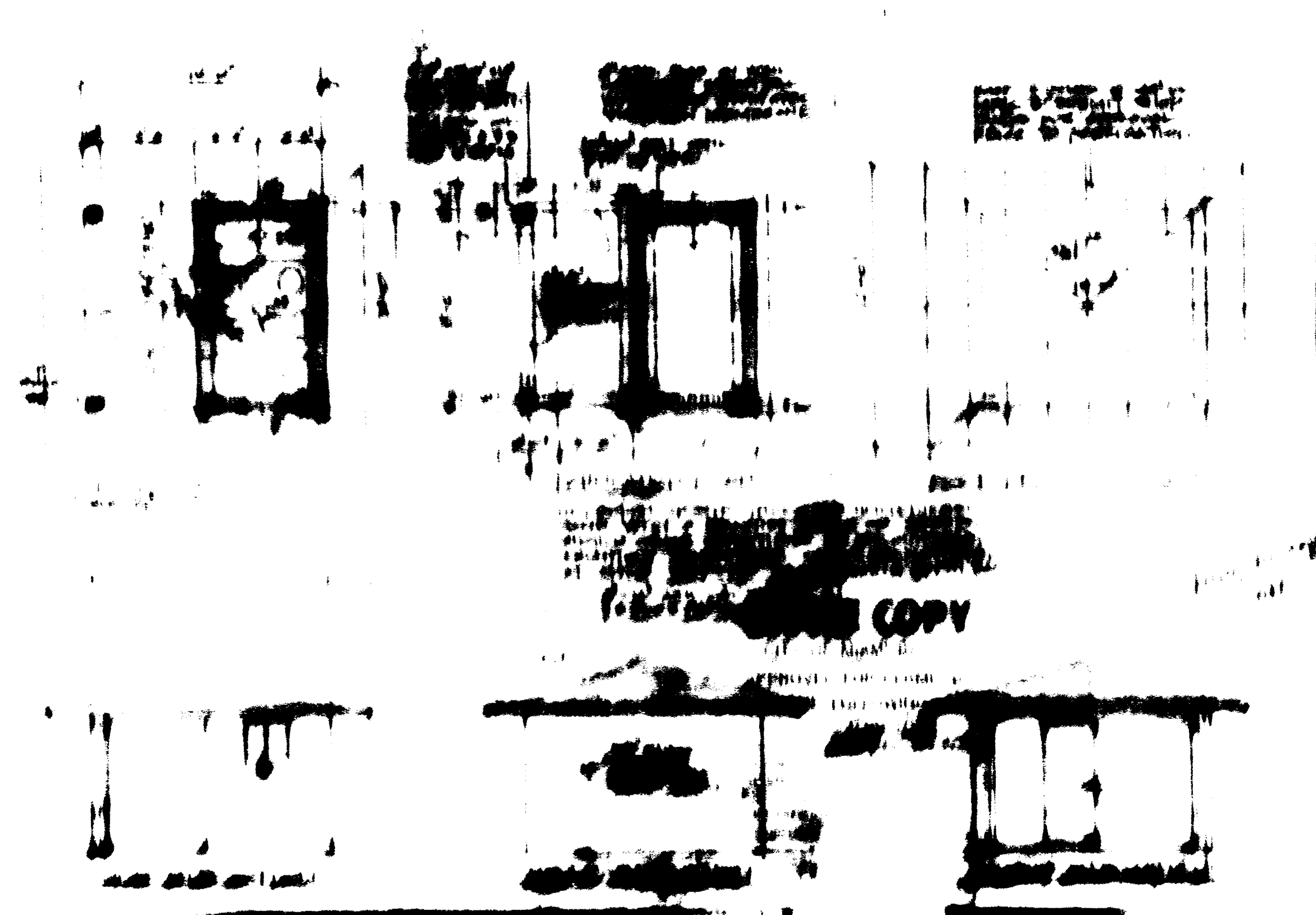
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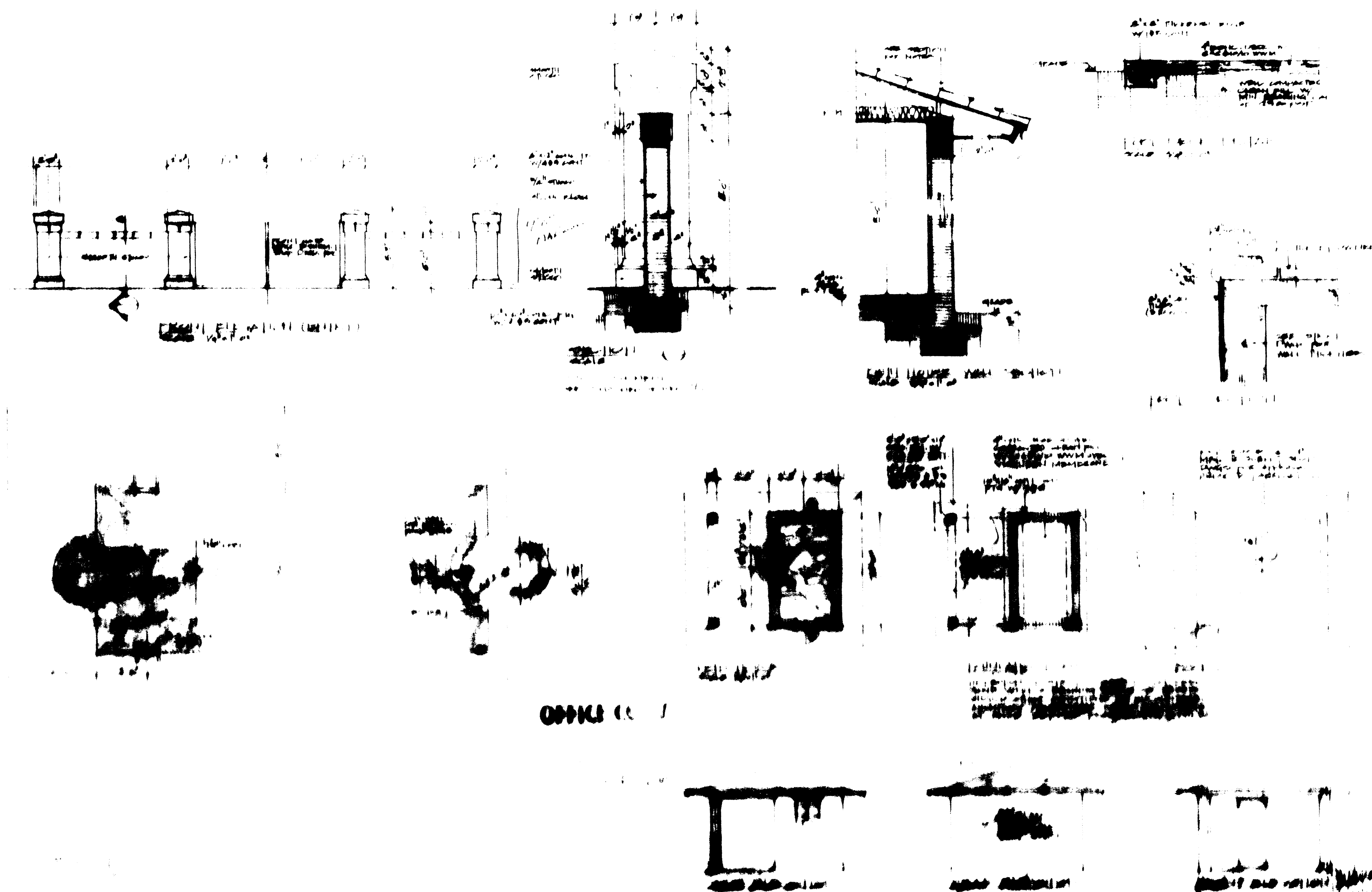


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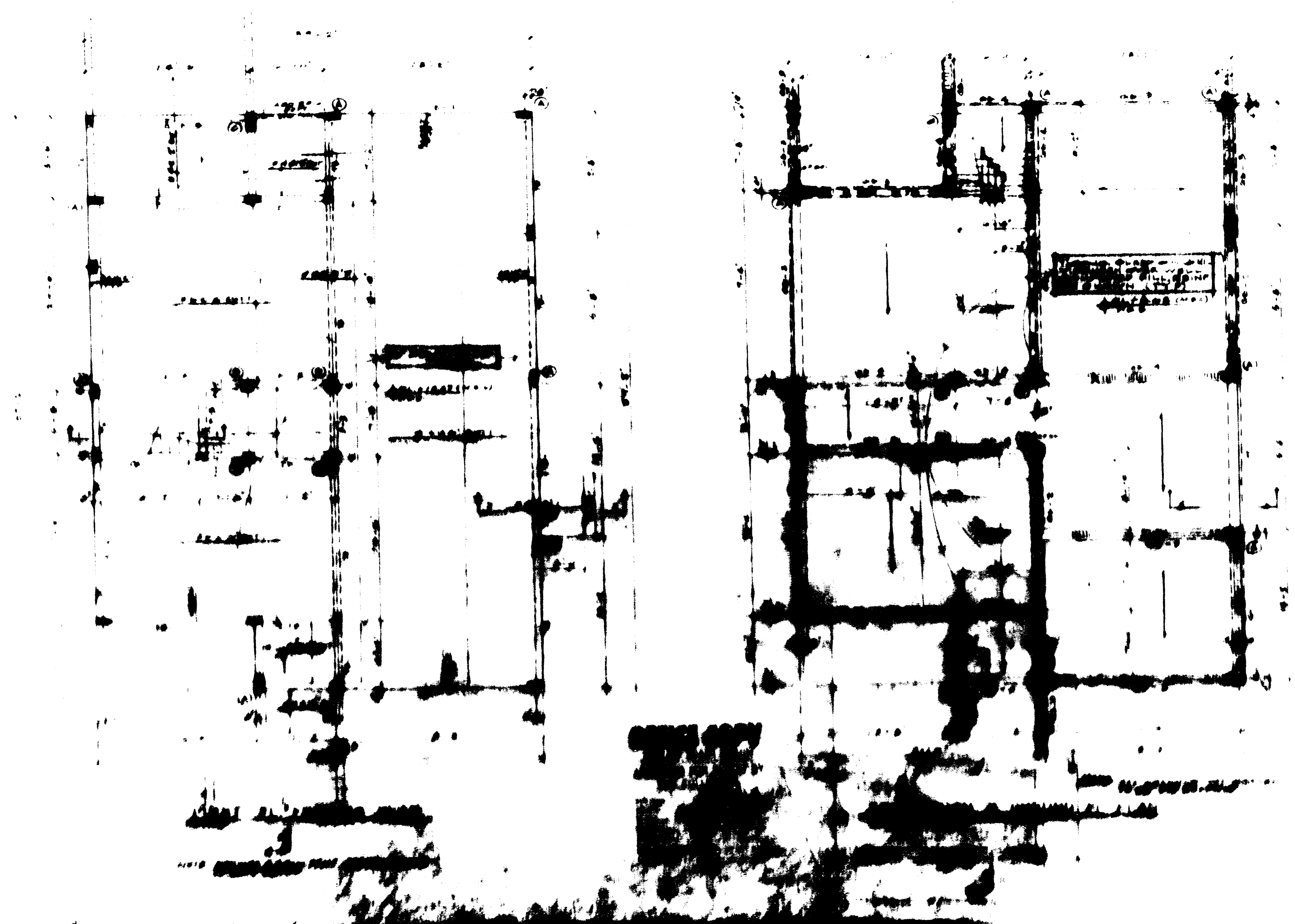
MICHAEL ANGEL GONZALEZ



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second floor plan



first floor plan

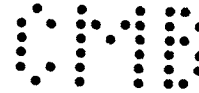


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WIGUE, ANGE, GONZALEZ

92482

B1300961



"Delivering Excellence Every Day"

SECTION 1524

HIGH VELOCITY HURRICANE ZONES-- REQUIRED OWNERS NOTIFICATION FOR ROOFING CONSIDERATIONS

1524.1 Scope. As it pertains to this section, it is the responsibility of the roofing contractor to provide the owner with the required roofing permit, and to explain to the owner the content of this section. The provisions of Chapter 15 of the *Florida Building Code, Building* govern the minimum requirements and standards of the industry for roofing system installations. Additionally, the following items should be addressed as part of the agreement between the owner and the contractor. The owner's initial in the designated space indicates that the item has been explained.

1. Aesthetics-workmanship: The workmanship provisions of Chapter 15 (High Velocity Hurricane Zone) are for the purpose of providing that the roofing system meets the wind resistance and water intrusion performance standards. Aesthetics (appearance) are not a consideration with respect to workmanship provisions. Aesthetic issues such as color or architectural appearance, that are not part of a zoning code, should be addressed as part of the agreement between the owner and the contractor.

2. Rerailing wood decks: When replacing roofing, the existing wood roof deck may have to be rerailed in accordance with the current provisions of Chapter 16 (High Velocity Hurricane Zones) of the Florida Building Code. (The roof deck is usually concealed prior to removing the existing roof system).

3. Common roofs: Common roofs are those which have no visible delineation between neighboring units (i.e. townhouses, condominiums, etc.). In buildings with common roofs, the roofing contractor and/or owner should notify the occupants of adjacent units of roofing work to be performed.

4. Exposed ceilings: Exposed, open beam ceilings are where the underside of the roof decking can be viewed from below. The owner may wish to maintain the architectural appearance; therefore, roofing nail penetrations of the underside of the decking may not be acceptable. The owner provides the option of maintaining this appearance.

5. Ponding water: The current roof system and/or deck of the building may not drain well and may cause water to pond (accumulate) in low-lying areas of the roof. Ponding can be an indication of structural distress and may require the review of a professional structural engineer. Ponding may shorten the life expectancy and performance of the new roofing system. Ponding conditions may not be evident until the original roofing system is removed. Ponding conditions should be corrected.

6. Overflow scuppers (wall outlets): It is required that rainwater flow off so that the roof is not overloaded from a build up of water. Perimeter/edge walls or other roof extensions may block this discharge if overflow scuppers (wall outlets) are not provided. It may be necessary to install overflow scuppers in accordance with the requirements of: Chapter 15 and 16 herein and the *Florida Building Code, Plumbing*.

7. Ventilation: Most roof structures should have some ability to vent natural airflow through the interior of the structural assembly (the building itself). The existing amount of attic ventilation shall not be reduced. **Exception:** Attic spaces, designed by a Florida-licensed engineer or registered architect to eliminate the attic venting, venting shall not be required.

Owner's/Agent's Signature:

Donald M. Alstruth

Date:

11 / 16 / 12

Contractor's Signature:

M. G.

Permit Number:

Property Address:

1649 W 88 ST Miami Beach

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 government entities such as water management's districts, state agencies, or federal agencies.

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

Review Type
Structural
Zoning
Engineering
Public Works

City of Miami Beach
Building Department
Roofing Permit
OFFICE COPY

Initials

H

Date

11/20/12

Bond

N/A

N/A

N/A

11/20/12

11/20/12

2012

0118

Florida Building Code Edition 2010
High-Velocity Hurricane Zone Uniform Permit Application Form.

12012

Section A (General Information)

Master Permit No. _____ Process No. _____

Contractor's Name AdS Roofing Corp.

Job Address 1649 W 22 St

ROOF CATEGORY

- ☐ Low Slope ☐ Mechanically Fastened Tile ☒ Mortar/Adhesive Set Tile
☐ Asphaltic Shingles ☐ Metal Panel/Shingles ☐ Wood Shingles/Shakes
☐ Prescriptive BUR-RAS 150

ROOF TYPE

- ☐ New Roof ☒ Reroofing ☐ Recovering ☐ Repair ☐ Maintenance

ROOF SYSTEM INFORMATION

Low Slope Roof Area (SF)

0

Steep Sloped Roof Area (SF)

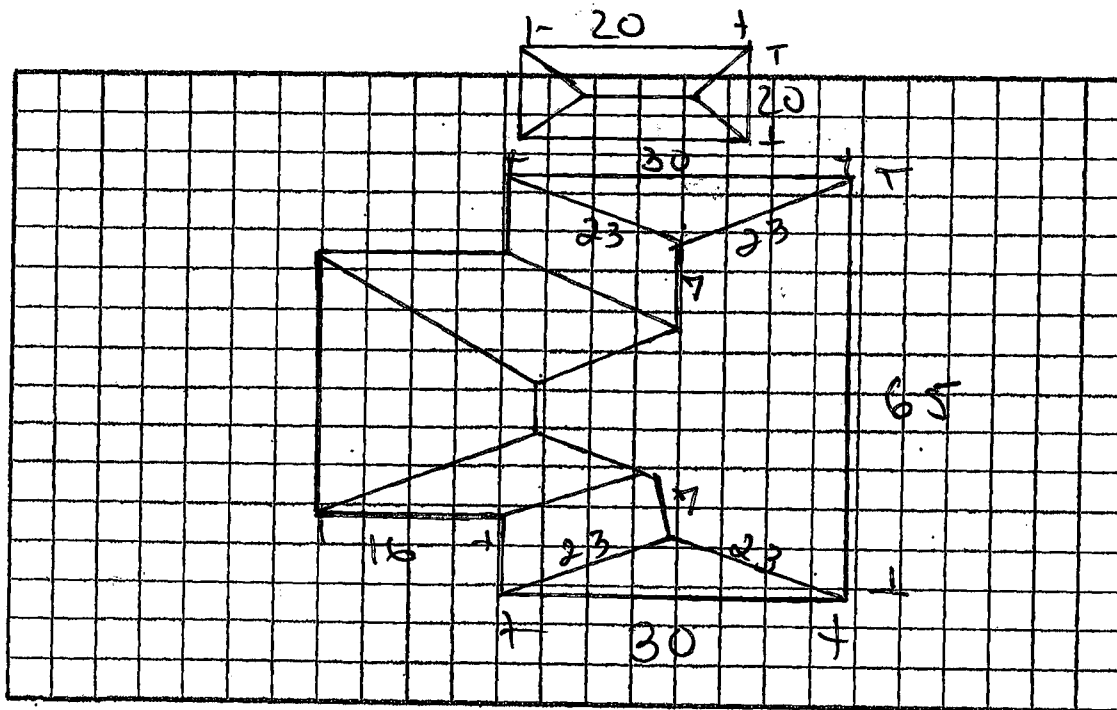
4034 SF

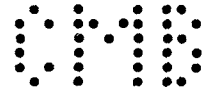
Total (SF)

4034 SF

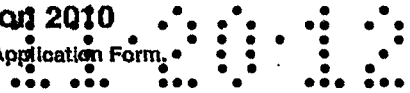
Section B (Roof Plan)

Sketch Roof Plan: Illustrate all levels and sections, roof drains, scuppers, overflow scuppers and overflow drains. Include dimensions of sections and levels, clearly identify dimensions of elevated pressure zones and location of parapets.





Florida Building Code Edition 2010
High-Velocity Hurricane Zone Uniform Permit Application Form



Section D (Steep Sloped Roof System)

Roof System Manufacturer: <u>Boral Roofing LLC</u>
Notice of Acceptance Number: <u>12-0308-25</u>
Minimum Design Wind Pressures, If Applicable (From RAS 127 or Calculations): P1: <u>-40.9</u> P2: <u>71.3</u> P3: <u>105.4</u>

Polyfoam Med Paddy Application
40.4

Secondary Water Barrier - Polyglass Polystick Strip IRX

Steep Sloped Roof System Description

Roof Slope: <u>4</u> : 12	Deck Type: <u>Plywood 5/8</u>
	Type Underlayment: <u>All Weather Empire Base Sheet</u>
	Insulation: <u>N/A</u>
	Fire Barrier: <u>N/A</u>
Ridge Ventilation? <u>N/A</u>	Fastener Type & Spacing: <u>1 1/4" Ring Shank nails 12" field 6" lap</u>
	Adhesive Type: <u>Polyfoam AH 160</u>
	Type Cap Sheet: <u>CertainTeed underlayment</u>
Mean Roof Height: <u>24'</u>	Roof Covering: <u>Saxony Slate</u>
	Type & Size Drip Edge: <u>2x3gal 0.26 GA. 1 1/4" Ring Shank nails 4" on</u>

010 1 20 12
tion Form.

Section E (Tile Calculations)

For Moment based tile systems, choose either Method 1 or 2. Compare the values for M_f with the values from M_r . If the M_f values are greater than or equal to the M_r values, for each area of the roof, then the tile attachment method is acceptable.

Method 1 "Moment Based Tile Calculations Per RAS 127"

$(P_1) \frac{40.9 \times \lambda \cdot 200}{\lambda} = 8.18 \cdot \text{Mg} \cdot \frac{6.97}{\lambda} = M_1 \cdot 1.21$ Product Approval M_f 40.4
 $(P_2) \frac{71.3 \times \lambda \cdot 200}{\lambda} = 14.26 \cdot \text{Mg} \cdot \frac{6.97}{\lambda} = M_2 \cdot 7.29$ Product Approval M_f 40.4
 $(P_3) \frac{105.4 \times \lambda \cdot 200}{\lambda} = 21.08 \cdot \text{Mg} \cdot \frac{6.97}{\lambda} = M_3 \cdot 14.11$ Product Approval M_f 40.4

< OK for foam application
Med Paddy

Method 2 "Simplified Tile Calculations Per Table Below"

Required Moment of Resistance (M_r) From Table Below _____ Product Approval M_r _____

M _r required Moment Resistance*					
Mean Roof Height → Roof Slope ↓	15'	20'	25'	30'	40'
2:12	34.4	36.5	38.2	39.7	42.2
3:12	32.2	34.4	36.0	37.4	39.8
4:12	30.4	32.2	33.8	35.1	37.3
5:12	28.4	30.1	31.6	32.8	34.9
6:12	26.4	28.0	29.4	30.5	32.4
7:12	24.4	25.9	27.1	28.2	30.0

*Must be used in conjunction with a list of moment based tile systems endorsed by the Broward County Board of Rules and Appeals.

For Uplift based tile systems use Method 3. Compared the values for F^U with the values for F_t . If the F^U values are greater than or equal to the F_t values, for each area of the roof, then the tile attachment method is acceptable.

Method 3 "Uplift Based Tile Calculations Per RAS 127"

(P_1 : _____ $\times L$ _____ = _____ $\times w$: = _____) - W : _____ $\times \cos \theta$ _____ = F_{r1} _____ Product Approval F' _____

(P₂: _____ × L _____ = _____ × W: = _____) - W: _____ × cos θ _____ = F₂ _____ Product Approval F' _____

(P_3 : _____ $\times L$ _____ = _____ $\times W$: = _____) - W : _____ $\times \cos \theta$ _____ = F_3 _____ Product Approval Form _____

Where to Obtain Information		
Description	Symbol	Where to find
Design Pressure	P1 or P2 or P3	RAS 127 Table 1 or by an engineering analysis prepared by PE based on ASCE 7
Mean Roof Height	H	Job Site
Roof Slope	θ	Job Site
Aerodynamic Multiplier	λ	Product Approval
Restoring Moment due to Gravity	M_g	Product Approval
Attachment Resistance	M_f	Product Approval
Required Moment Resistance	M_g	Calculated
Minimum Attachment Resistance	F'	Product Approval
Required Uplift Resistance	F _r	Calculated
Average Tile Weight	W	Product Approval
Tile Dimensions	L = length W = width	Product Approval

All calculations must be submitted to the building official at the time of permit application.

0118

11-20-12



HTWM16 & HTWM20 STRAP TIE, WOOD TO MASONRY

	ULTIMATE LOADS			ALLOWABLE LOAD	1/8-INCH DEFLECTION		
UPLIFT	4230	3978	4120	1326	2010	2080	2144

ALLOWABLE DESIGN LOADS:

UPLIFT	1326	LBS
--------	------	-----

TEST MATERIAL:

WOOD: DF-L/SP & S-P-F
 CMU: 8", C-90 BLOCK, 2000 psi Grout

ATTACHMENT:

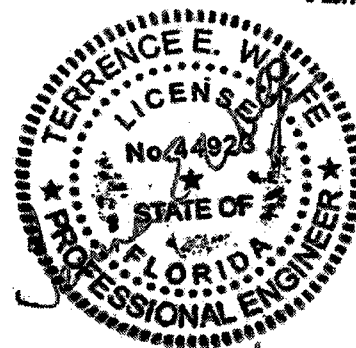
TO WOOD: (8) 10d x 1-1/2" long Nails, .148" Dia.
 TO CONCRETE: (4) 1/4" x 1-3/4" Wedge Bolts by Powers

References: Stork Twin City Testing Corporation
 Project Number 324039
 Date: December 23, 2004

Table 11P NDS 2005 Page 98

Powers Fasteners pg 51

State of Florida
 C.O.A.
 # 20779

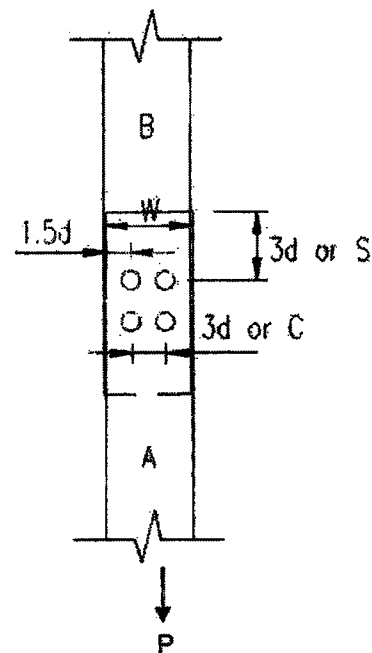


8/18/09

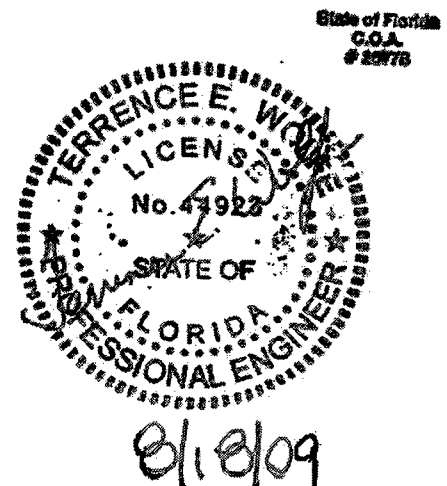


RATIONAL ANALYSIS OF HTWM16&20

Thickness of truss plate in contact with the nail head (t_1)=	0.087 in.
F_u (ksi)=	56 ksi
F_y (ksi)=	42 ksi
Gross Width of Truss Plate	1.4375 in.
Width of Truss Tab (W) =	1.438 in.
No. of Truss Tabs =	1.000 ea
Distance S (Minimum $3d$)=	0.346 in.
Distance C (Minimum $3d$)=	0.75 in.
Nominal Diameter of Holes =	0.1875 in.
Number of Holes in Horizontal Row =	2
Number of Holes in Vertical Row =	7
Total Number of Nails =	14
Wood Substrate	S-P-F
Specific Gravity "G" =	42
Nail Type =	10D
Nail Length =	1.5 in.
Common Wire Nail Diameter=	0.148 in.



- *NOTE: 1. Spacing between nails shall not be less than $3d$.
 *NOTE: 2. Minimum longitudinal edge distance is $3d$.
 *NOTE: 3. Minimum transverse edge distance is $1.5d$.



CALCULATIONS

0118

CHECK ALLOWABLE LOAD ON STEEL PLATE

Yielding of Gross Section

$$T_n = A \cdot F_y = 5.253 \text{ kips}$$

$$T_a (FS=1.67) = 3.145 \text{ kips}$$

Fracture of Net section

1) Normal Path

$$L_n = W \cdot \# \text{ of Nails} \cdot d = 1.063 \text{ in.}$$

$$L_c = L_n = 1.063 \text{ in.}$$

2) Shear Path

$$L_s = \# \text{ of Nails in Hor Row} \cdot 2 \cdot (S-d/2) + \text{Vert}$$

$$\text{nails} = 1.009 \text{ in.}$$

$$L_c = .6 \cdot L_s = 0.605 \text{ in.}$$

3) Block Tear-out

$$L_n = C-d = 0.563 \text{ in.}$$

$$L_s = 2 \cdot (S-d/2) = 0.505 \text{ in.}$$

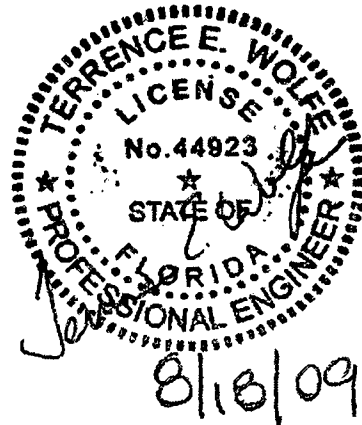
$$L_c = L_n + .6 \cdot L_s = 0.865 \text{ in.}$$

$$\text{Controlling Fracture} = 0.605 \text{ in.}$$

$$T_n = A \cdot F_u = 2.950 \text{ kips}$$

$$T_a (FS=2.00) = 1.475 \text{ kips}$$

State of Florida
C.O.E.
25979



CHECK ALLOWABLE LOAD ON FASTENERS

NDS 2005 Edition Table 11P, Pg 98

Common wire nail in single shear w/14ga side-plate: Z=

105.00 #/nail

Reduction for embedment: $6D < p < 10D$

1.5 NONE

See Table 11P Notes

Therefore Z =

105

For Wind Uplift $Z_w =$

168 #/nail

Use Load Duration Factor 1.6

Total Number of Nails =

8 ea

Attachment to truss

Total Fastener Uplift Capacity =

1344 #

Total Number of Nails =

8 ea

Attachment to truss

Total Fastener Uplift Capacity =

1344 #

Controlling Nail Connection for Uplift

1344 #

Total Number of Masonry Screws

4

1/4" x 1-3/4" Wedge Bolt

1480 lbs

C90 block Pg 51

Allowable Load = Ultimate/4.0

370 lbs

Anchor Spacing:

2.125 in.

Rs = 0.84 **

Edge Distance from top of wall

2.5 in.

Re = 1

Allowable load= Base Load x Rs x Re

310.8 lbs/screw

Use Load Duration Factor 1

For Wind Uplift =

310.8 lbs/screw

Controlling Masonry Connection for Uplift

1243.2 lbs

** Adjusted to match actual full scale testing of hurricane strap into CMU filled cells.

0718

11-20-12



Letter of Certification

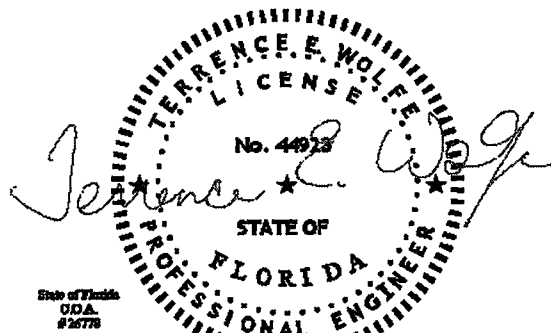
To: To Whom It May Concern
From: Terrence E. Wolfe, P.E.
Date: 7/11/2009
Re: 9B-72.110 Criteria for Certification of Independence

Force Engineering & Testing, Inc. nor Terrence E. Wolfe, P.E. have, nor do they intend to acquire or will acquire, a financial interest in United Steel Products Company.

Force Engineering & Testing, Inc. nor Terrence E. Wolfe, P.E. is owned, operated or controlled by United Steel Products Company.

Terrence E. Wolfe, P.E. as the evaluator/validator does not have, nor will acquire, a financial interest in United Steel Products Company.

Terrence E. Wolfe, P.E. as the evaluator/validator does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.



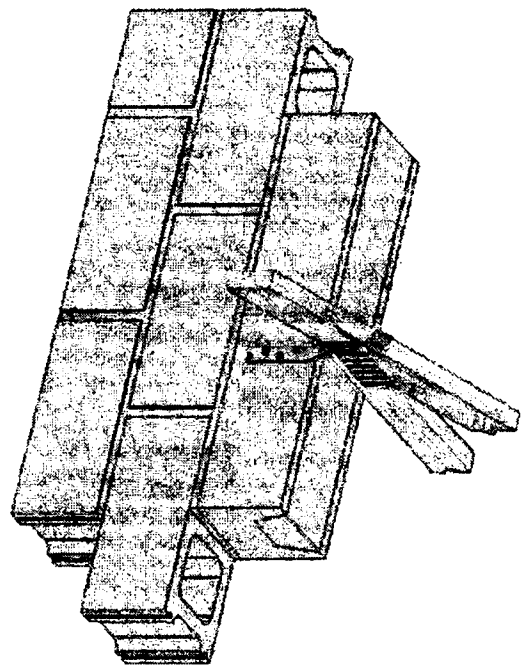
July 10, 2009

070

11.00.12



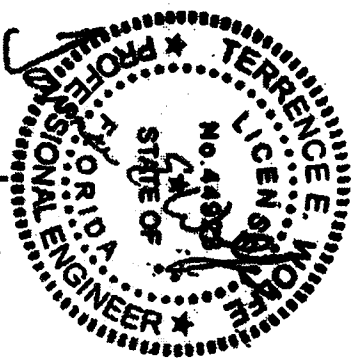
HTWM Masonry Twist Straps



USP Steel No.	Steel Gauge	Dimensions			Fastener Schedule				Allowable Loads (lbs.) ¹		
		W	L	L1	CMU ²		Concrete ³		TieBar/Rebar ⁴	Nail Type	Uplift
					Qty	Wedge Bolts	Qty	Wedge Bolts			
HTW18	14	1-1/4	18	5-3/4	4	1/4" x 1-3/4"	4	1/4" x 1-3/4"	8	10d x 1-1/2"	160%
HTW420	14	1-1/4	20	7-3/4	4	1/4" x 1-3/4"	4	1/4" x 1-3/4"	8	10d x 1-1/2"	1240

(1) Allowable loads have been increased 50% for wind or seismic loads; no further increases shall be permitted.
(2) 10d x 1-1/2 nails are 9 gauge (0.148" diameter) by 1-1/2" long.
(3) Use Powers Fasteners 1/4" x 1-3/4" Wedge-Bolts, or equal, installed in accordance with manufacturer's specification.

State of Florida
C.O.A.
#58776



8/18/09



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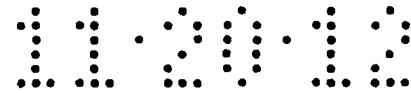
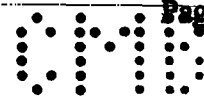


Product Approval

USER: Public User

[Product Approval Menu](#) >
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 Application Detail

FL #	FL6223-R1				
Application Type	Revision				
Code Version	2007				
Application Status	Approved				
Comments					
Archived					
Product Manufacturer	United Steel Products Company				
Address/Phone/Email	703 Rogers Drive Montgomery, MN 56069 (952) 898-8651 tgrevious@mll.com				
Authorized Signature	Todd Grevious tgrevious@mll.com				
Technical Representative	Robert Lutz, P.E.				
Address/Phone/Email	11910 62nd Street North Largo, FL 33773 (800) 443-6442 rlutz@uspconnectors.com				
Quality Assurance Representative					
Address/Phone/Email					
Category	Structural Components				
Subcategory	Wood Connectors				
Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer Evaluation Report - Hardcopy Received				
Florida Engineer or Architect Name who developed the Evaluation Report	Terrence E. Wolfe				
Florida License	PE-44923				
Quality Assurance Entity	PFS Corporation				
Quality Assurance Contract Expiration Date	12/31/2015				
Validated By	Locke Bowden Validation Checklist - Hardcopy Received				
Certificate of Independence	FL6223_R1_COI_Letter_of_Certification-USP.pdf				
Referenced Standard and Year (of Standard)	<table border="0"> <thead> <tr> <th><u>Standard</u></th> <th><u>Year</u></th> </tr> </thead> <tbody> <tr> <td>ASTM D1761</td> <td>2000</td> </tr> </tbody> </table>	<u>Standard</u>	<u>Year</u>	ASTM D1761	2000
<u>Standard</u>	<u>Year</u>				
ASTM D1761	2000				
Equivalence of Product Standards Certified By					
Sections from the Code					



Product Approval Method

Method 1 Option D

Date Submitted

03/04/2009

Date Validated

09/02/2009

Date Pending FBC Approval

07/20/2009

Date Approved

09/17/2009

Summary of Products

FL #	Model, Number or Name	Description
6223.1	GTWS Girder Truss Connector	GTWS2T,GTWS3T,GTWS4T
Limits of Use Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: N/A Other: GTWS2T, GTWS3T and GTWS4T: See Installation Details for Allowable Design Load. Not for HVHZ Zones.		Installation Instructions FL6223 R1 II GTWS Installation Details.pdf Verified By: Terrence E. Wolfe, PE 44923 Created by Independent Third Party: Yes Evaluation Reports FL6223 R1 AE ASTM D Equivalence Letter 3-5-09.pdf FL6223 R1 AE GTWS Analysis.pdf FL6223 R1 AE Table II Lateral Design Values.pdf Created by Independent Third Party: Yes
6223.2	HTWM Strap Tie	HTWM16,HTWM20 Strap Tie Wood to Masonry; HTWM16,HTWM20 Strap Tie Wood to Concrete
Limits of Use Approved for use in HVHZ: Yes Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: N/A Other: HTWM16,HTWM20 Strap Tie, Wood to Masonry; HTWM16, HTWM20 Strap Tie, Wood to Concrete: See Installation Details for Allowable Design Load. For use in HVHZ Zones.		Installation Instructions FL6223 R1 II HTWM Installation Details.pdf Verified By: Terrence E. Wolfe, PE. 44923 Created by Independent Third Party: Yes Evaluation Reports FL6223 R1 AE HTWM Analysis.pdf Created by Independent Third Party: Yes
6223.3	HUGT Girder TieDown	HUGT2,HUGT3,HUGT4 Girder Tiedown (Non-Sloped Application); HUGT2,HUGT3,HUGT4 Girder Tiedown (Sloped Application 3:12 to 8:12)
Limits of Use Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: N/A Other: HUGT2,HUGT3,HUGT4 Girder Tiedown (Non-Sloped and Sloped): See Installation Details for Allowable Load. Not for use in HVHZ Zones.		Installation Instructions FL6223 R1 II HUGT Installation detail.pdf Verified By: Terrence E. Wolfe, PE 44923 Created by Independent Third Party: Yes Evaluation Reports FL6223 R1 AE ASTM D Equivalence Letter 3-5-09.pdf FL6223 R1 AE HUGT 2-ply, 3-ply, 4-ply spruce, pine, fir Analysis.pdf FL6223 R1 AE HUGT2, HUGT3, HUGT4 Girder Tiedown sloped Analysis.pdf Created by Independent Third Party: Yes
6223.4	MSH213-SK45	MSH213-SK45 Strap Hangars
Limits of Use Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: N/A Other: MSH213-SK45 Strap Hangars, Face Mount; MSH213-SK45 Strap Hangars, Top Mount Minimum Nailing; MSH213-SK45 Strap Hangar, Top Mount Maximum Nailing: See Installation Details for Load. Not for use in HVHZ Zones.		Installation Instructions FL6223 R1 II MSH213 I-R Installation details.pdf Verified By: Terrence E. Wolfe 44923 Created by Independent Third Party: Yes Evaluation Reports FL6223 R1 AE ASTM D Equivalence Letter 03-5-09.pdf FL6223 R1 AE MSH213 SK45 Face Mount analysis.pdf FL6223 R1 AE MSH213 SK45 Top Mount Min. Nailing analysis.pdf FL6223 R1 AE MSH214 SK 45 Top Mount Max. Nailing analysis.pdf Created by Independent Third Party: Yes
6223.5	RFUS	RFUS Uplift Girder Tie (Wood to Wood)
Limits of Use Approved for use in HVHZ: Yes Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: N/A Other: RFUS: See Installation Details for Allowable Design Load. For use in HVHZ Zones.		Installation Instructions FL6223 R1 II RFUS Installation details.pdf Verified By: Terrence E. Wolfe 44923 Created by Independent Third Party: Yes Evaluation Reports FL6223 R1 AE RFUS Analysis.pdf FL6223 R1 AE Table II Lateral Design Values.pdf Created by Independent Third Party: Yes

6223.6	RUSC	RUSC Uplift Girder Tie (Wood to Wood)
Limits of Use Approved for use in HVHZ: Yes Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: N/A Other: RUSC: See Installation Details for Allowable Design Load. For use in HVHZ Zones.		Installation Instructions FL6223_R1_11_RUSC_Installation_details.pdf Verified By: Terrence E. Wolfe, PE 44929 Created by Independent Third Party: Yes Evaluation Reports FL6223_R1_AE_RUSC_analysis.pdf FL6223_R1_AE_Table II Lateral Design Values.pdf Created by Independent Third Party: Yes

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Department of Community Affairs
 Florida Building Code Online
 Codes and Standards
 2555 Shumard Oak Boulevard
 Tallahassee, Florida 32399-2100
 (850) 487-1824, Fax (850) 414-8436
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Product Approval Accepts:





DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY
AFFAIRS (PERA)

BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 25 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/pera/

Nu-Vue Industries, Inc.

1055 East 29 Street

Hialeah, Florida 33013

SCOPE: This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA-Product Control Section 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 Section (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. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section 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 Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series NVTa, NVTAS, NVBH, NVUH, NVRT and NVTH Wood Connectors.

APPROVAL DOCUMENT: Drawing No. NU-2, titled "NVTa and NVTAS, NVBH 24 and NVUH, NVRT and NVTH", sheets 1 through 4 of 4, dated 02/13/2003, with last revision dated 01/25/2012, prepared by Nu-Vue Industries, Inc., signed and sealed by Vipin N. Tolat, P.E., bearing the Miami-Dade County Product Control revision stamp with the Notice of Acceptance (NOA) number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: None

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and 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 NOA # 08-0326.11 and consists of this page 1 and evidence pages E1 and E2, as well as approval document mentioned above.

The submitted documentation was reviewed by Carlos M. Utrera, P.E.



[Signature]
06/04/2012

NOA No: 12-0130.33
Expiration Date: August 21, 2013
Approval Date: June 14, 2012
Page 1

0718

11.20.12

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS "Submitted under NOA No. 05-0701.04"

1. Drawing No. NU-2, titled "NVTa and NVTAS, NVBH 24 and NVUH, NVRT and NVTH", sheets 1 through 4 of 4, dated 02/13/2003, with last revision dated 01/25/2012, prepared by Nu-Vue Industries, Inc., signed and sealed by Vipin N. Tolat, P.E.

B. TEST "Submitted under NOA No. 05-0701.04"

Test reports on wood connectors per ASTM D1761 by Product Testing, Inc., signed and sealed by C. R. Caudel, P.E. and S. E. Black, P.E.

	<u>Report No.</u>	<u>Wood Connector</u>	<u>Direction</u>	<u>Date</u>
1.	PT 02-4073	NVTA	Upward	11/06/02
2.	PT 02-4075	NVTA	Upward	11/07/02
3.	PT 02-4074	NVTA	Upward	11/06/02
4.	PT 02-3938	NVTA	Upward	08/06/02
5.	PT 03-4177	NVRT36	Upward	02/03/03
6.	PT 03-4202	NVRT36-T	Upward	02/19/03
7.	PT 03-4271	NVRT36-T	Upward	03/27/03
8.	PT 03-4270	NVRT24-T	Upward	03/27/03
9.	PT 02-4095	NVUH26	Up & Downward	01/17/03
10.	PT 02-4096	NVBH24	Up & Downward	12/03/02
11.	31-22456.0002	NVTA & NVTAS	Lateral	07/06/02
12.	PT 04-4698	NVTH24	Upward Parallel/Perpendicular	04/15/04
13.	PT 04-5036	NVTH24	Upward Load	12/10/04

C. CALCULATIONS "Submitted under NOA No. 04-1202.01"

Report of Design Capacities prepared by Vipin N. Tolat, P.E.

	<u>Product Model</u>	<u>No. of Pages</u>	<u>Date</u>	<u>Signature</u>
1.	NVBM24	7 through 8	05/05/03	V. N. Tolat, P.E.
2.	NVRT	9 through 14	05/05/03	V. N. Tolat, P.E.
3.	NVTA & NVTAS	1 through 6	05/05/03	V. N. Tolat, P.E.
4.	NVTA & NVTAS	1 through 14	02/06/03	V. N. Tolat, P.E.
5.	NVRT	15 through 15	07/07/03	V. N. Tolat, P.E.


06/04/2012

Carlos M. Utrera, P.E.

Product Control Examiner

NOA No: 12-0130.33

Expiration Date: August 21, 2013

Approval Date: June 14, 2012

Nu-Vue Industries, Inc.

0418
11.20.12

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

D. QUALITY ASSURANCE

1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA)

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Drawing No. NU-2 statement of code conformance to 2010 FBC, dated 01/25/2012, issued, signed and sealed by Vipin N. Tolat, P.E.

"Submitted under NOA No. 04-1202.01"

2. No Financial Interest and code compliance letter issued by Vipin N. Tolat, P.E., on 03/26/2003 signed and sealed by Vipin N. Tolat, P.E.


06/04/2012

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No: 12-0130.33
Expiration Date: August 21, 2013
Approval Date: June 14, 2012

Truss Anchors NVTB and Riveted Truss Anchors with Seat NVTAS

H Length (in)	Product Code		Gauge seat	Gauge strap
	NVTA-16	NVTAS 212		
16	NVTA-16	NVTAS 212	20	14
18	NVTA-18	NVTAS 214	20	14
20	NVTA-20	NVTAS 216	20	14
22	NVTA-22	NVTAS 218	20	14
24	NVTA-24	NVTAS 220	20	14
26	NVTA-26	NVTAS 222	20	14
28	NVTA-28	NVTAS 224	20	14
30	NVTA-30	NVTAS 226	20	14
36	NVTA-36	NVTAS 232	20	14
48	NVTA-48	NVTAS 244	20	14

No. of Fasteners each strap 10d	Maximum Allowable Load (lbs)			
	Uplift Single Strap	Uplift Double Straps ¹ (NVTA-30)	L1 Single & Double Straps	L2 Single & Double Straps
5	757	1514	250	500
6	805	1610	250	500
7	854	1708	250	500
8	902	*1804	250	500
9	951	*1902	250	500
10	999	*1998	250	500
11	1048	*2096	250	500
12	1096	*2192	250	500
13	1145	*2290	250	500
14	1193	*2290	250	500

*Note: For 8 or more nails per strap, use double truss for double straps.

***Note:** For 8 or more nails per strap, use double truss for double straps.

1. Steel shall conform to ASTM A653, structural grade 33 (Min. yield 33 ksi) and a minimum galvanized coating of G 60 per ASTM A525.

2. Allowable loads are based on National Design specifications (NDS) for wood construction, 2005 Edition and Florida Building Code 2010

3. Design loads are for Southern Pine species with a specific gravity of 0.55. Allowable loads for other species shall be adjusted accordingly.

4. Nail values are based on NDS table 11P, $G=0.55$ for common wire nails and have been reduced for Penetration Depth factor C_p .

5. Allowable loads for wind uplift have already been increased by a duration factor of 1.8 for anchor nails. 33% steel stress increase is not used in the tabulated values.

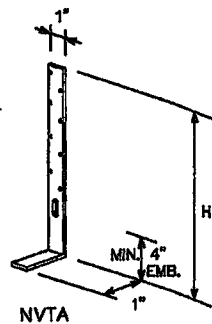
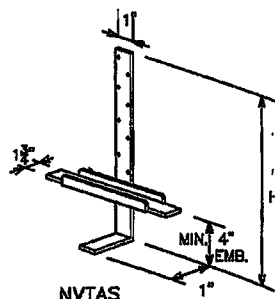
6. Allowable loads for more than one direction for a single connection cannot be added together. A design load which can be divided into components in the directions given must be evaluated as follows:

$$\frac{\text{Actual Uplift}}{\text{Allowable Uplift}} + \frac{\text{Actual L1}}{\text{Allowable L1}} + \frac{\text{Actual L2}}{\text{Allowable L2}} \leq 1.0$$

7. Allowable loads are based on 1½" thick wood members unless otherwise noted.

8. All tie beams and grouted concrete masonry shall comply with chapters 10 and 21 of 2010 FBC. Concrete for tie beams and grout and mortar for concrete masonry shall be a min. of 2500 psi. Concrete masonry shall comply with ASTM C80.

9. All tests have been conducted in accordance with ASTM D-1781.



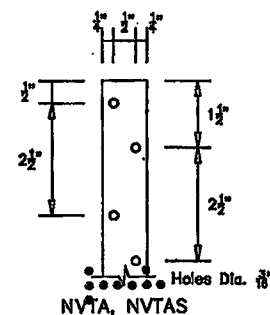
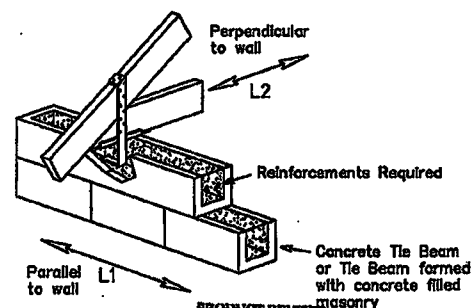
Truss Anchors NVTa and Riveted Truss Anchors with Seat NVTAS

H Length (in)	Product Code		Gauge seat	Gauge strap
16	NVTA-16	NVTAS 212	20	14
18	NVTA-18	NVTAS 214	20	14
20	NVTA-20	NVTAS 216	20	14
22	NVTA-22	NVTAS 218	20	14
24	NVTA-24	NVTAS 220	20	14
26	NVTA-26	NVTAS 222	20	14
28	NVTA-28	NVTAS 224	20	14
30	NVTA-30	NVTAS 226	20	14
36	NVTA-36	NVTAS 232	20	14
48	NVTA-48	NVTAS 244	20	14

No. of Fasteners each strap 10d x 1.5"	Maximum Allowable Load (lbs)			
	Uplift Single Strap	Uplift Double Straps ₂ (NVTA) ₆	L1 Single & Double Straps	L2 Single & Double Straps
5	1032	2236	250	500
6	1127	2254	385	565
7	1138	2272	520	630
8	1144	*2288	520	630
9	1153	*2306	520	630
10	1161	*2322	520	630
11	1170	*2340	520	630
12	1178	*2356	520	630
13	1187	*2374	520	630

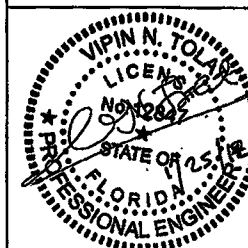
*Note: For 8 or more nails per strap, use double truss for double straps.

*Note: For 8 or more nails per strap, use double truss for double straps.



VIPIN N. TOLAT, PE (CIVIL)
FL REG. # 12847
15123 LANTERN CREEK LANE
HOUSTON, TX 77068

PRODUCT REVISED ^{masonry}
 as complying with the Florida
 Building Code
 Acceptance No. 12-0130, 33
 Expiration Date 08/21/2013
 NE By *[Signature]*
 Adjunct/Dedic Product Control



1/25/12

Nu-Vue Industries, Inc.
1053-1059 East 29 Street
Ft. Meigs, Florida 33015
PHONE: (305) 894-0397
FAX: (305) 894-0399

NVTA AND NVTAS TRUSS ANCHORS

DWG #:	Sheet:	Date:	Revisions:
NU-2	1 of 4	FEB. 13, 2003	July 7, 2003 Jan. 15, 2005 Jan. 10, 2006 July 18, 2008

Jan 25, 2012

TABLE 3
NVBH 24 BUTTERFLY HANGER

SIZE	PRODUCT CODE	GAUGE	FASTENER SCHEDULE		ALLOWABLE LOADS (lbs.)
			HEADER B4	JOIST B4	DOWNWARD GRAVITY LOADS
2x4	NVBH24	18	12	8	1113

Notes:

1. Use all specified fasteners in schedule to achieve values indicated.
2. Values are based on 1 1/2" header and joist thickness.
3. See General Notes, Sheet 1.

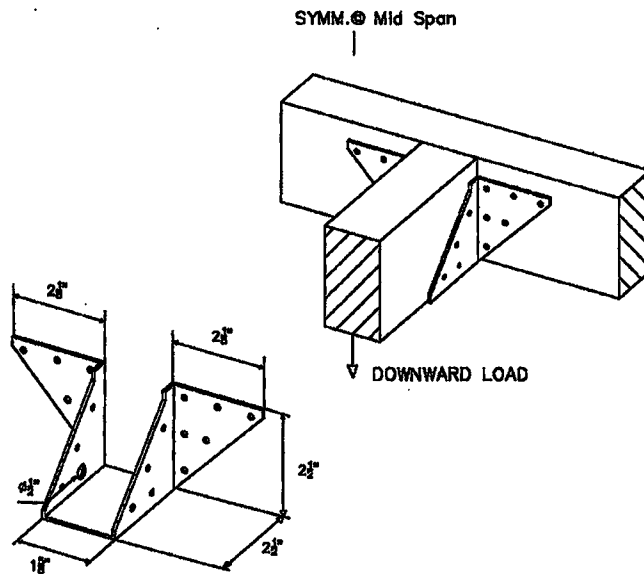
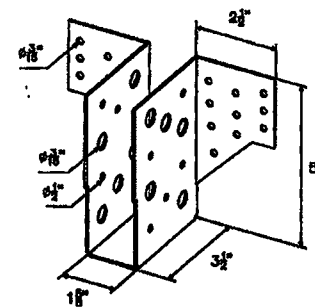


TABLE 4
NVUH 26 JOIST HANGER

SIZE	PRODUCT CODE	GAUGE	FASTENER SCHEDULE		ALLOWABLE LOADS (lbs.)	
			HEADER 16d	JOIST 10d x 1 1/2"	DOWNWARD GRAVITY LOADS	WIND UPLIFT LOAD
2x6	NVUH26	14	20	10	2233	1213

Notes:

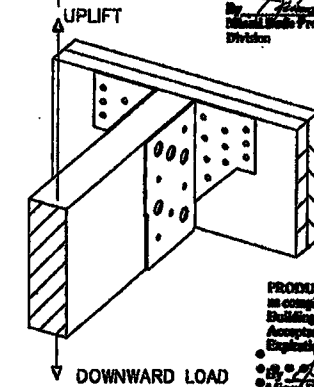
1. Use all specified fasteners in schedule to achieve values indicated.
2. Values are based on 3" header thickness and 1 1/2" joist thickness.
3. See General Notes, Sheet 1.



VIPIN N. TOLAT, PE (CIVIL)
FL REG. # 12847
15123 LANTERN CREEK LANE
HOUSTON, TX 77068

Signature
7/27/06

SYMM. @ Mid Span



PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 02-0130-23
Expiration Date 08/21/2013
By *Signature*
Miami Trade Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 02-0301-04
Expiration Date 08/21/08
By *Signature*
Miami Trade Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 02-0326-11
Expiration Date 08/21/2013
By *Signature*
Miami Trade Product Control

Nu-Vue Industries, Inc.			
1053-1059 East 28 Street Hialeah, Florida 33013 PHONE: (305) 894-0397 FAX: (305) 894-0398			
NVBH 24 AND NVUH 26 HANGERS			
DWG #:	Sheet:	Date:	Revisions:
NU-2	2 of 4	FEB. 13, 2005	July 7, 2005 June 15, 2005 Jan. 10, 2005 July 19, 2006

TABLE 5
NVRT Flat and Twisted Rafter Ties

Length (in)	Product Code	Gauge
12	NVRT-12	14
16	NVRT-16	14
18	NVRT-18	14
20	NVRT-20	14
22	NVRT-22	14
24	NVRT-24	14
30	NVRT-30	14
36	NVRT-36	14
48	NVRT-48	14

16d Fasteners		Maximum Uplift Load (lbs)	
TOTAL	In each member	Flat Ties	Twisted Ties
8	4	725	724
10	5	881	880
12	6	998	996
14	7	1135	1132

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-030-33
Expiration Date 08/21/2013
By *[Signature]*
Miami Dade Product Control
Division

Notes:

- Specify "F" for Flat and "T" for Twisted when ordering.
- Fastener values are based on a minimum 1 1/2" thick wood members.
- * Indicates no. of nails in each connected wood member.
- See General Notes, sheet 1.

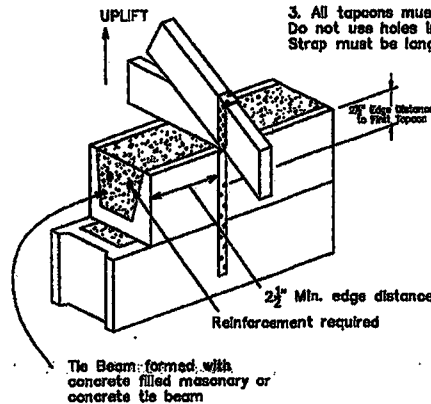
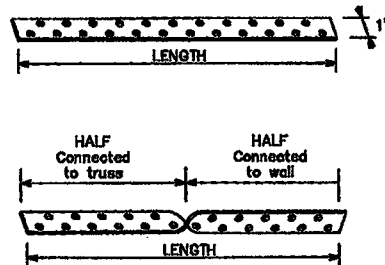
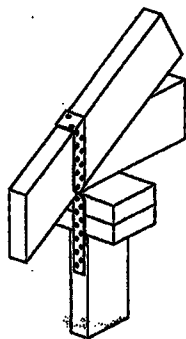


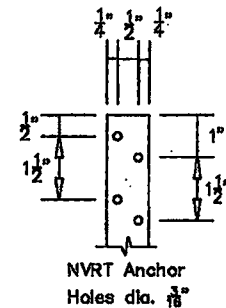
TABLE 6
NVRT Twisted Rafter Ties to Concrete Tie Beams
or Concrete Filled Masonry

Length (in)	Product Code	Gauge
12	NVRT-12	14
16	NVRT-16	14
18	NVRT-18	14
20	NVRT-20	14
22	NVRT-22	14
24	NVRT-24	14
30	NVRT-30	14
36	NVRT-36	14
48	NVRT-48	14

No. of 16d nails to Wood Framing	No. of 1/2" diameter Tapcons to Concrete	Maximum Uplift Load (lbs)
4	6	722
5	7	856
6	8	991
7	9	1125

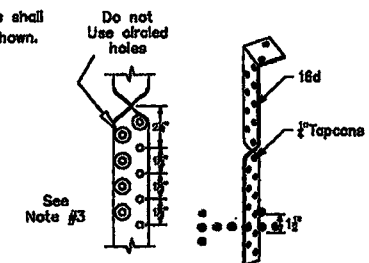
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 08-030-11
Expiration Date 08/21/2013
By *[Signature]*
Miami Dade Product Control
Division

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 07-030-04
Expiration Date 08/21/2013
By *[Signature]*
Miami Dade Product Control
Division



Notes:

- ITW tapcons shall be embedded a minimum of 1 1/2" into concrete tiebeam or tiebeam formed with concrete filled masonry. ITW tapcons shall have a min. edge distance of 2 1/2" and minimum spacing of 1 1/2" as shown.
- See General Notes, sheet 1.
- All tapcons must be in the same row space at 1 1/2" on centers. Do not use holes in the opposite row. Strap must be long enough to accommodate required tapcons.



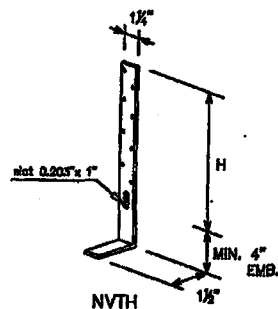
VIPIN N. TOLAT, PE (CIVIL)
FL. REG. # 12847
15123 LANTERN CREEK LANE
HOUSTON, TX 77068

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7/27/06

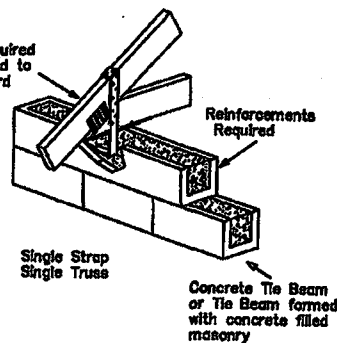
Nu-Vue Industries, Inc.
1053-1059 East 29 Street
Miami, Florida 33013
PHONE: (805) 684-0897
FAX: (305) 684-0388

NVRT FLAT AND TWISTED RAFTER TIES

DWG. #	Sheet	Date	Revisions
NU-2	3 of 4	FEB. 13, 2003	July 7, 2003 June 10, 2003 Jan. 10, 2003 July 16, 2003

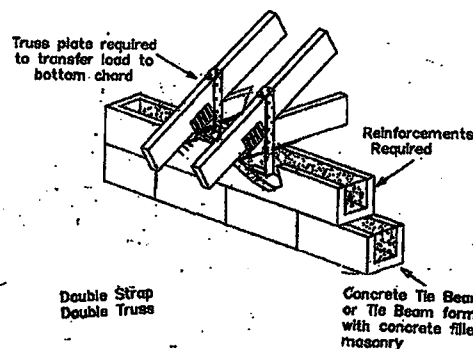


Truss plate required
to transfer load to
bottom chord



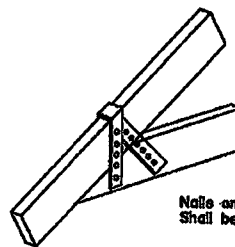
Single Strap
Single Truss

Concrete Tie Beam
or Tie Beam formed
with concrete filled
masonry



Double Strap
Double Truss

Concrete Tie Beam
or Tie Beam formed
with concrete filled
masonry



Nails on Front & Back
Shall be off centered

5 Nails in Front (Min.)
Nails 10d x 1.5"

PRODUCT REVISED
to comply with the Florida
Building Code
Acceptance No. 2-0130-33
Expiration Date 08/21/2013
By [Signature]
Miami Dade Product Control

PRODUCT REVISED
to comply with the Florida
Building Code
Acceptance No. 08-0226-11
Expiration Date 08/21/2013
By [Signature]
Miami Dade Product Control
Division

PRODUCT REVISED
to comply with the Florida
Building Code
Acceptance No. 05-0210-04
Expiration Date 08/21/2013
By [Signature]
Miami Dade Product Control
Division

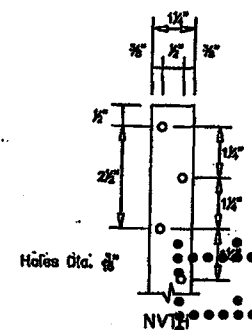
VIPIN N. TOLAT, PE (CIVIL)
FL REG. # 12847
16183 LANTERN CREEK LANE
HOUSTON, TX 77068

CONJEL
7/27/06

TABLE 7

Truss Anchors NVTH

H Length (in)	Product Code	Gauge seat	Gauge strap	No. of Fasteners in each Strap 10d x 1.5"	Maximum Uplift Loads (lbs)	
					Single Strap on Single Truss	Double Straps on Double Truss
12	NVTH-16	18	14	5	1032	2064
14	NVTH-18	18	14	6	1222	2444
16	NVTH-20	18	14	7	1275	2550
18	NVTH-22	18	14	8	1329	2658
20	NVTH-24	18	14	9	1383	2766
22	NVTH-26	18	14	10	1437	2874
24	NVTH-28	18	14	11	1490	2980
26	NVTH-30	18	14	12	1544	3088
32	NVTH-36	18	14	13	1598	3196
44	NVTH-48	18	14			



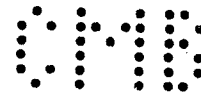
Nu-Vue Industries, Inc.
2050-1080 East 29th Street
Hialeah, Florida 33016
Phone: (305) 694-0897
Fax: (305) 694-0898

NVTH ANCHORS

DWG #:	Sheet:	Date:	Revisions:
NU-2	4 of 4	JULY 19, 2006	



DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS (PERA)
BOARD AND CODE ADMINISTRATION DIVISION



MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/pera

NOTICE OF ACCEPTANCE (NOA)

Boral Roofing LLC.
7575 Irvine Center Drive, Suite 100
Irvine, CA. 92618

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA - Product Control Section 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 Section (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. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section 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 Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Saxony (Shake, Slate, Split Shake) Concrete Roof Tile

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and 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 revises NOA# 11-0907.10 and consists of pages 1 through 8.
The submitted documentation was reviewed by Alex Tigera.



NOA No.: 12-0308.25
Expiration Date: 12/16/12
Approval Date: 06/21/12
Page 1 of 8

018

11.20.12

ROOFING ASSEMBLY APPROVAL

Category: Roofing
Sub Category: Roofing Tiles
Material: Concrete

1. SCOPE

This renews and revises a system using Saxony (Shake, Slate and Split Shake) Concrete Roof Tile, as manufactured Boral Roofing LLC in Lake Wales, FL and described in Section 2 of this Notice of Acceptance. For locations where the pressure requirements, as determined by applicable Building Code does not exceed the design pressure values obtained by calculations in compliance with RAS 127 using the values listed in section 4 herein. The attachment calculations shall be done as a moment based system.

2. PRODUCT DESCRIPTION

<u>Manufactured by Applicant</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
Monier Lifetile LLC Saxony (Shake, Slate and Split Shake) Tile	l = 16½" w = 12-3/8" .6" thick	TAS 112	Flat, interlocking, high pressure extruded concrete roof tile equipped with two nail holes. For direct deck or battened nail-on, mortar or adhesive set applications.
Trim Pieces	l = varies w = varies varying thickness	TAS 112	Accessory trim, concrete roof pieces for use at hips, rakes, ridges and valley terminations. Manufactured for each tile profile.

2.1 MANUFACTURING LOCATION

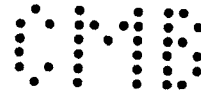
2.1.1. Lake Wales, FL.

2.2 EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
Redland Technologies	7161-03 Appendix III	Static Uplift Testing PA 102 & PA 102(A)	Dec. 1991
The Center for Applied Engineering, Inc.	94-084	Static Uplift Testing PA 101 (Mortar Set)	May 1994
The Center for Applied Engineering, Inc.	94-060A	Static Uplift Testing PA 101 (Adhesive Set)	March, 1994
The Center for Applied Engineering, Inc.	25-7183-6	Static Uplift Testing PA 102 (2 Quik-Drive Screws, Direct Deck)	Feb. 1995
The Center for Applied Engineering, Inc.	25-7183-5	Static Uplift Testing PA 102 (2 Quik-Drive Screws, Battens)	Feb. 1995
The Center for Applied Engineering, Inc.	25-7214-1	Static Uplift Testing PA 102 (1 Quik-Drive Screw, Direct Deck)	March, 1995



NOA No.: 12-0308.25
 Expiration Date: 12/16/12
 Approval Date: 06/21/12
 Page 2 of 8



2.2 EVIDENCE SUBMITTED:

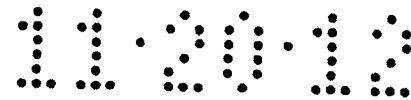
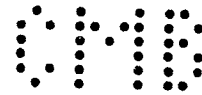
<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
The Center for Applied Engineering, Inc.	25-7214-5	Static Uplift Testing PA 102 (1 Quik-Drive Screw, Battens)	March, 1995
Redland Technologies	7161-03	Wind Tunnel Testing	Dec. 1991
Redland Technologies	Appendix II Letter Dated Aug. 1, 1994	PA 108 (Nail-On) Wind Tunnel Testing	Aug. 1994
Redland Technologies	P0631-01	PA 108 (Nail-On) Wind Tunnel Testing	July 1994
Redland Technologies	P0402	PA 108 (Mortar Set) Withdrawal Resistance Testing of screw vs. smooth shank nails	Sept. 1993
The Center for Applied Engineering, Inc.	Project No. 307025	Wind Driven Rain	Oct. 1994
Celotex Corporation Testing Service	Test #MDC-77 520109-1	PA 100 Static Uplift Testing	Dec. 1998
Celotex Corporation Testing Service	520111-4 520191-1	PA 101 Static Uplift Testing	March 1999
Walker Engineering, Inc.	Calculations	PA 101 Aerodynamic Multiplier	June 2007
Walker Engineering, Inc.	Evaluation Calculations	25-7094	February 1996
Walker Engineering, Inc.	Evaluation Calculations	25-7496	April 1996
Walker Engineering, Inc.	Evaluation Calculations	25-7584	December 1996
		25-7804b-8	
		25-7804-4 & 5	
		25-7848-6	
Walker Engineering, Inc.	Evaluation Calculations	25-7183	March 1995
Walker Engineering, Inc.	Calculations	Two Patty Adhesive Set System	April 1999
Walker Engineering, Inc.	Calculations	Restoring Moment Due to Gravity	June 2007
Nutting Engineering	129	TAS-112	Jan. 2007

3. LIMITATIONS

- 3.1 Fire classification is not part of this acceptance.
- 3.2 For mortar or adhesive set tile applications, a static field uplift test shall be performed in accordance with TAS 106.
- 3.3 Applicant shall retain the services of a Miami-Dade County Certified Laboratory to perform quarterly test in accordance with TAS 112, appendix 'A'. Such testing shall be submitted to the Building Code Compliance Office for review.
- 3.4 Minimum underlayment shall be in compliance with the applicable Roofing Applications Standards listed section 4.1 herein.
- 3.5 30/90 hot mopped underlayment applications may be installed perpendicular to the roof slope unless stated otherwise by the underlayment material manufacturers published literature.
- 3.6 This acceptance is for wood deck applications. Minimum deck requirements shall be in compliance with applicable building code.



NOA No.: 12-0308.25
 Expiration Date: 12/16/12
 Approval Date: 06/21/12
 Page 3 of 8



4. INSTALLATION

- 4.1 Saxony (Shake, Slate and Split Shake) Concrete Roof Tile and its components shall be installed in strict compliance with Roofing Application Standard RAS 118, RAS 119, and RAS 120.
- 4.2 Data For Attachment Calculations

Table 1: Average Weight (W) and Dimensions (l x w)

Tile Profile	Weight-W (lbf)	Length-l (ft)	Width-w (ft)
Saxony (Shake, Slate and Split Shake) Tile	11.8	1.375	1.02

Table 2: Aerodynamic Multipliers - λ (ft³)

Tile Profile	λ (ft ³) Batten Application	λ (ft ³) Direct Deck Application
Saxony (Shake, Slate and Split Shake) Tile	0.185	0.200

Table 3: Restoring Moments due to Gravity - M_g (ft-lbf)

Tile Profile	2":12"		3":12"		4":12"		5":12"		6":12"		7":12" or greater	
	Battens	Direct Deck	Battens	Direct Deck	Battens	Direct Deck	Battens	Direct Deck	Battens	Direct Deck	Battens	Direct Deck
Saxony (Shake, Slate and Split Shake) Tile	6.63	7.14	6.56	7.07	6.47	6.97	6.34	6.83	6.18	6.66	6.02	6.48

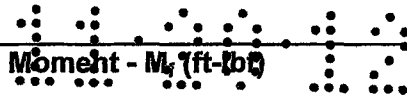
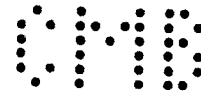


**Table 4: Attachment Resistance Expressed as a Moment - M_r (ft-lbf)
for Nail-On Systems**

Tile Profile	Fastener Type	Direct Deck (min 15/32" plywood)	Direct Deck (min. 19/32" plywood)	Battens
Saxony (Shake, Slate and Split Shake) Tile	2-10d Ring Shank Nails	30.9	38.1	17.2
	1-10d Smooth or Screw Shank Nail	7.3	9.8	4.9
	2-10d Smooth or Screw Shank Nails	14.0	18.8	7.4
	1 #8 Screw	30.8	30.8	18.2
	2 #8 Screw	51.7	51.7	24.4
	1-10d Smooth or Screw Shank Nail (Field Clip)	24.3	24.3	24.2
	1-10d Smooth or Screw Shank Nail (Eave Clip)	19.0	19.0	22.1
	2-10d Smooth or Screw Shank Nails (Field Clip)	35.5	35.5	34.8
	2-10d Smooth or Screw Shank Nails (Eave Clip)	31.9	31.9	32.2

**Table 6: Attachment Resistance Expressed as a Moment M_r (ft-lbf)
for Two Patty Adhesive Set Systems**

Tile Profile	Tile Application	Minimum Attachment Resistance
Saxony (Shake, Slate and Split Shake) Tile	Adhesive ¹	31.3 ²

1 See manufactures component approval for installation requirements.

2 Flexible Products Company TileBond Average weight per patty 13.9 grams.

3M™ 2-Component Foam Roof Tile Adhesive AH-160. Average weight per patty 8 grams.

**Table 7: Attachment Resistance Expressed as a Moment - M_r (ft-lbf)
for Single Patty Adhesive Set Systems**

Tile Profile	Tile Application	Minimum Attachment Resistance
Saxony (Shake, Slate and Split Shake) Tile	3M™ 2-Component Foam Roof Tile Adhesive AH-160	118.9 ³
	3M™ 2-Component Foam Roof Tile Adhesive AH-160	40.4 ⁴

3 Large paddy placement of 45 grams

4 Medium paddy placement of 24 grams



NOA No.: 12-0308.25
Expiration Date: 12/16/12
Approval Date: 06/21/12
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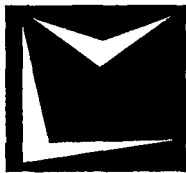
0.75

Moment - M_y (ft-lbf)

Moment - M_x (ft-lbf)

5. LABELING

All tiles shall bear the imprint or identifiable marking of the manufacturer's name or logo, or following statement: "Miami-Dade County Product Control Approved".



Or

BORAL-LIFETILE

BORAL ROOFING LLC, SAXONY TILE (LAKE WALES FL)
LOCATED UNDERNEATH TILE

6. BUILDING PERMIT REQUIREMENTS

6.1 Application for building permit shall be accompanied by copies of the following:

6.1.1 This Notice of Acceptance.

6.1.2 Any other documents required by the Building Official or applicable building code in order to properly evaluate the installation of this system.

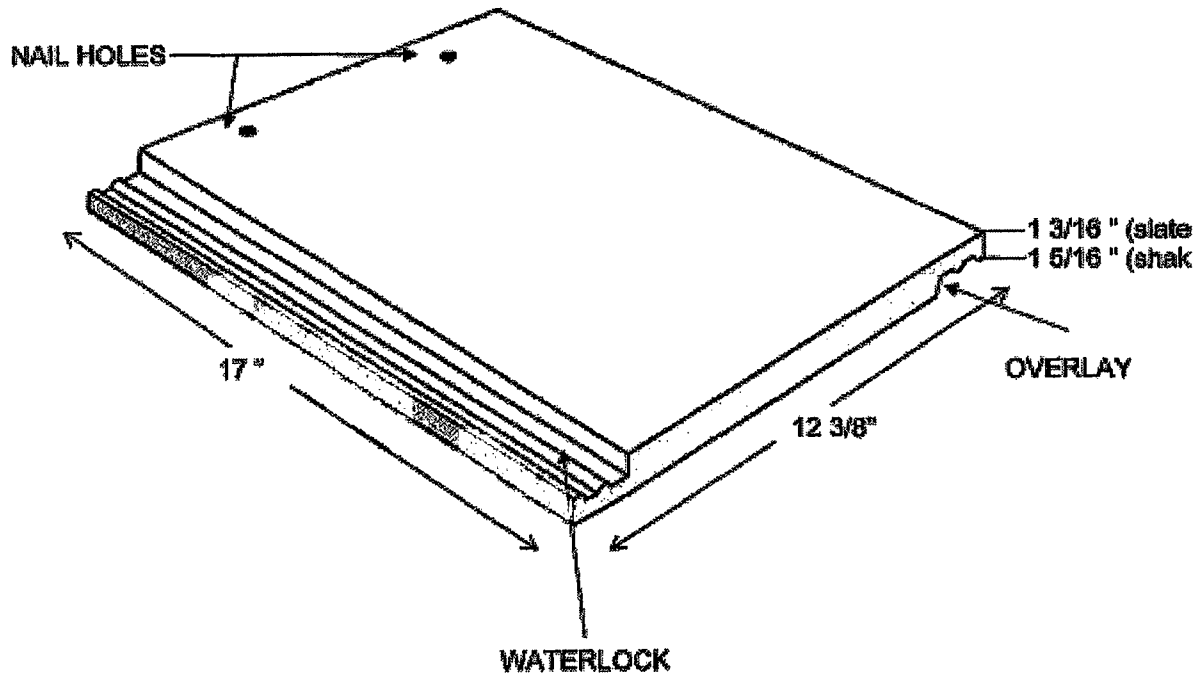


NOA No.: 12-0308.25
Expiration Date: 12/16/12
Approval Date: 06/21/12
Page 6 of 8

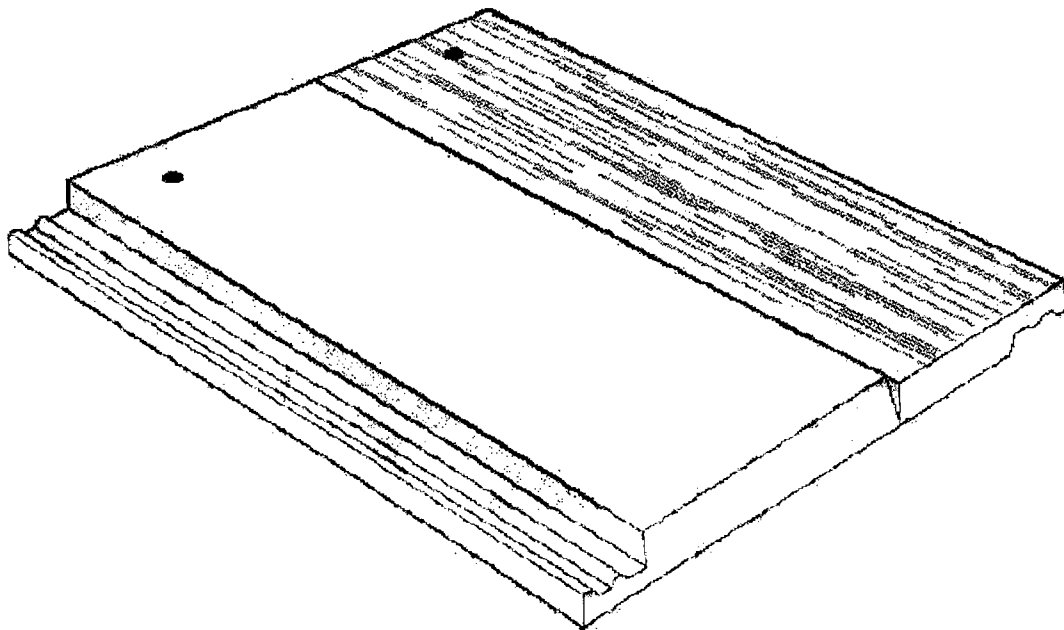
018

PROFILE DRAWINGS

11.20.12



SAXONY CONCRETE ROOF TILE (SLATE MODEL)



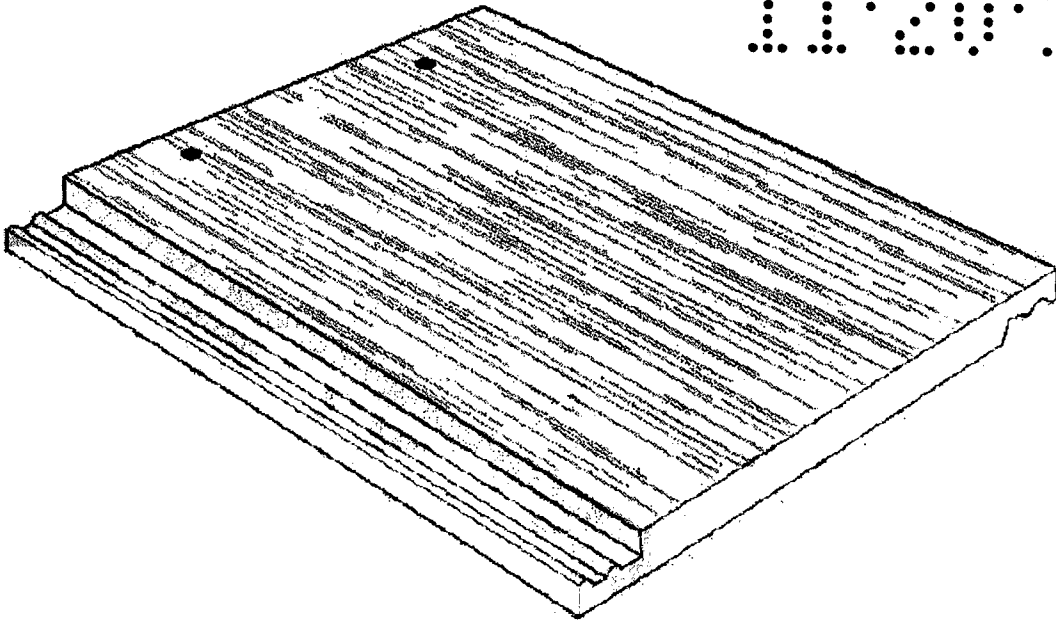
SAXONY CONCRETE ROOF TILE (SPLIT SHAKE MODEL)



NOA No.: 12-0308.25
Expiration Date: 12/16/12
Approval Date: 06/21/12
Page 7 of 8

0718

11.20.12



SAXONY CONCRETE ROOF TILE (SHAKE MODEL)

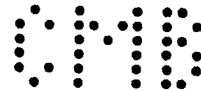
END OF THIS ACCEPTANCE



NOA No.: 12-0308.25
Expiration Date: 12/16/12
Approval Date: 06/21/12
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MIAMI-DADE

DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS (PERA)
BOARD AND CODE ADMINISTRATION DIVISION



MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

11805 SW 28 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/pera

NOTICE OF ACCEPTANCE (NOA)

3M Company
3M Center Building 0220-05-E-06
St. Paul, MN. 55144-1000

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA - Product Control Section 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 Section (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. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section 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 Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: 3M™ 2-Component Foam Roof Tile Adhesive AH-160

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and 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.

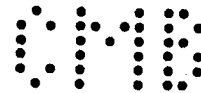
ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

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 renews and revises NOA# 11-0124.04 and consists of pages 1 through 7.
The submitted documentation was reviewed by Alex Tigera.



NOA No.: 12-0228.18
Expiration Date: 05/10/17
Approval Date: 05/10/12
Page 1 of 7



11-20-12

ROOFING COMPONENT APPROVAL:

Category: Roofing
Sub Category: Roof tile adhesive
Materials: Polyurethane

SCOPE:

This approves 3M™ 2-Component Foam Roof Tile Adhesive AH-160 as manufactured by 3M Company as described in Section 2 of this Notice of Acceptance. For the locations where the design pressure requirements, as determined by applicable building code, does not exceed the design pressure values obtained by calculations in compliance with Roofing Application Standard RAS 127, for use with approved flat, low, and high profile roof tiles system using 2-Component Foam Roof Tile Adhesive AH-160. Where the attachment calculations are done as a moment based system for single patty placement, and as an uplift based system for double patty systems

PRODUCTS MANUFACTURED BY APPLICANT:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
3M™ 2-Component Foam Roof Tile Adhesive AH-160	N/A	TAS 101	Two component polyurethane foam adhesive
Foam Dispenser RTF1000	N/A		Dispensing Equipment
ProPack® 30 & 100	N/A		Dispensing Equipment

PRODUCTS MANUFACTURED BY OTHERS:

Any Miami-Dade County Product Control Accepted Roof Tile Assembly having a current NOA which list moment resistance values with the use of 2-Component Foam Roof Tile Adhesive AH-160 roof tile adhesive.

MANUFACTURING LOCATION:

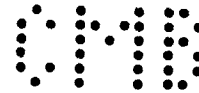
1. Tomball, TX.

PHYSICAL PROPERTIES:

<u>Property</u>	<u>Test</u>	<u>Results</u>
Density	ASTM D 1622	1.6 lbs./ft. ³
Compressive Strength	ASTM D 1621	18 PSI Parallel to rise 12 PSI Perpendicular to rise
Tensile Strength	ASTM D 1623	28 PSI Parallel to rise
Water Absorption	ASTM D 2127	0.08 Lbs./Ft ²
Moisture Vapor Transmission	ASTM E 96	3.1 Perm / Inch
Dimensional Stability	ASTM D 2126	+0.07% Volume Change @ -40° F., 2 weeks +6.0% Volume Change @ 158°F., 100% Humidity, 2 weeks
Closed Cell Content	ASTM D 2856	86%



NOA No.: 12-0228.18
Expiration Date: 05/10/17
Approval Date: 05/10/12
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Note: The physical properties listed above are presented as typical average values as determined by accepted ASTM test methods and are subject to normal manufacturing variation.

EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
Center for Applied Engineering	#94-060	TAS 101	04/08/94
	257818-1PA	TAS 101	12/16/96
	25-7438-3	SSTD 11-93	10/25/95
	25-7438-4		
	25-7438-7	SSTD 11-93	11/02/95
	25-7492	SSTD 11-93	12/12/95
Miles Laboratories Polymers Division	NB-589-631	ASTM D 1623	02/01/94
Ramtech Laboratories, Inc.	9637-92	ASTM E 108	04/30/93
Southwest Research Institute	01-6743-011	ASTM E 108	11/16/94
	01-6739-062b[1]	ASTM E 84	01/16/95
Trinity Engineering	7050.02.96-1	TAS 114	03/14/96
Celotex Corp. Testing Services	528454-2-1	TAS 101	10/23/98
	528454-9-1		
	528454-10-1		
	520109-1	TAS 101	12/28/98
	520109-2		
	520109-3		
	520109-6		
	520109-7		
	520191-1	TAS 101	03/02/99
	520109-2-1		

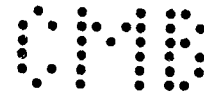
LIMITATIONS:

1. Fire classification is not part of this acceptance. Refer to the Prepared Roof Tile Assembly for fire rating.
2. 3M™ 2-Component Foam Roof Tile Adhesive AH-160 shall solely be used with flat, low, & high tile profiles.
3. Minimum underlayment shall be in compliance with the Roofing Application Standard RAS 120.
4. Roof Tile manufactures acquiring acceptance for the use of 3M™ 2-Component Foam Roof Tile Adhesive AH-160 roof tile adhesive with their tile assemblies shall test in accordance with TAS 101.
5. Roof Tile manufactures acquiring acceptance for the use of HANDI-STICK roof tile adhesive with their tile assemblies shall test in accordance with TAS 101 with section 10.4 as modified herein.

$$F' = \frac{\left(\frac{F}{2} \right) - W}{MS}$$



NOA No.: 12-0228.18
 Expiration Date: 05/10/17
 Approval Date: 05/10/12
 Page 3 of 7



INSTALLATION:

1. 3M™ 2-Component Foam Roof Tile Adhesive AH-160 may be used with any roof tile assembly having a current NOA that lists uplift resistance values with the use of 3M™ 2-Component Foam Roof Tile Adhesive AH-160.
2. 3M™ 2-Component Foam Roof Tile Adhesive AH-160 shall be applied in compliance with the Component Application section and the corresponding Placement Details noted herein. The roof tile assembly's adhesive attachment with the use of 3M™ 2-Component Foam Roof Tile Adhesive AH-160 shall provide sufficient attachment resistance, expressed as an uplift based system, to meet or exceed the uplift resistance determined in compliance with Miami-Dade County Roofing Application Standards RAS 127. The adhesive attachment data is noted in the roof tile assembly NOA.
3. 3M™ 2-Component Foam Roof Tile Adhesive AH-160 and its components shall be installed in accordance with Roofing Application Standard RAS 120, and 3M Company's 3M™ 2-Component Foam Roof Tile Adhesive AH-160 Operating Instruction and Maintenance Booklet.
4. Installation must be by a Factory Trained 'Qualified Applicator' approved and licensed by 3M Company. 3M Company shall supply a list of approved applicators to the authority having jurisdiction.
5. Calibration of the Foam Dispenser RTF1000 dispensing equipment is required before application of any adhesive. The mix ratio between the "A" component and the "B" component shall be maintained between 1.0-1.15 (A): 1.0 (B). The dispense timer shall be set to deliver 0.0175 to 0.15 pounds per tile as determined at calibration. No other settings shall be approved.
6. 3M™ 2-Component Foam Roof Tile Adhesive AH-160 shall be applied with Foam Dispenser RTF1000 or ProPack® 30 & 100 dispensing equipment only.
7. 3M™ 2-Component Foam Roof Tile Adhesive AH-160 shall not be exposed permanently to sunlight.
8. Tiles must be adhered in freshly applied adhesive. Tile must be set within 2 to 3 minutes after 3M™ 2-Component Foam Roof Tile Adhesive AH-160 has been dispensed.
9. 3M™ 2-Component Foam Roof Tile Adhesive AH-160 placement and minimum patty weight shall be in accordance with the 'Placement Details' herein. Each generic tile profile requires the specific placement noted herein.

Table 1: Adhesive Placement For Each Generic Tile Profile

Tile Profile	Placement Detail	Single Paddy Weight Min. (grams)	Two Paddy Weight per paddy Min. (grams)
Flat, Low, High Profiles	#1	35	N/A
High Profile (2 Piece Barrel)	#1	17/side on cap and 34/pan	N/A
Flat, Low, High Profiles	#2	24	N/A
Flat, Low, High Profiles	#3		8



CR18

11.30.12

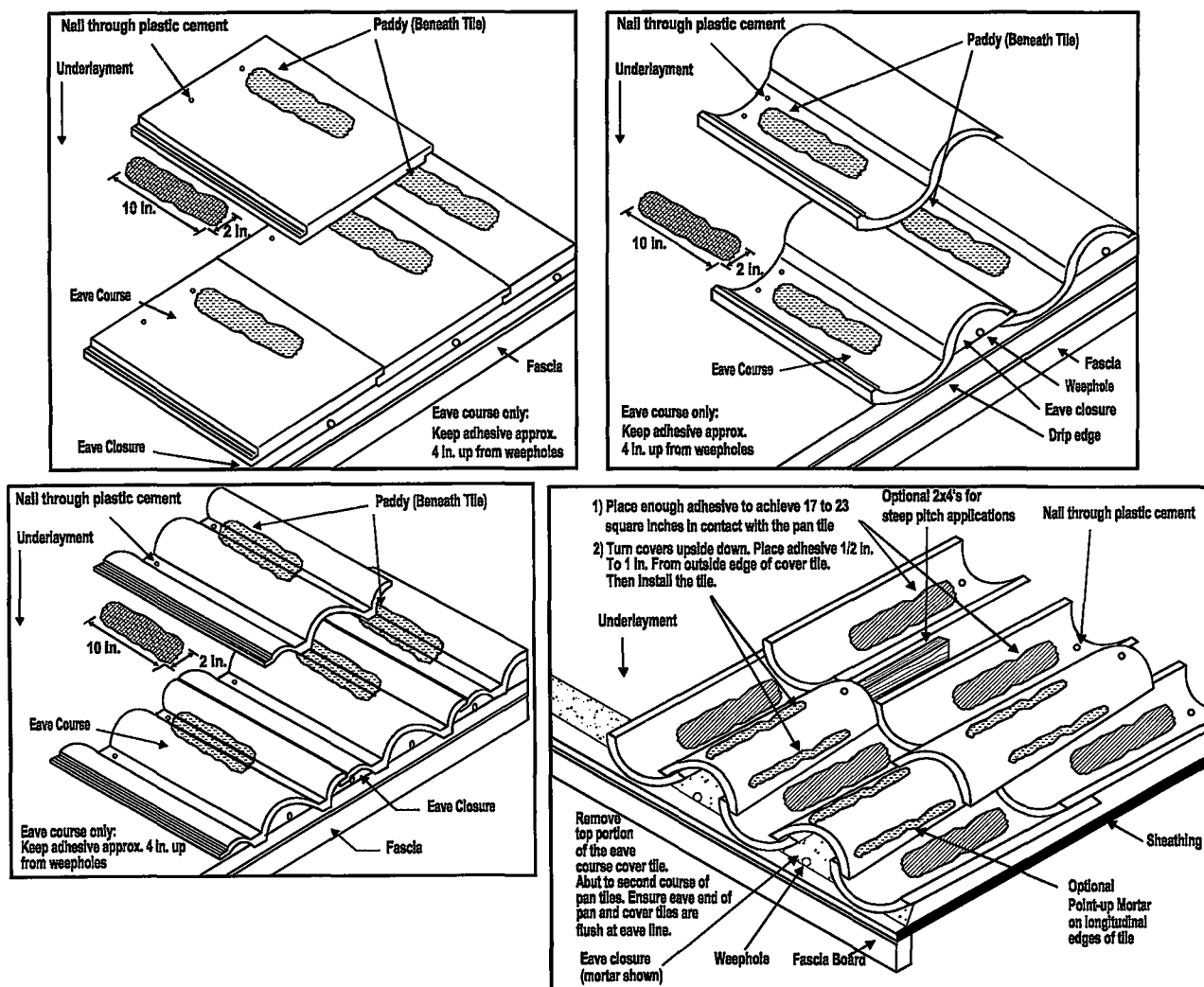
LABELING:

All 3M™ 2-Component Foam Roof Tile Adhesive AH-160 containers shall comply with the Standard Conditions listed herein.

BUILDING PERMIT REQUIREMENTS:

As required by the Building Official or applicable building code in order to properly evaluate the installation of this system.

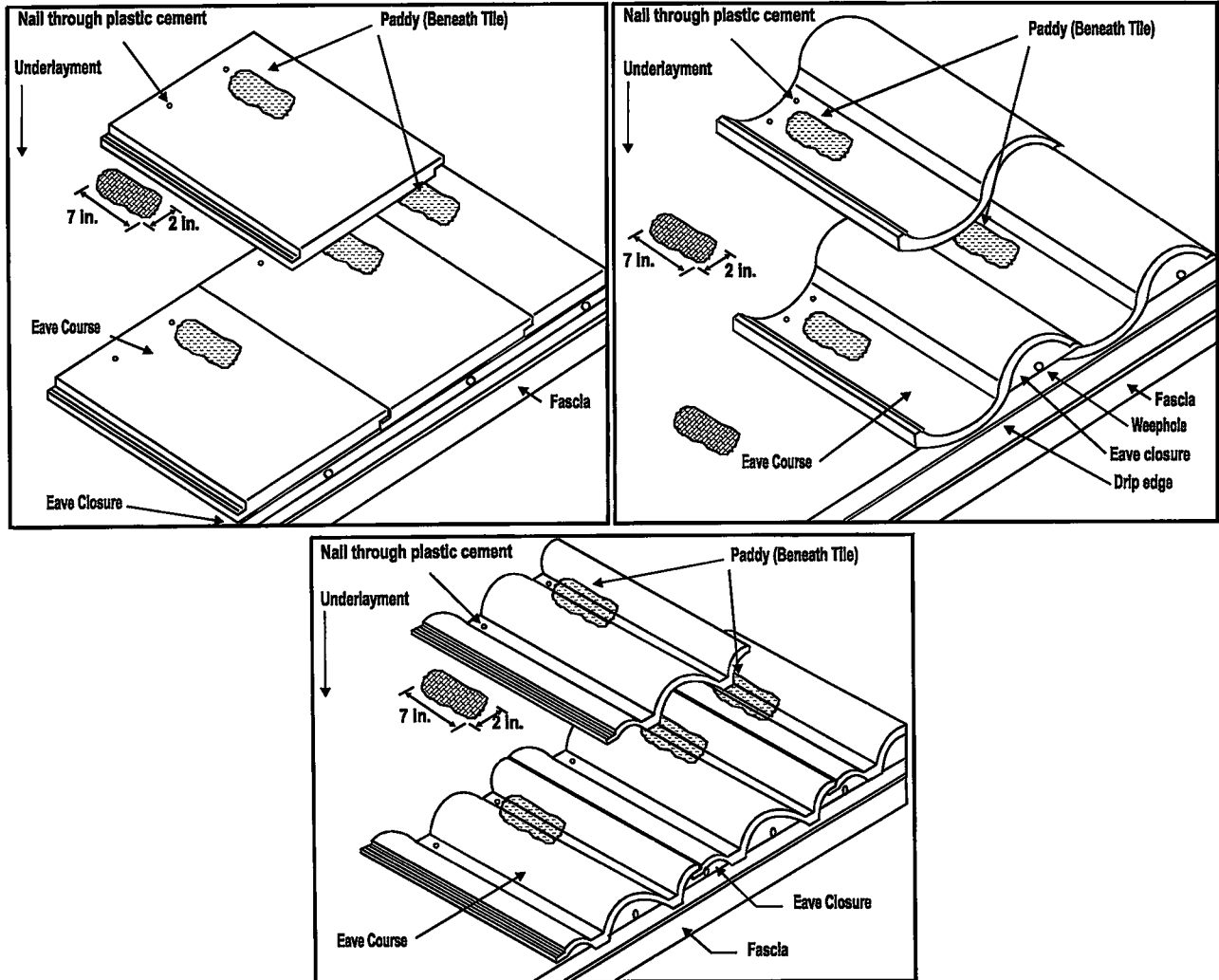
ADHESIVE PLACEMENT DETAIL 1 SINGLE PATTY



NOA No.: 12-0228.18
Expiration Date: 05/10/17
Approval Date: 05/10/12
Page 5 of 7

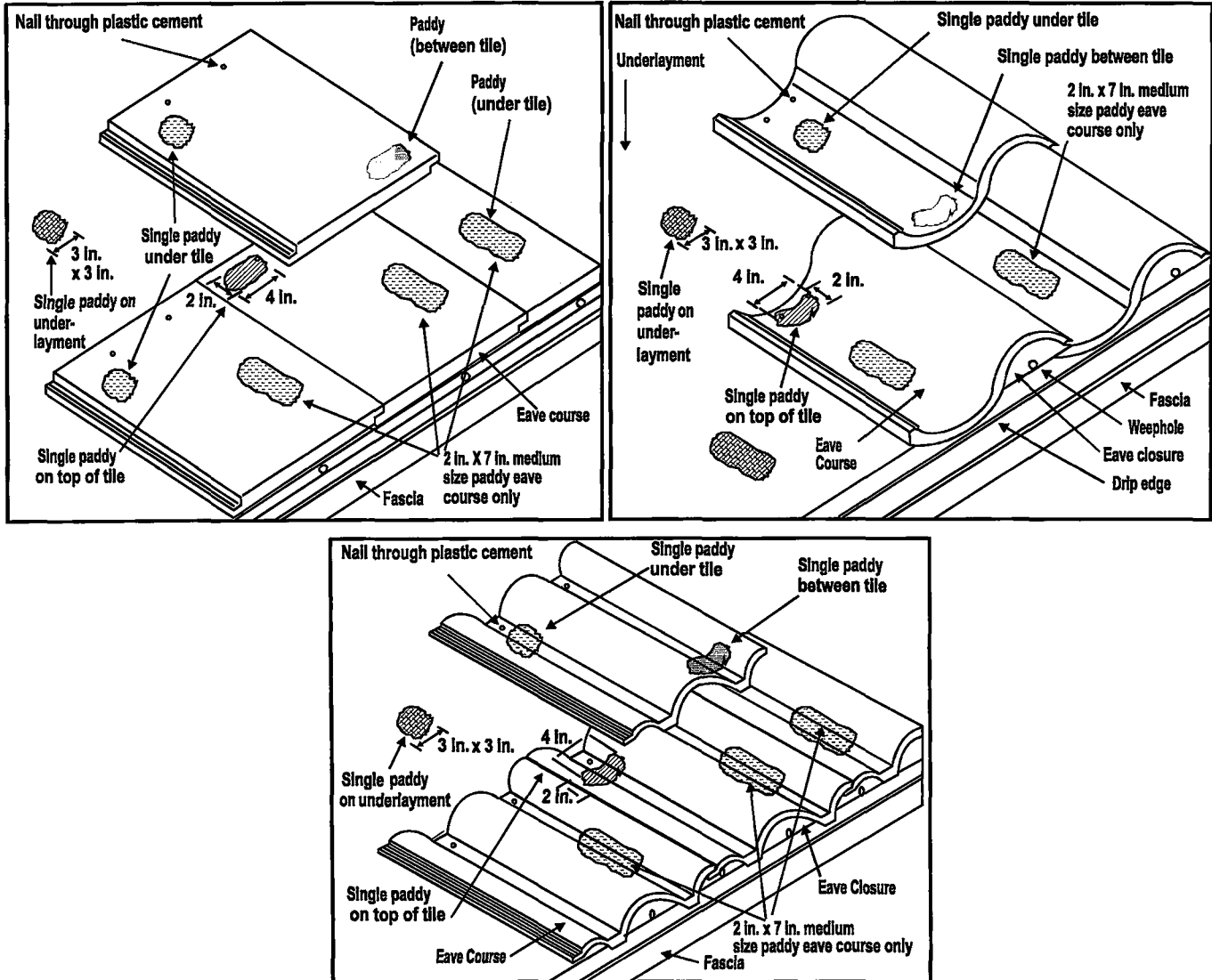
ADHESIVE PLACEMENT DETAIL 3 SINGLE PATTY

1.20.12



ADHESIVE PLACEMENT DETAIL 3 DOUBLE PATTY

11.20.12



END OF THIS ACCEPTANCE



DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY
AFFAIRS (PERA)

BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
1805 SW 26 Street, Room 208
Miami, Florida 33135-2474
T (786) 315-2590 F (786) 31525-99
www.miamidadecounty.gov/pera

CertainTeed Corporation
1400 Union Meeting Road
P.O. Box 1100
Blue Bell PA 19422

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA - Product Control Section 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 Section (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. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section 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 Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: CertainTeed Underlayment Systems

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and 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 NOA No. 10-0608.01 and consists of pages 1 through 7.

The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 11-1129.01
Expiration Date: 11/24/14
Approval Date: 07/26/12
Page 1 of 7

0118

11.20.12

ROOFING COMPONENT APPROVAL

Category: Roofing
Sub-Category: Underlayment
Material: SBS

SCOPE:

This approves CertainTeed Underlayment Systems, as described in this Notice of Acceptance; designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
WinterGuard HT <i>Manufacturing Location #1</i>	36" x 65' rolls Roll Weight: 45 lbs	ASTM D 1970	Modified fiberglass reinforced, bituminous sheet material for use as an underlayment in sloped roof assemblies. Designed as an ice & rain shield.
WinterGuard Granular <i>Manufacturing Location #2</i>	36" x 65' rolls Roll Weight: 72 lbs	ASTM D 1970	Granular surfaced modified, fiberglass reinforced, bituminous sheet material for use as an underlayment in sloped roof assemblies. Designed as an ice & rain shield.
WinterGuard Sand <i>Manufacturing Location #2</i>	36" x 65' rolls Roll Weight: 72 lbs	ASTM D 1970	Embedded sand surfaced modified, fiberglass reinforced, bituminous sheet material for use as an underlayment in sloped roof assemblies. Designed as an ice & rain shield.
Diamond Deck™ <i>Manufacturing Location #3</i>	48" x 250' Roll Weight: 38 lbs.	ASTM D 226	Synthetic, scrim reinforced underlayment for use under shake, shingles, slate or metal roofing.
MetalAyment™ <i>Manufacturing Location #1</i>	39 3/8" x 61' Roll Weight: 54 lbs.	ASTM D 1970	A film surfaced, self-adhering underlayment for use under metal roofing.
Black Diamond™ Base Sheet <i>Manufacturing Location #2</i>	39 3/8" x 68' 7"; Roll Weight: 76 lbs.	ASTM D 1970	Granular surfaced modified, fiberglass reinforced, bituminous sheet material for use as an underlayment in sloped roof assemblies. Designed as an ice & rain shield. Not for use as an Anchor Sheet. Direct adhesion to wood deck not permitted in the HVHZ.
Flintlastic GTA <i>Manufacturing Location #1</i>	39 3/8" x 32' 10", Roll Weight: 105 lbs.	ASTM D 6222 Grade G Type I	Granule surfaced APP Modified Bitumen membrane with non-woven polyester mat reinforcement for torch application.



NOA No.: 11-1129.01
 Expiration Date: 11/24/14
 Approval Date: 07/26/12
 Page 2 of 7



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
All Weather/Empire Base Sheet	39 ³ / ₈ " x 65' 10", Weight: 70 lbs.	ASTM D 4601 Type II	Asphalt-coated fiberglass reinforced base sheet.
<i>Manufacturing Location #1</i>			
Flintlastic SA Cap FR	33'11" x 39-3/8"	TAS 103	Granule surfaced, fiberglass reinforced, fire retardant, self-adhering SBS cap sheet.
<i>Manufacturing Location #1</i>			
DryRoof™ TU	33'11" x 61' rolls	TAS 103	A polyester fabric surfaced, self-adhering underlayment.
<i>Manufacturing Location #1</i>			
Flintlastic GMS	39- ³ / ₈ " x 32'10" Roll Weight: 97 lbs.	ASTM D 6164 Grade G Type I	Granule surfaced SBS Modified Bitumen membrane with non-woven polyester mat reinforcement for mop application.
<i>Manufacturing Location #1</i>			

MANUFACTURING LOCATION:

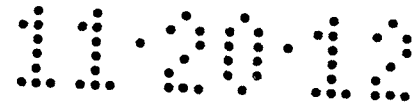
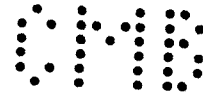
1. Little Rock, AR.
2. Shakopee, MN
3. Hangzhou, China

EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
Momentum Technologies, Inc.	AX31G8D	ASTM D4601	09/05/08
	AX31G8G	ASTM D6222	06/05/09
	RX02J9A	ASTM D6164	12/22/09
Exterior Research & Design, LLC	3527.10.04-R1	ASTM D1970	09/19/05
Trinity ERD	C8440.04.08	ASTM D4798, ASTM D1970	04/08/08
	C9560.05.08	ASTM D1970	06/25/08
	3530.12.05-1-R1	ASTM D1623	10/05/09
	C12960.06.09	TAS 103	06/02/09
	3523.03.05-R2	ASTM D1623	01/12/10
	C32240.03.10	ASTM D4977	03/04/10
	C3500.04.10	TAS 103	04/01/10
	C31860.05.10	ASTM D1623	05/18/10
	C30280.12.09-R2	ASTM D226	12/11/09
	C31410.10.10	ASTM D5147, ASTM D4798	10/27/10
	C30890.03.10-1	ASTM D1970	03/17/10
	C34940.09.11-R1	TAS 103, ASTM D1623, ASTM D4798	10/04/11
PRI Construction Materials Technologies, LLC	CTC-075-02-01	ASTM D1623	10/07/11
	CTC-075-02-01	TAS 103	10/07/11



NOA No.: 11-1129.01
Expiration Date: 11/24/14
Approval Date: 07/26/12
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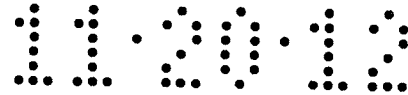
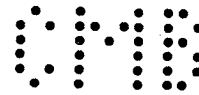


APPROVED ASSEMBLIES:

Deck Type 1: Wood, Non-insulated
Deck Description: $19/32$ " or greater plywood or wood plank
System E(1): Anchor sheet mechanically fastened to deck.
Anchor Sheet: (4:12 or Above) One or more plies of Diamond Deck with a minimum 4" headlap and a 6" end lap mechanically fastened to deck with approved nails and tin caps 6" o.c. at the side lap edge and in a grid pattern spaced 12" o.c. in the field of the roll.
(2:12 to < 4:12) One or more plies of Diamond Deck with a minimum 20" headlap and a 12" end lap mechanically fastened to deck with approved nails and tin caps 6" o.c. at the side lap edge and in a grid pattern spaced 12" o.c. in the field of the roll. Vertical joints should be offset 36" minimum.
Surfacing: Shall be acceptable for use in approved asphaltic shingles, wood shakes, & shingles, quarry slate, and metal roof applications. Must Comply with applicable Roofing Application Standards and Building Codes

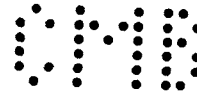
Deck Type 1: Wood, Non-insulated
Deck Description: $19/32$ " or greater plywood or wood plank
System E(2): Anchor sheet mechanically fastened to deck, membrane adhered.
Anchor Sheet: One or more plies of ASTM D 226 Type II or ASTM D 2626 with a minimum 4" headlap and a 6" end lap mechanically fastened to deck with approved nails and tin caps 6" o.c. at the side lap edge and in a grid pattern spaced 12" o.c. in the field of the roll.
Membrane: One or more plies of Flintlastic GTA torch applied to anchor sheet or WinterGuard HT, WinterGuard Granular, WinterGuard Sand, MetaLayment, DryRoof TU or Black Diamond Base Sheet self-adhering membrane adhered to the anchor sheet with a minimum 3" headlap and 6" end lap. Place the first course of membrane parallel to the eave, rolling the membrane to obtain maximum contact. Remove the release membrane as the membrane is applied. Vertical strapping of the membrane is acceptable. If membrane is strapped, then anchor sheet must also be strapped.
Surfacing: Shall be acceptable for use in approved asphaltic shingles, wood shakes, & shingles, quarry slate, and metal roof applications. Must Comply with applicable Roofing Application Standards and Building Codes





Deck Type 1:	Wood, Non-insulated
Deck Description:	¹⁹ / ₃₂ " or greater plywood or wood plank
System E(3):	Anchor sheet mechanically fastened to deck, membrane adhered.
Anchor sheet:	One ply of ASTM D 226 Type II organic felt or <u>All Weather/Empire Base mechanically attached with a minimum 4" side lap and a minimum 6" end lap.</u> Anchor sheet shall be applied at a right angle (90°) to the slope of the deck with approved annular ring shank nails and tin caps at a fastener spacing of 6" o.c. at the side lap edge and in a grid pattern spaced 12" o.c. in the field of the roll of the base sheet.
Ply Sheet:	(Optional) One or more plies of an ASTM D226 ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Membrane:	One ply of Flintlastic GMS adhered in a full mopping of Type IV asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or Flintlastic GTA torch applied to the preceding sheet or DryRoof TU, Flintlastic SA Cap FR self-adhering membranes adhered to the preceding sheet with a minimum 4" side lap and 6" end lap. Place the first course of membrane parallel to the eave, rolling the membrane to obtain maximum contact. Remove the release membrane as the membrane is applied. Vertical strapping of the membrane is acceptable. If membrane is strapped, then anchor sheet and ply sheet must also be strapped. When used in Tile roof systems the cap sheet shall be back nailed to deck with approved annular ring shank nails and tin caps at a maximum of 12" o.c. at the side laps and 6" o.c. at the end laps. No nails or tin caps shall be exposed.
Surfacing:	• Flintlastic SA Cap FR, Flintlastic GTA, Flintlastic GMS and DryRoof TU may be used with any approved roof tile system mechanically fastened as specified in their current NOA. • Flintlastic SA Cap FR, Flintlastic GTA, Flintlastic GMS may be used with any approved roof tile system adhered as specified in their current NOA using any foam adhesive listed and having a current tile adhesive NOA approval. • DryRoof TU may be used with any approved roof tile system adhered as specified in their current NOA using Dow TileBond foam adhesive (if listed in the tile NOA) and having a current tile adhesive NOA approval. Must comply with appropriate Roofing Application Standard RAS 118, RAS 119, RAS 120 and applicable Building Codes.





LABELING:

All membranes or packaging shall bear the imprint or identifiable marking of the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved" or the Miami-Dade County Product Control Seal as shown below.



BUILDING PERMIT REQUIREMENTS:

Application for building permit shall be accompanied by copies of the following:

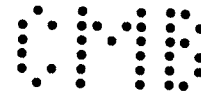
1. This Notice of Acceptance.
2. Any other documents required by the Building Official or applicable building code in order to properly evaluate the installation of this material.

LIMITATIONS:

1. Fire classification is not part of this acceptance.
2. CertainTeed underlayment roofing systems utilizing Flintlastic GTA, WinterGuard HT, WinterGuard Granular, WinterGuard Sand, Diamond Deck, MetaLayment, DryRoof TU or Black Diamond Base Sheet as a cap membrane shall be acceptable for use in asphaltic shingles, wood shakes, & shingles, quarry slate, and metal roof applications.
3. CertainTeed underlayment roofing systems utilizing DryRoof TU, Flintlastic SA Cap FR, Flintlastic GTA or Flintlastic GMS as a cap membrane shall be acceptable for use in foam adhesive set and mechanically fastened roof tile systems as specified in the surfacing option of the approved assemblies.
4. This acceptance is for prepared roofing applications. Minimum deck requirements shall be in compliance with applicable building code. CertainTeed underlayment roofing systems shall be installed in strict compliance with applicable Building Code.
5. CertainTeed underlayment roofing systems membranes shall be applied to a smooth, clean and dry surface with deck free of irregularities.
6. CertainTeed underlayment roofing systems membranes shall not be applied over an existing roof membrane as a recover system but may be applied over an approved roofing Base/Anchor sheet underlayment.
7. WinterGuard HT, WinterGuard Granular, WinterGuard Sand, Black Diamond Base Sheet, Flintlastic SA Cap FR, MetaLayment, Diamond Deck, Flintlastic GMS, and Flintlastic GTA shall not be left exposed as a temporary roof for longer than 180 days of application. DryRoof TU shall not be left exposed as a temporary roof for longer than 30 days after application.
8. CertainTeed underlayment products may be used with any approved roof covering Notice of Acceptance listing CertainTeed underlayment products as a component part of an assembly in the Notice of Acceptance. If CertainTeed underlayment products are not listed, a request may be made to the Authority Having Jurisdiction (AHJ) or Miami-Dade County Product Control for approval provided that appropriate documentation is provided to detail compatibility of the products, wind uplift resistance, and fire testing results.
9. All nails in the deck shall be carefully checked for protruding heads. Re-fasten any loose decking panels. Sweep the deck thoroughly to remove any dust and debris prior to application.
10. When applying the membrane in the valley, start at the low point and work to the high point, rolling the membrane from the center outward in both directions.



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Approval Date: 07/26/12
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LIMITATIONS:

11. Roll or broom the entire membrane surface so as to have 100% contact with the surface, giving special attention to overlap areas.
12. Flash vent pipes, stacks, chimneys and penetrations in compliance with Roof Assembly current Product Control Notice of Acceptance and applicable Building Code.
13. The maximum roof slope for use as roof tile underlayment for direct-to-deck tile assemblies shall be as follows: (See Table Below)

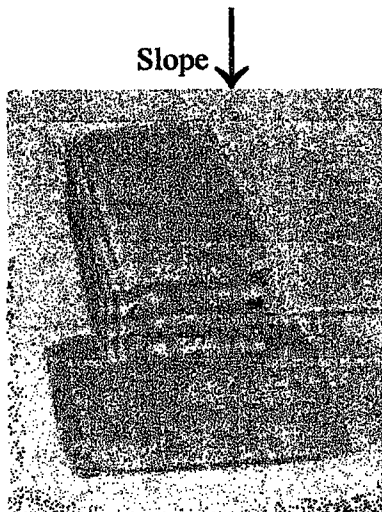
Tile Profile	Flintlastic SA Cap FR ¹ , Flintlastic GMS ¹	DryRoof™ TU ²	Flintlastic GTA ²
Flat Tile	4:12	6:12	6:12
Profiled Tile	4:12	6:12	6:12

¹The following is applicable to all systems using Flintlastic SA Cap FR and Flintlastic GMS:

- Slopes up to 4:12 – Stage by placing two tiles perpendicular to the slope followed by maximum four tiles on top parallel to the slope for a total of 6 tiles. (Illustrated in Figure 1 below).
- Slopes greater than 4:12 – Horizontal batten strips are required. Stage tiles touching horizontal battens; a maximum of 10 tiles shall be stacked parallel to the slope (See Figure 2 below).

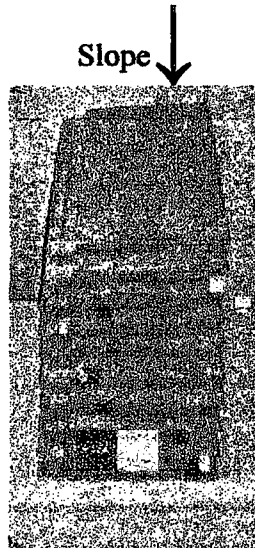
²The following is applicable to all systems using DryRoof™ TU and Flintlastic GTA:

- Tiles shall be stored on battens on roof pitches greater than 6:12”.



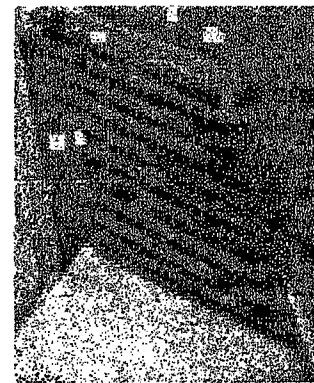
Front View

Figure 1: Staged Method,



Front View

Figure 2: Batten Method



Side View

Figure 2: Batten Method

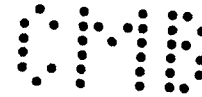
END OF THIS ACCEPTANCE



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DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS (PERA)
BOARD AND CODE ADMINISTRATION DIVISION



MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
1805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/pera

NOTICE OF ACCEPTANCE (NOA)

Polyglass USA Inc.
150 Lyon Drive
Fernley, NV 89408

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA - Product Control Section 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 Section (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. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section 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 Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Polyglass Polystick Underlayments

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and 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.

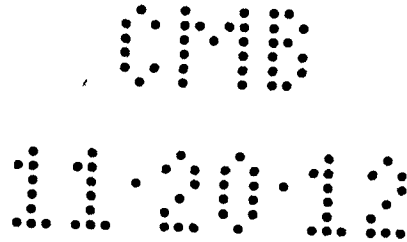
This revises NOA # 11-0601.10 and consists of pages 1 through 8
The submitted documentation was reviewed by Alex Tigera.



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Expiration Date: 09/13/16
Approval Date: 04/05/12
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ROOFING COMPONENT APPROVAL

Category: Roofing
Sub-Category: Underlayment
Material: SBS , APP Self-Adhering Modified Bitumen



PRODUCTS DESCRIPTION:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Polystick MTS underlayment <i>Manufacturing Location #2</i>	Roll: 65'8" x 3'3- ³ / ₈ " 60 mils thick	TAS 103	A homogeneous, rubberized asphalt waterproofing membrane, glass fiber reinforced with polyolefinic film on the upper surface for use as an underlayment for metal roofing, roof tile, slate tiles and shingle underlayment.
Polystick IR-Xe underlayment <i>Manufacturing Location #1 & #2</i>	Roll: 65' x 3'3- ³ / ₈ " Or 65' x 3' 60 mils thick	TAS 103 and ASTM D 1970	A fine granular/sand top surface self-adhering, APP polymer modified, fiberglass reinforced, bituminous sheet material for use as an underlayment in sloped roof assemblies. Designed as an ice & rain shield and as a flat roof tile underlayment.
Polystick TU underlayment <i>Manufacturing Location #1 & #2</i>	Roll: 32'10" x 3'3- ³ / ₈ " 100 mils thick	TAS 103 and ASTM D 1970	A heavy granuled surface self adhering, APP polymer modified, fiberglass or polyester reinforced, bituminous sheet material for use as an underlayment in sloped roof assemblies. Designed as a a roof tile underlayment.
Polystick TU Plus underlayment (Surface Printing) <i>Manufacturing Location #2</i>	Roll: 65' x 3'3- ³ / ₈ " 80 mils thick	TAS 103 and ASTM D 1970	A rubberized asphalt self-adhering, glass-fiber/polyester reinforced waterproofing membrane. Designed as a metal roofing and roof tile underlayment.
Polystick TU P underlayment <i>Manufacturing Location #2</i>	Roll: 32'10" x 3'3- ³ / ₈ " 130 mils thick	TAS 103 and ASTM D 1970	A rubberized asphalt waterproofing membrane, glass-fiber/polyester reinforced, with a granular surface designed for use as a tile roof underlayment.
Polystick Tile Pro <i>Manufacturing Location #2</i>	Roll: 61' x 3'3- ³ / ₈ " 60 mils thick	TAS 103 and ASTM D 1970	A rubberized asphalt self-adhering, glass-fiber/polyester reinforced waterproofing membrane. Designed as a metal roofing and roof tile underlayment.
Polystick Dual Pro <i>Manufacturing Location #2</i>	Roll: 61' x 3'3- ³ / ₈ " 60 mils thick	TAS 103 and ASTM D 1970	A rubberized asphalt self-adhering, glass-fiber/polyester reinforced waterproofing membrane. Designed as a metal roofing and roof tile underlayment.

MANUFACTURING PLANTS:

1. Hazelton, PA
2. Winter Haven, FL

0418

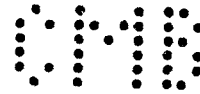
11-20-12

EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
Exterior Research & Design, LLC	11756.04.01-1	TAS 103	04/27/01
	11756.08.01-1	ASTM D 1970	08/14/01
Trinity ERD	02202.08.05	TAS 103	08/29/05
	P5110.08.07	TAS 103	08/29/07
	P10870.09.08-R1	TAS 103	12/04/08
	P10870.04.09	TAS 103/ASTM D4798 & G155	04/13/09
	P33360.06.10	ASTM D1970	07/01/10
	P33370.03.11	TAS 103	03/02/11
	P33370.04.11	ASTM D 1623	04/26/11
	P36900.09.11	TAS 103/ASTM D4798 & G155	09/01/11
	P37300.10.11	TAS 110/ASTM D4798 & D1970	10/19/11
	PRI01111	ASTM D 4977	04/08/02
PRI Asphalt Technologies	PUSA-005-02-01	ASTM D 4977	01/31/02
	PUSA-018-02-01	ASTM D 2523	07/14/03
	PUSA-035-02-01	TAS 103	09/29/06
	PUSA-033-02-01	ASTM D 1970	01/12/06
	PUSA-055-02-02	TAS 103	12/10/07
	PUSA-083-02-01	TAS 103	06/30/08
	PUSA-089-02-01	TAS 103/ASTM D4798 & G155	07/06/09
	JX20H7A	TAS 103/ASTM D4798 & G155	04/01/08
Momentum Technologies, Inc.	RX14E8A	TAS 103/ASTM D4798 & G155	11/09/09
	DX23D8B	TAS 103/ASTM D4798 & G155	02/18/10
	DX23D8A	TAS 103/ASTM D4798 & G155	02/18/10



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INSTALLATION PROCEDURES:

Deck Type 1: Wood, non-insulated

Base Sheet: One or more plies of ASTM D 226 Type II or ASTM D 226.

Fastening: Per FBC 1518.2 & 1518.4 Nails and tin caps 12" grid, 6" o.c. at a minimum 4" head lap. (for base sheet only)

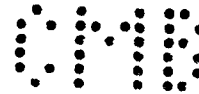
Membrane: Polystick membranes self-adhered.

Surfacing: None

1. All nails in the deck shall be carefully checked for protruding heads. Re-fasten any loose decking panels, and sweep the deck thoroughly to remove any dust and debris prior to application.
2. Place the underlayment over metal drip edge in accordance with RAS 111.
3. Place the first course of membrane parallel to the eave, rolling the membrane to obtain maximum contact. Remove the release film as the membrane is applied. . All side laps shall be a minimum of 3-1/2" and end laps shall be a minimum of 6." Roll the membrane into place after removing the release strip. Vertical strapping of the roof with Polystick is acceptable. Membrane shall be back nailed in accordance with applicable building code.
4. When applying the membrane in the valley, start at the low point and work to the high point, rolling the membrane from the center outward in both directions.
5. For ridge applications, center the membrane and roll from the center outward in both directions.
6. Roll or broom the entire membrane surface so as to have full contact with the surface, giving special attention to lap areas.
7. Flash vent pipes, stacks, chimneys and penetrations in compliance with Roof Assembly current Product Control Notice of Acceptance.
8. All protrusions or drains shall be initially taped with a 6" piece of underlayment. The flashing tape shall be pressed in place and formed around the protrusion to ensure a tight fit. A second layer of Polystick shall be applied over the underlayment.



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GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance.
2. Polystick MTS, TU Plus, Tile Pro and Dual Pro may be used in asphaltic shingles, wood shakes and shingles, non-structural metal roofing, roof tile systems and quarry slate roof assemblies. IR-Xe, TU, and TU P may be used in all the previous assemblies listed except metal roofing.
3. Deck requirements shall be in compliance with applicable building code.
4. Polyglass Polystick membranes shall be applied to a smooth, clean and dry surface. The deck shall be free of irregularities.
5. Polyglass Polystick membranes and underlayments shall not be adhered directly over a pre-existing roof membrane as a recover system.
6. Polyglass Polystick membranes shall not be left exposed as a temporary roof for longer than the amount of days listed in the table below after application. Polyglass reserves the right to revise or alter product exposure times; not to exceed the preceeding maximum time limitations.

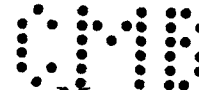
Exposure Limitations (days)							
	MTS	IR-Xe	TU	TU Plus	TU P	Tile Pro	Dual Pro
Winter Haven, FL.	180	180	180	180	180	180	180
Hazleton, PA.	N/A	30	30	180	N/A	N/A	N/A

7. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9N-3 of the Florida Administrative Code.
8. In roof tile application, data for the attachment resistance of roof tiles shall be as set forth in the roof tile manufacturer's Notice of Acceptance. Polystick TU, TU Plus, and Tile Pro may be used in both adhesive set and mechanically fastened roof tile applications. Polystick IR-Xe, and Dual Pro are limited to mechanically fastened roof tile applications. Polystick MTS is limited to mechanically fastened with battens roof tile applications. Polystick TU P may be used in both adhesive set and mechanically fastened roof tile applications with the exception of mortar set tile applications.
9. The maximum roof slope for use as roof tile underlayment for (direct-to-deck) tile assemblies shall be as follows: (See Table Below)

Tile Profile	Polystick MTS	Polystick IR-Xe	Polystick TU, TU Plus, TU P, Tile Pro
Flat Tile	Prohibited without battens	5:12	No limitation
Profiled Tile	Prohibited without battens	Prohibited	No limitation

The above slope limitations can be exceeded only by using battens and counter battens in accordance with the Approved Tile System Notice of Acceptance and applicable Florida Building Code requirements. **Battens are required for both loading and installation of tiles at all times.**





POLYGLASS GENERAL APPLICATION GUIDELINES FOR POLYSTICK MEMBRANES:

1. Polyglass does accept the direct application of Polystick underlayment membranes to wood decks. Installers are cautioned to refer to applicable local building codes prior to direct deck installation to ensure this is acceptable. Please also refer to applicable Product Data Sheets of the corresponding products.
2. All rolls, with the exception of Polystick TU Plus should be back-nailed in selvage edge seam as per Polyglass Back Nailing Guide. Nails shall be 11 gauge ring shank type, applied with a minimum 1" metal disk as required in Dade County or simplex type nail as otherwise allowable in other regions, at a minimum rate of 12" o.c. Polystick TU Plus should be back nailed in designated area marked "nail area, area para clavar" on the face of membrane, with the above stated nails and/or disks. The head lap membrane is to cover the area being back-nailed. (Please refer to applicable local building codes prior to installation.)
3. All seal lap seams (selvage laps) must be rolled with a hand roller to ensure full contact.
4. All fabric over fabric and granule over granule end laps, shall have a 6" wide, uniform layer of Polyglass Polyplus 55 Premium Modified Flashing Cement, Polyglass Polyplus 50 Premium MB Flashing Cement, Polyglass PG500 MB Flashing Cement, Mule-Hide 241 Premium Modified Flashing Cement, Mule-Hide 251 Premium Wet/Dry Elastomeric Flashing Cement, or Mule-Hide 421 Mod Bit Flashing Adhesive Trowel Grade mastic, applied in between the application of the lap. The use of mastic between the laps does not apply to Polystick MTS.
5. A maximum of 6 tiles per stack are allowed when loading tile on the underlayments. Refer to the Polyglass Tile Loading Guidelines. See General Limitations #9 and #10.
6. Battens and/or Counter-battens, as required by the tile manufacturers NOA's, must be used on all projects for pitch/slopes of 7"/12" or greater. It is suggested that on pitch/slopes in excess of 6 1/4"/12", precautions should be taken, such as the use of battens to prevent tilting during the loading process.
7. Minimum cure time after membrane installation & before loading of roofing tiles is Forty-Eight (48) Hours.
8. Polystick membranes may not be used in any exposed application such as crickets, exposed valleys, or exposed roof to wall details.
9. Repair of Polystick membranes is to be accomplished by applying Polyglass Polyplus 55 Premium Modified Flashing Cement, Polyglass Polyplus 50 Premium MB Flashing Cement, Polyglass PG500 MB Flashing Cement, Mule-Hide 241 Premium Modified Flashing Cement, Mule-Hide 251 Premium Wet/Dry Elastomeric Flashing Cement, or Mule-Hide 421 Mod Bit Flashing Adhesive Trowel Grade mastic to the area in need of repair, followed by a patch of the Polystick material of like kind should be set and hand rolled in place over the area needing such repair. Patching membrane shall be a minimum of 6 inches in either direction. The repair should be installed in such a way so that water will run parallel to or over the top of all laps of the patch.
10. All self-adhered membranes must be rolled to ensure full contact with approved substrates. Polyglass requires a minimum of 40 lbs for a weighted roller for the rolling of the field membrane. Hand rollers are acceptable for rolling of patches or small areas of the roof. Brooming may be used where slope prohibits rolling.
11. All approved substrates should be dry, clean and properly prepared, before any application of Polystick membranes commences. An approved substrate technical bulletin can be furnished upon request. It is recommended to refer to applicable building codes prior to installation to verify acceptable substrates.
12. The Polyglass Miami-Dade Notice of Acceptance (NOA) approval for Polystick membranes and PolyProtector UDL can be furnished upon request by our Technical Services Department by calling 1 (800) 894-4563.



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Expiration Date: 09/13/16
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010

01.05.11

B1300961

1649 W 22 St

City of Miami Beach
Building Department
Roofing Permit
OFFICE COPY

Review Type	Initials	Date	Bond
Structural	AV	11/20/12	N/A
Zoning	[Signature]	11/20/12	N/A
Engineering	[Signature]	11/20/12	N/A
Public Works	EVH-hi	11-20-2012	

PLAN REVIEW NOTICE

Phone 305-673-7080

Fax 305-673-7023

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. / C.O., or the release of bonds.)

ENC-11-20-2012

48 HOURS PRIOR TO EXCAVATING
CONTRACTOR SHALL CALL FOR LOCATION
OF UNDERGROUND UTILITIES
SUNSHINE ONE-CALL 1-800-432-4770
CITY OF MIAMI BEACH 305-673-7080



MIAMI BEACH

Plan Routing Sheet

General Information		
Date 24 JULY 2013	Process/Permit Number Re-Submittals Only B1305474	Historic (Y/N) N
Job Address 1649 W. 27ND ST		
Contact Name DONALD ABRASHOFF	E-mail MABRASHOFF@AOL.com	Telephone 7039675900

Re-submittals - New Sheets:

☐ Yes

☐ No

List all new sheets:

OFFICE USE ONLY

Required Approvals - As Indicated		
☒ Planning & Zoning	☐ Fire	☐ Public Works
☐ Flood Plain Management	☒ Building	☐ Structural
☐ Electrical	☐ Mechanical	☐ Plumbing
☐ Elevator		

Comments:

Reviewer:

Henry

Date:

7/24/13



Walk Thru



Drop Off

Ordered By:

Star Title Partners
of Palm Harbor LLC.

PROPERTY ADDRESS: 1649 W 22ND STREET MIAMI BEACH, Florida 33140

SURVEY NUMBER: FL1207.1597

FIELD WORK DATE: 7/25/2012

REVISION DATE(S): (prev. 7/25/2012)

FL 1207.1597

BOUNDARY SURVEY
MIAMI-DADE COUNTY

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 the County and there may be additional permits required from other government entities such as water management's districts, state agencies, or federal agencies. The City of Miami Beach 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.

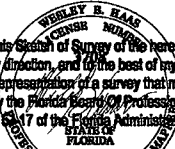
C-1
R= 100.00' (P+M)
L= 43.18' (P) 42.85' (M)
Δ= 24°44'19" (P) 24°33'07" (M)
S 53°17'48" W, 42.84' (P)
S 53°59'56" W, 42.52' (M)

C-2
R= 210.00' (P+M)
L= 138.02' (P) 137.94' (M)
Δ= 37°39'25" (P) 37°38'07" (M)
N 71°10'18" E, 135.55' (P)
N 71°25'42" E, 135.47' (M) ABLE:

C-3
R= 100.00' (P+C)
L= 42.66' (P+C)
Δ= 24°26'38" (P+C)
CH=N 77°46'41" E, 42.34' (P+C)

L1 N90°00'00" E 14.45' (P)
S 89°58'11" E 14.49' (M)
L2 S00°00'00" W 25.00' (P)
S 0°04'19" W 24.87' (C)

I hereby certify that this Sketch of Survey of the herein described property has been made under my direction, and to the best of my knowledge and belief, it is a true and accurate representation of a survey that meets the minimum technical standards set forth by the Florida Board of Professional Land Surveyors as described in Chapter 6017 of the Florida Administrative Code.



Wesley B. Haas
State of Florida Professional Surveyor and Mapper
License No. 3708

Use of This Survey for Purposes other than Intended, without Written Verification, will be at the User's Sole Risk and Without Liability to the Surveyor. Nothing herein shall be construed to Give ANY Rights or Benefits to Anyone Other than those Certified.

OFFICE COPY

CITY OF MIAMI BEACH
APPROVED FOR PERMIT BY
THE FOLLOWING

NOTES:
LOT APPEARS TO BE SERVICED BY CITY WATER AND SEWER
FENCE OWNER'S NOT TO BE REMOVED

GRAPHIC SCALE
1 inch = 50 feet

FLOOD INFORMATION:

By performing a search with the local governing municipality at www.fema.gov, the property appears to be located in zone AE (with a Base Flood Elevation of 8.0 NGVD 1929). This Property was found in the CITY OF MIAMI BEACH, community number 120651, dated 07/1/09.

POINTS OF INTEREST
NONE VISIBLE

CLIENT NUMBER: PHSS11928

DATE: 7/25/2012

BUYER: DONALD MICHAEL ABRASHOFF AND BRUCE A. CARTER

SELLER: CHARLES HUMBLE

CERTIFIED TO: DONALD MICHAEL ABRASHOFF AND BRUCE A. CARTER, STAR TITLE PARTNERS OF PALM HARBOR, LLC, WESTCOAST BANK, TITLE INSURANCE COMPANY, WELLS FARGO BANK, NATION'S TRUST, SUCCESSORS AND/OR ASSIGNS; AS THEIR INTERESTS MAY APPEAR

This is page 1 of 2 and is not valid without all pages.

Florida Land Title Association

AFFILIATE MEMBERS

EXACTA
Land Surveyors, Inc.
P. (305) 669-6169 • F. (305) 669-3325
12220 Towne Lake Drive, Suite 55 • Ft. Myers, FL 33919

REPORT OF SURVEY

PL 1207.1597

This is page 2 of 2 and is not valid without all pages.

LEGAL DESCRIPTION:

LOT 23, BLOCK 4A, 3RD REVISED PLAT OF SUNSET ISLANDS, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 40, PAGE 8, OF THE PUBLIC RECORDS OF MIAMI-DADE COUNTY, FLORIDA.

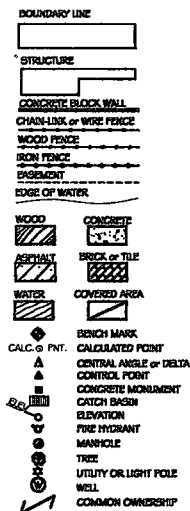
JOB SPECIFIC SURVEYOR NOTES:

THE ASSUMED BEARING REFERENCE OF SOUTH 24°26'38" EAST IS BASED ON THE EASTERLY LINE OF LOT 23, BLOCK 4A, 3RD REVISED PLAT OF SUNSET ISLANDS, AS RECORDED IN PLAT BOOK 40, PAGE 8, OF THE PUBLIC RECORDS OF MIAMI-DADE COUNTY, FLORIDA.

GENERAL SURVEYOR NOTES:

- The legal description is based on this survey as supplied by others. This survey does not determine or imply ownership.
- This survey only shows improvements found above ground. Underground footings, utilities and encroachments are not located on this survey map.
- If there is a septic tank, or drain field, on this survey, the location is approximate, and was determined by visual inspection only, and cannot be relied on for accuracy.
- This survey is exclusively for the use of the parties to whom it is certified.
- Additional deletions to this survey map and plat shall be prohibited without written consent of the signing party or parties.
- Dimensions are in feet and decimal fractions.
- Due to varying construction standards, house dimensions are approximate.
- Any FEMA flood zone data contained on this survey is for informational purposes only. Research to obtain such data was performed at www.fema.gov.
- All corners marked as set are at a minimum a 1/2" diameter, 18" iron rebar with a cap stamped LB8737.
- If you are reading this survey in an electronic format, the information contained on this document is only valid if this document is electronically signed as specified in Chapter 5J-17.062 (3) of the Florida Administrative Code. The Electronic Signature File related to this document is prominently displayed on the invoice for this survey which is sent under separate cover. Manually signed and sealed logs of all survey signature files are kept in the office of the performing surveyor. If this document is in paper format, it is not valid without the signature and original raised seal of a Florida Licensed Surveyor.
- Unless otherwise noted, an examination of the abstract of title was NOT performed by the signing surveyor to determine which instruments, if any, are affecting this property.
- The symbols reflected in the legend and on this survey may have been enlarged or reduced for clarity. The symbols have been plotted at the corner of the feature location, and may not represent the actual shape or size of the feature.

LEGEND:



SURVEYOR'S LEGEND

AK	ASK CONDITIONING	ID	IDENTIFICATION	SEW.	SEWER
B.L.	BEARING REFERENCE	INT.	INTERSECTION	S.F.	SQUARE FOOT
B.L.	BLOCK	IR	IRON ROD	S/H	SET DRILL HOLE
B.C.	BLOCK CORNER	IP	IRON PIPE	S/R	SET IRON ROD & CAP
B.L.L.	BUILDING RESTRICTION LINE	L	LENGTH	SN	SET NAIL
B.M.	BASIMENT	LSB	LICENSE # - SURVEYOR	SND	SET NAIL & DISC
BW	BOXWOOD WINDOW	LSB	LICENSE # - SURVEYOR	STY.	STORY
C	CALCULATED	M	MEASURED	S.T.L.	SURVEY TIE LINE
C	CURVE	M.R.	NON RADIAL	SV	SEWER VALVE
CATV	CABLE TV, RISER	N.T.S.	NOT TO SCALE	SW	SIDEWALK
C.B.	CONCRETE BLOCK	O.C.S.	ON CONCRETE SLAB	S.W.	SEAWALL
C.M.	CORNER	O.G.	ON GROUND	TEL	TELEPHONE FACILITIES
C.L.F.	CHAIN LINK FENCE	O.H.L.	OVERHEAD LINE	T.O.B.	TOP OF BANK
C.O.	CLEAN OUT	O.R.B.	OFFICIAL RECORDED BOOK	TX	TRANSFORMER
C.O.C.	CONCRETE	OH	OVERHANG	TYP.	TYPICAL
C.V.G.	CONCRETE VALLEY GUTTER	OA	OVERALL	WC	WITNESS CORNER
CL	CENTER LINE	OS	OFFSET	WP	WATER FILTER
CD	CONCRETE SLAB	PSM	PROFESSIONAL LAND SURVEYOR	WM	WOODEN FENCE
CP	COVERED PORCH	PSM	PROFESSIONAL LAND SURVEYOR	WM	WATER METER/VALVE BOX
CSW	CONCRETE SIDEWALK	PLD	PROFESSIONAL LAND SURVEYOR	WV	WATER VALVE
COB	CORNER	PLD	PROFESSIONAL LAND SURVEYOR	V.F.	VINYL FENCE
CS	CONCRETE	PLD	PROFESSIONAL LAND SURVEYOR		
CSW	CONCRETE SIDEWALK	PLD	PROFESSIONAL LAND SURVEYOR		
COB	CORNER	PLD	PROFESSIONAL LAND SURVEYOR		
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B1305476

1649 22ND
ST.

13033

FL 1207.1597
BOUNDARY SURVEY
MIAMI-DADE COUNTY

Partners
Harbor LLC.
ADDRESS: 1649 W 22ND STREET MIAMI BEACH, Florida 33140
WORK DATE: 7/25/2012
REVISION DATE(S): (rev.0 7/25/2012)

C-1
R=100.00'(P#M)
L=43.18'(P) 42.85'(M)
 $\Delta=24^{\circ}44'19''$ (P) $24^{\circ}33'07''$ (M)
S $53^{\circ}11'13''$ W, 42.84'(P)
S $53^{\circ}59'56''$ W, 42.52'(M)

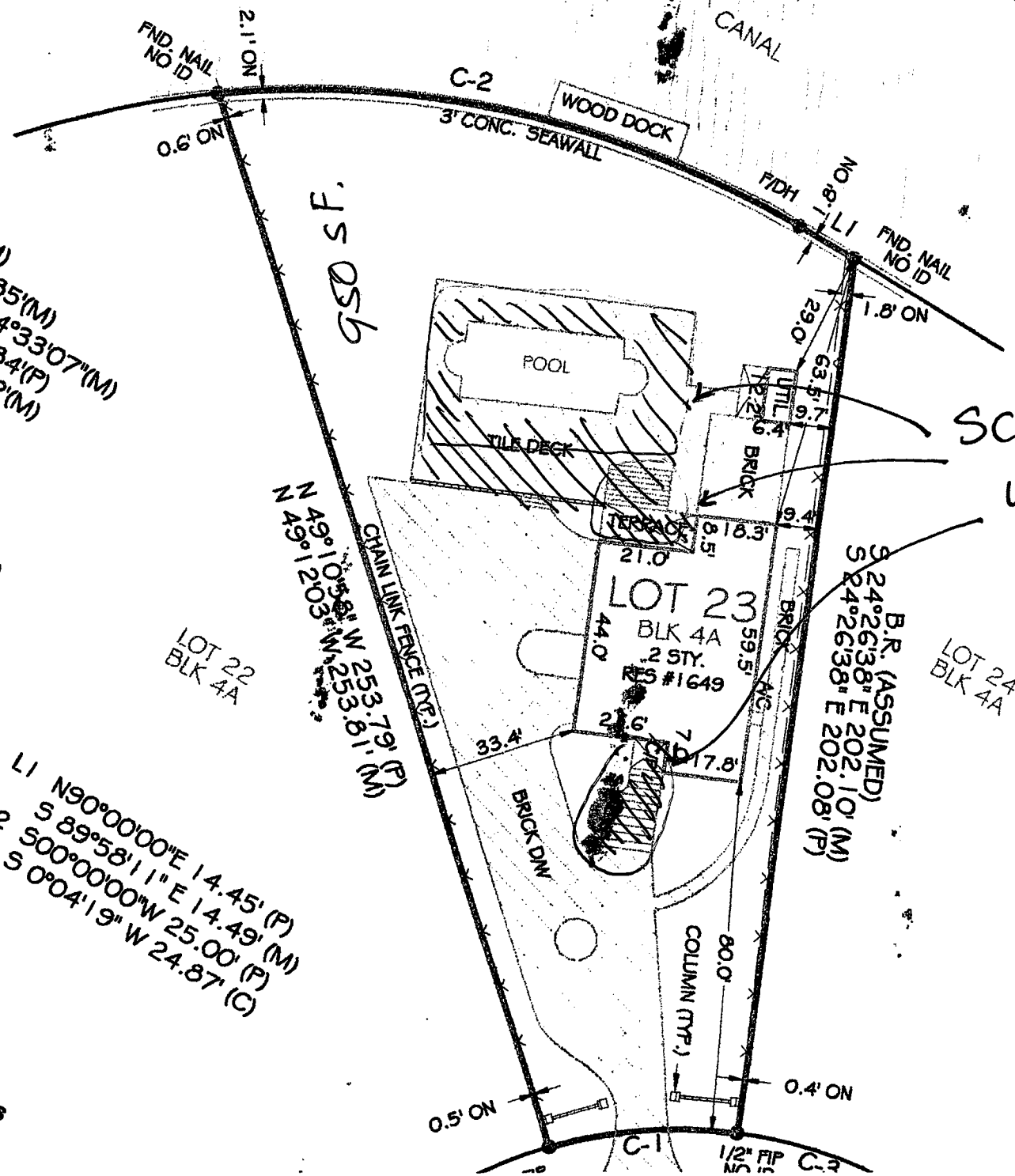
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R=210.00'(P#M)
L=138.02'(P) 137.94'(M)
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N $71^{\circ}10'18''$ E, 135.55'(P)
N $71^{\circ}25'42''$ E, 135.47'(M)ABLE:

C-3
R=100.00'(P#C)
L=42.66'(P#C)
 $\Delta=24^{\circ}26'38''$ (P#C)
CH=N $77^{\circ}46'41''$ E, 42.34'(P#C)

I hereby certify that this Sketch of Survey of the hereon described property has been made under my direction, and to the best of my knowledge and belief, it is a true and accurate representation of a survey that meets the minimum technical standards set forth by the Florida Board of Professional Land Surveyors as described in Chapter 51, 17 of the Florida Administrative Code.

Wesley B. Haas
State of Florida Professional Surveyor & Mapper
License No. 13033

L1 N $90^{\circ}00'00''$ E 14.45'(P)
S $89^{\circ}58'11''$ E 14.49'(M)
L2 S $00^{\circ}00'00''$ W 25.00'(P)
S $0^{\circ}04'19''$ W 24.87'(C)



FLOOD INFORMATION
By performing
fema...



MIAMI BEACH

Plan Routing Sheet

General Information		
Date <i>8-30-13</i>	Process/Permit Number Re-Submittals Only <i>B1306170</i>	Historic (Y/N) <i>N</i>
Job Address <i>1649 W 22 ST</i>		
Contact Name <i>DANNY MACK</i>	E-mail <i>DANNY.MACK223@miabeach.com</i>	Telephone <i>(305) 252-1516</i>

Re-submittals - New Sheets:

☐

Yes

☐

No

List all new sheets:

OFFICE USE ONLY

Required Approvals - As Indicated		
☒ Planning & Zoning	☐ Fire	☐ Public Works
☒ Flood Plain Management	☒ Building	☒ Structural
☐ Electrical	☐ Mechanical	☐ Plumbing
☐ Elevator		

Comments:

Reviewer:

Rut

Date:

8/30/13



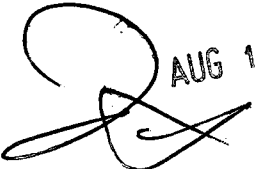
Walk Thru

☐

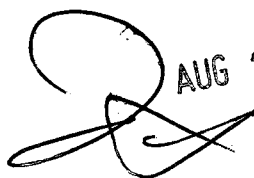
Drop Off

Clear Choice Windows & Doors, Inc. 12901 SW 122nd Ave Unit 105 Miami, Florida 33186				Wind Speed (mph) 175 Importance Factor 1.00 Exposure Category D Risk Category 2	Mean Roof Height [h] (ft) 29.00 Height Above Gnd. Level [z] (ft) 29.00 Horizontal Dimen. of Bldg. (ft) 39.00 Roof Slope (deg.) >10 Type of Building With Impact Protection
Coefficient Kh 1.16		Coefficient Kzt 1.00		Coefficient Kz 1.16	Coefficient Kd 0.85
Velocity Pressure Evaluated @z [qz] (lb/ft^2) 77.30			Velocity Pressure Evaluated @h [qh] (lb/ft^2) 77.30		

Mark	Comp Type	Component Size			Gcp Coefficients					Gcpi Coeff.		Design Wind Pressures (lb/ft^2)			
		W (in)	H (in)	S (in)	A ft^2	Z4+	Z5+	Z4-	Z5-	Pos	Neg	Z4+	Z4-	Z5+	Z5-
u1	Other	52.30	79.00		28.69	0.92	0.92	-1.02	-1.24	0.18	-0.18	51.0	-55.6	51.0	-65.8
u2	Other	64.00	89.00		39.56	0.89	0.89	-0.99	-1.19	0.18	-0.18	49.8	-54.5	49.8	-63.5
u3,4,5	Other	24.00	60.00		10.00	1.00	1.00	-1.10	-1.40	0.18	-0.18	54.7	-59.4	54.7	-73.3
u6,8	Other	37.00	50.60		13.00	0.98	0.98	-1.08	-1.36	0.18	-0.18	53.8	-58.4	53.8	-71.4
u7	Other	30.00	80.00		16.67	0.96	0.96	-1.06	-1.32	0.18	-0.18	52.9	-57.6	52.9	-69.6



AUG 19 2013

 AUG 19 2013

ASCE 7-10 WIND LOADS ON COMPONENTS AND CLADDING : AL-FAROOQ CORPORATION, 1235 S.W. 87th AVE, MIAMI, FL. 33174. TEL: 305-264-8100

Engineers Seal	Engineers Name And Signature	Design Date 8/16/2013 7:46:18 AM	Design Reference Number Abrashoff 1649 W 22 St
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**DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY
AFFAIRS (PERA)
BOARD AND CODE ADMINISTRATION DIVISION
NOTICE OF ACCEPTANCE (NOA)**

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/pera/

PGT Industries
1070 Technology Drive,
Nokomis, Fl. 34275

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA - Product Control Section 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 Section (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. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section 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 Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "FD-750" Outswing Aluminum French Door w/Sidelites - L.M.I.

APPROVAL DOCUMENT: Drawing No. 8000-11, titled "Alum. French Door & Side Lites, Impact", sheets 1 through 12 of 12, dated 12/23/04, with revision E dated 10/12/11, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E., 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 Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and 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 NOA # 09-1028.10 and consists of this page 1 and evidence pages E-1, E-2, and E-3, as well as approval document mentioned above.

The submitted documentation was reviewed by Manuel Perez, P.E.



NOA No 11-1013.24
Expiration Date: February 24, 2015
Approval Date: November 24, 2011
Page 1

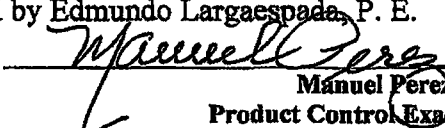
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections
2. Drawing No. 8000-11, titled "Alum. French Door & Side Lites, Impact", sheets 1 through 12 of 12, dated 12/23/04, with revision E dated 10/12/11, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.

B. TESTS

1. Test reports on: 1) Air Infiltration Test,
2) Uniform Static Air Pressure Test,
3) Water Resistance Test,
4) Forced Entry Test, per SFBC 3603.2 (b)
along with marked-up drawings and installation diagram of an aluminum sliding glass door using a low sill threshold, glazed with 7/16" laminated glass, prepared by Fenestration Testing Laboratory, Inc., Test Report No. FTL-5941, dated 05/20/09, signed and sealed by Julio E. Gonzalez, P.E.
(Submitted under NOA # 09-1028.10)
2. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94,
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Test, Per FBC 2411 3.2.1 and TAS 202-94
along with marked-up drawings and installation diagram of aluminum doors of OXXO configuration, prepared by Fenestration Testing Laboratory, Inc., Test Report No. *(Submitted under NOA # 09-1028.10)*
3. Test reports on: 1) Uniform Static Air Pressure Test, per FBC, TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
4) Forced Entry Test, per FBC 2411 3.2.1 and TAS 202-94
along with marked-up drawings and installation diagram of aluminum doors of OXXX configuration, prepared by Fenestration Testing Laboratory, Test Reports No. FTL-4527, dated 02/10/05, signed and sealed by Edmundo Largaespada, P. E.
(Submitted under NOA # 05-0419.03)
4. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, per FBC, TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Forced Entry Test, per FBC 2411 3.2.1 and TAS 202-94
along with marked-up drawings and installation diagram of aluminum doors of OXXO configuration, prepared by Fenestration Testing Laboratory, Test Reports No. FTL-4528, dated 02/14/05, signed and sealed by Edmundo Largaespada, P. E.
(Submitted under NOA # 05-0419.03)

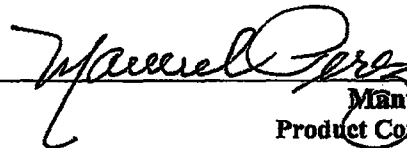

Manuel Perez, P.E.
Product Control Examiner
NOA No 11-1013.24

Expiration Date: February 24, 2015
Approval Date: November 24, 2011

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS (CONTINUED)

5. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of aluminum doors of XXXO configuration, prepared by Fenestration Testing Laboratory, Test Reports No. FTL-4529, dated 02/14/05, signed and sealed by Edmundo Largaespada, P. E.
(Submitted under NOA # 05-0419.03)
6. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of aluminum outswing French door, prepared by Fenestration Testing Laboratory, Test Reports No. FTL-4530, dated 02/14/05, signed and sealed by Edmundo Largaespada, P. E.
(Submitted under NOA # 05-0419.03)
7. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of aluminum outswing French door, prepared by Fenestration Testing Laboratory, Test Reports No. FTL-4311, dated 09/01/04, signed and sealed by Edmundo Largaespada, P. E.
(Submitted under NOA # 05-0103.03)
8. Test reports on: 1) Uniform Static Air Pressure Test, per FBC, TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of aluminum outswing French door, prepared by Fenestration Testing Laboratory, Test Reports No. FTL-4312, dated 09/13/04, signed and sealed by Edmundo Largaespada, P. E.
(Submitted under NOA # 05-0103.03)
9. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, per FBC, TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Forced Entry Test, per FBC 2411 3.2.1 and TAS 202-94
along with marked-up drawings and installation diagram of aluminum outswing French door, prepared by Fenestration Testing Laboratory, Test Reports No. FTL-4315, dated 09/13/04, signed and sealed by Edmundo Largaespada, P. E.
(Submitted under NOA # 05-0103.03)



Manuel Perez, P.E.
Product Control Examiner
NOA No 11-1013.24

Expiration Date: February 24, 2015
Approval Date: November 24, 2011

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2007, dated 10/01/09, prepared, signed and sealed by Robert L. Clark, P.E, updated to the FBC-2010 on 10/11/11, signed and sealed by A. Lynn Miller, P.E.
2. Glazing complies with ASTM E1300-04

D. QUALITY ASSURANCE

1. Miami Dade Department of Permitting, Environment, and Regulatory Affairs (PERA).

E. MATERIAL CERTIFICATIONS

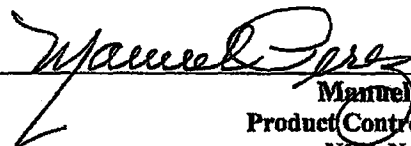
1. Notice of Acceptance No. **10-0922.09** issued to **E.I. DuPont DeNemours & Co., Inc.** for their "**DuPont Butacite® PVB, Interlayer**" dated 12/24/10, expiring on 12/11/11.
2. Notice of Acceptance No. **09-0223.05** issued to **Solutia, Inc.** for their "**Saflex Multi-layer Glass Interlayer**" dated 04/08/09, expiring on 04/08/14.
3. Notice of Acceptance No. **08-1224.04** issued to **Solutia, Inc.** for their "**Saflex Composites Glass Interlayer with PET Core**" dated 02/25/09, expiring on 12/11/13.

F. STATEMENTS

1. Statement letter dated 10/07/11, Successor Engineer adopting the another engineer's work per FAR 61G15-27-001, signed & sealed by A. Lynn Miller, P.E.
2. Statement letter of conformance with the FBC-2007 and FBC-2010, prepared by manufacturer, dated 10/11/11, signed & sealed by A. Lynn Miller, P.E.
3. Statement letter of "No financial interest", prepared by manufacturer, dated 10/11/11, signed & sealed by A. Lynn Miller, P.E.
4. Letter of lab compliance, part of the above test reports.
5. Proposal No. **08-1891** issued by BCCO, dated January 26, 2009, signed by Ishaq Chanda, P.E.

G. OTHER

1. Notice of Acceptance No. **09-1028.10**, issued to PGT Industries for their Series "FD-750" Outswing Aluminum French Door w/Sidelites – L.M.I., approved on 02/10/10 and expiring on 02/24/15.



Manuel Perez, P.E.
Product Control Examiner
NOA No 11-1013.24

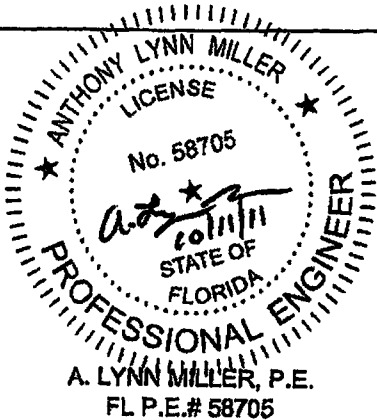
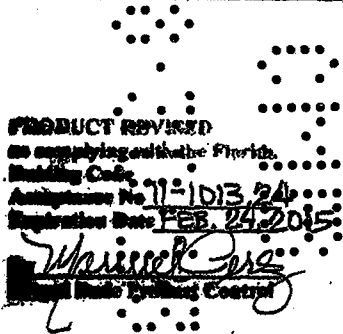
Expiration Date: February 24, 2015
Approval Date: November 24, 2011

NOTES: OUTSWING IMPACT FRENCH DOOR(S) AND SIDE LITE(S)

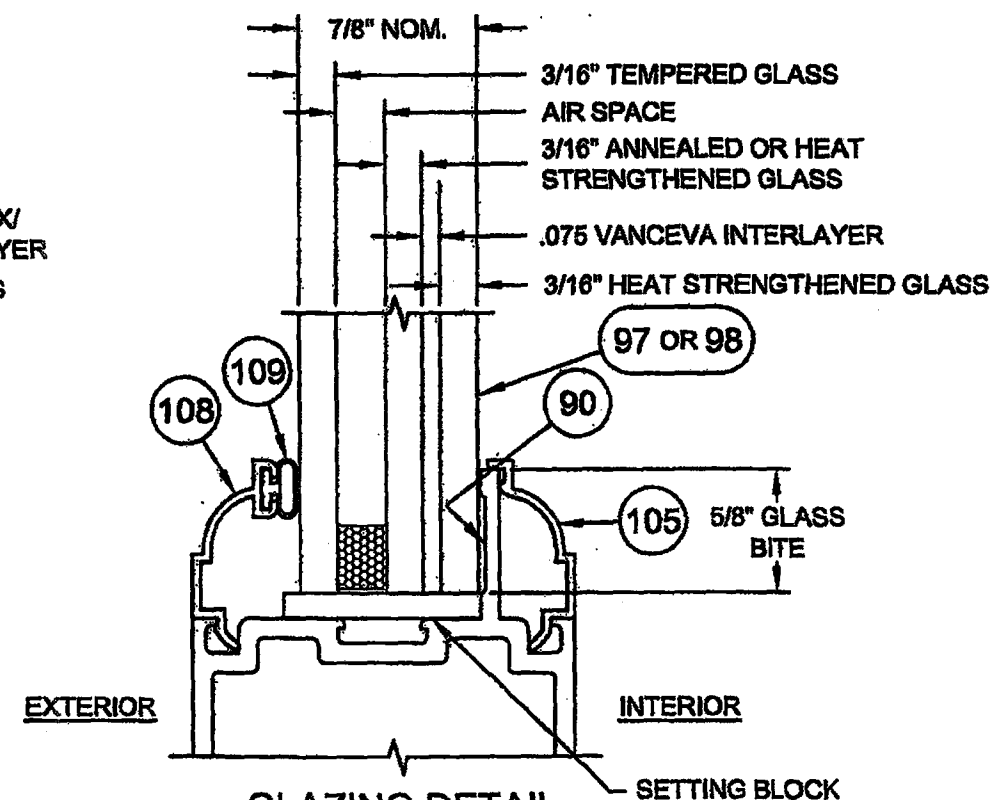
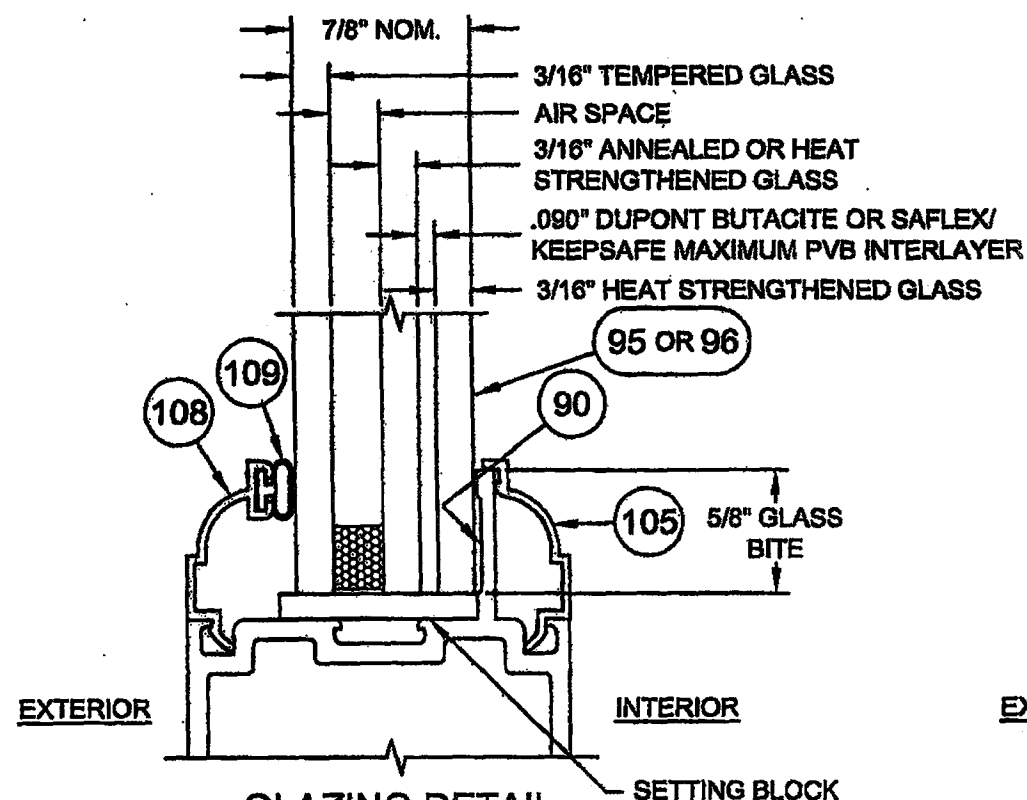
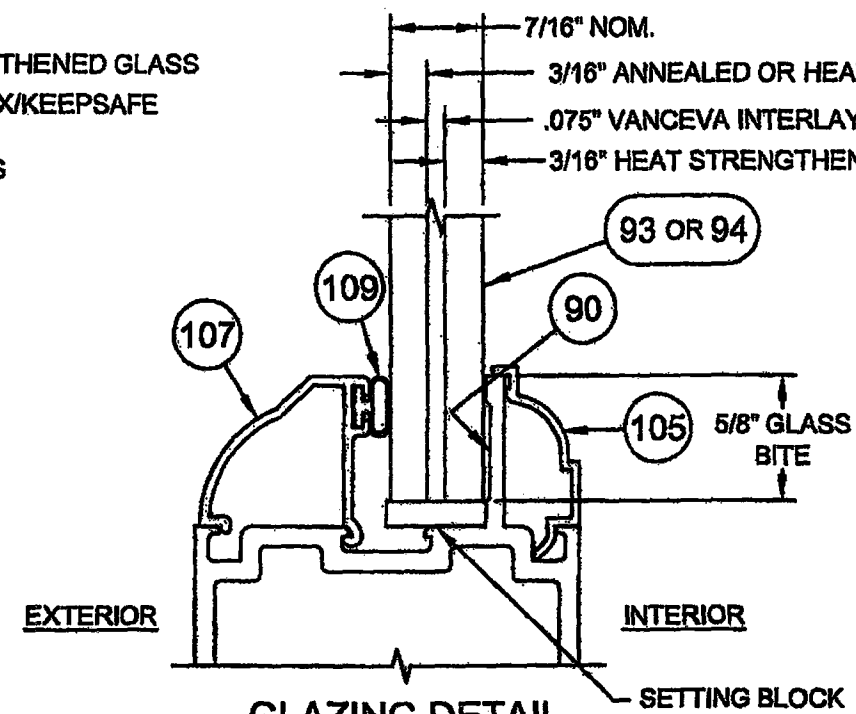
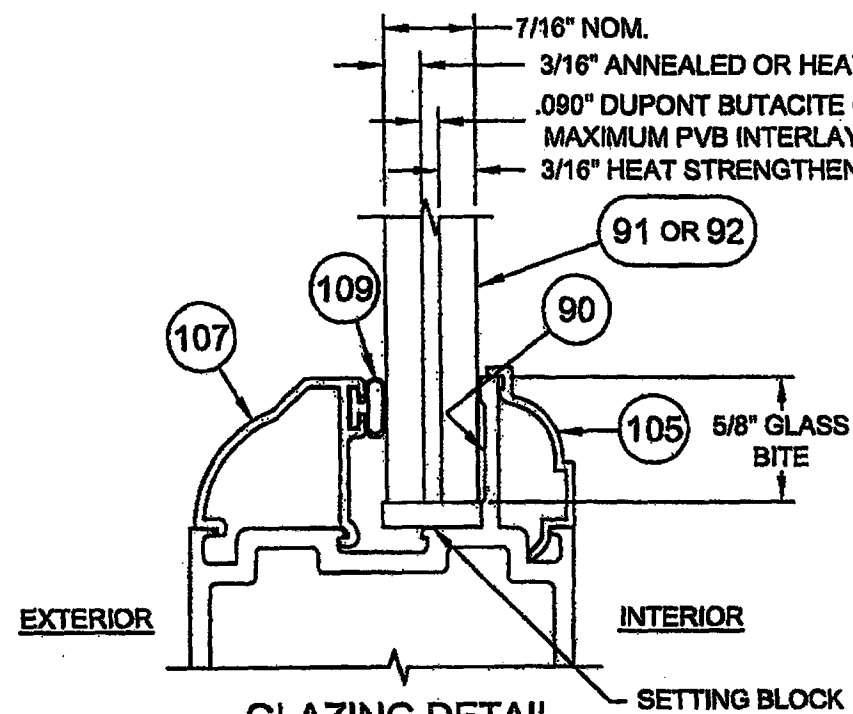
1. GLAZING OPTIONS:
- A. 7/16" LAMI CONSISTING OF (1) LITE OF 3/16" ANNEALED GLASS AND (1) LITE OF 3/16" HEAT STRENGTHENED GLASS WITH AN .090 PVB INTERLAYER OF DUPONT BUTACITE OR SAFLEX/KEEPSAFE MAXIMUM.
 - B. 7/16" LAMI CONSISTING OF (2) LITES OF 3/16" HEAT STRENGTHENED GLASS WITH AN .090 PVB INTERLAYER OF DUPONT BUTACITE OR SAFLEX/KEEPSAFE MAXIMUM.
 - C. 7/16" LAMI CONSISTING OF (1) LITE OF 3/16" ANNEALED GLASS AND (1) LITE OF 3/16" HEAT STRENGTHENED GLASS WITH AN .075 VANCEVA INTERLAYER.
 - D. 7/16" LAMI CONSISTING OF (2) LITES OF 3/16" HEAT STRENGTHENED GLASS WITH AN .075 VANCEVA INTERLAYER.
 - E. 7/8" LAMI I.G. CONSISTING OF (1) LITE OF 3/16" TEMPERED GLASS OUTSIDE, 1/4" AIR SPACE AND (1) 7/16" LAMI GLASS ASSEMBLY INSIDE (3/16" A,.090 PVB, 3/16" HS).
 - F. 7/8" LAMI I.G. CONSISTING OF (1) LITE OF 3/16" TEMPERED GLASS OUTSIDE, 1/4" AIR SPACE AND (1) 7/16" LAMI GLASS ASSEMBLY INSIDE (3/16" HS,.090 PVB, 3/16" HS).
 - G. 7/8" LAMI I.G. CONSISTING OF (1) LITE OF 3/16" TEMPERED GLASS OUTSIDE, 1/4" AIR SPACE AND (1) 7/16" LAMI GLASS ASSEMBLY INSIDE (3/16" A,.075 VANCEVA, 3/16" HS).
 - H. 7/8" LAMI I.G. CONSISTING OF (1) LITE OF 3/16" TEMPERED GLASS OUTSIDE, 1/4" AIR SPACE AND (1) 7/16" LAMI GLASS ASSEMBLY INSIDE (3/16" HS,.075 VANCEVA, 3/16" HS).
2. DESIGN PRESSURES: TABLE 1, SHEET 3.
- A. NEGATIVE DESIGN LOADS BASED ON TESTED PRESSURE AND GLASS TABLES ASTM E1300-02.
 - B. POSITIVE DESIGN LOADS BASED ON WATER TEST PRESSURE AND GLASS TABLES ASTM E1300-02.
3. CONFIGURATIONS: X, O, XX, XO, OX, XXX, XXO, OXX, OXO, XXXX, XXXO, OXXX, OR OXXO WHERE O REPRESENTS EITHER THE NARROW JAMB OR FULL JAMB SIDE LITE. ANY TWO ADJACENT X UNITS CAN BE EITHER TWO SINGLE, X DOORS OR A DOUBLE, XX DOOR' BOTH USING EITHER THE STANDARD OR THE LOW-RISE SILL. THE FRENCH DOOR ASSEMBLY BEAM IS USED TO ASSEMBLE X, XX, AND O UNITS TO MAKE THE ABOVE CONFIGURATIONS.
4. ANCHORAGE: THE 33 1/3% STRESS INCREASE HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT. FOR ANCHORAGE REQUIREMENTS SEE SHEETS 9 THRU 11.
5. SHUTTERS ARE NOT REQUIRED.
6. SEALANT: INSTALLATION SCREWS, FRAME AND PANEL CORNERS SEALED WITH CLEAR COLORED SEALANT. VERTICAL ASSEMBLY BEAM SEAMS SEALED ON THE INTERIOR AND EXTERIOR WITH CONTRACTOR'S SEALANT.
7. REFERENCES: TEST REPORTS: FTL-4311, FTL-4312, FTL-4315, FTL-4527, FTL-4528, FTL-4529, FTL-4530, FTL-4921 AND FTL-5941.
ANSI/AF&PA NDS-2005 FOR WOOD CONSTRUCTION
ADM-2005 ALUMINUM DESIGN MANUAL
8. THIS PRODUCT HAS BEEN DESIGNED & TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE, INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).

NOA DRAWING MAP

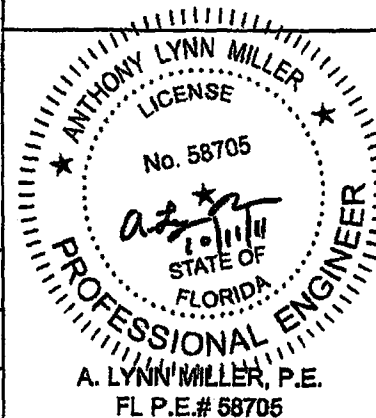
TOPIC	SHEET
GENERAL NOTES.....	1
CONFIGURATIONS.....	1
GLAZING DETAILS.....	2
DESIGN PRESSURES.....	3
ELEVATIONS.....	4
VERT. SECTIONS.....	5
HORIZ. SECTIONS.....	6
PARTS LIST.....	7
EXTRUSIONS.....	8-9
ANCHORAGE.....	10-12



Revised By: J.R.	Date: 09/22/09	Revisions: C	UPDATED BUILDING CODE AND DESIGN MANUAL YEARS. ADDED TEST REPORT NUMBERS.	1070 TECHNOLOGY DRIVE NOKOMIS, FL 34275 P.O. BOX 1528 NOKOMIS, FL 34274		Description: GENERAL NOTES AND DRAWING MAP			
Revised By: J.R.	Date: 01/25/10	Revisions: D	NO CHANGES THIS SHEET			Title: ALUM. FRENCH DOOR & SIDE LITES, IMPACT			
Revised By: J.J.	Date: 10/12/11	Revisions: E	FBC 2010 CODE CHANGE			Series/Model: FD750	Scale: FULL	Sheet: 1 of 12	Drawing No. 8000-11
Drawn By: F.K.	Date: 12/23/04	Checked By: L.T.	Date: 4/8/05						Rev: E



PRODUCT REVISED
on complying with the Florida
Bidding Code
Assessment No. 11013.34
Expiration Date FEB. 24, 2010
By William E. Gritz
General Trade Product Council



Revised By: F.K.	Date: 10/12/06	Revisions: B	NO CHANGE THIS SHEET	1070 TECHNOLOGY DRIVE NOKOMIS, FL 34276 P.O. BOX 1529 NOKOMIS, FL 34274		Description: GLAZING DETAILS				
Revised By: J.R.	Date: 08/22/09	Revisions: C	NO CHANGE THIS SHEET			Title: ALUM. FRENCH DOOR & SIDE LITES, IMPACT				
Revised By: J.R.	Date: 01/25/10	Revisions: D	NO CHANGES THIS SHEET			Series/Model: FD750				
Drawn By: F.K.	Date: 12/23/04	Checked By: L.T.	Date: 4/8/05			Scale: FULL	Sheet: 2 of 12	Drawing No. 8000-11	Rev: E	