



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)  
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/economy](http://www.miamidade.gov/economy)

## NOTICE OF ACCEPTANCE (NOA)

Horton World Solutions LLC  
2106 E. State Hwy 114, Suite 301  
South Lake, TX 76092

### 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 RER- 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. RER 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 High Velocity Hurricane Zone of the Florida Building Code.

### DESCRIPTION: Horton Wall Panel

**APPROVAL DOCUMENT:** Drawing No. 6985, titled "Horton Composite Wall Panel", sheets 1 through 24 of 24, prepared by Daniel C. Smith, PE Consulting Engineers, dated July 15, 2020, signed and sealed by Daniel C. Smith, P.E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and the approval date by the Miami-Dade County Product Control Section.

### MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

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

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

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

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

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

This NOA consists of this page 1, evidence submitted 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*  
07/30/2020

NOA No. 20-0519.04  
Expiration Date: 07/30/2025  
Approval Date: 07/30/2020  
Page 1

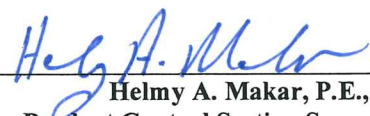
**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. *Drawing No. 6985, titled " Horton Composite Wall Panel ", sheets 1 through 24 of 24, prepared by Daniel C. Smith, PE Consulting Engineers, dated July 15, 2020, signed and sealed by Daniel C. Smith, P.E.*

**B. TEST**

1. *Test report on Large Missile Impact test and Cyclic Wind Pressure test per TAS 201 and TAS 203 and Uniform Static Air Pressure test per TAS 202 on Wall Panels prepared by PRI Construction Material Technologies LLC, report No. 2220T0009, dated Jan. 14, 2020, signed and sealed by Zachary R. Priest, P.E.*
2. *Test report on Average Maximum Load Resistance per ASTM E 72, on Wall Panels prepared by PRI Construction Material Technologies LLC, report No. 2220T0008.01, dated Nov. 12, 2019, signed and sealed by Timothy Efaw.*
3. *Test report on Compression test only per ASTM E 72, on Wall Panels prepared by NTA, report No. 2019-09-13, dated February 18, 2020, signed and sealed by Justin M. Mann.*
4. *Saturated 5% salt solution at 95 degrees for 1000 hrs. in accordance with ASTM B117-11 prepared by ATL, Inc., report No. ATLNC 0813.01-19SS, dated Oct. 22, 2019, signed and sealed by Keith Owen.*
5. *Saturated 5% salt solution at 95 degrees for 400 hrs. in accordance with ASTM B117-11 prepared by ATL, Inc., report No. ATLNC 0108.01-19SS, dated Feb. 05, 2019, signed and sealed by Keith Owen.*
6. *Saturated 5% salt solution at 95 degrees for 1200 hrs. in accordance with ASTM B117-11 prepared by ATL, Inc., report No. ATLNC 0726.01-18SS, dated Oct. 02, 2018, signed and sealed by Keith Owen.*
7. *Test report on Water Penetration Resistance on Wall Panels per ASTM E331, prepared by PRI Construction Material Technologies LLC, report No. 2220T0018, dated Jan. 27, 2020, signed and sealed by Timothy Efaw.*
8. *Test report on Water Leakage Resistance on Wall Panels per ASTM TAS 114 Appendix G, prepared by PRI Construction Material Technologies LLC, report No. 2220T0020, dated March 11, 2020, signed and sealed by Timothy Efaw.*
9. *Test report on Weathered Flexural Strength of Wall Panels per ASTM G155 with D790, prepared by PRI Construction Material Technologies LLC, report No. 2220T0023.01, dated March 16, 2020, signed and sealed by Timothy Efaw.*
10. *Test report on Fire Performance Evaluation per ASTM D1929 on Wall Panels per prepared by Southwest Research Institute, report No. HWS-001, dated Jan. 20, 2020, signed and sealed by Matthew S. Blais.*



Helmy A. Makar, P.E., M.S.  
Product Control Section Supervisor

NOA No. 20-0519.04

Expiration Date: 07/30/2025

Approval Date: 07/30/2020



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**C. CALCULATIONS**

1. *Panel allowable calculation and Fasteners verification prepared by Daniel C. Smith, PE Consulting Engineers, dated April 02, 2020, signed and sealed by Daniel C. Smith, P.E.*
2. *Fasteners verification prepared by Daniel C. Smith, PE Consulting Engineers, dated May 21, 2020, signed and sealed by Daniel C. Smith, P.E.*
3. *Wall Wind Loads calculation prepared by Daniel C. Smith, PE Consulting Engineers, dated May 21, 2020, signed and sealed by Daniel C. Smith, P.E.*

**D. QUALITY ASSURANCE**

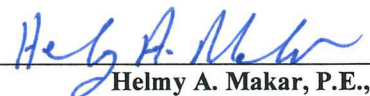
1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

**E. MATERIAL CERTIFICATION**

1. *None.*

**F. OTHERS**

1. *Florida Building Code, 2017 Edition, compliance letter issued by Daniel C. Smith, PE Consulting Engineers, dated July 15, 2020, signed and sealed by Daniel C. Smith, P.E.*



Helmy A. Makar, P.E., M.S.  
Product Control Section Supervisor  
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## HORTON COMPOSITE PANELS

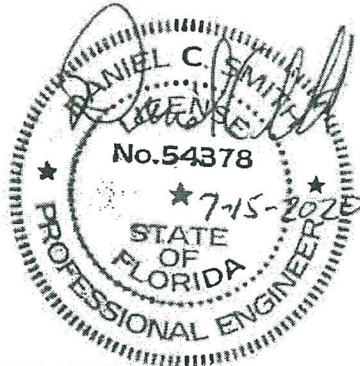
- EXTERIOR WALL: 5.5" THICK
- INTERIOR LOAD-BEARING WALL: 3.5" THICK
- INTERIOR PARTITION WALL: 3.5" THICK
- ROOF: 12" THICK
- EPS FOAM TYPE: 1.00 PCF OR BETTER, TYPE I
- HORTON LAMINATE HWS-001
- PANEL SPLINES:  $\frac{3}{4}$ " x  $2\frac{3}{8}$ " P.V.C. TRIM

## INSULATION

- CLIMATE ZONE: —
- WALLS: R-22
- ROOF: R-49

## ADHESIVE

- PLANT ADHESIVE: ASHLAND CHEMICAL 5040D
- FIELD ADHESIVE: SEAL BOND 105 / AFCAT 955
- PANEL TO TRACK
- TRACK TO CONCRETE
- METAL PLATE TO PANEL (SUPPORT CABINETS AND GARAGE)
- WOOD TO COMPOSITE PANEL



## TO ELIMINATE DELAMINATION:

- USE ADHESIVE WITH A DYE ADDED
- REJECT FOAM WITH WAVINESS IN SURFACE (ADHESIVE WILL HIGHLIGHT)
- STORE GLUE AND GLUE SPREAD IN WARM (70° F) ROOM
- AIR BLOW DUST OFF LAMINATE
- KEEP FLOOR CLEAN
- AIR BLOW DUST OFF FOAM

Approved as complying with the  
Florida Building Code  
Date 07/30/2020  
NOA# 20-0519.04  
Miami Dade Product Control

## WOOD FRAMING:

FOLLOW RESIDENTIAL CODE SPECIFICATIONS AND BEST PRACTICE  
INDUSTRY STANDARDS FOR WOOD FRAMING, EXCEPT WHERE NOTED.

SEE ENCLOSED DETAILS FOR SPECIAL CONDITION WOOD TO COMPOSITE  
PANEL CONNECTIONS.

By H. A. Mohr

WALL-1

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

☐ For Construction  
☒ Not for Construction

HORTON WORLD SOLUTIONS LLC  
SOUTHLAKE TEXAS

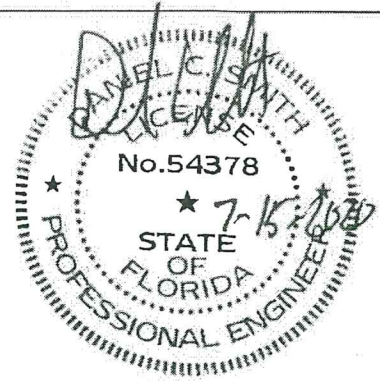
Horton World Solutions, LLC  
Horton Wall Panel Product# HWS-001



Daniel C. Smith, PE  
Consulting Engineers  
13237 Melvin Arnold Road  
Raleigh, NC 27613  
P: 919.844.6050  
E: dan@dansmithpe.com



# LIST OF MATERIALS



ASTM A653 COLD FORM METAL TRACK WITH G-90 COATING.

- TRACKS HAVE A 2" FLANGE
- SILL PLATES, 2x2 ANGLE AND 6" x 2" ARE 16 GA
- TOP PLATES ARE 18 GA
- WALL MOUNTING CABINETS 4" x 18 GA OR 2X WOOD

SEAL BOND 105 ADHESIVES ARE REQUIRED BY THE ENGINEERING SERVICE REPORT ACCEPTED BY THE BUILDING CODES

- USE TO SECURE SILL PLATE TO CONCRETE
- USE TO GLUE THE LAMINATE TO THE STEEL FLANGES
- USE TO GLUE TO ATTACH STEEL TO THE LAMINATE FOR METAL PLATES
- USE TO GLUE TOP PLATE TO THE WALL PANEL LAMINATES
- USE TO EXPANDING ADHESIVES TO SECURE THE SPINES T THE PANELS

HORTON SUPPLIED PVC (3/4" THICK) FOR ALL SPLINES

ANCHOR BOLTS (THESE PRODUCTS HAVE BUILT IN WASHERS)

- SIMPSON STRONG-TIE 1/2" Ø x 3" TITEN HD SCREW ANCHOR - ZINC
- HILTI KWIK HUS-EZ 1/2" Ø x 3" ANCHOR BOLT
- ITW - TAPCON 1/2" Ø x 3" ANCHOR BOLT

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Miami Dade Product Control  
By H. G. A. M. R.

## CONNECTION SCREWS (ROOF)




- ROOF PANEL TO TOP TRACK 3/16" Ø - 14" LONG COUNTER SINK HEAD  
TEK #3 SELF DRILLING WITH WASHER

FILL GAPS AGAINST WALLS TO MAKE TIGHT

- AFCAT DOOR AND WINDOW EXPANDING FOAM ADHESIVE
- RED DEVIL LOW EXPANDING FOAM ADHESIVE FOR SAME CRACKS

BENEATH INTERIOR WALLS

- USE CAULK - NOT AN ADHESIVE

 <p>#6-1 1/4" DRYWALL SCREW</p> <ul style="list-style-type: none"> <li>- HOLDS METAL UNTIL ADHESIVE CURES</li> <li>- HOLDS DRYWALL TO WALLS/CEILINGS</li> </ul>	 <p>1/2" Ø STAINLESS STEEL ANCHOR BOLT WITH MOLDED WASHER AND CONCRETE THREADS (SIMPSON, HILTI, TAPCON)</p>
 <p>#8-3/4" SCREW TO PULL TRACK TO LAMINATE SQUEEZE ADHESIVE, SPACE AS NEEDED, NOT LESS THAN 24" o.c.</p>	

WALL - 2

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

☐ For Construction  
☒ Not for Construction

HORTON WORLD SOLUTIONS LLC  
SOUTHLAKE TEXAS

Horton World Solutions, LLC  
Horton Wall Panel Product# HWS-001



Daniel C. Smith, PE  
Consulting Engineers  
13237 Melvin Arnold Road  
Raleigh, NC 27613  
P: 919.844.6050  
E: dan@dansmithpe.com

### Horton Composite Laminate Description

- A GMT (Glass Mat Technology) fiberglass and polypropylene resin fabricated to have random fiber orientation. (Non-Provisional patent submitted)
- Testing has shown that the random orientation of the fibers are close in stiffness and strength in the 0° and 90° orientation, making this an anisotropic material. Anisotropic is equal strength in the plane of the material.
- Laminate has a polyester scrim on each face that allows screw connections and coatings to stick to the laminate.
- Laminate is 8' (243.8 cm) wide and 0.05" (1.27 mm) thick.

### Horton Composite Panel

- The laminate is adhered to the front and back face of the EPS foam.
- The composite panel is pressed together according to the manufacturer's specifications
- ICC NTA has observed the lamination process and the panel fabrication process.
- Horton wall panels are 3.5", 5.5" and 8" thick.

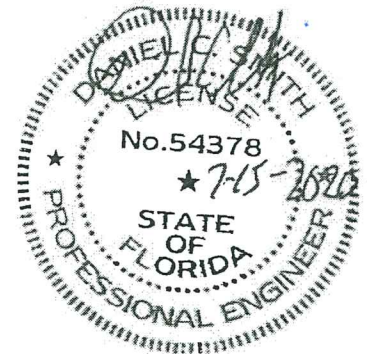
### Typical Panel sizes and weight.

- Walls are 8' wide and 8 to 12' tall
- 5.5" panel 8' x 10' weights = 73 lbs
- 8" panel 8' x 10' weights = 88 lbs

DRYVIT Sandpebble DS416, Primer Sand DS477 and Aquasill DS494

DRYVIT was tested as part of the Miami-Dade TAS tests:

- DRYVIT was the exterior coating on the panels that were tested for the Missile Impact strikes, cyclic and air infiltration testing. - PASSED
- DRYVIT was used on the walls as part of the E331 tests (seam, corner, window and roof joint). - PASSED



Approved as complying with the  
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Date 07/30/2020  
NOA# 20-0519.04  
Miami Dade Product Control

By H. A. M. M.

WALL - 3

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

☐ For Construction  
☒ Not for Construction

HORTON WORLD SOLUTIONS LLC  
SOUTHLAKE TEXAS

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Daniel C. Smith, PE  
Consulting Engineers  
13737 Melvin Arnold Road  
Raleigh, NC 27613  
P: 919.844.6050  
E: dan@dansmithpe.com

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In Compliance with Checklists #0135 AND #0285

TAS 201, 202, 203 (PRI Tampa Fl - Project # 2220T0009)

- Large Missile Impact, Design Test Pressure, Test Pressure

TAS 114 (G) (PRI Tampa Fl)

- Wind driven rain test of the Henry Tropi-Cool roof coating

ASTM G155 UV

- At 500 hours - 4% decline in flexural strength.
- At 1,000 hours - flexural strength loss exceeded 10%

General Note for HORTON WALL PANEL is in compliance with the 2017 FBC and High Velocity Hurricane Zones: Dade and Broward County

In Compliance with PLASTIC and FOAM PLASTIC Checklist #0445

- SELF-IGNITION TEMPERATURE FOR PLASTICS ASTM D1929 - PASSED,
- RATE OF BURING OF PLASTICS ASTM D635 - PASSED
- SURFACE BURNING CHARACTERISTICS ASTM E84 - PASSED.

In Addition, the Wall Panels passed

- CORNER BURN TEST NFPA 286,

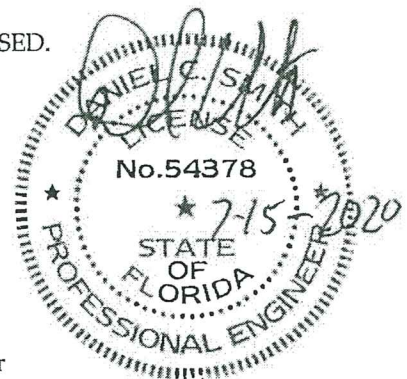
Tests used the thickest wall panel and the thickest roof panel

Doors

- will require metal tracks on the vertical edges to secure the door to the frame. Double doors would require a header.
- DP 50 rating

Windows

- up to 3' wide do not require any metal frame
- up to 6' wide will require a header and a column
- over 6' wide will require a cold-formed steel box column 2" x 5.5" between each window and a metal track on the outer edge of the window set.
- DP 50 rating
- Columns A cold-form steel C channel for moderate winds  
A cold-formed steel column 2" x 5.5" for high winds



Approved as complying with the  
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Date 07/30/2020  
NOA# 26-0519.04  
Miami Dade Product Control

By Hely A. Miller

WALL - 4

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

☐ For Construction  
☒ Not for Construction

HORTON WORLD SOLUTIONS LLC  
SOUTHLAKE TEXAS

Horton World Solutions, LLC  
Horton Wall Panel Product# HWS-001



Daniel C. Smith, PE  
Consulting Engineers  
13237 Melvin Arnold Road  
Raleigh, NC 27613  
P: 919.844.6050  
E: dan@dansmithpe.com

## AXIAL TESTS (ICC-NTA LLC, NAPPANEE INDIANA)

IN addition to performing required Axial compression tests, Horton wanted to perform a 16 foot tall panel with axial compression loads, and apply a 2nd floor load at mid-height of the panel. 2nd Floor Loads were limited to the test apparatus of 700 lb load applied across a 4 foot panel width.

### No openings

- 4 ft x 8 ft - 8"
- 4 ft x 16ft - 8"
- 4 ft x 10ft - 5.5"

### With 3' x 5' windows

- 8ft x 16ft - 8" WITH 3' x 5' WINDOW
- 8ft x 10ft - 5.5" WITH 3' x 5' WINDOW

### Balloon Setup

- 4ft x 16ft - 5.5" WITH 2nd FLOOR LOAD AT 8 ft
- 4ft x 16ft - 8" WITH 2nd FLOOR LOAD AT 8 ft

### ASTM E72 - AXIAL COMPRESSION LOADS (SF = 3)

8" THICK - 8 FT TALL 620 LBS PER FOOT

8" THICK - 16 FT TALL 390 LBS PER FOOT

5.5" THICK - 10 FT TALL 660 LBS PER FOOT

### UPLIFT OF TOP PLATE - ADHESIVE

ALLOWABLE UPLIFT = 425 LBS PER FOOT

### ASTM E72 SECTION 9 SHEAR TEST (SF = 5)

20 GA METAL PLATE TO LAMINATE

6" x 6" METAL PLATE:

- MIN. OF 80% COVERAGE WITH AFCAT 955
- 126 LBS

CONTINUOUS 4" STRAP (20GA)

- MIN. OF 80% COVERAGE WITH AFCAT 955
- 168 LBS PER FOOT

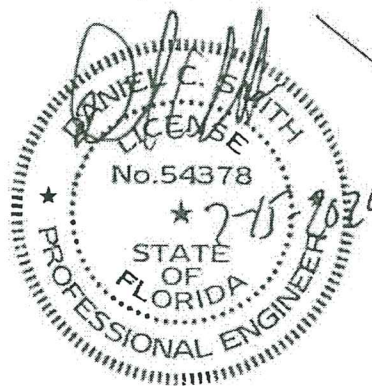
## NOTES:

RADIO FREQ. CONTROLLED LIGHT SWITCHES

OPTIONAL: DRILL HOLE FOR LIGHT SWITCHES AS SHOWN

HWS-001 COMPOSITE  
LAMINATE 0.05" THICK

EPS FOAM  
1 LB (3.5", 5", 8" THICK)



Approved as complying with the  
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NOA# 20-0518.04  
Miami Dade Product Control

By H. G. A. Mohr

AXIAL

SHEAR

ADHESIVE  
BEAD

TYPICAL WALL PANEL FABRICATION  
ELEVATION VIEW

WALL - 5

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

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☒ Not for Construction

HORTON WORLD SOLUTIONS LLC  
SOUTHLAKE TEXAS

Horton World Solutions, LLC  
Horton Wall Panel Product# HWS-001



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Consulting Engineers  
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Raleigh, NC 27613  
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E: dan@dansmithpe.com



### TRANSVERSE TESTS (PRI Tampa Fl)

#### Wall Panels

- 4 ft x 10 ft - 5.5"
- 8 ft x 10 ft - 5.5" with 3' x 5' window

This test shows that HWS will have to have steel columns to the sides of the windows, with small panels above and below the window.

This is detailed in the Construction drawings

- 4 ft x 8 ft - 8"
- 4 ft x 16 ft - 8"

### ASTM E72 - TRANSVERSE LOADS

#### 5.5" THICK PANEL (8' WIDE)

20 PSF LL - MAX HEIGHT 8'

50 PSF LL - MAX HEIGHT 7' 6"

#### 5.5" THICK PANEL w/ 3' WIDE WINDOW (8' WIDE PANEL)

20 PSF LL - MAX HEIGHT 8'

50 PSF LL - MAX HEIGHT 7' 6"

#### 8" THICK PANEL (8' WIDE)

20 PSF LL - MAX HEIGHT 12'

50 PSF LL - MAX HEIGHT 9'

#### 8" THICK PANEL w/ 3' WIDE WINDOW (8' WIDE PANEL)

20 PSF LL - MAX HEIGHT 12'

50 PSF LL - MAX HEIGHT 9'

### ANCHOR BOLTS (HILTI - SIMPSON AND ITW SIMILAR)

#### ANCHOR BOLT - ALLOWABLE WITHDRAWAL

$\frac{1}{2}$ " Ø ANCHOR BOLT 3" EMBEDMENT 3,000 PSI CONCRETE =

$\frac{5}{8}$ " Ø ANCHOR BOLT 3" EMBEDMENT 3,000 PSI CONCRETE =

#### ANCHOR BOLT - ALLOWABLE SHEAR UNCRACKED CONCRETE

EDGE DISTANCE 2.5" FOOTING 12" THICK MIN.

$\frac{1}{2}$ " Ø ANCHOR BOLT 3" EMBEDMENT 3,000 PSI CONCRETE = 1,290 LBS

$\frac{1}{2}$ " Ø ANCHOR BOLT 4 1/4" EMBEDMENT 3,000 PSI CONCRETE = 1,419 LBS

$\frac{5}{8}$ " Ø ANCHOR BOLT 3 1/4" EMBEDMENT 3,000 PSI CONCRETE = 1,396 LBS

$\frac{5}{8}$ " Ø ANCHOR BOLT 5" EMBEDMENT 3,000 PSI CONCRETE = 1,588 LBS

NOTE: ENGINEER HAS TO CHECK BENDING OF THE WEB PORTION OF THE BOTTOM TRACK FROM THE FORCE TO THE ANCHOR BOLT.

### NOTES:

RADIO FREQ. CONTROLLED LIGHT SWITCHES

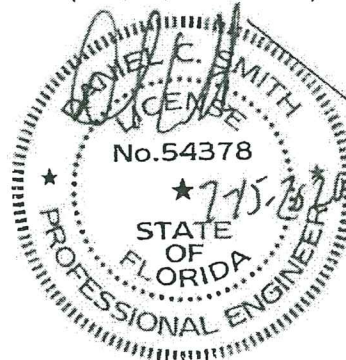
OPTIONAL: DRILL HOLE FOR LIGHT SWITCHES AS SHOWN

HWS-001 COMPOSITE LAMINATE 0.05" THICK

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NOA# 20-0517-04  
Miami Dade Product Control

By Heidi A. Melton

EPS FOAM  
1 LB (3.5", 5", 8" THICK)



AXIAL

ADHESIVE BEAD

TYPICAL WALL PANEL FABRICATION  
ELEVATION VIEW

WALL - 6

DCSPE #: 6985

Drawn By: KSW/DCS

Date: 7-15-2020

☐ For Construction

☒ Not for Construction

HORTON WORLD SOLUTIONS LLC  
SOUTHLAKE TEXAS

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Horton Wall Panel Product# HWS-001



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13237 Melvin Arnold Road  
Raleigh, NC 27613  
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E: dan@dansmithpe.com

### ASTM E72 RACKING TESTS

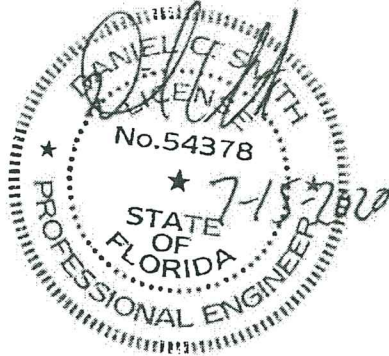
#### ALLOWABLE VALUES (SF =3)

5.5" THICK 8 FT x 8 FT TALL PANEL  
WITH SPLINE 114 LBS / FT

5.5" THICK 8 FT x 8 FT TALL PANEL  
WITH 3-0 / 5-0 WINDOW 78 LBS / FT

8" THICK 8 FT x 8 FT TALL PANEL  
WITH SPLINE 122 LBS / FT

8" THICK 8 x 8 FT TALL PANEL  
WITH SPLINE/ & 3-0 / 5-0 WINDOW 86 LBS / FT



### TOP AND BOTTOM TRACKS

ASTM A653 - 33 KSI STEEL  
16 GA THICK WITH G-90 COATING

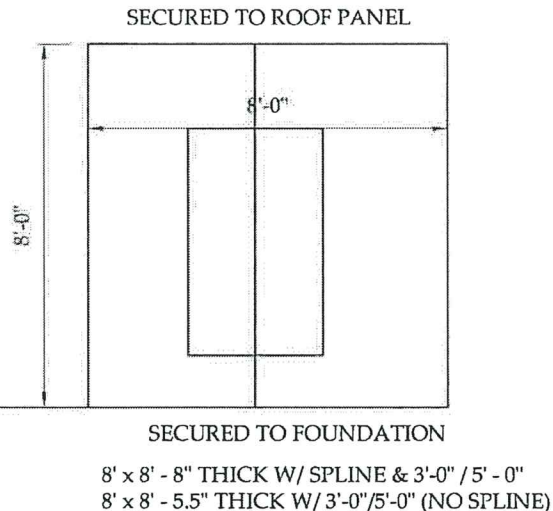
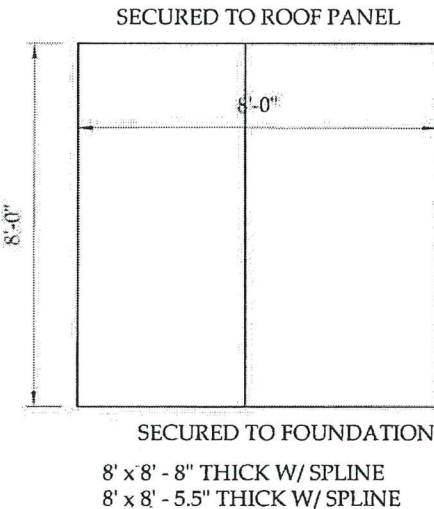
TRACKS MUST OVERLAP WALL  
VERTICAL SEAM BY 24"

### RACKING TESTS (PRI Tampa Fl)

These tests followed regular testing procedures. There was no metal track installed

to the top of the window opening.

- 5 1/2" thick panel with vertical spline ASTM E72, PROJECT #: 2220T0025
- 5 1/2" thick panel with vertical spline & 3' x 5' window, ASTM E72, PROJECT #: 2220T0008.03
- 8" thick panel with vertical spline ASTM E72, PROJECT #: 2220T0008.01
- 8" thick panel with vertical spline & 3' x 5' window, ASTM E72, PROJECT #: 2220T0025



PANEL RACKING CONFIGURATIONS  
ELEVATION VIEW

Approved as complying with the  
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Date 07/30/2020  
NOA# 20-0518.04  
Miami Dade Product Control

By *He G. H. Ma*

WALL - 7

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

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HORTON WORLD SOLUTIONS LLC  
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Consulting Engineers  
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Raleigh, NC 27613  
P: 919.844.6050  
E: dan@dansmithpe.com

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NOTES:

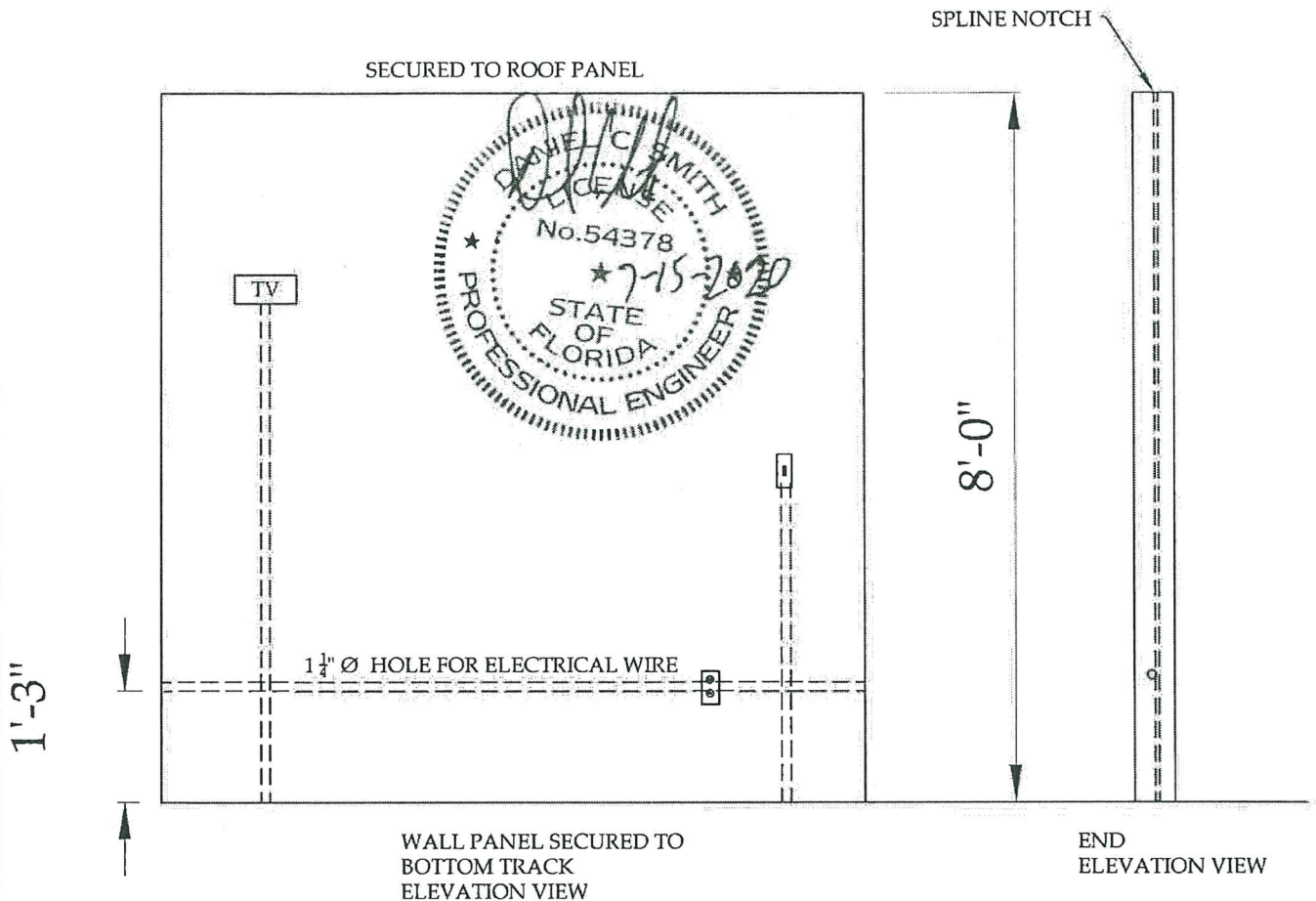
RADIO FREQ. CONTROLLED LIGHT SWITCHES

OPTIONAL: DRILL HOLE FOR LIGHT SWITCHES AS SHOWN

TOP AND BOTTOM TRACKS

ASTM A653 - 33 KSI STEEL  
16 GA THICK WITH G-90 COATING

TRACKS MUST OVERLAP WALL  
VEERTICAL SEAM BY 24"



 TYPICAL WALL PANEL FABRICATION  
ELEVATION VIEW

Approved as complying with the  
Florida Building Code  
Date 07/30/2020  
NOA# 20-0519.04  
Miami Dade Product Control

By H. G. A. M. W.

WALL - 8

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

☐ For Construction  
☒ Not for Construction

HORTON WORLD SOLUTIONS LLC  
SOUTHLAKE TEXAS

Horton World Solutions, LLC  
Horton Wall Panel Product# HWS-001

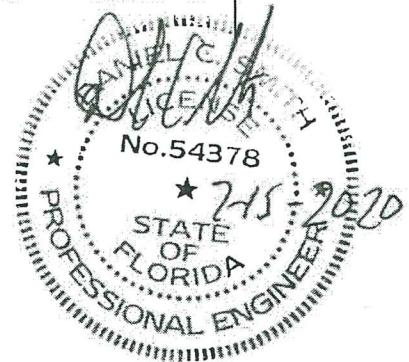
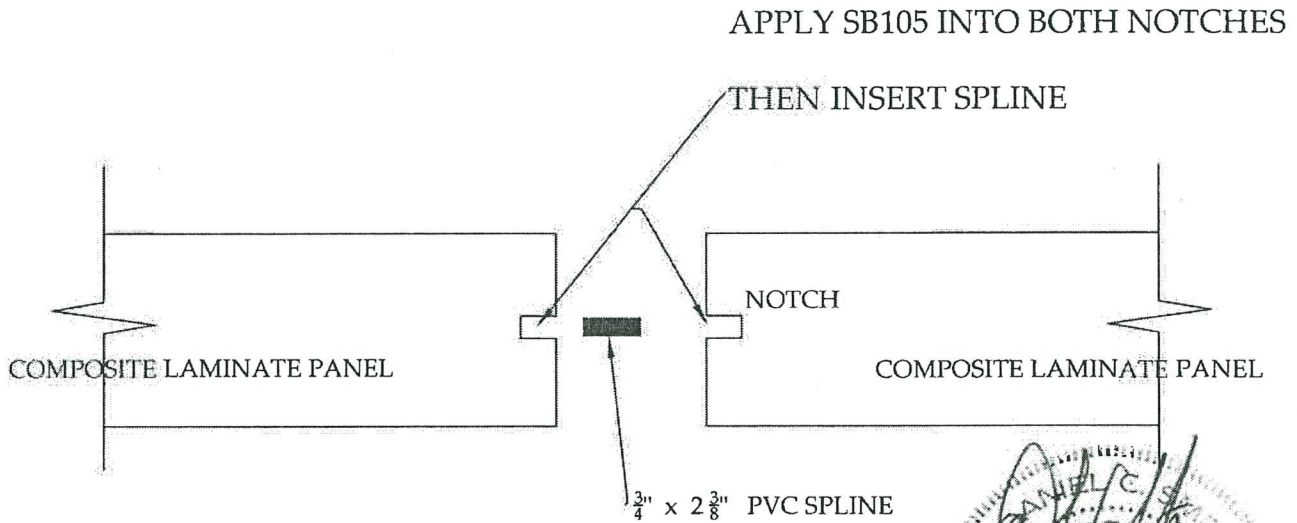


Daniel C. Smith, PE  
Consulting Engineers  
13237 Melvin Arnold Road  
Raleigh, NC 27613  
P: 919.844.6050  
E: dan@dansmithpe.com

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NOTES:

PURPOSE OF THE SPLINE IS TO KEEP TWO  
PANELS FROM HAVING DIFFERENTIAL  
TRANSVERSE DEFLECTION



 SPLINE CONNECTION  
ELEVATION VIEW

Approved as complying with the  
Florida Building Code  
Date 07/30/2020  
NOA# 20-0519.04  
Miami Dade Product Control

By H. G. A. Smith

WALL - 9

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

☐ For Construction  
☒ Not for Construction

HORTON WORLD SOLUTIONS LLC  
SOUTHLAKE TEXAS

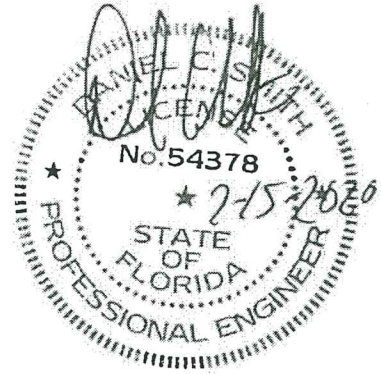
Horton World Solutions, LLC  
Horton Wall Panel Product# HWS-001



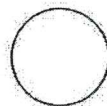
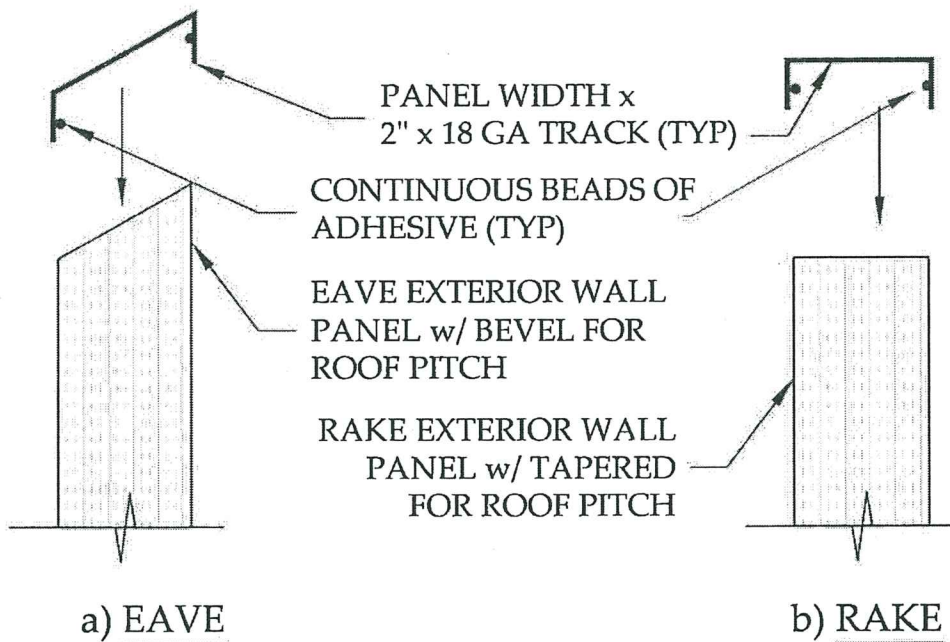
Daniel C. Smith, PE  
Consulting Engineers  
13237 Melvin Arnold Road  
Raleigh, NC 27613  
P: 919.844.6050  
E: dan@dansmithpe.com



ADHESIVE BEADS ALLOWABLE  
UPLIFT ARE 425 LBS PER FOOT



● = ADHESIVE BEADS ARE  $\frac{3}{8}$ " THICK  
AND CONTINUOUS. NO SKIPS



TOP TRACK ADHESIVE  
ELEVATION VIEW

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Date 07/30/2020  
NOA# 20-0519.04  
Miami Dade Product Control

By *[Signature]*

WALL - 10

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

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Daniel C. Smith, PE  
Consulting Engineers  
13237 Melvin Arnold Road  
Raleigh, NC 27613  
P: 919.844.6050  
E: dan@dansmithpe.com

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ADHESIVE BEADS ARE  $\frac{3}{8}$ " THICK  
AND CONTINUOUS. NO SKIPS

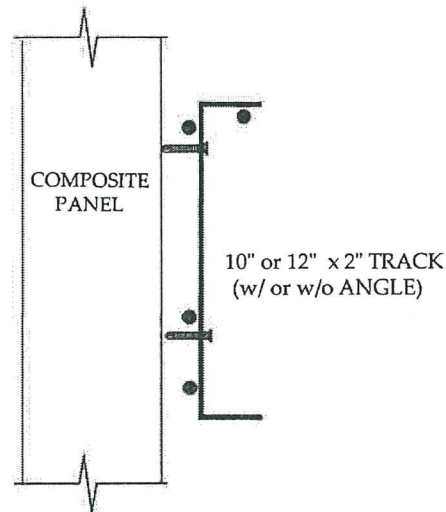
ASTM A653 - 33 KSI STEEL  
16 GA THICK WITH G-90 COATING

NOTE:  
USE (2) #6 DRYWALL SCREWS -  
MINIMUM FOR HOLDING METAL  
TO LAMINATE WHILE ADHESIVE  
CURES

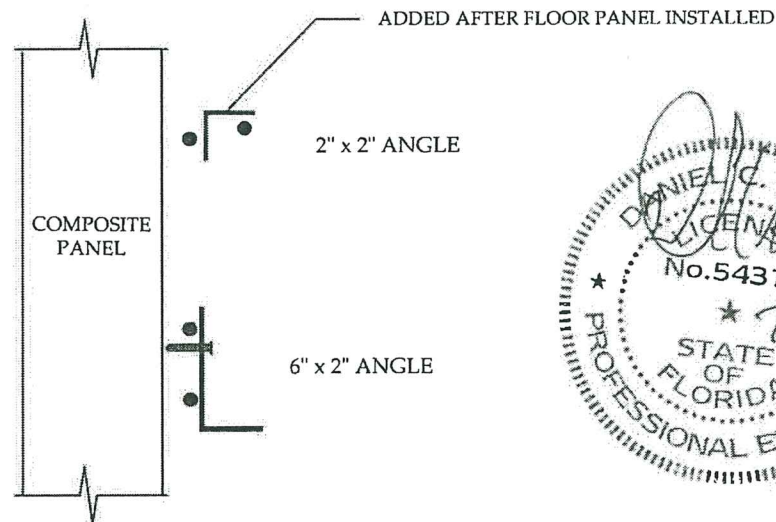
SCREW INTO LAMINATE  
ALLOWABLE LOADS

WHEN DIRECT ATTACHMENT TO  
THE LAMINATE FACE - USE A  
MINIMUM OF 2 SCREWS

SHEAR = 113 LBS  
WITHDRAWAL = 41 LBS



ONE PIECE OPTION



TWO PIECE OPTION



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Date: 07/30/2020  
NOA# 20-0519.04  
Miami Dade Product Control

By: *[Signature]*

ATTACHMENT TO WALL PANELS  
ELEVATION VIEW

WALL - 11

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

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SOUTHLAKE TEXAS

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Daniel C. Smith, PE  
Consulting Engineers  
13237 Melvin Arnold Road  
Raleigh, NC 27613  
P: 919.844.6050  
E: dan@dansmithpe.com

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- = ADHESIVE BEADS ARE  $\frac{3}{8}$ " THICK AND CONTINUOUS. NO SKIPS

NOTE:  
ADD TYPICAL DRYSWALL SCREW TO HOLD METAL IN PLACE TIGHT TO WALL WHILE ADHESIVE IS CURING.  
WAIT 48 HOURS TO ADD DEAD WEIGHT

NOTE:  
USE (2) #6 DRYWALL SCREWS - MINIMUM FOR HOLDING METAL TO LAMINATE WHILE ADHESIVE CURES

SCREW INTO LAMINATE  
ALLOWABLE LOADS

WHEN DIRECT ATTACHMENT TO THE LAMINATE FACE - USE A MINIMUM OF 2 SCREWS

SHEAR = 113 LBS  
WITHDRAWAL = 41 LBS

ASTM E72 SECTION 9 SHEAR TEST (SF = 5)

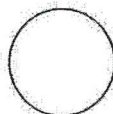
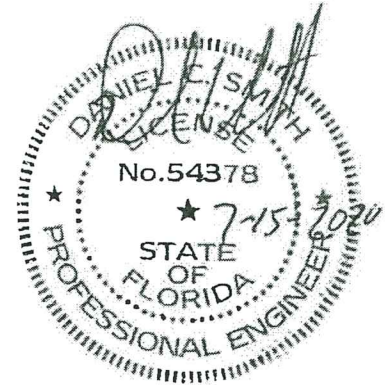
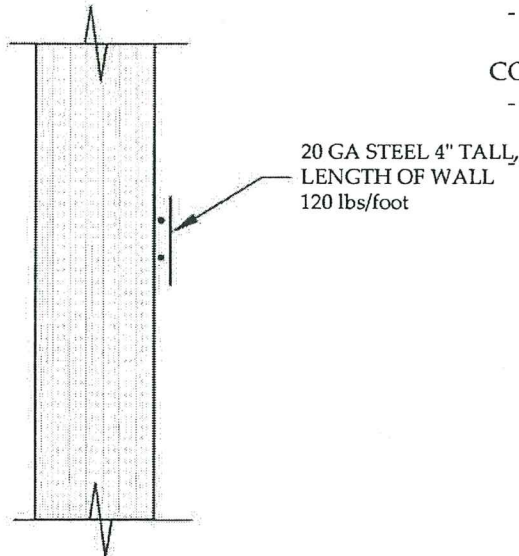
20 GA METAL PLATE TO LAMINATE

6" x 6" METAL PLATE:

- MIN. OF 80% COVERAGE WITH AFCAT 955
- 126 LBS

CONTINUOUS 4" STRAP

- MIN. OF 80% COVERAGE WITH AFCAT 955
- 168 LBS PER FOOT



SECURING CABINETS & TV  
ELEVATION VIEW

Approved as complying with the  
Florida Building Code

Date 07/30/2020

NOA# 20-051904

Miami Dade Product Control

By *Healy A. Miller*

WALL - 12

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

☐ For Construction  
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Daniel C. Smith, PE  
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13237 Melvin Arnold Road  
Raleigh, NC 27613  
P: 919.844.6050  
E: dan@dansmithpe.com

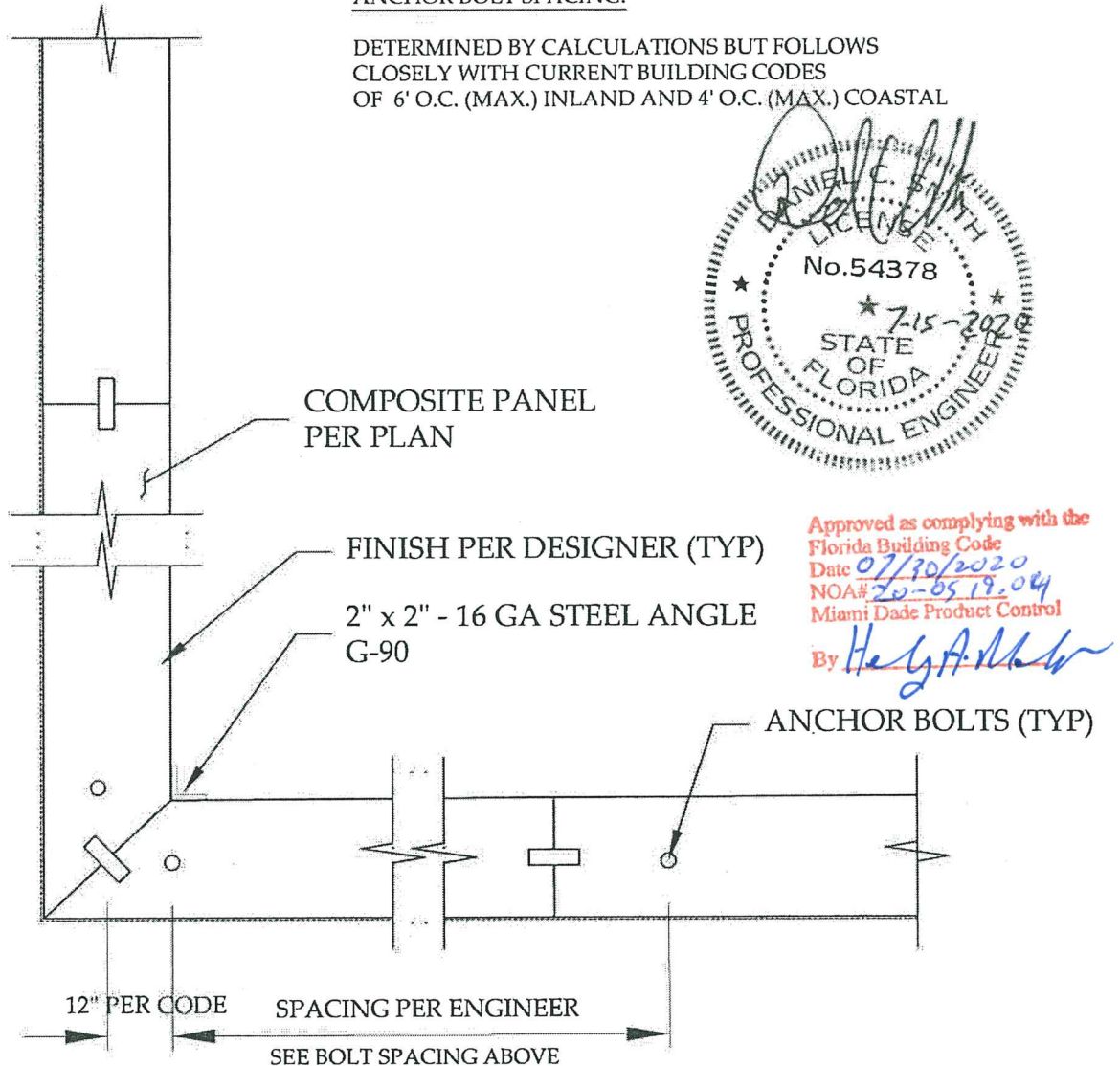
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NOTE: CORNER WALL CONNECTION OF THE WALL PANELS:

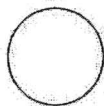
WHEN WIND LOAD ON WALL A, THE FORCE TRANSFER TO WALL B  
(PERPENDICULAR TO WALL A) - THE ALLOWABLE  
COMPRESSION or TENSION FORCE IS 550 PLF  
FROM SILL PLATE TO THE TOP PLATE

ANCHOR BOLT SPACING:

DETERMINED BY CALCULATIONS BUT FOLLOWS  
CLOSELY WITH CURRENT BUILDING CODES  
OF 6' O.C. (MAX.) INLAND AND 4' O.C. (MAX.) COASTAL



Approved as complying with the  
Florida Building Code  
Date 07/30/2020  
NOA# 20-0519.04  
Miami Dade Product Control  
By *H. G. A. N. M.*



OUTSIDE CORNER PIECES - BOTTOM TRACK  
ELEVATION VIEW

WALL - 13

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

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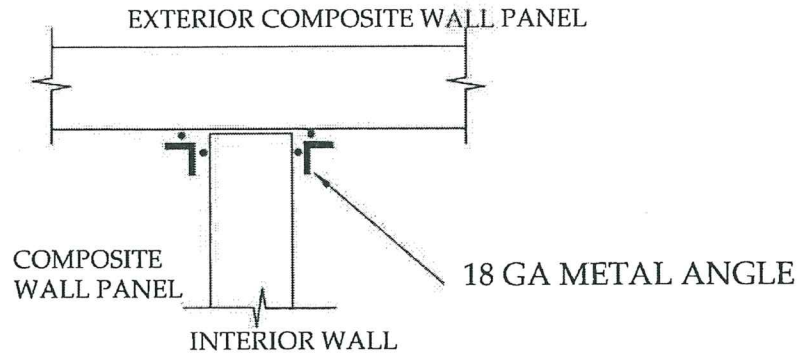


Daniel C. Smith, PE  
Consulting Engineers  
13237 Melvin Arnold Road  
Raleigh, NC 27613  
P: 919.844.6050  
E: dan@dansmithpe.com

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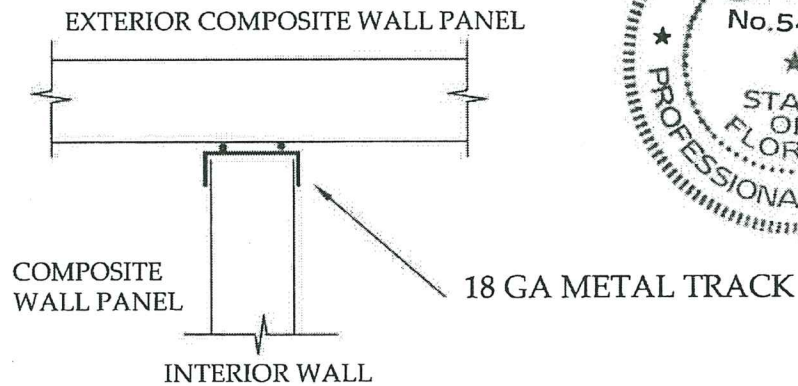


- = ADHESIVE BEADS ARE  $\frac{3}{8}$ " THICK AND CONTINUOUS. NO SKIPS



○ INTERIOR WALL TO EXTERIOR WALL PANEL  
PLAN VIEW

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Florida Building Code  
Date 6/26/2020  
NOA# 20-0519.04  
Miami Dade Product Control  
By Haley A. Miller



○ WALL CONNECTION TO ANOTHER WALL  
PLAN VIEW



WALL - 14

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

☐ For Construction  
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SOUTHLAKE TEXAS

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Horton Wall Panel Product# HWS-001

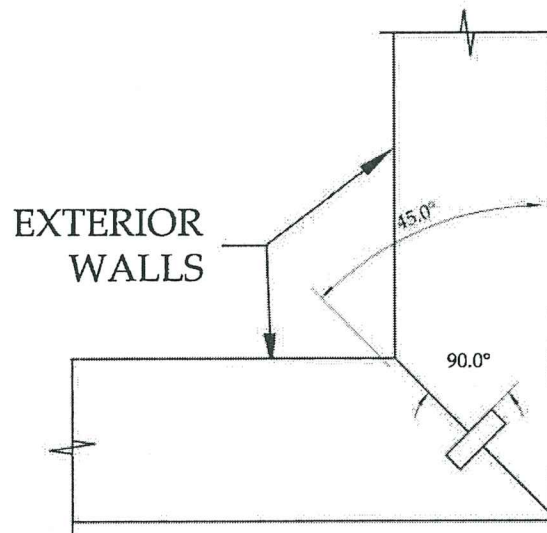


Daniel C. Smith, PE  
Consulting Engineers  
13237 Melvin Arnold Road  
Raleigh, NC 27613  
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E: dan@dansmithpe.com

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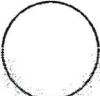
ADHESIVE BEADS ARE  $\frac{3}{8}$ " THICK  
AND CONTINUOUS. NO SKIPS

NOTE:  
USE #6 DRYWALL SCREWS FOR  
HOLDING METAL TO LAMINATE  
WHILE ADHESIVE CURES



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Date 07/30/2020  
NOA# 20-0879.04  
Miami Dade Product Control

By H. G. A. M. M.

 TYPICAL CORNER CONNECTION - SPLINE  
ELEVATION VIEW

WALL - 15

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

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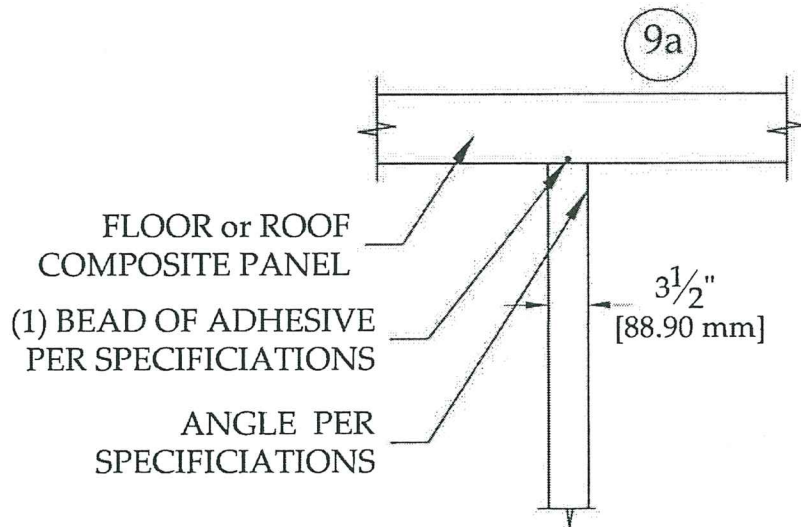


Daniel C. Smith, PE  
Consulting Engineers  
10237 Melvin Arnold Road  
Raleigh, NC 27613  
P: 919.844.6050  
E: dan@dansmithpe.com



- ADHESIVE BEADS ARE  $\frac{3}{8}$ " THICK AND CONTINUOUS. NO SKIPS

ALTERNATE: 2 VERTICAL ANGLES



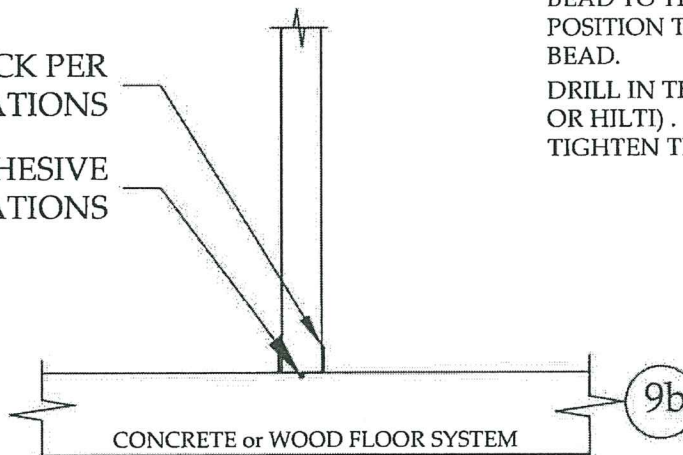
FLOOR or ROOF  
COMPOSITE PANEL

(1) BEAD OF ADHESIVE  
PER SPECIFICATIONS

ANGLE PER  
SPECIFICATIONS

TRACK PER  
SPECIFICATIONS

(1) BEAD OF ADHESIVE  
PER SPECIFICATIONS



#### NON-LOAD BEARING WALLS:

APPLY  $\frac{3}{8}$ " WIDE ADHESIVE TO 20 GA TRACK TO THE CONCRETE.

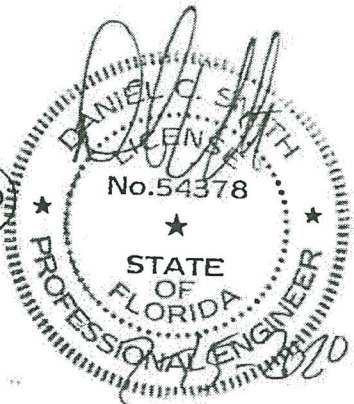
ADD ANCHOR BOLTS AS NECESSARY TO SECURE WALL

#### LOAD BEARING OR SHEAR WALLS:

APPLY  $\frac{3}{8}$ " WIDE CONTINUOUS ADHESIVE BEAD TO THE CONCRETE.  
POSITION THE 16 GA SILL TRACK OVER THE BEAD.

DRILL IN THE  $\frac{1}{2}$ "  $\varnothing$  ANCHOR BOLT (SIMPSON OR HILTI) . (PER PLAN)  
TIGHTEN THE ANCHOR BOLT

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Florida Building Code  
Date 07/30/2020  
NOA# 20-0519.04  
Miami Dade Product Control  
By Haley A. McLean



INTERIOR NON-LOAD BEARING COMPOSITE WALLS  
ELEVATION VIEW

WALL - 16

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

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SOUTHLAKE TEXAS

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Daniel C. Smith, PE  
Consulting Engineers  
13237 Melvin Arnold Road  
Raleigh, NC 27613  
P: 919.844.6050  
E: dan@dansmithpe.com

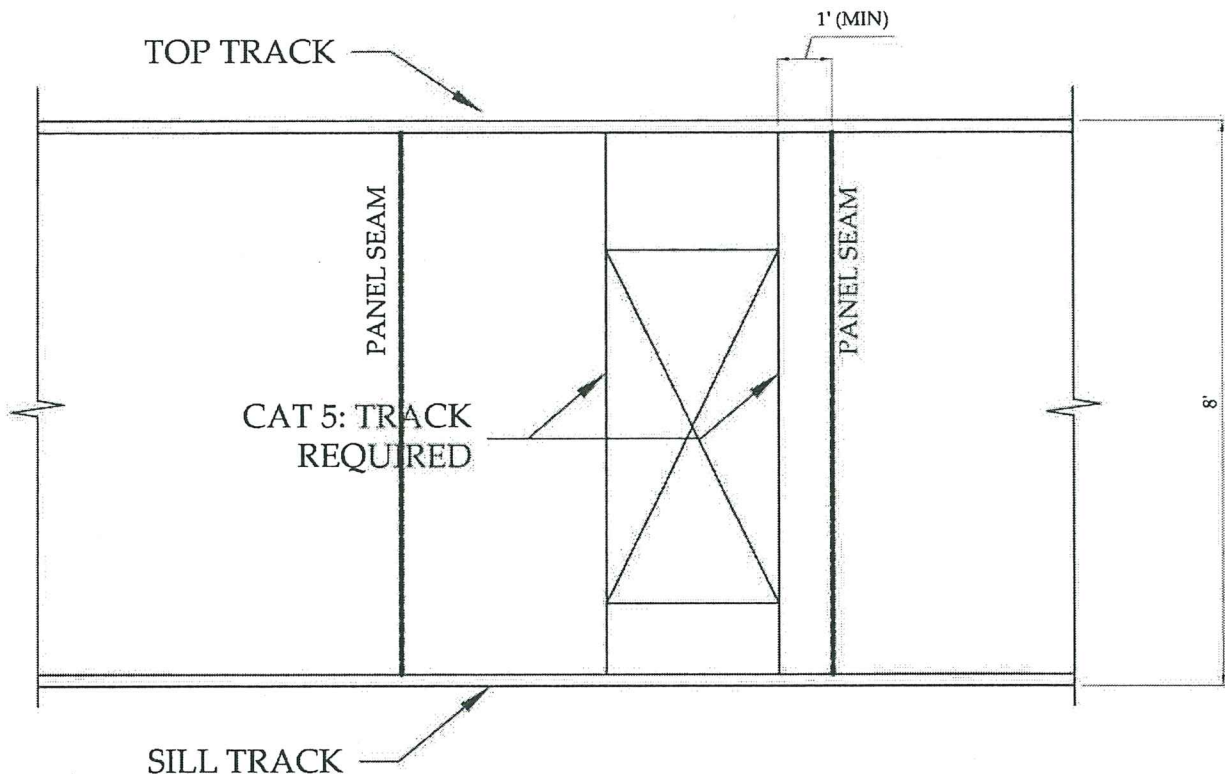
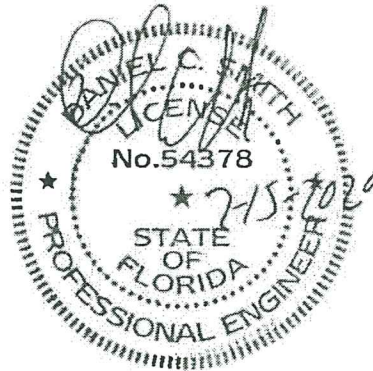
## TOP TRACK - BUTT JOINT

THE TOP TRACK BUTT JOINT CANNOT OCCUR WITHIN 24" OF THE WALL PANEL JOINT OR STUD FRAMING FOR WINDOWS OR DOORS.

THE SEAL BOND 105 ADHESIVE PROVIDES 790 LBS OF TENSION BETWEEN THE LAMINATE AND THE STEEL TRACK, WHEN A  $\frac{3}{8}$ " DIAMETER BEAD IS APPLIED.

SINGLE WINDOWS WITH NO HEADER (3' 0" MAX. WIDTH)

- \* CAT 5 WINDS: REQUIRE TRACK ON EACH VERTICAL FROM TOP PLATE DOWN TO BOTTOM PLATE.



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Date: 07/30/2020  
NOA# 20-051804  
Miami Dade Product Control

By: *Heidi A. Miller*

5.5" THICK WALL PANEL w/ 3' WINDOW OPENING  
ELEVATION VIEW

WALL - 17

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

☐ For Construction  
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SOUTHLAKE TEXAS

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Daniel C. Smith, PE  
Consulting Engineers  
13237 Melvin Arnold Road  
Raleigh, NC 27613  
P: 919.844.6050  
E: dan@dansmithpe.com

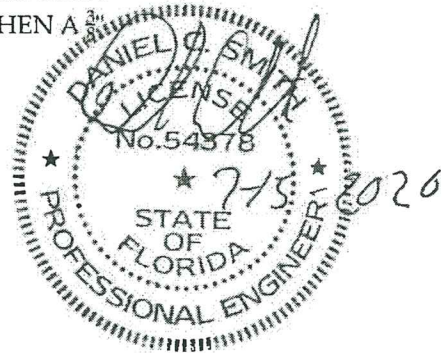
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### TOP TRACK - BUTT JOINT

THE TOP TRACK BUTT JOINT CANNOT OCCUR WITHIN 24" OF THE WALL PANEL JOINT OR STUD FRAMING FOR WINDOWS OR DOORS.

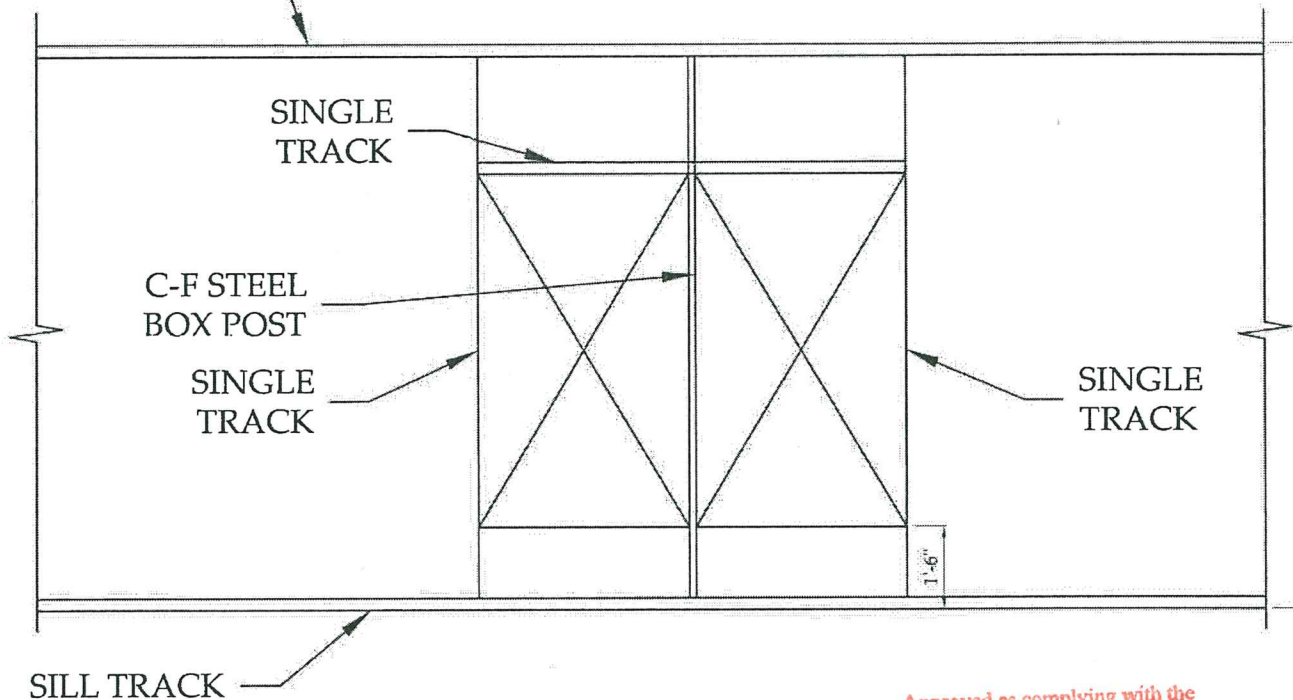
THE SEAL BOND 105 ADHESIVE PROVIDES 790 LBS OF TENSION BETWEEN THE LAMINATE AND THE STEEL TRACK, WHEN A 3/8" DIAMETER BEAD IS APPLIED.



DOUBLE WINDOWS (UP TO 6' WIDE)

- \* REQUIRE A 20 GA STEEL TRACK (2" FLANGES)

TOP TRACK



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NOA# 20-0519.04  
Miami Dade Product Control

By Heidi A. Nelson



5.5" THICK WALL PANEL w/ (2) 3' WINDOW OPENING  
ELEVATION VIEW

WALL - 18

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

☐ For Construction  
☒ Not for Construction

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Daniel C. Smith, PE  
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13237 Melvin Arnold Road  
Raleigh, NC 27613  
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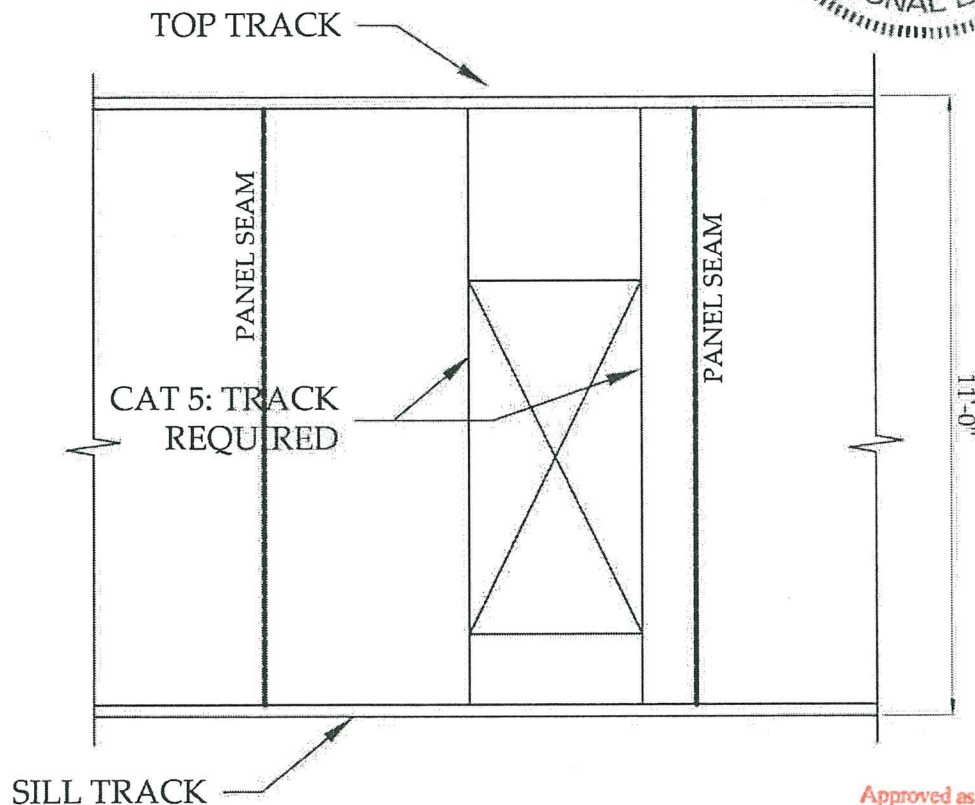
## TOP TRACK - BUTT JOINT

THE TOP TRACK BUTT JOINT CANNOT OCCUR WITHIN 24" OF THE WALL PANEL JOINT OR STUD FRAMING FOR WINDOWS OR DOORS.

THE SEAL BOND 105 ADHESIVE PROVIDES 790 LBS OF TENSION BETWEEN THE LAMINATE AND THE STEEL TRACK, WHEN A  $\frac{3}{8}$ " DIAMETER BEAD IS APPLIED.

SINGLE WINDOW WITH NO HEADER (3' 0" MAX. WIDTH)

- \* INLAND WIND: PASSED AXIAL AND TRANSVERSE LOADS
- \* CAT 5 WINDS: REQUIRE TRACK ON EACH VERTICAL FROM TOP PLATE DOWN TO BOTTOM PLATE.



8" THICK WALL PANEL w/ 3' WINDOW OPENING  
ELEVATION VIEW

Approved as complying with the  
Florida Building Code  
Date: 07/30/2020  
NOA# 20-0519.04  
Miami Dade Product Control

By: *[Signature]*

WALL - 19

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

☐ For Construction  
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SOUTHLAKE TEXAS

Horton World Solutions, LLC  
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Daniel C. Smith, PE  
Consulting Engineers  
13237 Melvin Arnold Road  
Raleigh, NC 27613  
P: 919.844.6050  
E: dan@dansmithpe.com

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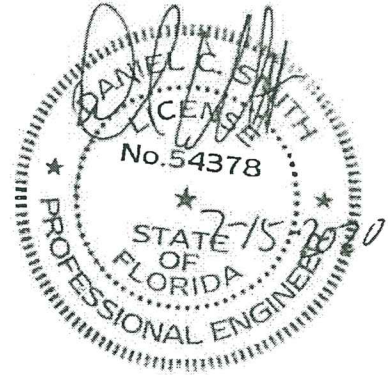
### TOP TRACK - BUTT JOINT

THE TOP TRACK BUTT JOINT CANNOT OCCUR WITHIN 24" OF THE WALL PANEL JOINT OR STUD FRAMING FOR WINDOWS OR DOORS.

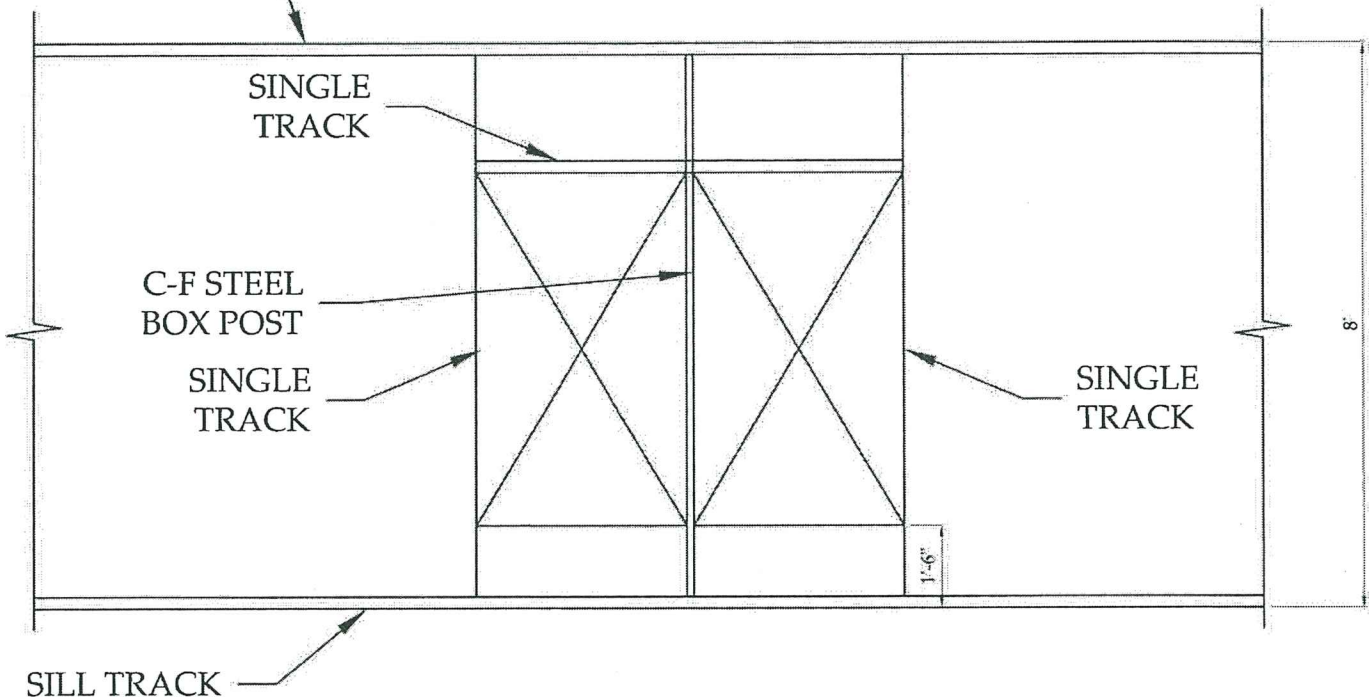
THE SEAL BOND 105 ADHESIVE PROVIDES 790 LBS OF TENSION BETWEEN THE LAMINATE AND THE STEEL TRACK, WHEN A  $\frac{3}{8}$ " DIAMETER BEAD IS APPLIED.

DOUBLE WINDOWS (UP TO 6' WIDE)

- \* REQUIRE A 20 GA STEEL TRACK (2" FLANGES)



TOP TRACK



8' THICK WALL PANEL w/ (2) 3' WINDOW OPENING  
ELEVATION VIEW

Approved as complying with the  
Florida Building Code  
Date 07/30/2020  
NOA# 20-0518-04  
Miami Dade Product Control  
By *He GA Ma*

WALL - 20

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

☐ For Construction  
☒ Not for Construction

HORTON WORLD SOLUTIONS LLC  
SOUTHLAKE TEXAS

Horton World Solutions, LLC  
Horton Wall Panel Product# HWS-001



Daniel C. Smith, PE  
Consulting Engineers  
13237 Melvin Arnold Road  
Raleigh, NC 27613  
P: 919.844.6050  
E: dan@dansmithpe.com

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CONSTRUCTION OF HOUSES WITH THESE HORTON WORLD SOLUTION COMPOSITE PANELS REQUIRES TRAINING AND FIELD SUPERVISION BY HORTON EMPLOYEES. NO CHANGES TO PLANS CAN BE MADE WITHOUT WRITTEN APPROVAL OF THE ENGINEER OF RECORD.

FIELD INSTALLATION NOTES:

#1) LAYOUT WALLS ON CONCRETE SLAB.

- CHECK DIAGONAL DIMENSIONS FOR SQUARE.
- DRILL ANCHOR BOLT HOLES. SEE BOTTOM TRACK PLAN FOR LOCATIONS.

#2) CLEAN BOLT HOLES.

- CLEAN OUT DUST FROM BOLT HOLES PER MANUFACTURER'S REQUIREMENTS.
- SWEEP AREA TO REMOVE DUST OFF OF SLAB.

#3) LAY BOTTOM TRACK.

- CLEAN ALL SURFACES OF BOTTOM TRACK w/ PURPLE POWER & CLEAN RAGS.
- APPLY FIELD ADHESIVE (SEE NOTES) TO CONCRETE.
- SET BOTTOM TRACK.
- INSTALL ANCHOR BOLTS.

#4) INSTALL WALL PANELS.

- APPLY FIELD ADHESIVE (SEE NOTES) TO INSIDE (3) SIDES OF BOTTOM TRACK.
- POSITION NEXT PANEL  $\frac{1}{8}$ " AWAY FROM INSTALLED PANEL.
- INSERT SPLINE FROM ABOVE (SEE DETAIL).
- APPLY SOULDA FOAM ADHESIVE TO BOTH FACES OF VERTICAL GAP BETWEEN PANELS.
- CLEAN ALL SURFACES OF TOP TRACK w/ PURPLE POWER & CLEAN RAGS.
- REPEAT PROCESS FOR NEXT WALL PANEL.

#5) WORK AROUND ENTIRE PERIMETER.

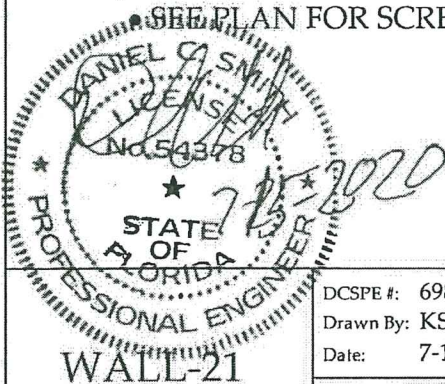
- APPLY FIELD ADHESIVE (SEE NOTES) TO INSIDE (3) SIDES OF TOP TRACK.
- PLACE TOP TRACK ON WALL w/ BUTT JOINTS STAGGERED 24" AWAY FROM PANEL SEAMS.

#6) INSTALL ROOF PANELS.

SEE PLAN FOR SCREW AND SPACING PATTERN.

CONTRACTOR or OWNER MUST  
GET THE FOOTINGS INSPECTED  
BEFORE THE CONCRETE IS POURED  
--- NO EXCEPTIONS ---

GENERAL CONTRACTOR SHALL  
VERIFY ALL DIMENSIONS BEFORE  
CONSTRUCTION BEGINS.



Approved as complying with the  
Florida Building Code  
Date 07/30/2020  
NOA# 20-0519.04  
Miami Dade Product Control  
By H. A. Melton

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

☐ For Construction  
☒ Not for Construction

HORTON WORLD SOLUTIONS LLC  
SOUTHLAKE TEXAS

Horton World Solutions, LLC  
Horton Wall Panel Product# HWS-001

  
Daniel C. Smith, PE  
Consulting Engineers  
13237 Melvin Arnold Road  
Raleigh, NC 27613  
P: 919.844.6050  
E: dan@dansmithpe.com

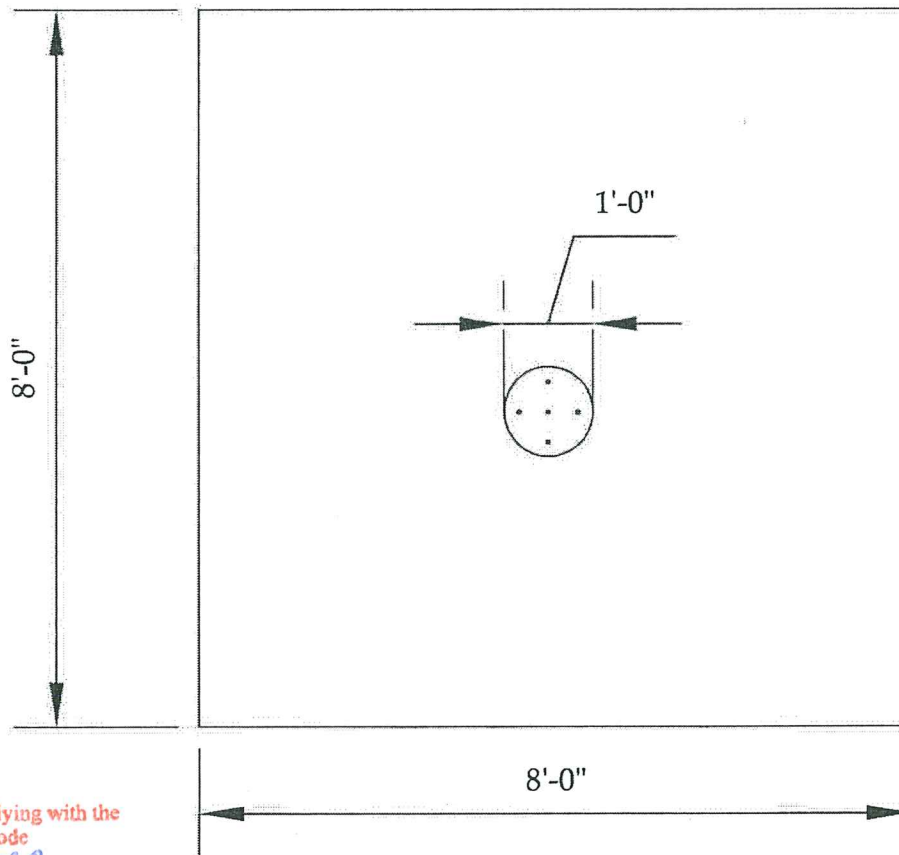
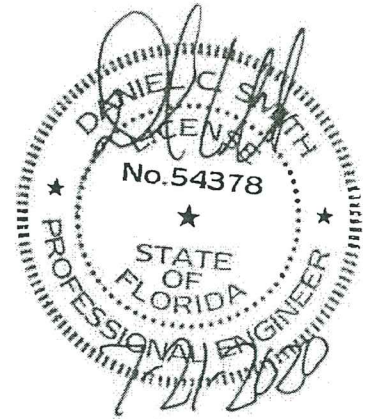
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NOTES:

IF DELAMINATION AREA IS MORE THAN 12" IN DIAMETER -  
THEN CUT UP THE PANEL AND SAVE THE GOOD PORTION.

REPAIR METHOD:

- DRILL IN A  $\frac{1}{2}$ " LONG SCREW AND PULL UP TO DETERMINE  
SIZE OF THE DELAMINATION AREA
- DRILL  $\frac{3}{8}$ " -  $\frac{1}{2}$ " DIAMETER HOLE IN CENTER OF AREA
- DRILL ADDITIONAL HOLES IF NECESSARY AT 4"  
O.C. FROM CENTER HOLE
- LIMIT HOLES TO 5 .
- SQUEEZE IN ADHESIVE
- APPLY 25 LB WEIGHTS TO THE REPAIR AREA. (PLYWOOD)



Approved as complying with the  
Florida Building Code  
Date 07/30/2020  
NOA# 20-0518.04  
Miami Dade Product Control

By H. G. A. Mohr

PLAN VIEW

WALL - 22

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

☐ For Construction  
☒ Not for Construction

HORTON WORLD SOLUTIONS LLC  
SOUTHLAKE TEXAS

Horton World Solutions, LLC  
Horton Wall Panel Product# HWS-001



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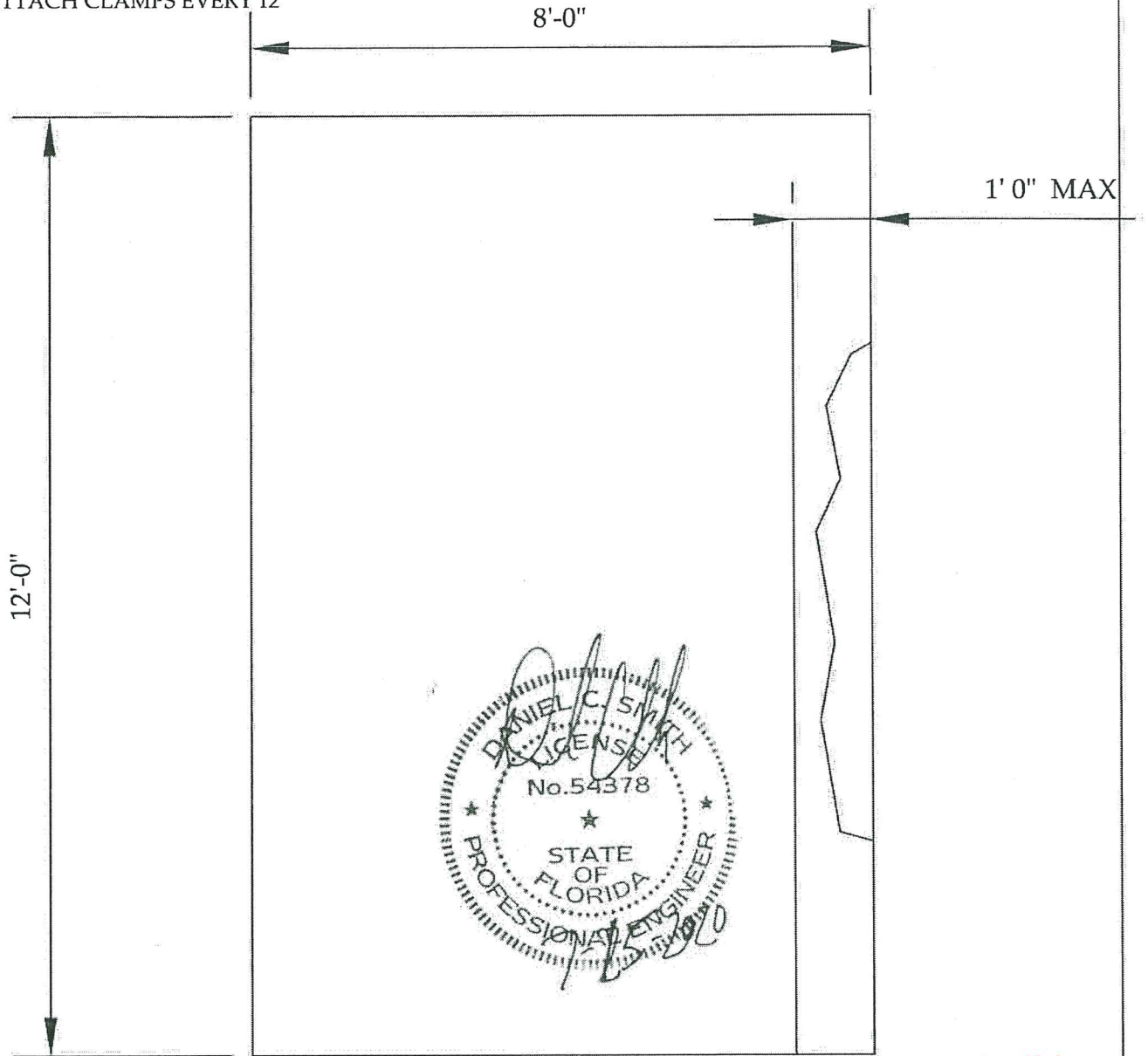
NOTES:

IF DELAMINATION IS MORE THAN 4 SQ FT - CUT UP PANEL

REPAIR PROCESS

USE NOZZLE TO SLIDE UNDERNEATH LAMINATE.  
ADD ADHESIVE WHILE PULLING OUT THE NOZZLE

- ATTACH CLAMPS EVERY 12"



PLAN VIEW

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NOA# 20-6519-04  
Miami Dade Product Control

By Heg A. M. W.

WALL - 23

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

☐ For Construction  
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E: dan@dansmithpe.com

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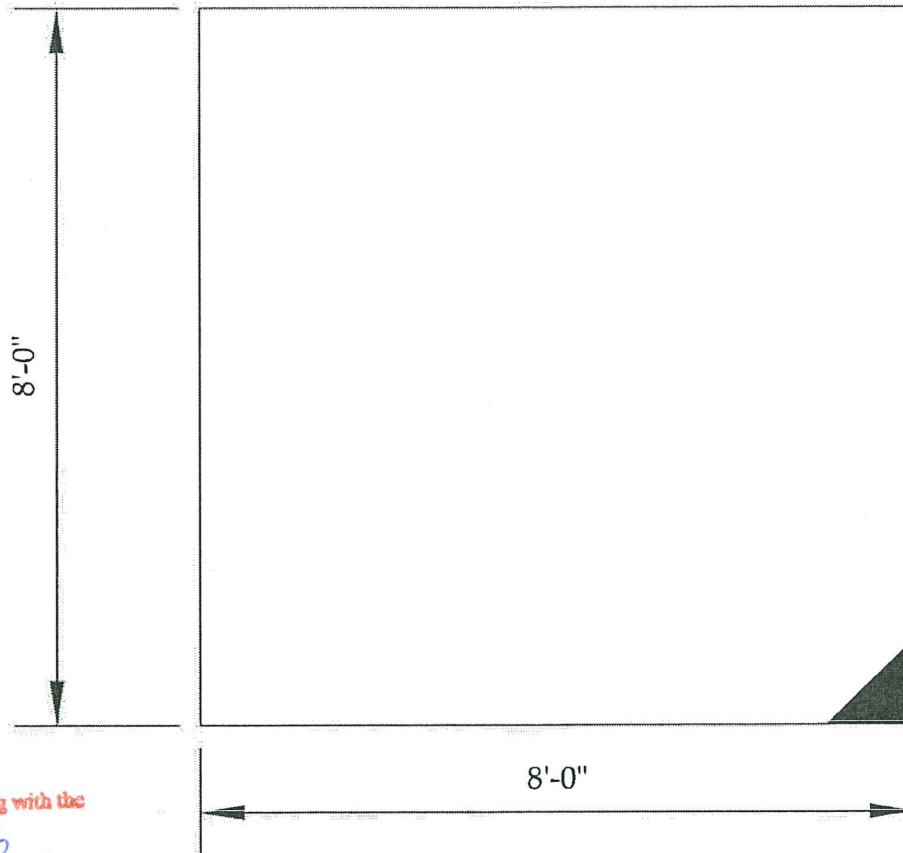
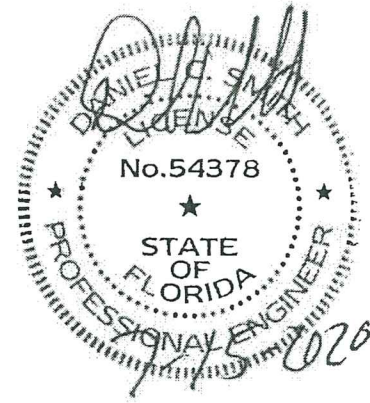
NOTES:

SHIPPING KNOCKS OUT A CHUCK OF FOAM.

LAMINATE IS IN GOOD CONDITION

REPAIR METHOD:

- CREATE PANEL SHAPE WITH PLYWOOD AND CLAMPS
- SPRAY IN THE EXPANDED FOAM ADHESIVE.
- LET CURE AND THEN CUT OFF EXCESSIVE FOAM.
- RESTRICT VOLUME TO 70 CUBIC INCHES OF REPAIR.



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Florida Building Code  
Date 07/30/2020  
NOA# 20-0589-004  
Miami Dade Product Control

By Hely A. Miller

PLAN VIEW

WALL - 24

DCSPE #: 6985  
Drawn By: KSW/DCS  
Date: 7-15-2020

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