



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

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

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

www.buildingcodeonline.com

NOTICE OF ACCEPTANCE (NOA)

Wellbilt Industries, LLC
8600 N.W. South River Dr. (Suite # 207)
Miami, Florida 33166

SCOPE:

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

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

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

DESCRIPTION: Sure-Board Wall Panel System

APPROVAL DOCUMENT: Drawing No. 08-219, titled " Sure-Board Wall Panel ", sheets 1 through 10 of 10, prepared by Tilteco, Inc., dated October 01, 2008 with last revision #2 dated June 28, 2010, signed and sealed by Walter A. Tillit Jr., P.E., on July 01, 2010 bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

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

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

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

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

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. **An original signed and sealed company letter from Wellbilt Industries, LLC is required, providing that the Sure-Board Wall Panel System was purchased from them in order for this NOA to be valid on any job.**

This NOA revises NOA #08-1126.08 and consists of this page 1, evidence submitted pages E-1 & E-2 as well as approval document mentioned above.

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



Helmy A. Makar
 07/21/2010

NOA No. 10-0519.09
Expiration Date: 02/05/2014
Approval Date: 07/21/2010

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #03-1015.08

A. DRAWINGS

1. *Drawing No. 02-385, titled " Wall Panel System ", sheets 1 through 10 of 10, prepared by Tilteco, Inc., dated July 11, 2002 with last revision #1 dated January 7, 2004, signed and sealed by Walter A. Tillit Jr., P.E.*

B. TEST

1. *Test report on Large Missile Impact test, Cyclic Wind Pressure test and Uniform Static Air Pressure test and Air & Water Infiltration tests and ASTM E 72-98 on Composite Wall Panels over Galvanized Steel Studs, prepared by American Test Lab of South Florida, report No. 0506.01-03, dated September 5, 2003, signed and sealed by William R. Mehner, P.E. and Henry Hattem, PE.*
2. *Addendum to report No. 0506.01-03, dated December 15, 2003, signed and sealed by William R. Mehner, P.E. and Henry Hattem, PE.*

C. CALCULATIONS

1. *Panel allowable calculation and Anchors' verification prepared by Walter A. Tillit Jr., P.E. dated august 27, 2003 signed and sealed by Walter A Tilit Jr., PE.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATION

1. *Tensile test report of metal panel, prepared by Q. C. Metallurgical, Inc., dated August 4, 2003, signed and sealed by Frank E. Grate, Jr., P E.*
2. *Copy of N.O.A. # 00-1114.05.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 05-0929.09

A. DRAWINGS

1. *Drawing No. 05-291, titled " Wall Panel System ", sheets 1 through 10 of 10, prepared by Tilteco, Inc., dated September 16, 2005 with last revision #1 dated September 16, 2005, signed and sealed by Walter A. Tillit Jr., P.E.*

B. TEST

1. *None.*

C. CALCULATIONS

1. *Panel Anchors' verification per FBC 2004 edition prepared by Walter A. Tillit Jr., P.E. dated September 21, 2005 signed and sealed by Walter A Tilit Jr., PE.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATION

1. *None.*


Henry A. Makar, P.E., M.S.

Senior Product Control Examiner

NOA No. 10-0519.09

Expiration Date: 02/05/2014

Approval Date: 07/21/2010

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 08-1126.08

A. DRAWINGS

1. *Drawing No. 08-219, titled " Sure-Board Wall Panel ", sheets 1 through 10 of 10, prepared by Tilteco, Inc., dated October 01, 2008 with last revision #1 dated October 01, 2008, signed and sealed by Walter A. Tillit Jr., P.E., on December 15, 2008.*

B. TEST

1. *None.*

C. CALCULATIONS

1. *Calculation titled "Revision of Miami-Dade County Product Approval Anchor Calculations " by Walter A. Tillit Jr., P.E. dated November 24, 2008 signed and sealed by Walter A Tilit Jr., PE.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATION

1. *Copy of N.O.A. # 05-0929.09*

4. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 08-219, titled " Sure-Board Wall Panel ", sheets 1 through 10 of 10, prepared by Tilteco, Inc., dated October 01, 2008 with last revision #2 dated June 28, 2010, signed and sealed by Walter A. Tillit Jr., P.E., on July 01, 2010.*

B. TEST

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATION

1. *Copy of N.O.A. # 08-1126.08*



Helmy A. Makar, P.E., M.S.
Senior Product Control Examiner

NOA No. 10-0519.09

Expiration Date: 02/05/2014

Approval Date: 07/21/2010

GENERAL NOTES:

1. THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) APPLIES ONLY TO THE STRUCTURAL WALL PANELS INDICATED AND SPECIFIED ON THIS DRAWING, HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2007 EDITION OF THE F.B.C. DESIGN WIND LOADS SHALL BE DETERMINED IN ACCORDANCE WITH SECTION 1620 OF THE F.B.C. DESIGN DEAD AND LIVE LOADS SHALL BE DETERMINED IN ACCORDANCE WITH SECTIONS 1612 AND 1616 OF THE F.B.C.
2. BUILDING DIMENSIONS, DETAILS, UPLIFT, OVERTURNING, FOUNDATION, ROOF AND OTHER ELEMENTS WHERE WALL PANELS WILL BE INSTALLED SHALL BE DESIGNED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER OR ARCHITECT AND REVIEWED BY THE STRUCTURAL PLANS EXAMINER OF THE CORRESPONDING BUILDING DEPARTMENT IN ORDER TO ISSUE A PERMIT FOR CONSTRUCTION.
3. ALL ELECTRICAL, MECHANICAL DETAILS AND PARTS AND FIRE RATING PROVISIONS ARE NOT PART OF THIS APPROVAL AND SHALL BE PREPARED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER AND REVIEWED BY THE CORRESPONDING BUILDING DEPARTMENT IN ORDER TO ISSUE A PERMIT FOR CONSTRUCTION.
4. ALL STEEL STUDS AND SKIN SHALL HAVE STRUCTURAL QUALITY ASTM A-653, GRADE 40 Min. WITH 47.0 KSI Min. YIELD STRENGTH (AFTER ROLLED). G-60 GALVANIZED STEEL DESIGNATION FOR STUDS AND G-90 FOR SKIN.
5. ALL SCREWS SHALL BE CORROSION RESISTANT AS PER DIN 50018 WITH FLAT HEAD AND RAISED SIDES TO PREVENT EXCESSIVE PENETRATION WITH MIN. $F_y = 80$ ksi.
6. ANCHORS TO CONCRETE FLOOR, FOUNDATION, SHALL BE AS FOLLOWS:
 - (A) 1/4"Ø CRETE-FLEX ANCHORS AS MANUFACTURED BY ELCO FASTENING SYSTEMS, LLC, WITH 1 3/4" MINIMUM EMBEDMENT INTO $f'_c=3350$ psi POURED CONCRETE.
 - (B) 1/2"Ø POWERS POWER-STUD + SD2 ANCHORS AS MANUFACTURED BY POWERS FASTENERS, INC. WITH 5" MINIMUM EMBEDMENT INTO $f'_c=3350$ psi POURED CONCRETE
 - (C) 1/2"Ø KWIK BOLT EXPANSION ANCHORS AS MANUFACTURED BY HILTI, INC. WITH 5" MINIMUM EMBEDMENT INTO $f'_c=3350$ psi POURED CONCRETE
 - (D) ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER.

NOTE: TO VERIFY THAT ANCHORS ARE NOT OVERSTRESSED IN THESE PRODUCT APPROVAL DOCUMENTS (P.A.D.), A 33% INCREASE IN ALLOWABLE LOADS WAS NOT USED IN THE ANCHORS ANALYSIS.
7. WALL PANEL SYSTEM IS DESIGNED TO BE INSTALLED AS AN EXTERIOR BEARING WALL OR CURTAIN WALL:
 - WHEN INSTALLED AS A BEARING WALL, PANEL SHALL BE Laterally supported by a concrete slab and foundation at the bottom, and roof trusses or rafters with sheathing at top, at a spacings not to exceed 24" on centers. wall connection to roof system shall be performed by a Florida registered professional engineer or architect and reviewed by the structural plans examiner of the corresponding building department in order to issue a permit for construction. structural design shall include provisions for all loads developed at the joint between wall panels and roof system.
 - WHEN INSTALLED AS A CURTAIN WALL, PANEL SHALL BE Laterally supported by concrete slabs/beams, wood or steel structural beams. spacing between lateral support shall not to exceed 24" on centers on buildings without a concrete slab. for buildings with concrete slabs or continuous concrete beams, installation shall be as per section X-X, sheet 4 of 10, and detail 3 sheet 10 of 10.

STRUCTURAL ADEQUACY OF EXISTING BUILDING SHALL BE VERIFIED BY THE PERMIT HOLDER.

MAXIMUM ALLOWABLES: OBTAINED THRU TESTING PERFORMED AS PER TAS 201, 202, 203 AND ASTM E-72, AS PER ATL REPORT 0506.01-03 WITH ADDENDUM.
 LARGE MISSILE IMPACT RESISTANT: 80 FT/SEC. MISSILE SPEED.
 MAXIMUM PANEL HEIGHT: 108"
 MAXIMUM PANEL WIDTH: 48"
 MAXIMUM COMPRESSION LOAD PER PANEL: 5200 Lb (1300 Lb/FT) *
 MAXIMUM TENSION LOAD PER PANEL: 2600 Lb (650 Lb/FT) *
 MAXIMUM RACKING LOAD PER PANEL: 2200 Lb (550 Lb/FT) *
 MAXIMUM LATERAL WIND LOAD FOR PANELS WITH STUDS @ 16" o.c.: ±64.3 psf

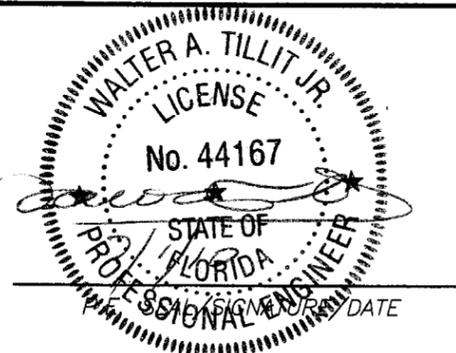
- * ONLY SOLID PANELS (WITH NO OPENINGS) SHALL BE CONSIDERED TO RESIST THE RACKING FORCES, COMPRESSION AND TENSION LOADS.
- 8. ELECTRIC SERVICE DROP CONDUCTORS OR ANY OVERHEAD WIRING SHALL NOT EXIST OR BE INSTALLED OVER ANY PART OF THIS STRUCTURE.
- 9. (a) THIS P.A.D. PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT; i.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.A.D.
- (b) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT BASED ON THIS P.A.D. PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.
- (c) THIS P.A.D. WILL BE CONSIDERED INVALID IF MODIFIED.
- (d) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE PROFESSIONAL OF RECORD (P.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.A.D. PROFESSIONAL OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.A.D. ENGINEER SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.
- (e) ORIGINAL P.A.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER THAT PREPARED IT.

10. A PERMANENT PANEL MANUFACTURER'S LABEL SHALL BE PLACED ON THE EXPOSED SURFACE OF THE PANEL. ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABEL SHALL READ AS FOLLOWS:
 "SURE-BOARD® WALL PANEL"
WELLBILT INTERNATIONAL.
 MIAMI, FLORIDA
 MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED.

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No 10-0519.09
 Expiration Date 02/05/2014
 By *Walter A. Tillit Jr.*
 Miami Dade Product Control
 Division

F.B.C. (High Velocity Hurricane Zone)

Warning note:
 Attention Building Official / Building Inspector.
 An 'original signed and company sealed letter' from Wellbilt International is required proving that the panels were purchased from them in order for this NOA to be valid on any job.



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TILLIT TESTING & ENGINEERING COMPANY
 6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
 Phone : (305)871-1530 . Fax : (305)871-1531
 EB-0006719
 WALTER A. TILLIT Jr. P.E.
 FLORIDA Lic. # 44167

SURE-BOARD® WALL PANEL						M.C.V./L.G. DRAWN BY
WELLBILT INTERNATIONAL						10/01/08 DATE
8600 N.W. SOUTH RIVER DR. (SUITE # 207) MIAMI, FL 33166 PHONE: (305) 884-8020 FAX: (305) 884-8029						08-219 DRAWING No
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	SHEET 1 OF 10
1	OLD 05-291	10/01/08	3	-	-	
2	WARNING NOTE	6/28/10	4	-	-	

SPECIFICATIONS FOR NON METALLIC WALL COMPONENTS: (SEE SHEET 3 OF 10)

1. THE ACROCRETE ACROWALL DA SYSTEM PROVIDES WEATHER RESISTANT TO EXTERIOR WALL. THE UTILIZATION OF DURABLE CEMENTITIOUS BOARD SUBSTRATE (PERMABASE BOARD) COMBINED WITH ACROCRETE ACRYLIC FINISH PROVIDES THE DESIRED ESTHETICS OF VARIOUS COLORS AND TEXTURES TO ACHIEVE AN ARCHITECTURALLY PLEASING WALL. THE ACROCRETE ACROWALL DA SYSTEM IS BACKED BY A 10 YEARS LIMITED MANUFACTURERS WARRANTY ON THE CEMENTITIOUS BOARD (PERMABASE BOARD) AND A 5 YEARS LIMITED MANUFACTURERS WARRANTY ON ALL COATINGS.

2. ACRYLIC EMULSION, MODEL 5-4253 BY SEACO SOUTHEASTERN ADHESIVE COMPANY, IS A READY TO USE ACRYLIC EMULSION THAT SHALL BE USED TO BOND THE PERMABASE BOARD TO THE GALVANIZED STEEL SKIN BEHIND IT CONSTITUTING THE SURE-BOARD® SYSTEM.

3. PERMABASE™ CEMENT BOARD BY NATIONAL GYPSUM COMPANY, IS A 1/2" THICK, CEMENTITIOUS TILE BACKER BOARD MADE OF PORTLAND CEMENT, AGGREGATE AND REINFORCED WITH FIBERGLASS MESH. THE BOTTOM (UNEXPOSED) SIDE FACING HAS A SMOOTH FINISH WITH A FIBERGLASS MESH EMBEDDED IN THE CEMENT SLURRY AND THE TOP (EXPOSED) SIDE FACING HAS A ROUGH FINISH WITH A FIBERGLASS MESH MECHANICALLY EMBEDDED INTO CORE WITH A WEIGHT OF 3.0 POUNDS PER SQUARE FOOT.

PHYSICAL PROPERTIES:	TEST METHOD	PERMABASE
FLEXURAL STRENGTH (psi)	ASTM C 947	750
WEIGHT (psf)	ASTM C 473	3
COMPRESSIVE STRENGTH (psi) (INDENTATION)	ASTM D 2394	2250
FLAME SPREAD/SMOKE DEVELOPED	ASTM E 84	5/0
THERMAL "R"/K VALUE	PROPERTY OF MATERIAL	0.2/2.7
SHEAR BOND STRENGTH, 7 DAYS:		
DRY-SET PORTLAND CEMENT MORTAR (psi)	ANSI A118.1	204
LATEX-SET PORTLAND CEMENT MORTAR (psi)	ANSI A118.4	241
ORGANIC ADHESIVES TYPE 1 (psi)	ANSI A136.1	159

4. ACRODRY BY ACROCRETE ARCHITECTURAL FINISHING SYSTEMS, INC., IS AN ACRYLIC ADHESIVE AND BASE COAT COMBINATION FOR THE ACROCRETE WALL SYSTEMS, USED TO EMBED REINFORCING MESH AND USED AS A LEVELING COAT. THE PROPER MIXING RATIO IS 12 Lb OF WATER TO 50 Lb/BAG OF ACRODRY, COVERING APPROXIMATELY 100 SQUARE FEET OF WALL.

5. ACROMESH BY ACROCRETE ARCHITECTURAL FINISHING SYSTEMS, INC., IS A SPECIALLY WOVEN AND TREATED FIBERGLASS REINFORCING HIGH IMPACT MESH, ALKALI RESISTANT, THICKNESS: 0.045+10% INCHES, WEIGHT: 20.5+10% oz./sq.yd., MINIMUM TENSILE WRAP: 800 Lb/in AND MINIMUM TENSILE FILL: 550 Lb/in.

6. ACROFINISH BY ACROCRETE ARCHITECTURAL FINISHING SYSTEMS, INC., IS A PREMIXED DECORATIVE AND PROTECTIVE WALL COATING. IT IS FORMULATED WITH A 100% PURE ACRYLIC BASED COATINGS INCORPORATING PURE MARBLE AGGREGATES IN VARIETY OF COLOR AND TEXTURES. 70 Lb PAIL COVERS APPROXIMATELY 100-190 SQUARE FEET OF WALL DEPENDING ON TEXTURE.

7. ACROMESH AND ACROFINISH BY ACROCRETE ARCHITECTURAL FINISHING SYSTEMS, INC. BEAR ALSO A MIAMI-DADE COUNTY PRODUCT CONTROL ACCEPTANCE AS COMPONENTS OF A WALL SYSTEM.

8. ACROCRETE ACROWALL DA SYSTEM BEARS AN EVALUATION REPORT BASED ON THE FOLLOWING TESTING PERFORMED ON THIS PRODUCT:

-TEST REPORTS ON ACROCRETE, PREPARED BY APPLIED CONSUMER SERVICES INC.

NUMBER	TEST	ADDITIONAL TEST:
2525-A	ASTM G 26, WEATHERING EXPOSURES	-TEST REPORT ON FIRE PROPAGATION UNDER MODIFIED ASTM E 108, PREPARED BY TESTING CONSULTANTS, INC. PROJECT NUMBER 002010.
2525-B	ASTM E 96, VAPOR TRANSMISSION	-TEST REPORT ON SURFACE BURNING CHARACTERISTICS OF ACROBASE AND ACROCRETE FINISH APPLIED TO GRC BOARD, TESTED UNDER ASTM E-84, PREPARED BY COMMERCIAL TESTING COMPANY, REPORT No. 75239.
2525-C	UL-181, p.11, MOLD RESISTANCE	-TEST REPORT ON WEATHERING EXPOSURE TESTS WITH XENON ARC AND RAIN CYCLES, 2000 HOURS UNDER ASTM G-26, PREPARED BY APPLIED CONSUMER SERVICES, INC., REPORT L/N 2931.
2525-D	ASTM D 413, ADHESION TEST	-TEST REPORT ON IMPACT LOAD RESISTANCE OF ACROWALL DA FINISH SYSTEMS UNDER EIMA TEST METHOD AND STANDARD 101.86, PREPARED BY ACROCRETE, INC.
2525-E	ASTM D 2240, HARDNESS TEST	-TEST REPORT ON PHYSICAL PROPERTIES, PREPARED BY JIM WALTER RESEARCH CORP. THE FOLLOWING TESTS WERE PERFORMED:
2525-F	ASTM C 177, THERMAL RESISTANCE	. COMPRESSIVE STRENGTH UNDER ASTM D 1621.
2525-G	ASTM C 6, WATER ABSORPTION	. FLEXURAL STRENGTH UNDER ASTM C 203.
2525-H	FS TT-C-555, WIND DRIVEN RAIN	. WATER ABSORPTION UNDER ASTM C 272.
2525-I	ASTM B 177, SALT FOG	. WATER VAPOR TRANSMISSION UNDER ASTM E 96.
2525-J	ASTM C 6, p14, FREEZE/THAW	. DIMENSIONAL STABILITY UNDER ASTM D 2126.
2525-K	ASTM D 968, SAND ABRASION	-TEST REPORT ON SURFACE BURNING CHARACTERISTICS UNDER ASTM E-84 FOR ACRODRY PREMIXED BASE COAT, CELOTEX CORPORATION TESTING SERVICES, MTS JOB No. 520228.
2525-L	ASTM D 1308/ANSI Z-124.2 (MODIFIED), CHEMICAL RESISTANCE	-ENGINEERING FIRE INVESTIGATION OF ACRODRY, WALKER ENGINEERING, INC.
2525-M	STAIN RESISTANCE	

APPLICATION SEQUENCE:

1. SPREAD 6-8 MIL OF ACRYLIC EMULSION TO BOND THE 22 GAGE GALVANIZED STEEL SKIN (ALREADY ATTACHED TO WALL PANEL STEEL FRAME) TO THE PERMABASE™ CEMENT BOARD CONSTITUTING THE SURE-BOARD® SYSTEM.

2. USE (5) #10x3/4" S.M.S. LOCATED AT 2 1/4" FROM END, 8", 13 1/2", 14", 7 1/2" TO SECURE PERMABASE™ CEMENT BOARD TO HORIZONTAL TOP AND BOTTOM SLIP TRACK AND USE (17) #10x1 1/2" S.M.S. STARTING AT 6" FROM BOTTOM AT 6" o.c. Max. TO SECURE PERMABASE™ CEMENT BOARD TO 20 GAGE GALVANIZED STEEL VERTICAL STUDS SPACED AT 16" o.c. Max.

3. APPLY ACRODRY AND EMBED 9 1/4" WIDE FIBERGLASS MESH INTO THE WET ACRODRY OVER EVERY JOINT BETWEEN PANELS AND PANEL EDGE AROUND DOORS AND WINDOWS. A PERIOD OF 24 HOURS SHALL LAPSE BETWEEN THE INSTALLATION OF THE JOINT MESH AND THE ACRODRY LEVELING COAT.

4. APPLY ACRODRY LEVELING COAT USING 1/2"x1/2" STAINLESS STEEL NOTCHED TROWEL WITH 1 1/2" SPACE BETWEEN NOTCHES TO THE ENTIRE SURFACE OF BOARD AT A UNIFORM THICKNESS. A PERIOD OF 24 HOURS SHALL LAPSE BEFORE INSTALLING THE FINISH COAT.

5. FINISH WALL USING A STAINLESS STEEL TROWEL, APPLY AND LEAVE A COAT OF TROWEL FINISHES EFFECT OR SAND EFFECT TO A UNIFORM THICKNESS, APPROXIMATELY 1 TO 1 1/2 TIMES THE LARGEST AGGREGATE. THE TEXTURE IS ACHIEVED BY UNIFORM HAND MOTION AND TYPE OF TOOL USED. MAINTAIN WET EDGE FOR UNIFORMITY OF COLOR AND TEXTURE. A TIGHT COAT OF ACROCRETE ACROFINISH SHALL BE APPLIED CONTINUOUSLY, TO A THICKNESS NOT GREATER THAN THE LARGEST AGGREGATES. A WET EDGE SHALL BE MAINTAINED. LEVELING AND TEXTURING SHALL TAKE PLACE IN ONE OPERATION. ACROFINISH DRYING TIME IS 24 HOURS. OVERALL AVERAGE THICKNESS OF ACROCRETE DA SYSTEM IS 3/16".

6. TO REDUCE THE RISK OF DAMAGING WATER SENSITIVE SHEATHING OR FRAMING, ALL WINDOW AND DOOR OPENINGS MUST BE PROPERLY FLASHED AND WATERPROOFED AND INCIDENTAL WATER SHALL BE ALLOWED TO ESCAPE. PLEASE REFER TO SHEET 3 OF 10 FOR TYP.

SEALING DETAIL AT JOINT BETWEEN PANELS AND SHEET 10 OF 10 FOR TYP. SEALING DETAIL AT BOTTOM OF PANEL. FOLLOW WINDOW AND DOOR MANUFACTURERS RECOMMENDATIONS FOR PROPER INSTALLATION. SEALING DETAILS ON SHEET 9 OF 10 ARE TYPICAL AND SHOW

THE INTENT TO PREVENT WATER INFILTRATION INTO AND BEHIND THE SYSTEM. SEE CORNER DETAIL ON SHEET 10 OF 10. ALTERNATE DETAILS AND SPECIFIC CONDITIONS NOT COVERED BY THE TYPICAL DETAILS ARE THE RESPONSIBILITY OF THE LICENSED DESIGN PROFESSIONAL OF RECORD FOR THE BUILDING WHERE THIS SYSTEM WILL BE USED, IN CONSULTATION WITH WELLBILT INTERNATIONAL INC.

7. TEMPORARY PROTECTION SHALL BE PROVIDED AT ALL TIMES UNTIL BASE COAT, FINISH, AND PERMANENT FLASHINGS, SEALANT, ETC. ARE COMPLETED TO PROTECT THE WALL FROM WEATHER AND OTHER DAMAGE. SEALANT AND FLASHINGS SHALL BE INSTALLED PROMPTLY.

8. GLASS FIBER OR SAFB BLANKET INSULATION MAY BE INSERTED IN THE WALL CAVITY FOR BETTER THERMAL AND SOUND PERFORMANCE.

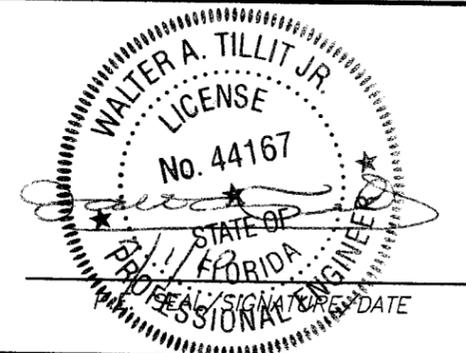
9. THE MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS AND THIS DRAWING SHALL BE STRICTLY ADHERED TO AND A COPY OF THESE INSTRUCTIONS SHALL BE AVAILABLE AT ALL TIMES ON THE JOB SITE DURING INSTALLATION.

10. THE INSTRUCTIONS WITHIN THIS DRAWING GOVERN IF THERE ARE ANY CONFLICTS BETWEEN THE MANUFACTURER'S INSTRUCTIONS AND THIS DRAWING.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 10-0519-09
Expiration Date 02/05/2014
By *Walter A. Tillit Jr.*
Miami Dade Product Control
Division

F.B.C. (High Velocity Hurricane Zone)

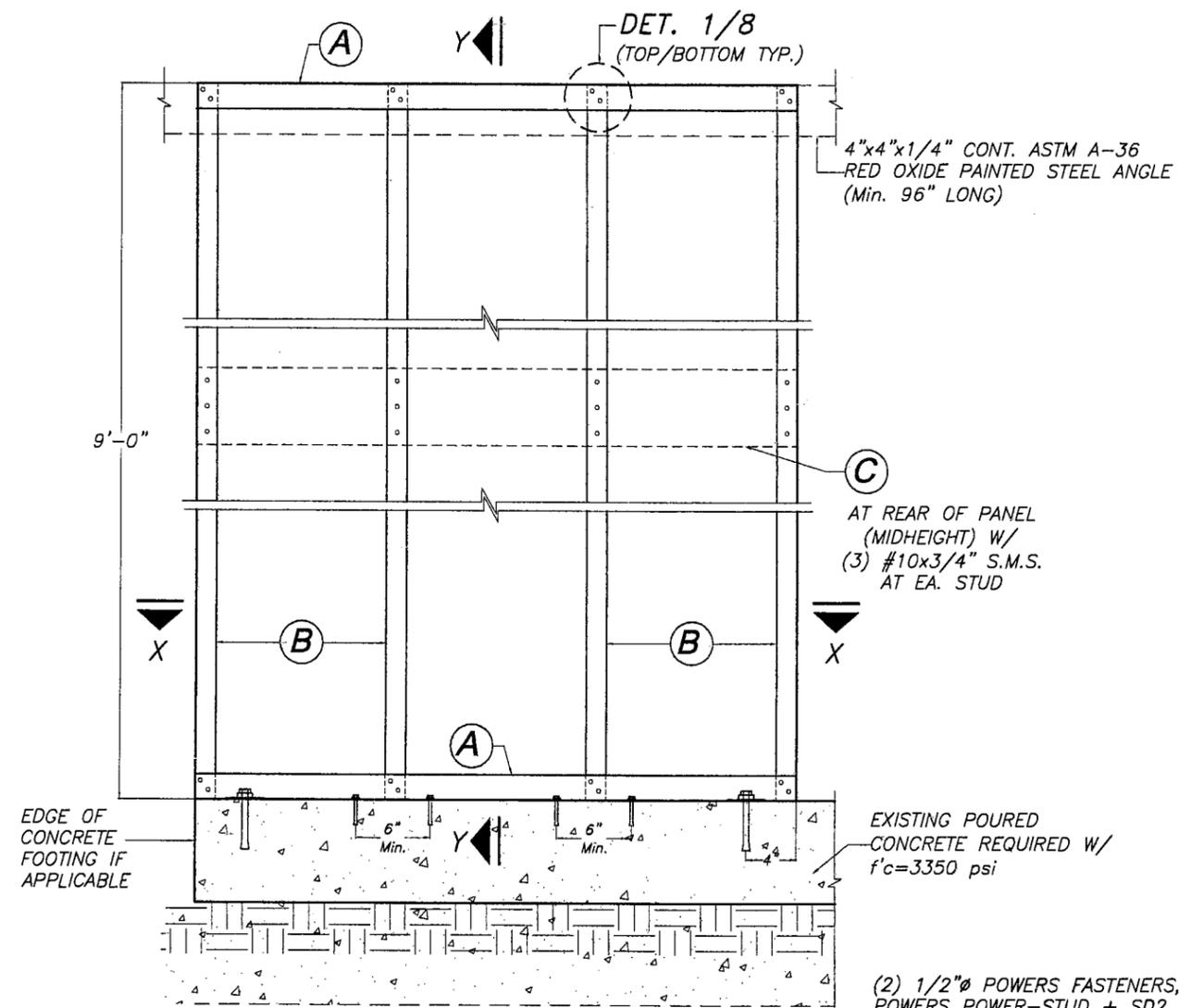
Warning note:
Attention Building Official / Building Inspector.
An 'original signed and company sealed letter' from Wellbilt International is required proving that the panels were purchased from them in order for this NOA to be valid on any job.



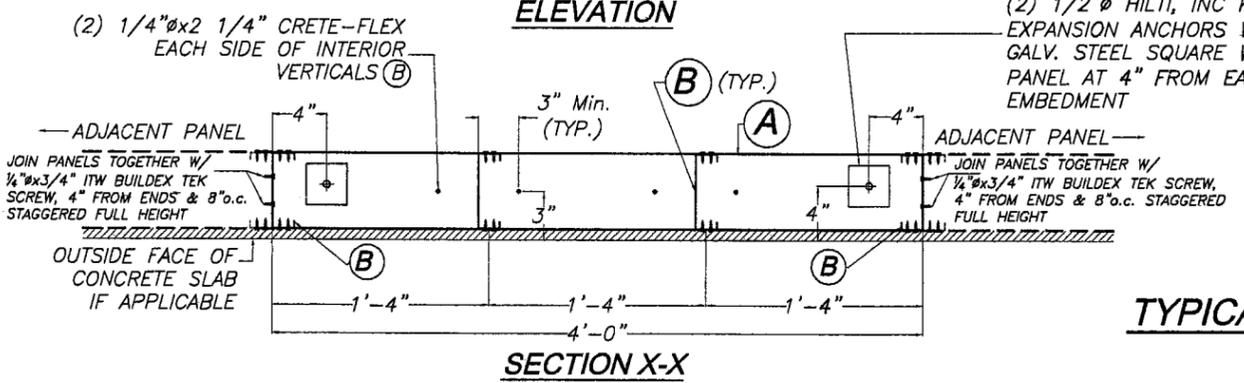
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TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
EB-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

SURE-BOARD® WALL PANEL					
WELLBILT INTERNATIONAL					
8600 N.W. SOUTH RIVER DR. (SUITE # 207) MIAMI, FL 33166 PHONE: (305) 884-8020 FAX: (305) 884-8029					
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 05-291	10/01/08	3	-	-
2	WARNING NOTE	6/28/10	4	-	-

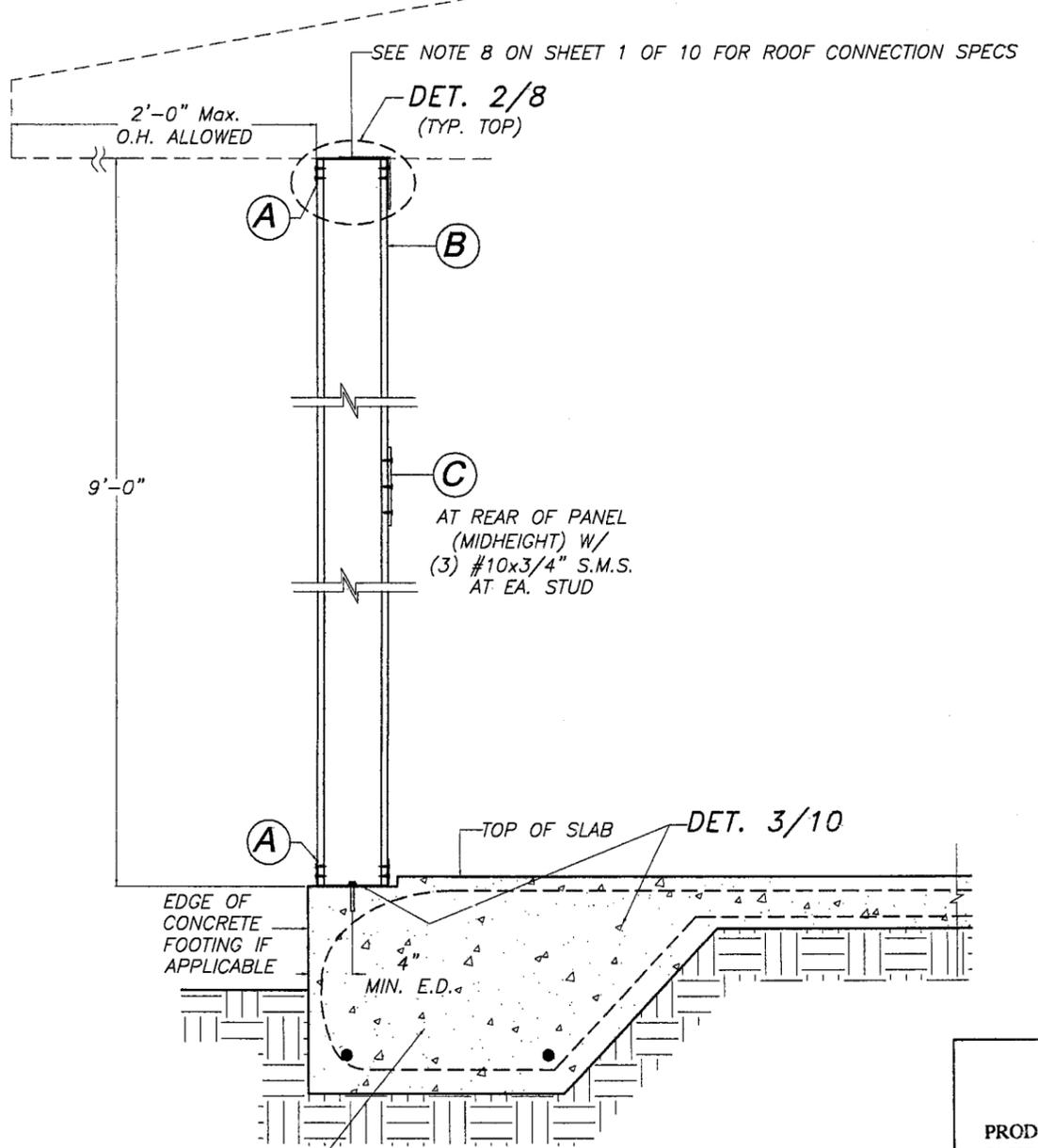
M.C.V./L.G.
DRAWN BY
10/01/08
DATE
08-219
DRAWING No
SHEET 2 OF 10



ELEVATION



SECTION X-X



SECTION Y-Y

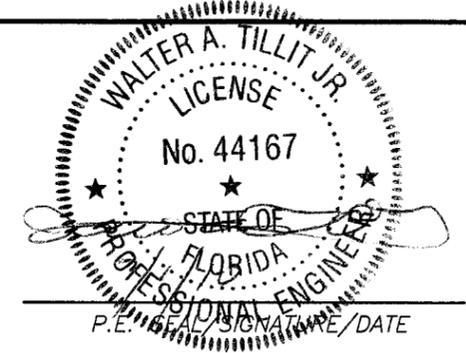
TYPICAL SOLID PANEL (48"x108") W/ STUDS @ 16" o.c.

N.T.S.

F.B.C. (High Velocity Hurricane Zone)

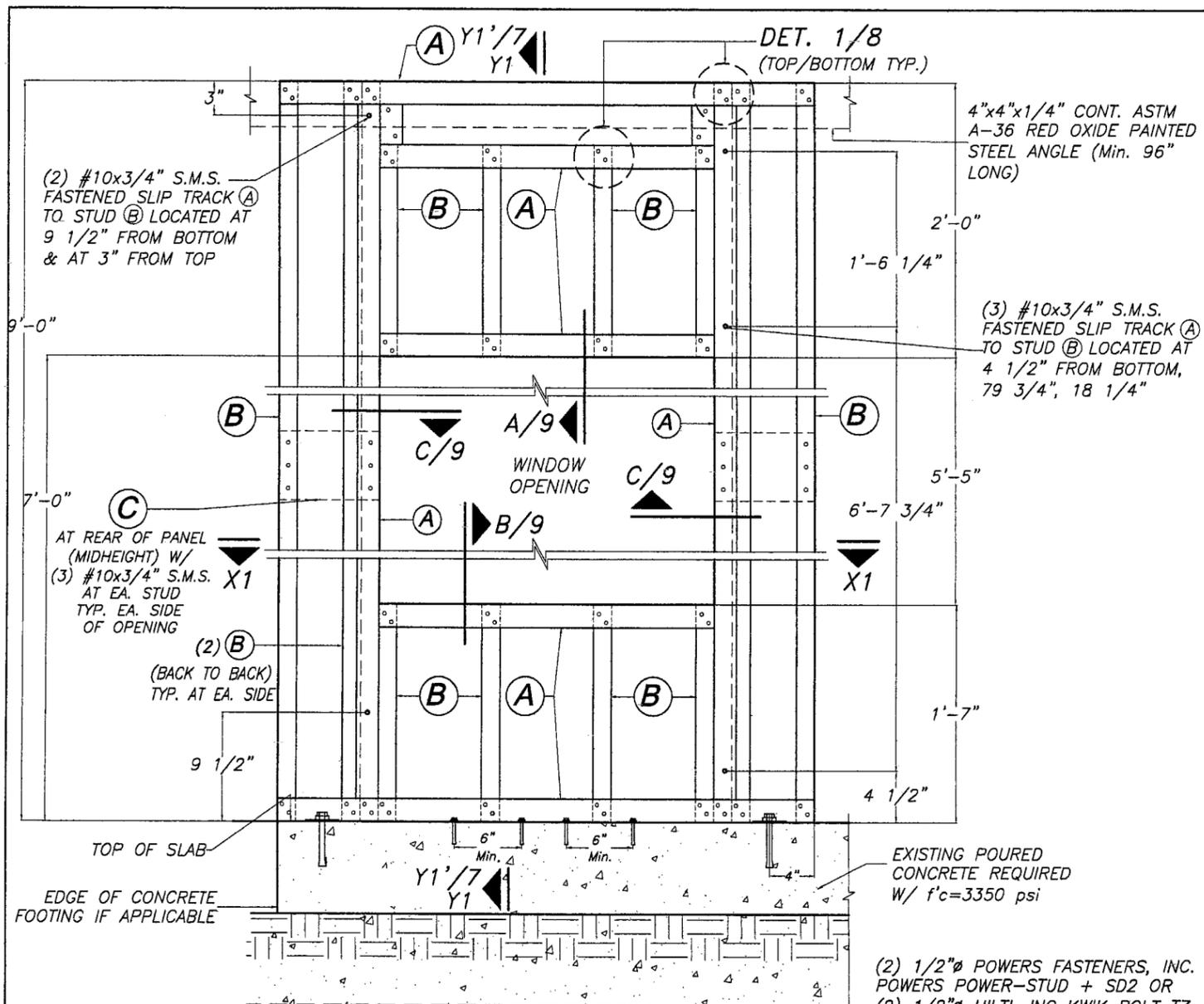
PRODUCT REVISED as complying with the Florida Building Code
 Acceptance No 10-0519.09
 Expiration Date 02/05/2014
 By *Helmut A. Tillit*
 Miami Dade Product Control Division

Warning note:
 Attention Building Official / Building Inspector.
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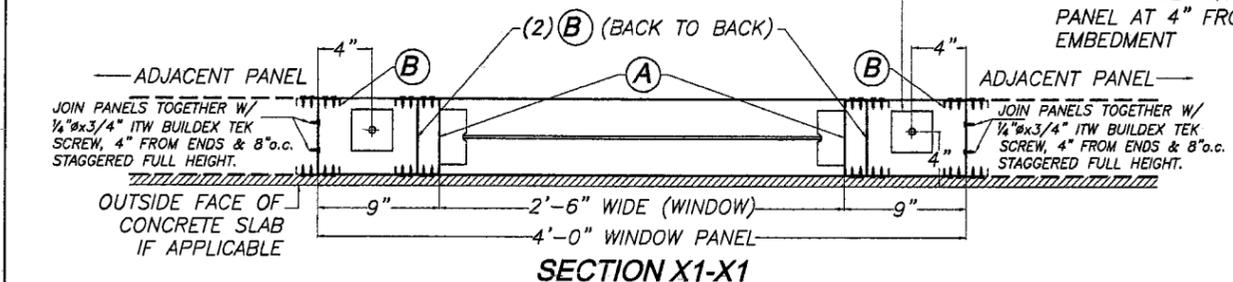


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 EB-0006719
 WALTER A. TILLIT Jr. P.E.
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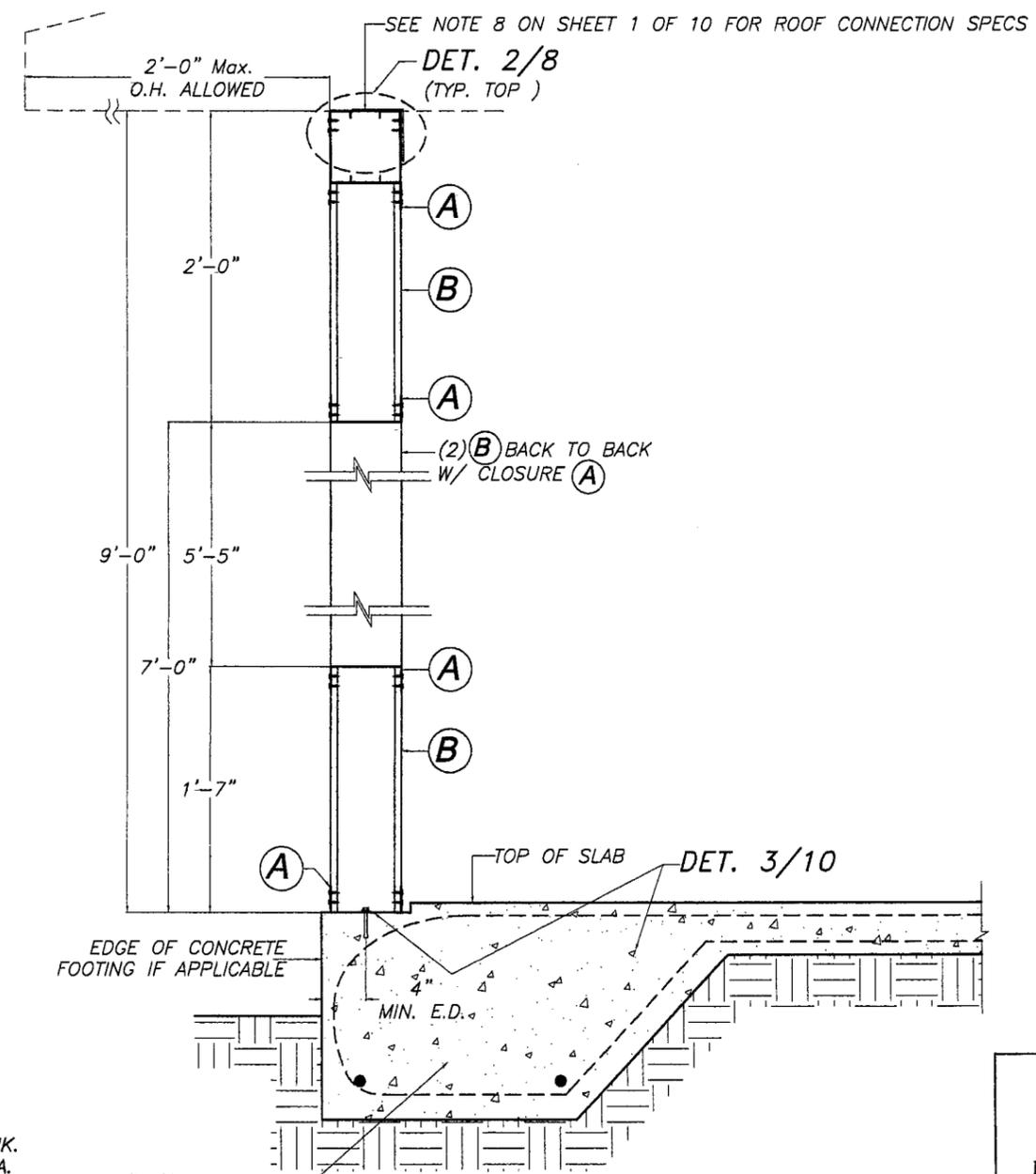
SURE-BOARD® WALL PANEL			M.C.V./L.G. DRAWN BY		
WELLBILT INTERNATIONAL			10/01/08 DATE		
8600 N.W. SOUTH RIVER DR. (SUITE # 207) MIAMI, FL 33166 PHONE: (305) 884-8020 FAX: (305) 884-8029			08-219 DRAWING No		
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 05-291	10/01/08	3	-	-
2	WARNING NOTE	6/28/10	4	-	-



ELEVATION



SECTION X1-X1



SECTION Y1-Y1

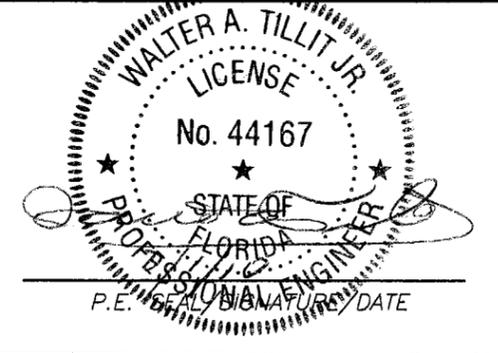
TYPICAL PARTIALLY SOLID PANEL AT WINDOWS

N.T.S.

F.B.C. (High Velocity Hurricane Zone)

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No 10-0519.09
 Expiration Date 02/05/2014
 By *Helmut A. Miller*
 Miami Data Product Control
 Division

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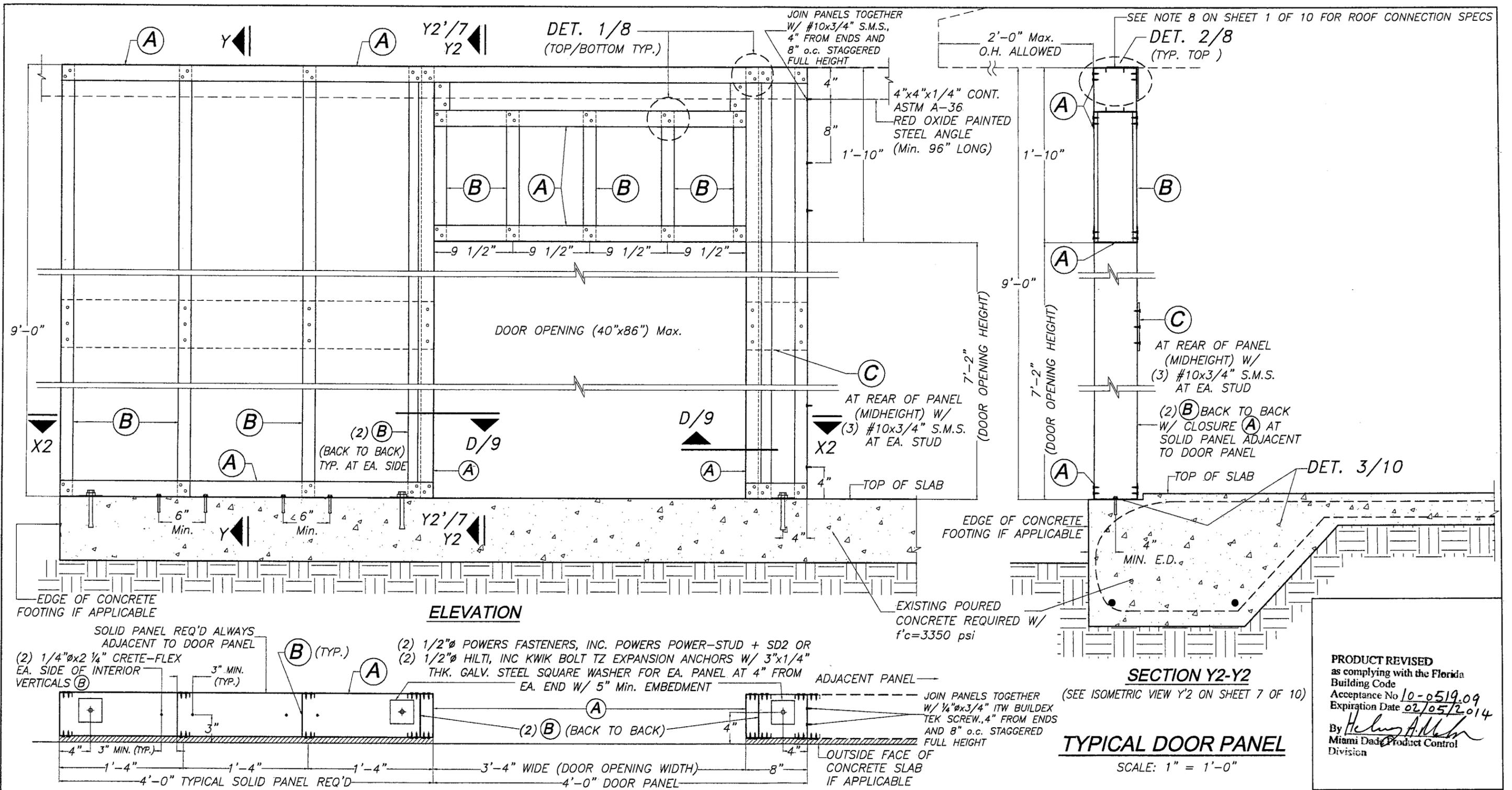
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1	OLD 05-291	10/01/08	3	-	-
2	WARNING NOTE	6/28/10	4	-	-

M.C.V./L.G.
 DRAWN BY

10/01/08
 DATE

08-219
 DRAWING No

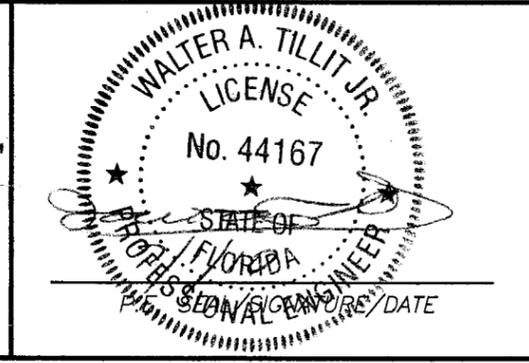
SHEET 5 OF 10



PRODUCT REVISED
 as complying with the Florida Building Code
 Acceptance No 10-0519.09
 Expiration Date 02/05/2014
 By *Healy A. Healy*
 Miami Dade Product Control Division

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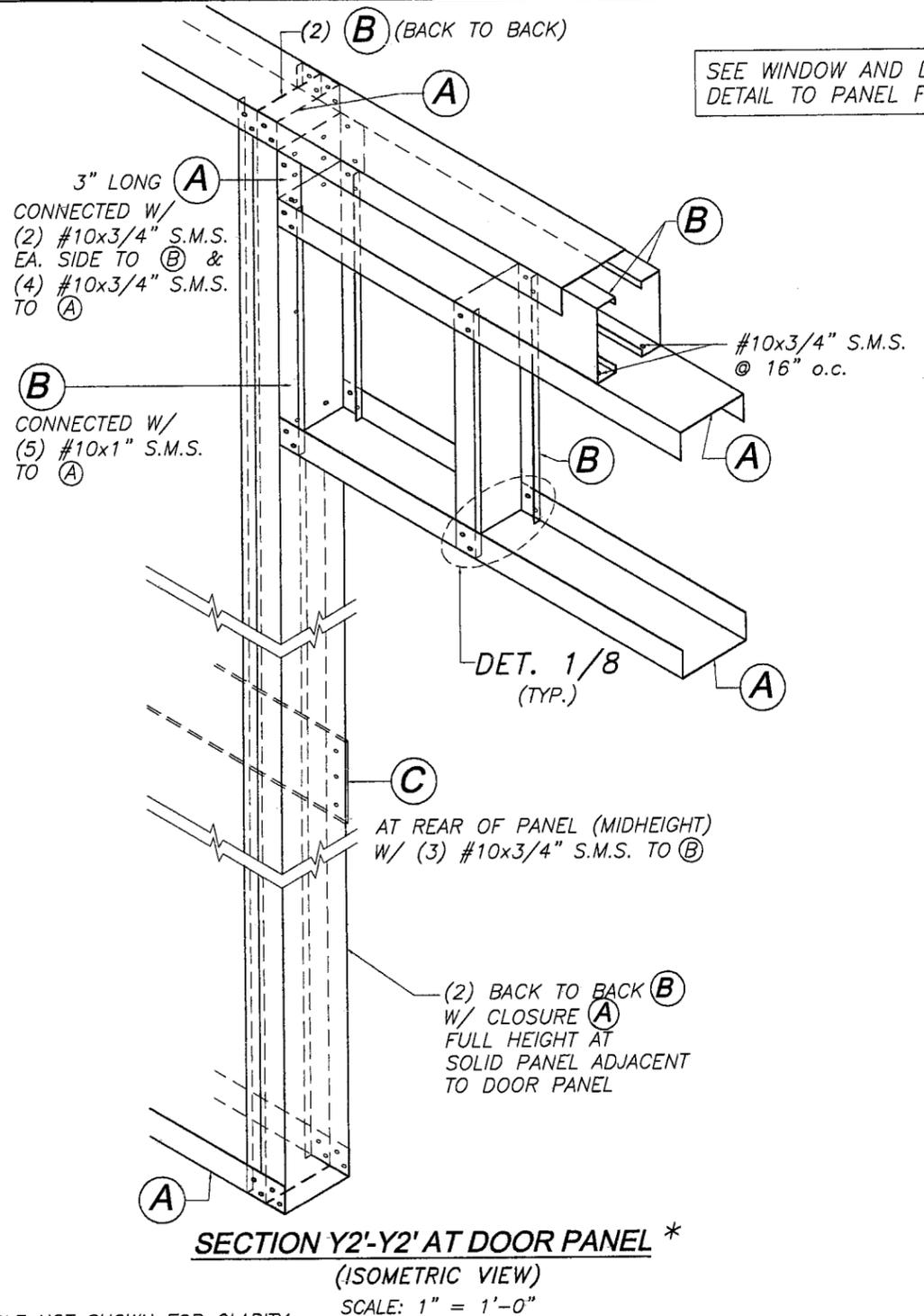
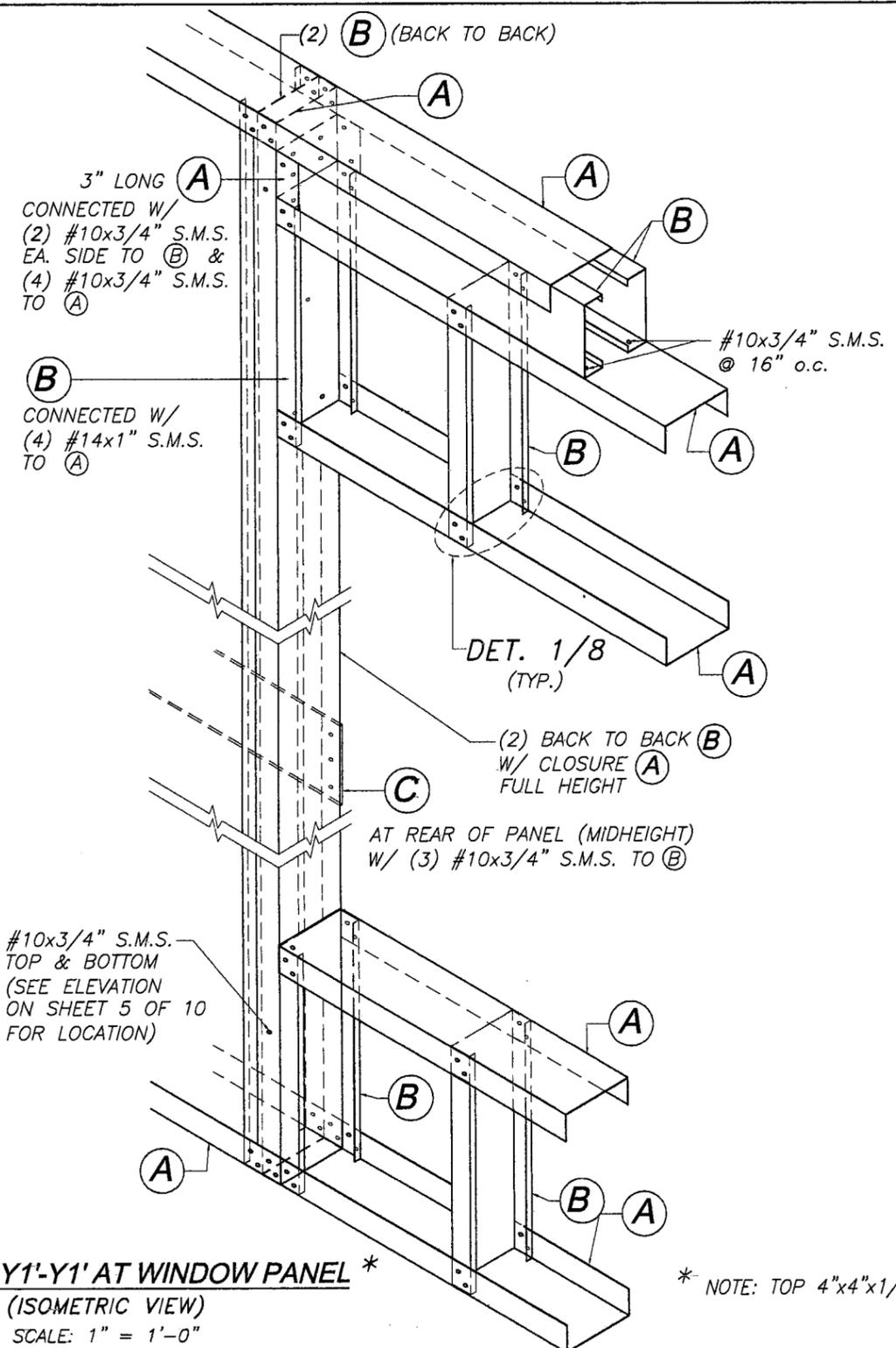
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2	WARNING NOTE	6/28/10	4	-	-

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 08-219
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 SHEET 6 OF 10

SEE WINDOW AND DOOR FRAME CONNECTION
DETAIL TO PANEL FRAME ON SHEET 9 OF 10

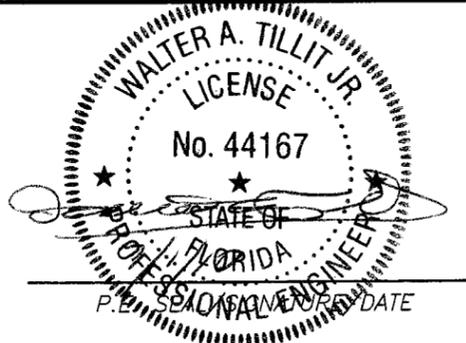


* NOTE: TOP 4"x4"x1/4" TOP STRUT. ANGLE NOT SHOWN FOR CLARITY
(SEE DETAIL 2/8)

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 10-0519.09
Expiration Date 02/05/2014
By *Henry A. Miller*
Miami Dade Product Control
Division

F.B.C. (High Velocity Hurricane Zone)

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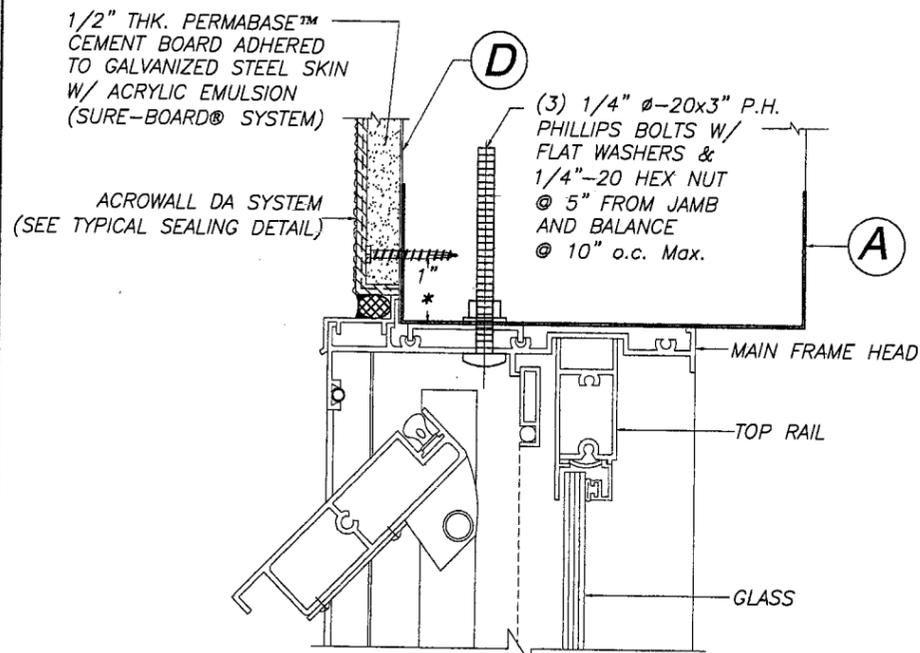
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DATE

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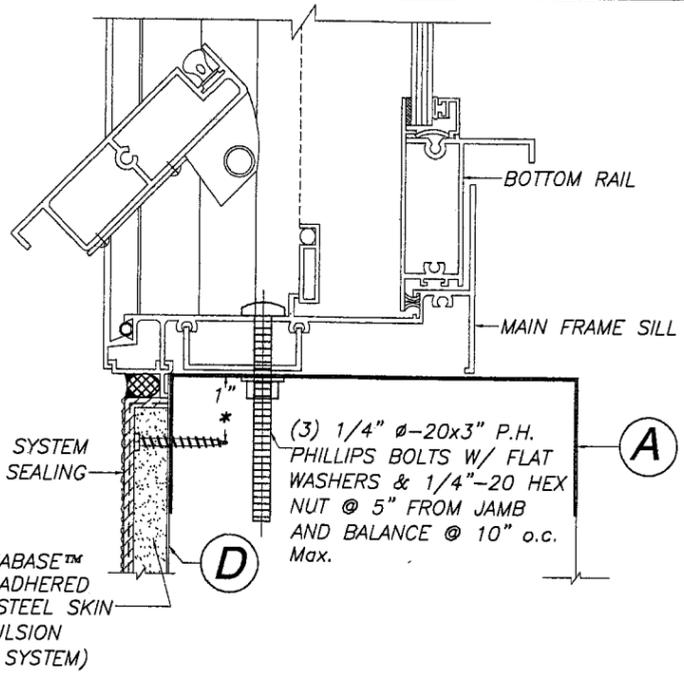
SHEET 7 OF 10

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
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2	WARNING NOTE	6/28/10	4	-	-



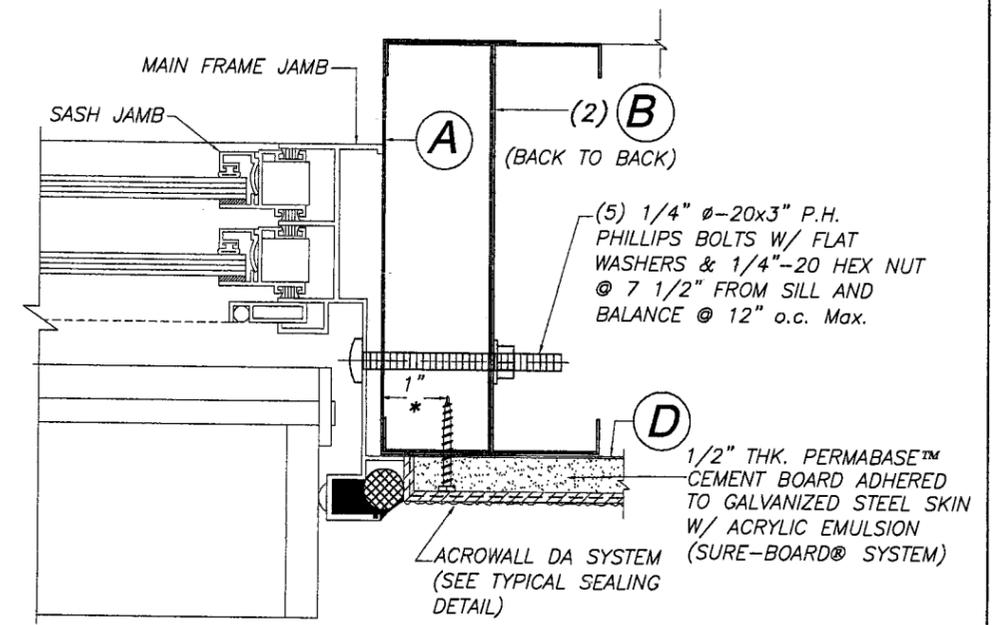
SECTION A: WINDOW HEAD CONNECTION TO PANEL

SCALE 3/8" = 1"



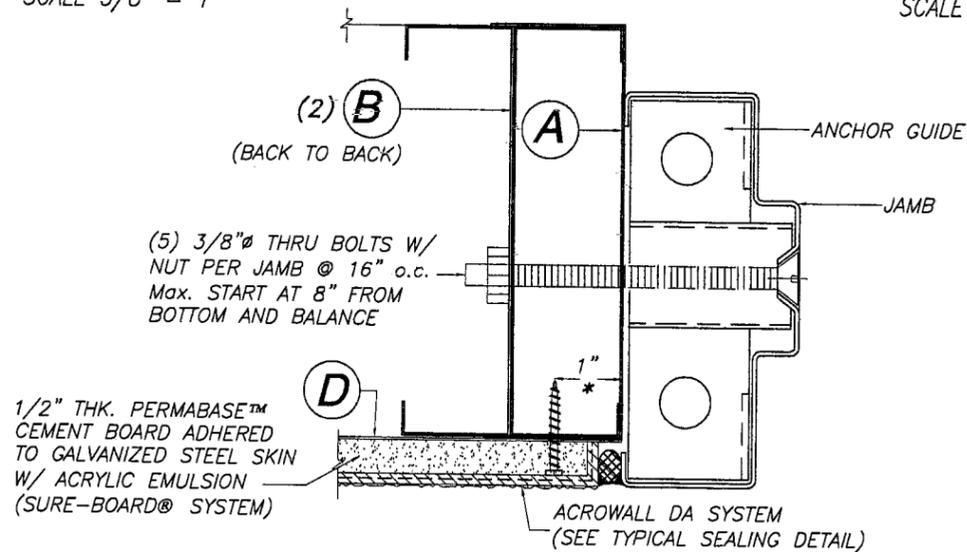
SECTION B: WINDOW SILL CONNECTION TO PANEL

SCALE 3/8" = 1"



SECTION C: WINDOW JAMB CONNECTION TO PANEL

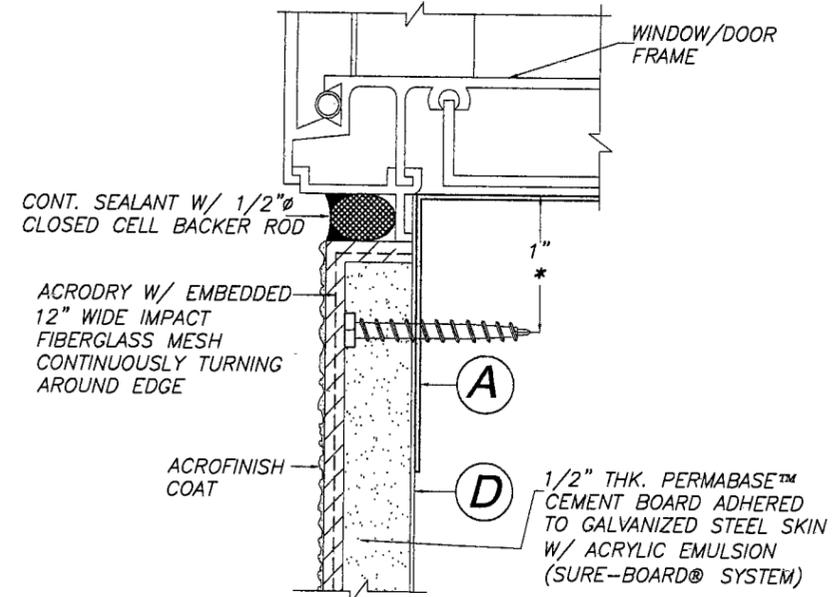
SCALE 3/8" = 1"



SECTION D: DOOR JAMB CONNECTION TO PANEL

SCALE 3/8" = 1"

* BOLTS USED TO CONNECT (SURE-BOARD® SYSTEM) TO METAL STUDS ADJACENT TO WINDOW'S HEADER AND SILL AS WELL AS AT DOOR OR WINDOW JAMB SHALL BE DRIVEN 1" FROM EDGE OF TRACK (A) AS SHOWN.



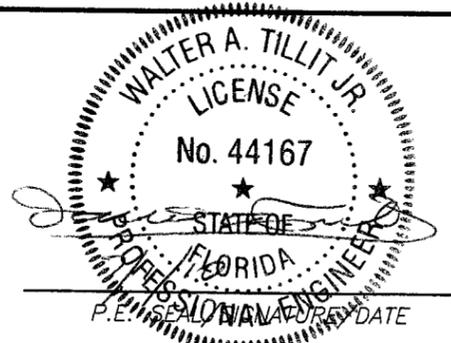
TYPICAL SEALING DETAIL

N.T.S.

PRODUCT REVISED as complying with the Florida Building Code Acceptance No 10-0519.09 Expiration Date 02/05/2014 By *Heather A. Walsh* Miami Dade Product Control Division

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2	WARNING NOTE	6/28/10	4	-	-

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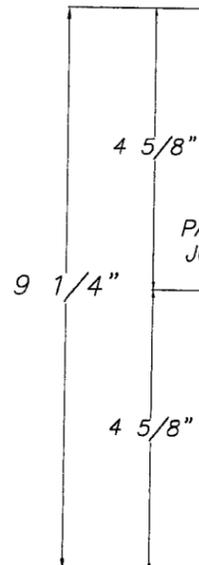
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08-219
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SHEET 9 OF 10

1/2" THK. PERMABASE™ CEMENT BOARD ADHERED TO GALVANIZED STEEL SKIN W/ ACRYLIC EMULSION (SURE-BOARD® SYSTEM) AT SIDE PANEL

9 1/4" WIDE CONT. FULL HEIGHT IMPACT FIBERGLASS MESH EMBEDDED INTO ACRODRY CENTERED WITH JOINT



(5) #10x3/4" S.M.S. LOCATED AT 2 1/4" FROM END, 8", 13 1/2", 14", 7 1/2" TO HORIZONTAL TOP AND BOTTOM SLIP TRACK (A) AND (17) #10x1 1/2" S.M.S. STARTING AT 6" FROM BOTTOM AT 6" o.c. Max. TO VERTICAL STUDS (B) SPACED AT 16" o.c. Max.

1/2" THK. PERMABASE™ CEMENT BOARD ADHERED TO GALVANIZED STEEL SKIN W/ ACRYLIC EMULSION (SURE-BOARD® SYSTEM) AT CORNER

ACRODRY BASE COAT
ACROFINISH COAT

CONT. ACRYLIC EMULSION AT JOINT BETWEEN PERMABASE BOARDS
9 1/4" WIDE CONT. FULL HEIGHT IMPACT CORNER FIBERGLASS MESH EMBEDDED INTO ACRODRY BENT AROUND CORNER AT 4 5/8" LEG EACH SIDE

1/2" THK. PERMABASE™ CEMENT BOARD ADHERED TO GALVANIZED STEEL SKIN W/ ACRYLIC EMULSION (SURE-BOARD® SYSTEM) AT FRONT OF PANEL

(2) 1/2"Ø POWERS FASTENERS, INC. POWERS POWER-STUD + SD2 OR (2) 1/2"Ø HILTI, INC KWIK BOLT TZ EXPANSION ANCHORS W/ 3"x1/4" THK. GALV. STEEL SQUARE WASHER FOR EA. PANEL AT 4" FROM EA. END W/ 5" Min. EMBEDMENT

1/2" THK. PERMABASE™ CEMENT BOARD ADHERED TO GALVANIZED STEEL SKIN W/ ACRYLIC EMULSION (SURE-BOARD® SYSTEM)

1/2"x6" Min. WIDE CONT. CLOSED CELL NEOPRENE GASKET W/ CONT. CALKING SEALANT

F.F. (AS APPLICABLE)

(15) 1/4"Øx3/4" ITW BUILDDEX TEK SCREW., LOCATED (1) AT 4" FROM HEAD, THEN (13) AT 8" STAGGERED & (1) AT 4" FROM BOTTOM

1/8"x6" Min. WIDE CONT. CLOSED CELL NEOPRENE GASKET, INSTALLED BEFORE PANELS ARE SCREWED BETWEEN EACH OTHER

(A) ADDITIONAL VERTICAL (WRAPS (B))

(A) SLIP TRACK

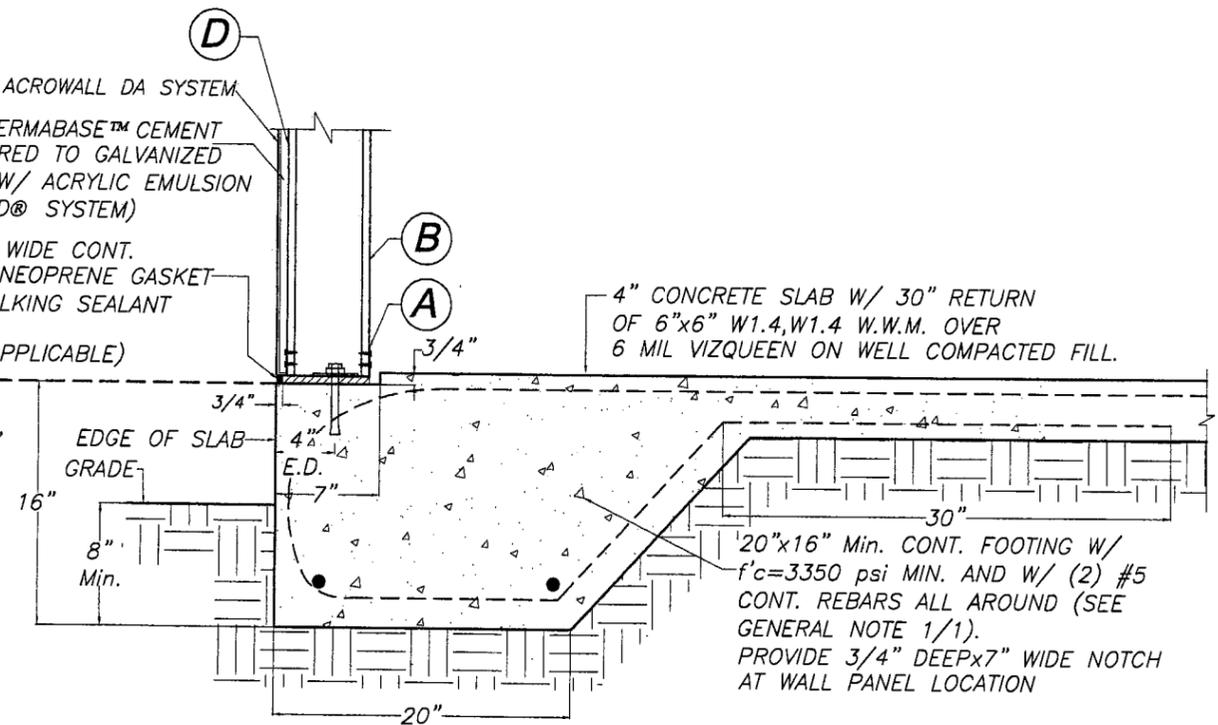
(2) 1/2"Ø POWERS FASTENERS, INC. POWERS POWER-STUD + SD2 OR (2) 1/2"Ø HILTI, INC KWIK BOLT TZ EXPANSION ANCHORS W/ 3"x1/4" THK. GALV. STEEL SQUARE WASHER FOR EA. PANEL AT 4" FROM EA. END W/ 5" Min. EMBEDMENT

(D) BENT CONT. AROUND CORNER TO COVER FULL STUD'S DEPTH (6")

CORNER DETAIL BETWEEN PANELS

(FRAMING & JOINTS SEALING)

SCALE: 1" = 1'-0"



DETAIL 3: FOOTING DETAIL

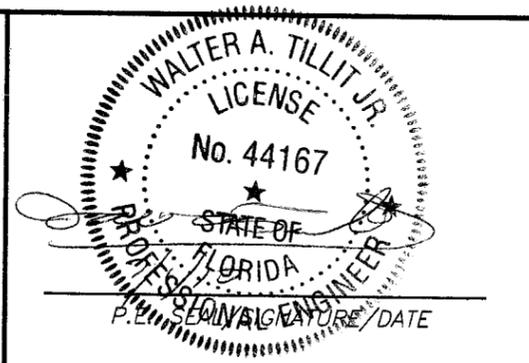
SCALE 1" = 1'-0" (SEE NOTE 2/1)

PRODUCT REVISED as complying with the Florida Building Code
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By *Helmut A. Mehn*
Miami Dade Product Control Division

F.B.C. (High Velocity Hurricane Zone)

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SHEET 10 OF 10