



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/

Worthington Armstrong Venture (WAVE)
101 Lindenwood Drive Suite 350
Malvern, PA 19355

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: EIFS & STUCCO Soffit System

APPROVAL DOCUMENT: Drawing No. **WAV0004**, titled "EIFS and STUCCO Ceiling System", Sheets 1 through 6 of 6, dated 04/28/2009, with revision B dated 03/01/2012, prepared by PTC, LLC, signed and sealed by Robert J. Amoroso, 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 metal grid piece shall bear a permanent label marked at not more than 4' o.c. with Aberdeen, MD and following statement: "Miami-Dade County Product Control Approved" and per FBC 1715.9.3. Also each unit (container, roll or board) needs to be labeled.

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 # **09-0512.02** and consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

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



[Signature]
06/18/2012

NOA No. 12-0314.04
Expiration Date: October 07, 2014
Approval Date: June 7, 2012
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. WAV0004, titled "EIFS and STUCCO Ceiling System", Sheets 1 through 6 of 6, dated 04/28/2009, with revision B dated 03/01/2012, prepared by PTC, LLC, signed and sealed by Robert J. Amoruso, P.E.

B. TESTS "Submitted under NOA # 09-0512.02"

1. 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
along with marked-up drawings and installation diagram of Stucco Ceiling System, prepared by Architectural Testing, Inc., Test Report No. 81352.01-109-18, dated 01/12/2009, with Revision 1 dated 08/06/2009, signed and sealed by Michael D. Stremmel, P.E.
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
along with marked-up drawings and installation diagram of EFIS Ceiling System, prepared by Architectural Testing, Inc., Test Report No. 81352.02-109-18, dated 01/12/2009, with Revision 1 dated 08/06/2009, signed and sealed by Michael D. Stremmel, P.E.

C. CALCULATIONS "Submitted under NOA # 09-0512.02"

1. Unbraced length analysis of steel stud, prepared by PTC, LLC, dated 09/08/2009, signed and sealed by Robert J. Amoruso, P.E.
2. Anchor calculations of ceiling systems, prepared by PTC, LLC, dated 04/15/2009, signed and sealed by Paul E. Winter, P.E.

D. QUALITY ASSURANCE

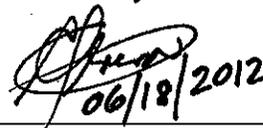
1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA)

E. MATERIAL CERTIFICATIONS

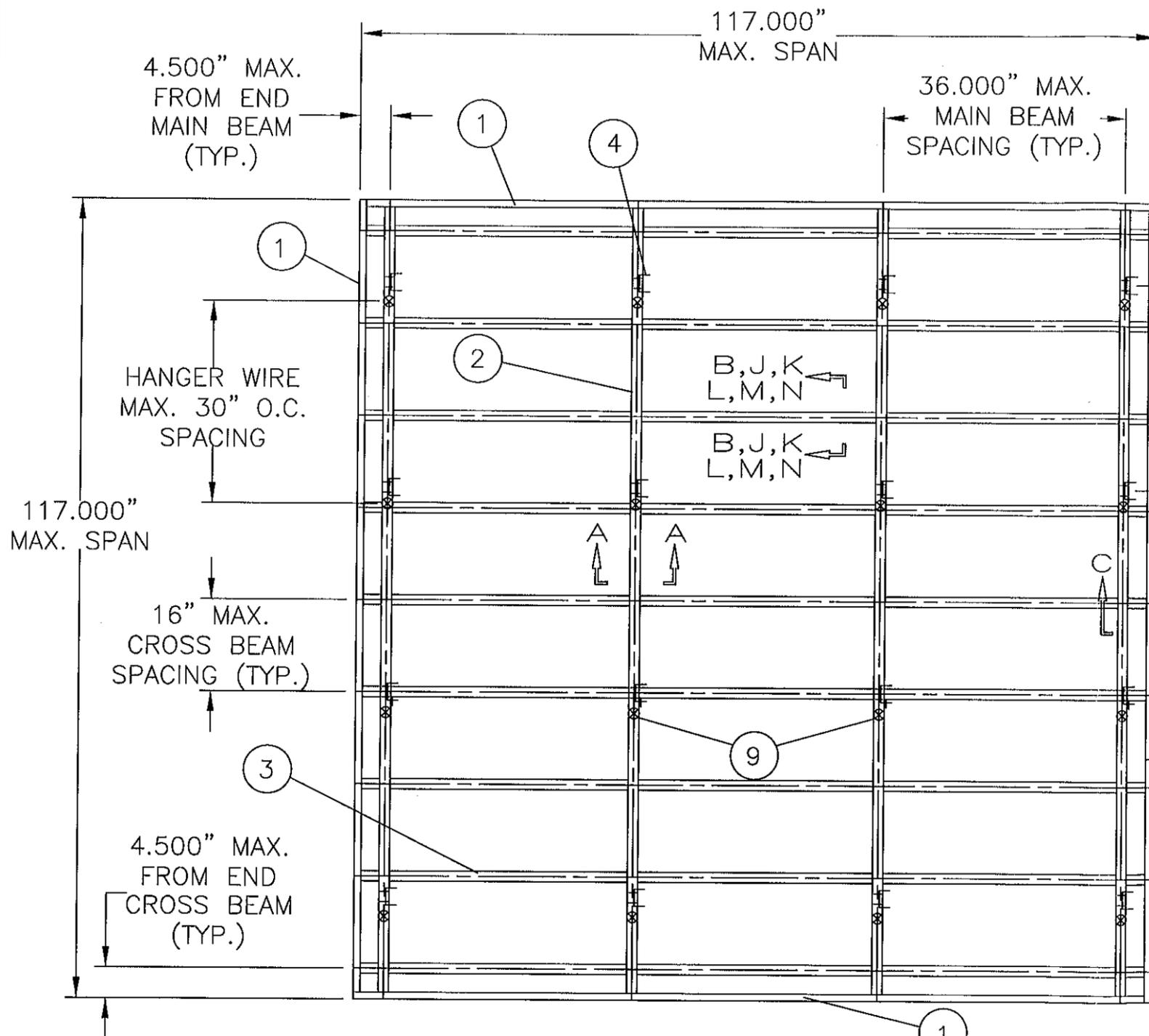
1. None.

F. STATEMENTS

1. Statement letter of code conformance to 2007 and 2010 FBC and no financial interest, issued by PTC Product Design Group, LLC; dated 03/08/2012, signed and sealed by Robert J. Amoruso, P.E.



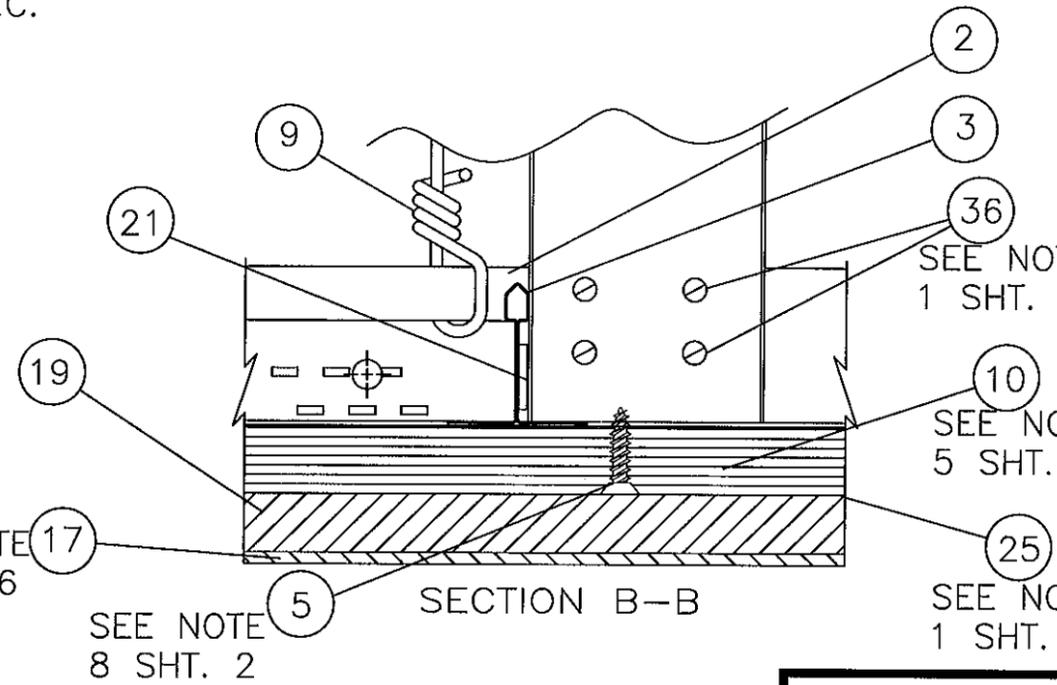
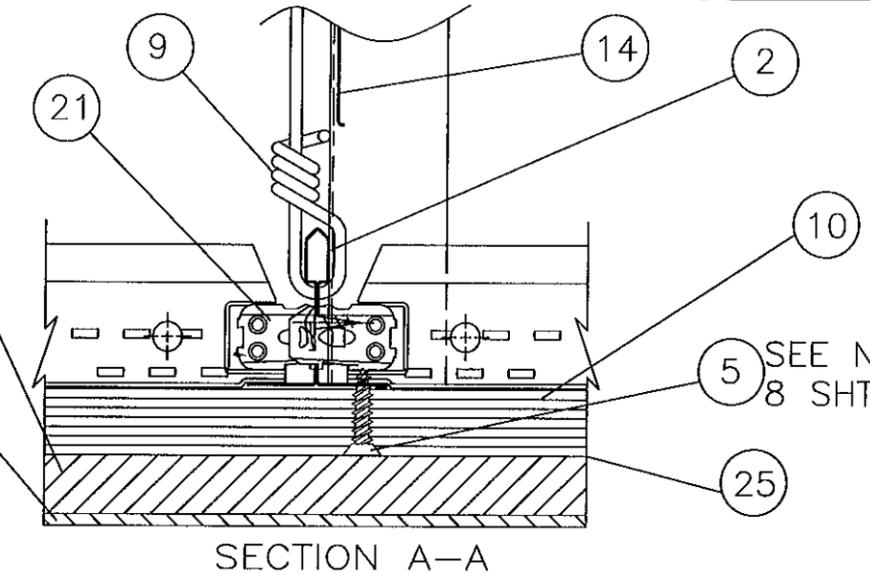
Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 12-0314.04
Expiration Date: October 07, 2014
Approval Date: June 7, 2012



EIFS LAYOUT

12" MAX. FROM END U-SHAPED STEEL STUDS

U-SHAPED STEEL STUDS MAX. 30" O.C. SPACING



PRODUCT REVISED
 as complying with the Florida Building Code
 Acceptance No. 12-0319.04
 Expiration Date 10/07/2014
 By: *[Signature]*
 Miami Dade Product Control

DESIGN PRESSURE CAPACITY
 +75.0/-75.0 PSF MAXIMUM

SYM	REVISION	DATE	BY
B	Updated to 2010 FBC	3/1/12	JBH
A	RFI Dated 7/2/09 Comment Revision	9/8/09	RJA

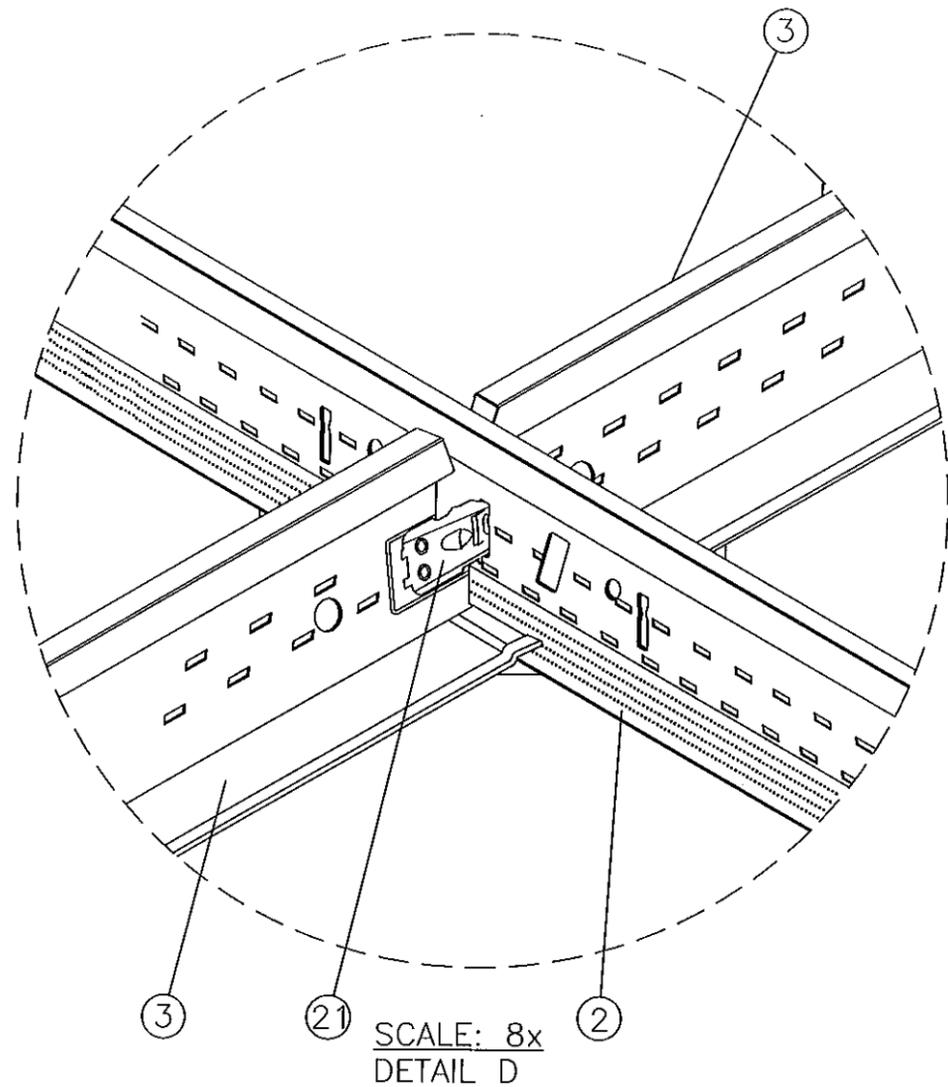
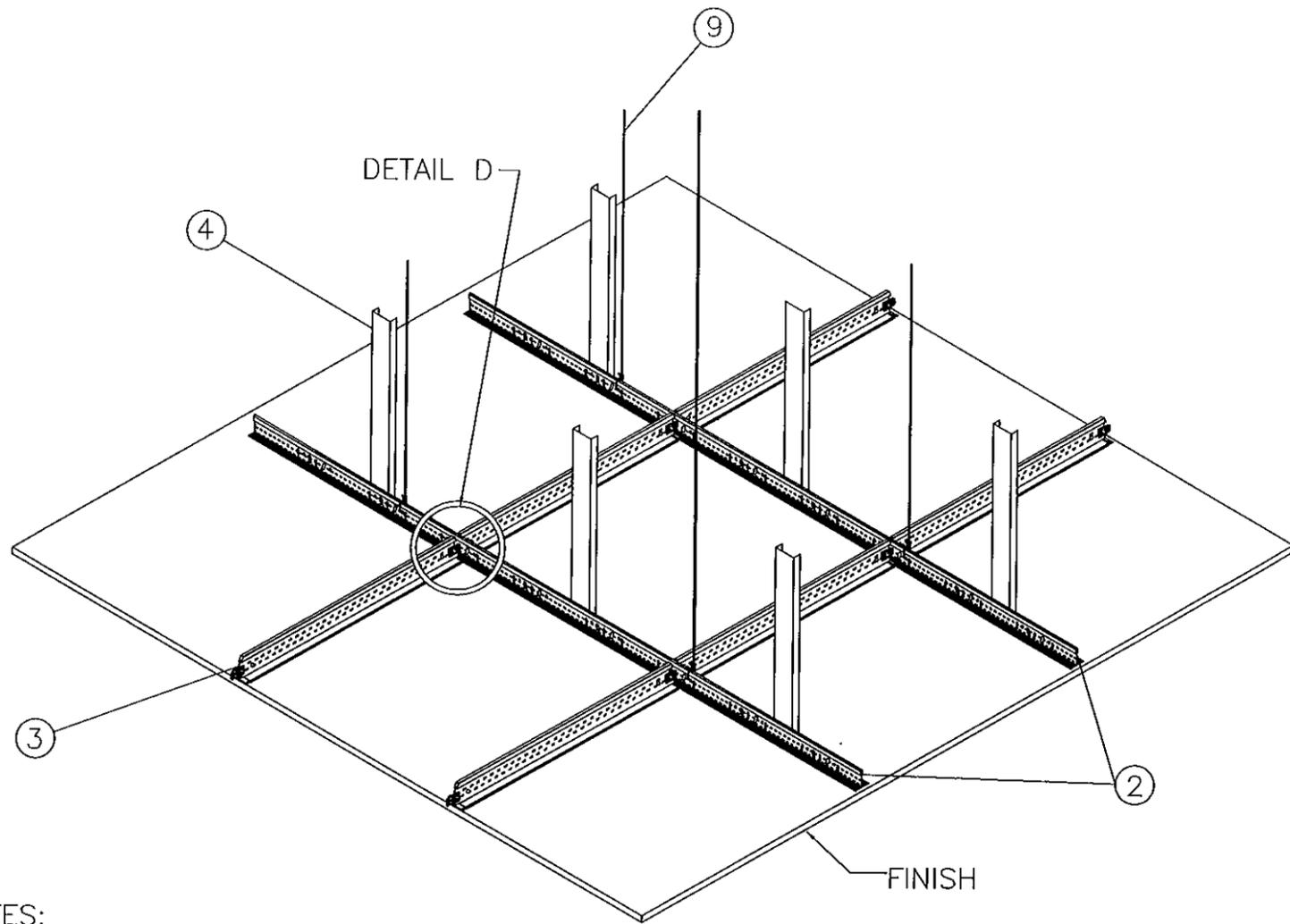
[Signature] 3/1/12
 Robert J. Amoruso, P.E.
 Florida P. E. No. 49752
 PTC, LLC
 P.O. Box 520775
 Longwood, Florida 32752
 FBPE Certification of Authorization NO. 25935

WAVE
 9 OLD LINCOLN HW, MALVERN, PA 19355
 TITLE: ELEVATION & CROSS SECTIONS
 117" X 117" EIFS CEILING SYSTEM, LMI

PREPARED BY: **PTC**
 DRN: SMC
 SCALE: NTS
 REV: B

DATE: 04/28/09
 DWG. NO: WAV0004
 SHEET: 1 OF 6

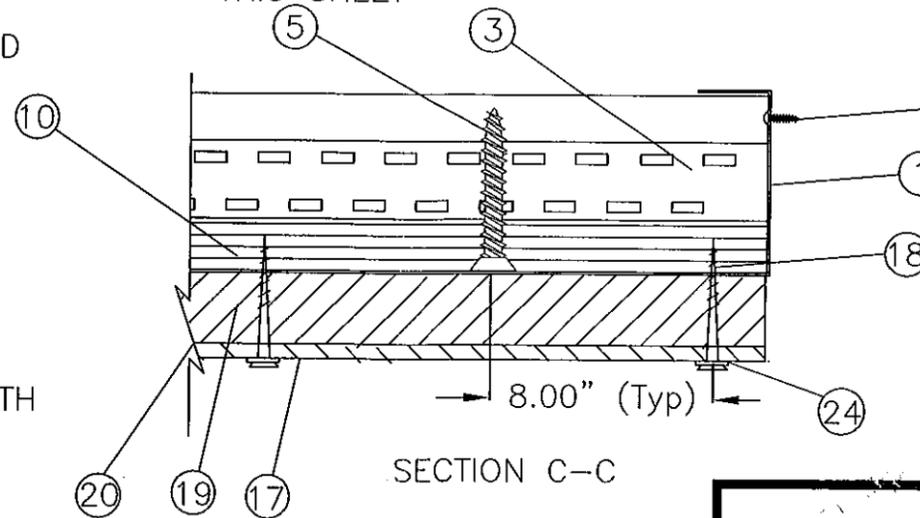
Phone 321.690.1788 Fax 321.690.1789



NOTES:

- 1) #6 X BUGLE HEAD DRYWALL SCREW AND 1-1/4" FLAT GALVANIZED WASHER IS SPACED 8" ON CENTER MAX. THROUGH THE AREA OF THE DENSGLASS AND INTO THE MAIN RUNNERS, CROSS TEES & PERIMETER CHANNEL.
- 2) HANGER WIRE MUST BE SECURED AT EACH END WITH A MIN. OF (3) TURNS IN 3" PER ASTM C636.
- 3) HANGER WIRE TO BE SPACED A MAXIMUM OF 30" O.C.
- 4) VERTICAL BRACING TO BE INSTALLED ON MAIN BEAMS AT A MAXIMUM OF 30" O.C.
- 5) 5/8" FRX, FIRE RESISTANT, EXTERIOR PLYWOOD TO BE INSTALLED FROM THE UNDERSIDE AGAINST CROSS TEES WITH ITEM #5
- 6) THIS PRODUCT IS DESIGNED TO COMPLY WITH THE HIGH VELOCITY HURRICANE ZONE (HVHZ) OF THE 2007 & 2010 FLORIDA BUILDING CODE (FBC) AT THE DESIGN PRESSURES STATED HEREIN.
- 7) CONSTRUCTION ADHESIVE APPLIED BETWEEN PLYWOOD AND DENSGLASS.
- 8) #8 SMS IS TO BE SPACED 8" O.C. THROUGH PLYWOOD ALONG MAIN RUNNER CROSS TEES AND PERIMETER CHANNEL.

SEE NOTE 8 THIS SHEET



SECURED 8" O.C. W/ (23) WOOD TO MAIN STRUCTURE (23) STEEL (26) CONCRETE

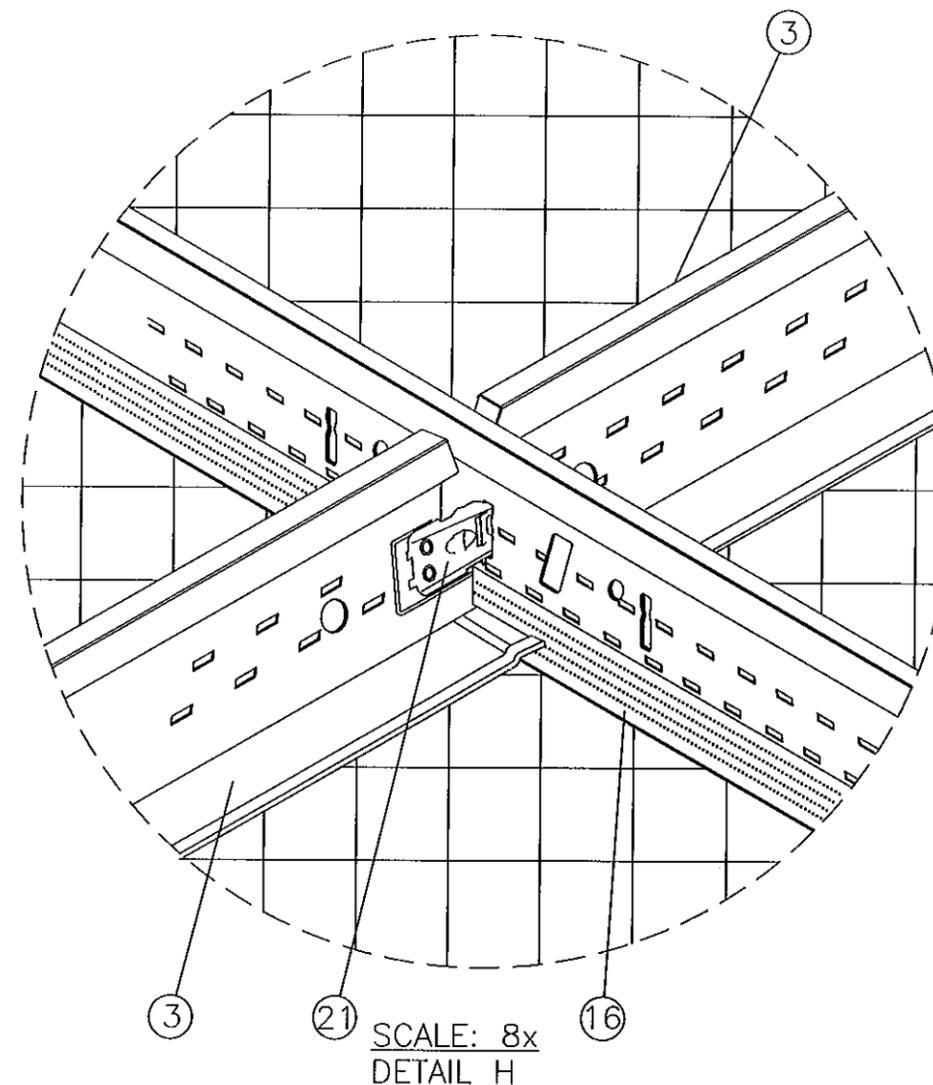
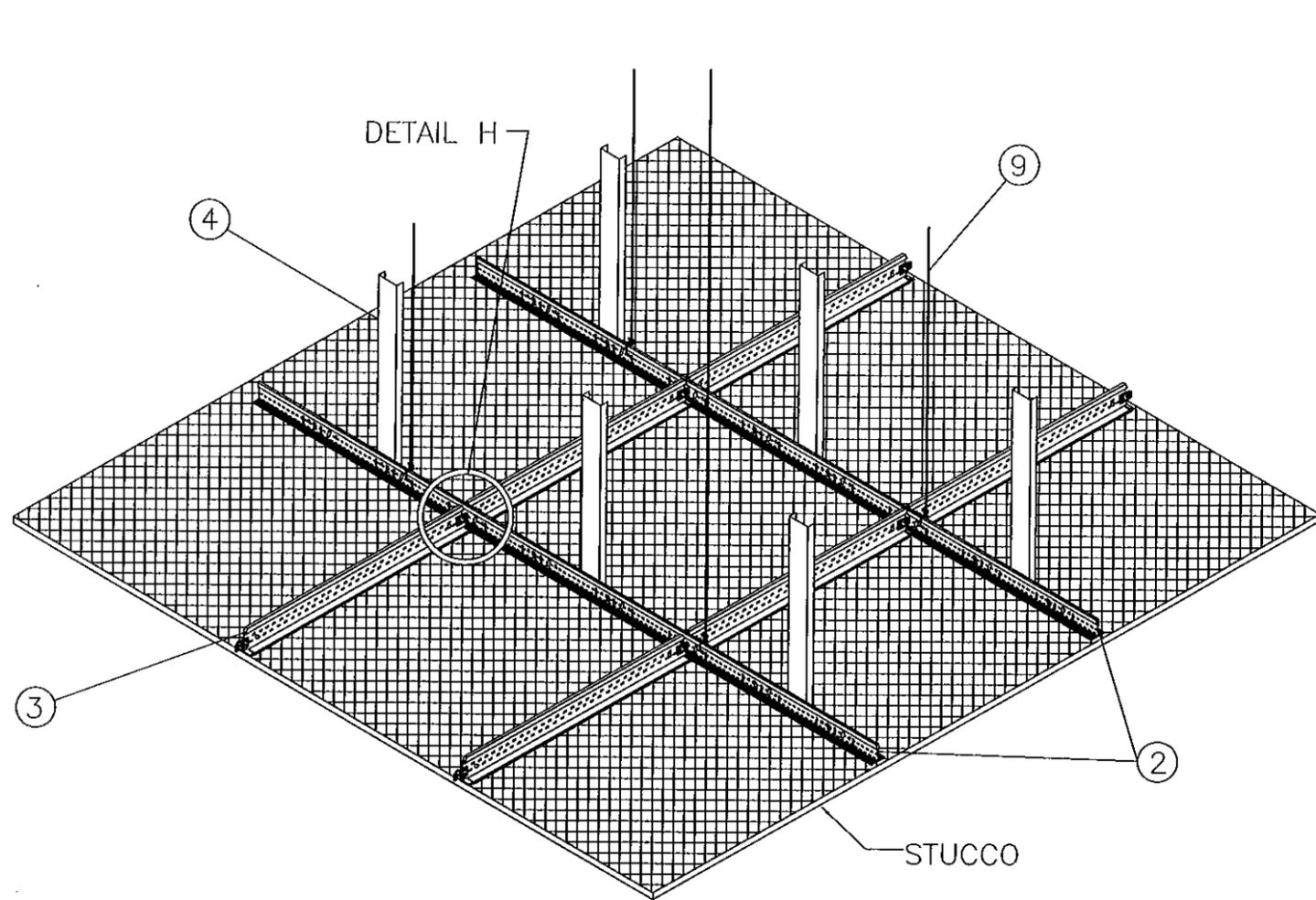
SECTION C-C

PRODUCT REVISED
in complying with the Florida
Building Code
Acceptance No 12-0314-04
Expiration Date 10/07/2014
By: *[Signature]*
Miami Trade Product Control

SYM	REVISION	DATE	BY
B	Updated to 2010 FBC	3/1/12	JBH
A	RFI Dated 7/2/09 Comment Revision	9/8/09	RJA

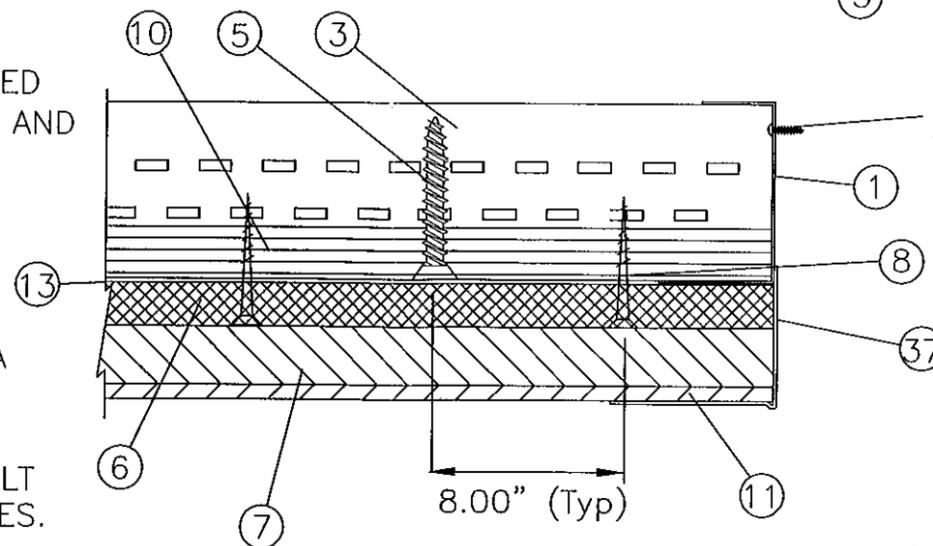
[Signature]
Robert J. Amoruso, P.E.
Florida P. E. No. 49752
PTC, LLC
P.O. Box 520775
Longwood, Florida 32752
FBPE Certification of Authorization NO. 25935

 PREPARED BY: PTC Phone 321.690.1788 Fax 321.690.1789		DRN: SMC	DATE: 04/28/09
		SCALE: NTS	DWG. NO: WAV0004
TITLE: WAVE 9 OLD LINCOLN HW, MALVERN, PA 19355 EIFS SYSTEM, LMI DETAILS		REV: B	SHEET: 2 OF 6



NOTES:

- 1) ITEM #8 THE #8 X 1 1/2" SHEET METAL SCREW IS SPACED 8" ON CENTER MAX. THROUGH THE RIBBED SHEET LATH AND INTO THE MAIN RUNNERS, CROSS TEES & PERIMETER CHANNEL.
- 2) HANGER WIRE MUST BE SECURED AT EACH END WITH A MIN. OF (3) TURNS IN 3" PER ASTM C636.
- 3) HANGER WIRE TO BE SPACED A MAXIMUM OF 30" O.C.
- 4) VERTICAL BRACING TO BE INSTALLED ON MAIN BEAMS AT A MAXIMUM OF 30" O.C.
- 5) 5/8" FRX, FIRE RESISTANT, EXTERIOR PLYWOOD INSTALLED FROM UNDERSIDE AGAINST CROSS TEES WITH ITEM #8. FELT PAPER SECURED TO UNDERSIDE OF PLYWOOD WITH STAPLES.
- 6) THIS PRODUCT IS DESIGNED TO COMPLY WITH THE HIGH VELOCITY HURRICANE ZONE (HVHZ) OF THE 2007 & 2010 FLORIDA BUILDING CODE (FBC) AT THE DESIGN PRESSURES STATED HEREIN.



SCALE: 8x
DETAIL H

SECURED 8" O.C. W/
TO MAIN STRUCTURE

23 WOOD
23 STEEL
26 CONCRETE

SECTION G-G

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 17-0314-04
Expiration Date 10/16/2014
By: *[Signature]*
Miami Trade Product Control

SYM	REVISION	DATE	BY
B	Updated to 2010 FBC	3/1/12	JBH
A	RFI Dated 7/2/09 Comment Revision	9/8/09	RJA

[Signature]
3/1/12

Robert J. Amoruso, P.E.
Florida P. E. No. 49752
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P.O. Box 520775
Longwood, Florida 32752
FBPE Certification of Authorization NO. 25935

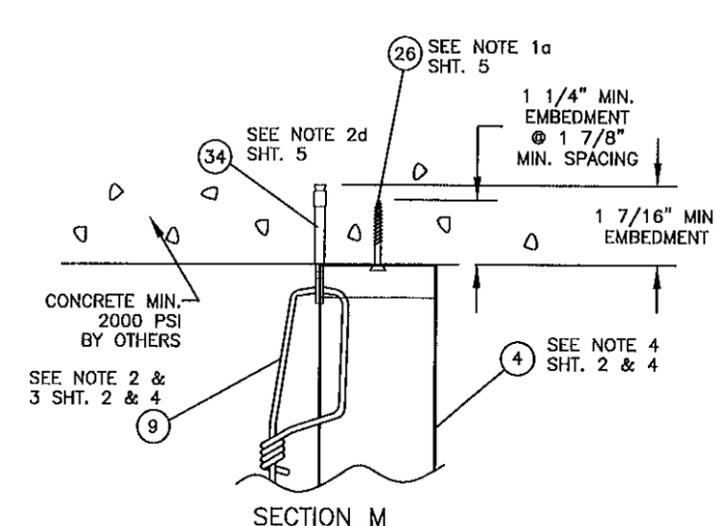
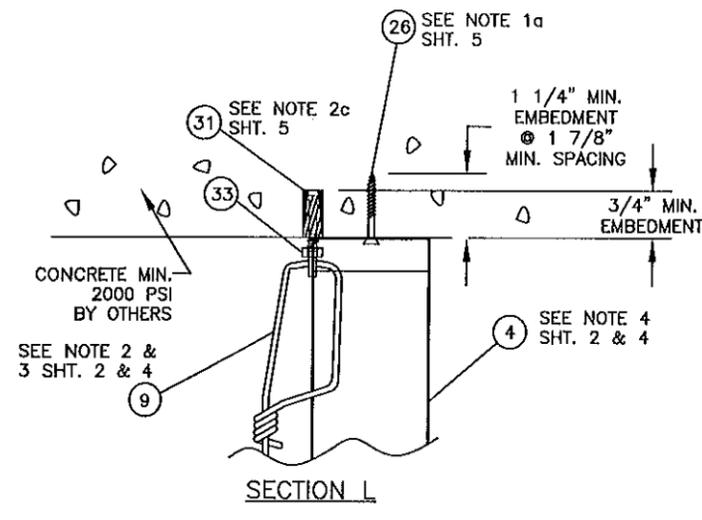
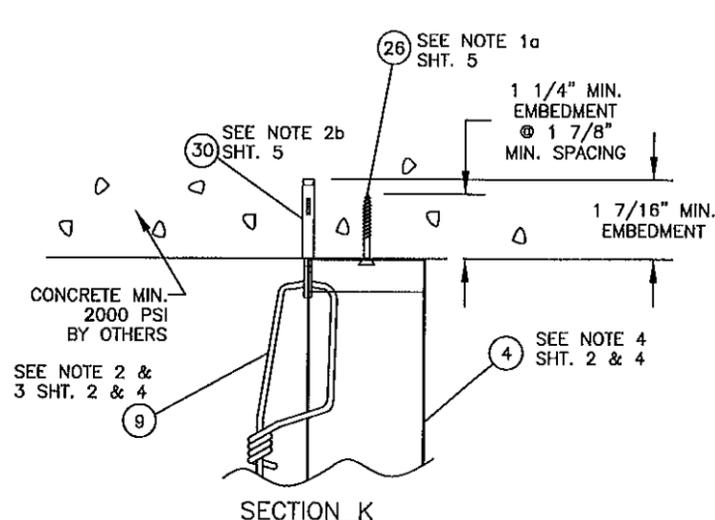
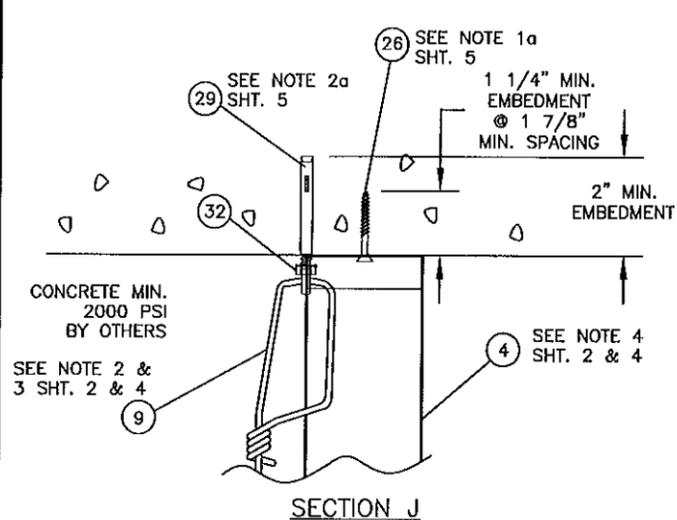
WAVE
9 OLD LINCOLN HW, MALVERN, PA 19355

TITLE: STUCCO SYSTEM, LMI DETAILS

PREPARED BY: **PTC**

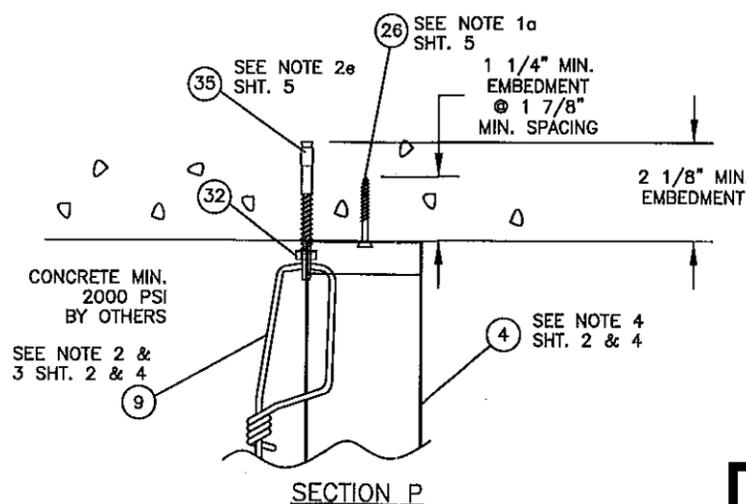
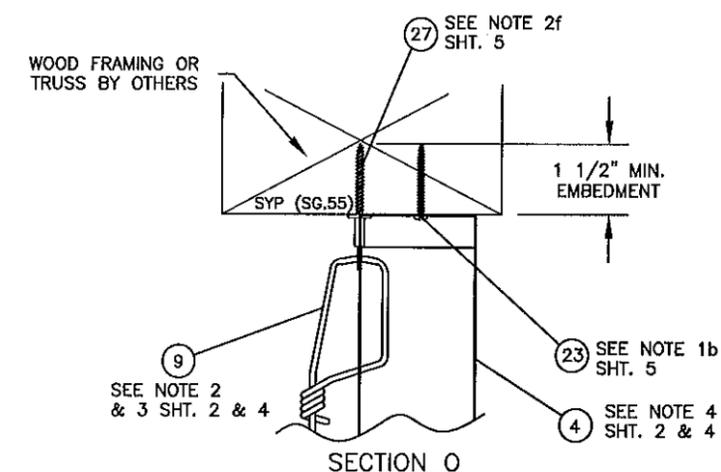
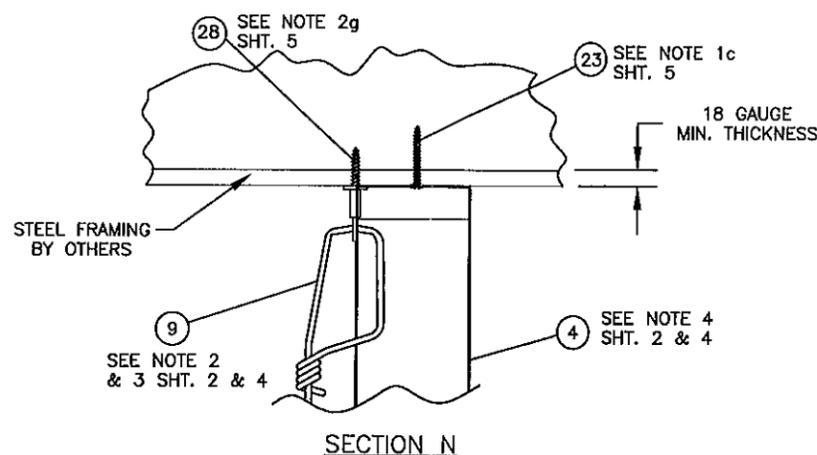
DRN: SMC	DATE: 04/28/09
SCALE: NTS	DWG. NO: WAV0004
REV: B	SHEET: 4 OF 6

Phone 321.690.1788 Fax 321.690.1789



ANCHOR NOTES:

- 1) THE VERTICAL BRACE IS SECURED TO THE MAIN BEAM AT THE BOTTOM WITH (4) ITEM #36 & TO THE STRUCTURE AT THE TOP AS FOLLOWS:
 - a.) CONCRETE SUBSTRATE WITH (3) ITEM #26, 3/16" DIA. RAWL TAPPER, W/1 1/4" MINIMUM EMBEDMENT. ITEM #17.
 - b.) WOOD FRAMING SUBSTRATE WITH (3) ITEM #23, #8 WOOD SCREW, W/1 1/2" MINIMUM EMBEDMENT.
 - c.) STEEL FRAMING SUBSTRATE WITH (3) ITEM #23, #8 SHEET METAL SCREW, W/MINIMUM 3 PITCHES OF THREAD BEYOND STEEL FRAMING.
- 2) THE HANGER WIRE IS SECURED TO THE MAIN BEAM AT THE BOTTOM WITH (1) ITEM #2 & #16 TO THE STRUCTURE AT THE TOP AS FOLLOWS:
 - a.) CONCRETE SUBSTRATE WITH (1) ITEM #29, 1/4" DIA. HILTI KWIKBOLT III, W/2" MINIMUM EMBEDMENT.
 - b.) CONCRETE SUBSTRATE WITH (1) ITEM #30, 1/4" DIA. HILTI HCKB EYEBOLT, W/1 7/16" MINIMUM EMBEDMENT.
 - c.) CONCRETE SUBSTRATE WITH (1) ITEM #31, 3/8" DIA. HILTI HDI-P DROP-IN, W/ 3/4" MINIMUM EMBEDMENT.
 - d.) CONCRETE SUBSTRATE WITH (1) ITEM #32, 1/4" DIA. HILTI HHDCA EYEBOLT, W/1 7/16" MINIMUM EMBEDMENT.
 - e.) CONCRETE SUBSTRATE WITH (1) ITEM #33, 1/4" DIA. ITW/RED HEAD TRUBOLT, W/2 1/8" MINIMUM EMBEDMENT.
 - f.) WOOD FRAMING SUBSTRATE WITH (1) ITEM #27, #10 WOOD EYEBOLT, W/1 1/2" MINIMUM EMBEDMENT.
 - g.) STEEL FRAMING SUBSTRATE WITH (1) ITEM #28, #10 SHEET METAL EYEBOLT, W/MINIMUM 3 PITCHES OF THREAD BEYOND STEEL FRAMING.



PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No 12-0314.04
 Expiration Date 10/07/2014
 By *[Signature]*
 Miami Dade Product Control

SYM	REVISION	DATE	BY
B	Updated to 2010 FBC	3/1/12	JBH
A	RFI Dated 7/2/09 Comment Revision	9/8/09	RJA

[Signature]
 Robert J. Amoroso, P.E.
 Florida P. E. No. 49752
 PTC, LLC
 P.O. Box 520775
 Longwood, FL 32752
 FBPE Certification of Authorization No. 25935

WAVE

9 OLD LINCOLN HW, MALVERN, PA 19355

TITLE: ELEVATION & CROSS SECTIONS
 STUCCO CEILING SYSTEM INSTALLATION DETAILS

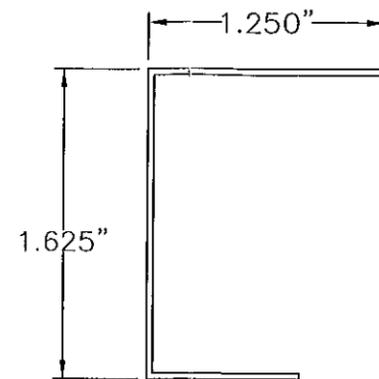
PREPARED BY: **PTC**

DRN: SMC	DATE: 04/28/09
SCALE: NTS	DWG. NO: WAV0004
REV: B	SHEET: 5 OF 6

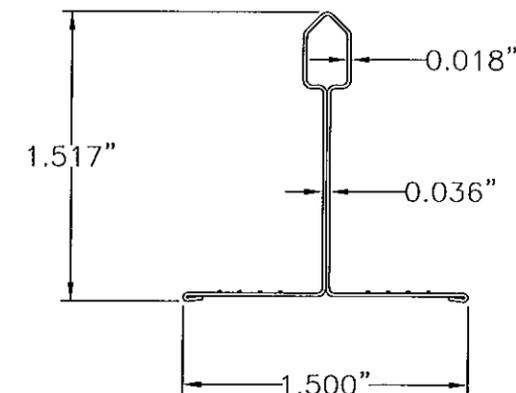
Phone 321.690.1788 Fax 321.690.1789

ITEM	QTY	DESCRIPTION
1	A/R	TRHA 21 GA., 1-5/8"x1-1/4" DRYWALL TRACK/ 33 KSI
2	A/R	HD8906 G-90 MAIN BEAM
3	A/R	XL7936 G-90 CROSS TEE
4	A/R	DEITRICH CSJ, 2-1/2" DEPTH, 18 GA STEEL STD, 33 KSI, 9' MAX. LENGTH - SEE NOTE 3
5	A/R	#8 X 1" LG. MODIFIED TRUSS HEAD SHEET METAL SCREW
6	A/R	3/8" RIBBED SHEET LATH, 3.4 LBS/SQ.YD., AS PER ASTM C-847
7	A/R	STUCCO BASED COAT
8	A/R	#8 X 1-1/2" LG. MODIFIED TRUSS HEAD SHEET METAL SCREW
9	A/R	#9 Ga. H.D.G. HANGER WIRE
10	A/R	5/8" FRX FIRE RESISTANT EXTERIOR PLYWOOD - 4 X 8 SHEETS
11	A/R	STUCCO FINISH COAT
12	A/R	BUILDING STRUCTURE OR 2 BY WOOD BUCK BY OTHERS
13	A/R	WATER PROOF FELT VAPOR BARRIER
14	A/R	QSUTC QS UP TIGHT CLIP
15	A/R	#9 X 1-1/2" WOODFAST DOUBLE LEAD THREAD 1/4" HEX WASHER HEAD
16	A/R	SP-135 G-90 MAIN BEAM
17	A/R	EFIS FINISH COAT
18	A/R	#6 X 1-1/4" LG BUGLE HEAD DRYWALL SCREW
19	A/R	1/2" EXTERIOR SHEET DENSGLASS GOLD, GEORGIA PACIFIC
20	A/R	PRIMER ADHESIVE MESH + EIFS FINISH
21	A/R	CROSS TEE BEAM CLIP
22	A/R	#10 1-LAG 150WS WOOD SCREW /#10 1-LAG 750SD SELF TAP W/EYELET
23	A/R	#8 X 1" LG. SHEET METAL SCREW
24	A/R	1-1/4" FLAT GALVANIZED WASHER
25	A/R	CONSTRUCTION ADHESIVE
26	A/R	3/16" DIAMETER RAWL TAPPER W/1 1/4" MIN. EMBEDMENT
27	A/R	#10 1-LAG 150WS WOOD SCREW W/EYELET
28	A/R	#10 1-LAG 750SD SELF DRILLING & TAPPING SCREW W/EYELET
29	A/R	1/4" DIA. HILTI KWIK BOLT III ANCHOR
30	A/R	1/4" DIA. HILTI HCKB CEILING HANGER W/EYELET
31	A/R	3/8" DIA. HILTI HDI-P DROP-IN ANCHOR
32	A/R	1/4" - 20 THREADED EYELET.
33	A/R	3/8" - 16 THREADED EYELET.
34	A/R	1/4" DIA. HILTI HHDCA CEILING HANGER W/EYELET
35	A/R	1/4" DIA. ITW/ RED HEAD TRUBOLT ANCHOR
36	A/R	#8 X 1" TRUSS HEAD SELF DRILLING SCREW
37	A/R	#66 3/4" CASE BEAD

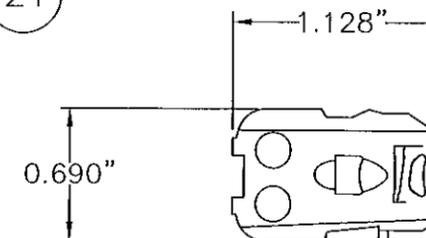
1 DRYWALL TRACK/
PERIMETER CHANNEL
TRHA 21 GAUGE



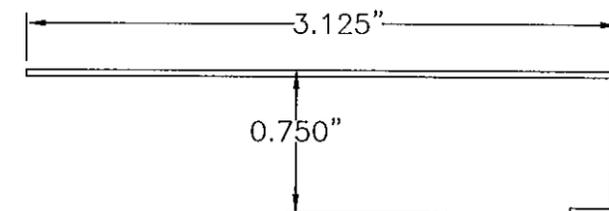
3 CROSS TEE BEAM
TYP. WALL THK, .018
EIFS & STUCCO



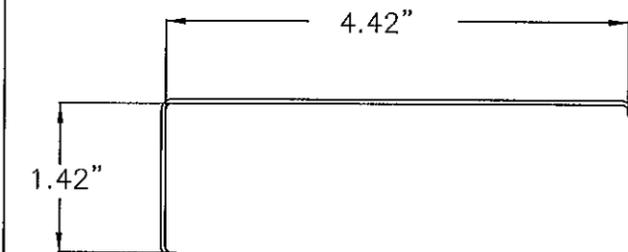
21 CROSS TEE BEAM CLIP



37 #66 3/4" CASE BEAD
TYP. WALL THK. 21 GAUGE



14 QSUTC UP TIGHT CLIP



NOTES:

- 1) EIFS COMPOSITION:
DRYVIT GENESIS BASE COAT MIXED WITH CEMENT 1/8" THICK BY 9" WIDE PER MANUFACTURER SPECIFICATIONS IS APPLIED TO THE DENSGLASS GOLD JOINTS ONLY, FOLLOWED BY DRYVIT BRAND #20 FIBERGLASS MESH WHICH IS WORKED INTO THE BASE MIX. ANOTHER 3/16" THICK COAT OF MIX IS TROWELED OVER THE ENTIRE SURFACE. A CONTINUOUS LAYER OF MESH IS THEN WORKED INTO THE WET BASE MIX WITH A SECOND LAYER OF BASE MIX COVERING THE MESH. THE BASE MIX IS ALLOWED TO DRY OVERNIGHT AND PRIOR TO A FINISH COAT OF DRYVIT BRAND MIX QUARTZPUTZ DPR BEING APPLIED AND TROWELED TO PRODUCE A 1/8" TO 3/16" FINISH COAT.
- 2) A STUCCO MIX WITH A FINISH THICKNESS OF 3/4" IS TROWELED INTO THE RIBBED LATH IN THREE COATS. THE FIRST COAT IS ALLOWED TO SET, THEN A SECOND LAYER OF MIX IS TROWELED ON SIDE TO SIDE TO THE STOPS ON ALL SIDES. THE FINISH COAT MIX OF IVORY FINISH LIME, WHITE CEMENT AND WHITE SILICA SAND IS WORKED INTO THE STUCCO MIX AND TROWELED ON IN AN 1/8" TO 3/16" THICK FINISH COAT.
- 2A) STUCCO MIX CONSIST OF: 22 SHOVELS OF C-144 SAND, 2 1/2 GALLONS "THORO" BRAND ACRYL 60 ACRYLIC ADDITIVE, 1 PACK CONTROL "X" CHOPPED FIBERS, 1 BAG (50 LBS.) TYPE "S" LIME, 1 BAG (94 LBS.) TYPE "1" PORTLAND CEMENT.
- 3) EQUIVALENT STEEL STUD MEETING THE FOLLOWING ACCEPTABLE:
 - A) SSMA NO. 250S162-43
 - B) YIELD STRENGTH 33 KSI MINIMUM.
 - C) 2-1/2" DEPTH
 - D) 1-5/8" FLANGE
 - E) 1/2" LIP
 - F) 18 GA.
 - G) MAX. LENGTH 9'

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0314-04
Expiration Date 10/01/2014
By *[Signature]*
Miami Dade Product Control

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A	RFI Dated 7/2/09 Comment Revision	9/8/09	RJA

[Signature]
Robert J. Amoruso, P.E.
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PTC, LLC
P.O. Box 520775
Longwood, Florida 32752
FBPE Certification of Authorization NO. 25935

WAVE
9 OLD LINCOLN HW, MALVERN, PA 19355

TITLE: DETAILS AND BILL OF MATERIALS
117" X 117" CEILING SYSTEM INSTALLATION

PREPARED BY: **PTC**

DRN: SMC	DATE: 04/28/09
SCALE: NTS	DWG. NO: WAV0004
REV: B	SHEET: 6 OF 6

Phone 321.690.1788 Fax 321.690.1789