



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

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

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

www.miamidade.gov

NOTICE OF ACCEPTANCE (NOA)

Kingspan ASI
725 Summerhill Drive
Deland, Florida 32724

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: Composite Wall Panels System

APPROVAL DOCUMENT: Drawing No. 08-355, titled "Thermalspan 300 Insulated Wall Panels", sheets 1 through 10 of 10, prepared by CBUCK Engineering, last revision #2 dated October 26, 2009, signed and sealed by James L. Buckner, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact

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

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

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

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

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

This NOA **revises & renews NOA #03-0429.01** and consists of this page 1 and the evidence submitted page E-1 as well as approval document mentioned above.

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



Helmy A. Makar
 11/25/2009

NOA No. 09-0506.04
Expiration Date: 09/25/2013
Approval Date: 11/25/2009
Page 1

Kingspan ASI

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- 1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #03-0429.01**
 - A. DRAWINGS**
 1. *Drawing No. 02-429, titled " Composite Wall Panels ", sheets 1 through 3 of 3, prepared by Knezevich & Associates, Inc., dated March 6, 2003, last revision #1 dated August 27, 2003, signed and sealed by V. J. Knezevich, P.E.*
 - B. TESTS**
 1. *Test report on Uniform Static Air Pressure Test, Large Missile Impact Test and Cyclic Wind Pressure Test of Aluma Shield 2" thick Wall Panel, prepared by Construction Research Laboratory, Inc., Report No. 6845A, dated January 31, 2003, signed and sealed by Nariman S. Balsara, P.E.*
 - C. CALCULATIONS**
 1. *None.*
 - D. QUALITY ASSURANCE**
 1. *By Miami-Dade County Building Code Compliance Office.*
 - E. MATERIAL CERTIFICATIONS**
 1. *Tensile Test Report No. 2KM-1334, prepared by QC Metallurgical, Inc., dated December 06, 2002.*
- 2. NEW EVIDENCE SUBMITTED**
 - A. DRAWINGS**
 1. *Drawing No. 08-355, titled " Thermalspan 300 Insulated Wall Panels ", sheets 1 through 10 of 10, prepared by CBUCK Engineering, last revision #2 dated October 26, 2009, signed and sealed by James L. Buckner, P.E.*
 - B. TESTS**
 1. *None.*
 - C. CALCULATIONS**
 1. *Calculation prepared by CBUCK Engineering, titled Thermalspan 300 Insulated Metal Wall Panel, 3 pages, dated 10/06/09, signed and sealed by James L. Buckner, P.E.*
 - D. QUALITY ASSURANCE**
 1. *By Miami-Dade County Building Code Compliance Office.*
 - E. MATERIAL CERTIFICATIONS**
 1. *None.*



Helmy A. Makar, P.E., M.S.
Senior Product Control Examiner
NOA No. 09-0506.04
Expiration Date: 09/25/2013
Approval Date: 11/25/2009

Engineering Report & Drawings

Of

Kingspan ASI

Thermalspan® 300 Insulated Metal Wall Panels

For

Miami-Dade Notice of Acceptance

Category: Panels
Sub - Category: Wall

Product Type: Composite Wall Panel System
Interior & Exterior Face Material: Steel
Core Material: Foam

Prepared by:

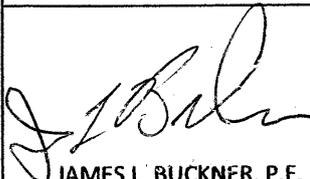
James L. Buckner, P.E.
Florida Professional Engineer # 31242
Project Manager: Youry Demosthenes
Report No.: 08-355-CompWallPanel
Date: 10 / 26 / 09

Contents:

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PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 09-0506.04
Expiration Date 09/25/2013
By Heather A. Miller
Miami Dade Product Control
Division

TITLE: ENGINEERING REPORT


JAMES L. BUCKNER, P.E.
FLORIDA P.E. #31242
10/26/09

 CBUG Engineering

CBUG, Inc. COA #8064
1334 S. Killian Dr., Ste 4
W. Palm Beach, FL 33403
(561) 491-9927

MANUFACTURER:

Kingspan ASI
725 Summerhill Drive
Deland, FL 32724

DATE: 10/26/09

PAGE #: 1 OF 10

PROJECT #: 08-355

DRAWN BY: YD

REVISIONS: 2

1.0 Product:

- 1.1 Manufacturer:** Kingspan ASI
- 1.2 Product Name:** Thermaspan® 300 Insulated Metal Wall Panel
- 1.3 Category:** Panels
- 1.4 Subcategory:** Wall

2.0 Evaluation Scope:

2.1 Evaluation Criteria:

- 2.1.1 Florida Building Code (FBC) 2007
- 2.1.2 Code Section: High Velocity Hurricane Zone (HVHZ)
- 2.1.3 Miami-Dade Building Code Compliance Office (BCCO) Checklist

2.2 Properties Evaluated:

- 2.2.1 Wind Resistance Properties
 - 2.2.1.1 Air Infiltration
 - 2.2.1.2 Uniform Static Air Pressure
 - 2.2.1.3 Water Resistance
 - 2.2.1.4 Large Missile Impact
 - 2.2.1.5 Cyclic Wind Pressure
- 2.2.2 Fire and Flame Properties
 - 2.2.2.1 Flame Spread Index
 - 2.2.2.2 Smoke Developed Index
 - 2.2.2.3 Spontaneous Ignition Temperature
 - 2.2.2.4 Flash Ignition Temperature

2.3 Limits of Evaluation:

This product is limited to compliance with the criteria in section 2.1 and properties in section 2.2 of this report.

3.0 Evaluated Uses:

Kingspan's Thermaspan 300 Insulated Wall I panels are steel face and foam core used as nonbearing exterior wall panels.

4.0 Assembly Description:

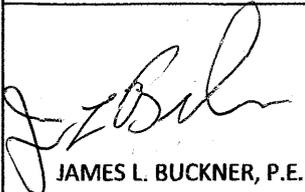
4.1 General:

Kingspan's Thermaspan 300 Insulated Wall Panel systems are factory assembled sandwich panels with Steel facings and a foam plastic core. These panels are applied vertically. The panels have a tongue and groove interlocking edge. The panels are anchored to supports with clips and screws.

4.2 Panel Dimensions:

- 4.2.1 Length: 10 ft to 48 ft
- 4.2.2 Coverage Width: 42 in
- 4.2.3 Thicknesses: 2 in, 2.5 in, 3 in, 4 in, 5 in, & 6 in

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 as complying with the Florida
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 Acceptance No 09-0506.04
 Expiration Date 09/25/2013
 By Heather A. Nelson
 Miami Dade Product Control
 Division


 JAMES L. BUCKNER, P.E.
 FLORIDA P.E. #31242
 10/26/09

TITLE: ENGINEERING REPORT

 CBUCK Engineering
 CBUCK, Inc. COA #8064
 1334 S. Killian Dr., Ste 4
 W. Palm Beach, FL 33403
 (561) 491-9927

MANUFACTURER:
 Kingspan ASI
 725 Summerhill Drive
 Deland, FL 32724

DATE: 10/26/09
PAGE #: 2 OF 10
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5.0 Support:

The Support assembly is designed by others and shall have the following minimum Characteristics:

- 5.1 Type: Horizontal Girts
- 5.2 Material: Steel
- 5.3 Thickness: 14 Ga.
- 5.4 Spacing: 4 ft o.c. Maximum

6.0 Performance:

6.1 Panel Module 42 in. Wide x 2 in. to 6 in. Thick

6.1.1 Wind Resistance:

Design Pressure	Positive	+ 60 psf
	Negative	- 80 psf

Based on: Horizontal Girts spaced 4ft. o.c. Maximum
3 or More Continuous Spans

6.1.2 Air Infiltration:

Standard:	TAS 202
Results:	Passed

6.1.3 Water Infiltration:

Standard:	TAS 202
Results:	Passed

6.1.4 Impact Rating:

Type:	Large Missile Impact:
Standard:	TAS 201
Results	Passed

6.1.5 Fire Classification:

Standard:	ASTM D1929	
Self Ignition Temperature:	Required	Tested
	> 650° F	856° F
Standard:	ASTM E 84	
Flame Spread Index:	Required	Tested
Smoke Developed Index:	< 75	25
	< 450	180

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as complying with the Florida
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Acceptance No 09-0506.04
Expiration Date 09/25/2013
By Helmy A. Melon
Miami Dade Product Control
Division


JAMES L. BUCKNER, P.E.
FLORIDA P.E. #31242
10/26/09

TITLE: ENGINEERING REPORT

 **CBUCK Engineering**
CBUCK, Inc. COA #8064
1334 S. Killian Dr., Ste 4
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MANUFACTURER:

Kingspan ASI
725 Summerhill Drive
Deland, FL 32724

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7.0 Installation:

Each panel shall be fastened at the vertical joints to the horizontal supports with one 14 ga. hidden fastener clip (per section 12.2) and one #14 self-tapping fastener per clip (per section 12.3).

In addition, attach the interior face of each panel with three #10 fab-lock fasteners (per section 12.4), at each intermediate horizontal support.

All bolts and washers shall be galvanized or stainless steel of 60 ksi minimum

The connection of the steel channel to the existing supporting structure is not part of this product control approval and it shall be submitted to permitting jurisdiction for review and approval.

Refer to Drawings on pages 6 through 10 of this report for supplemental installation guide.

8.0 Limitations of Use:

8.1 The panel supports shall be 14 gauge minimum.

8.2 Maximum support spacing shall not be exceeded.

8.3 The panels shall be supported by structural framing members complying with the Miami-Dade (Florida High velocity zone) code.

8.4 Panel shall not be used as axial load bearing components and shall not be intended / designed to act as a diaphragm.

8.5 The engineer of record or architect shall verify that the supporting structure is capable of resisting the superimposed loads from the wall panel system and that the supporting structure is capable of providing lateral stability to carry the wind loads to the building foundation.

9.0 Code Compliance

9.1 Product meets the High Velocity Hurricane Zone (HVHZ) Requirements of the Florida Building Code (FBC) 2007 for the properties evaluated.

10.0 Identification:

10.1 Each Panel shall bear a permanent label with the manufacturer's name or logo, manufacturing plant's city, state and the statement reading "Miami-Dade County Product Control Approved" is to be located on each panel.

11.0 Reference Data:

11.1 TAS 201, 202 & 203 – Large Missile Impact Test, Air Infiltration Test, Uniform Static Air Pressure Test & Water Resistant Test. & Cyclic Wind Pressure Loading, respectively.

Report No.: 6845A Dated: 1/31/03

By: Construction Research Laboratory, Inc.

11.2 TAS 201, 202 & 203 – Large Missile Impact Test, Air Infiltration Test, Uniform Static Air Pressure Test & Water Resistant Test. & Cyclic Wind Pressure Loading, respectively.

Report No.: 6845B Dated: 1/31/03

By: Construction Research Laboratory, Inc.

11.3 TAS 201, 202 & 203 – Large Missile Impact Test, Air Infiltration Test, Uniform Static Air Pressure Test & Water Resistant Test. & Cyclic Wind Pressure Loading, respectively.

Report No.: 6845C Dated: 1/31/03

By: Construction Research Laboratory, Inc.

11.4 ASTM D1929 – Self-Ignition Temperature

Project ID.: 01.11810.01.060a Dated: 1/13/06

By: Southwest Research Institute

11.5 ASTM E 84 – Flame Spread Index /Smoke Density

Project ID.: 3024555 Dated: 12/9/05

By: Factory Mutual

PRODUCT REVISED

as complying with the Florida Building Code

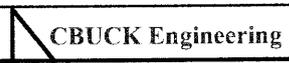
Acceptance No 09-0506.04

Expiration Date 09/25/2013

By *Helmut A. Nelson*

Miami Dade Product Control Division

J. L. Buckner
JAMES L. BUCKNER, P.E.
FLORIDA P.E. #31242
10/26/09

TITLE: ENGINEERING REPORT		
 CBUCK, Inc. COA #8064 1334 S. Killian Dr., Ste 4 W. Palm Beach, FL 33403 (561) 491-9927	MANUFACTURER: Kingspan ASI 725 Summerhill Drive Deland, FL 32724	DATE: 10/26/09
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		DRAWN BY: YD
		REVISIONS: 2

12.0 Product Components:

12.1 Thermaspan® 300 Insulated Metal Wall Panel

(A) Panel Exterior Face

The panel has a steel face. The panel exterior face is available in various architectural finishes.

- 12.1.1 Material: Steel
- 12.1.2 Yield Strength: 50 ksi
- 12.1.3 Corrosion Resistance: Galvanized G90
- 12.1.4 Material Standard: ASTM A653
- 12.1.5 Thickness: 26 Gauge (t = 0.018 in)

(B) Panel Core

The Core is a Laminated Urethane rigid foam insulation

- 12.1.6 Density of Foam: 2.6 pcf

(C) Panel Interior Face

The panel has a steel face. The panel interior face is available in various finishes.

- 12.1.7 Material: Steel
- 12.1.8 Yield Strength: 50 ksi
- 12.1.9 Corrosion Resistance: Galvanized G90
- 12.1.10 Material Standard: ASTM A653
- 12.1.11 Thickness: 22 Gauge (t = 0.030 in)

12.2 Hidden Fastener Clip:

This is the standard clip used between panels to secure the panel to the steel support

- 12.2.1 Part Number: A1203010
- 12.2.2 Material: Steel
- 12.2.3 Thickness: 14 Gauge
- 12.2.4 Corrosion Resistance: Galvanized

12.3 Clip Fasteners:

- 12.3.1 Type: Self Tapping Screw
- 12.3.2 Size: #14 x 3/4" Minimum penetration through support
- 12.3.3 Head: Hex head

12.4 Face Fasteners:

- 12.4.1 Type: Fab-Lock Screw
- 12.4.2 Size: #10 x 1"

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Expiration Date 09/25/2013
By *Healy A. Healy*
Miami Data Product Control
Division

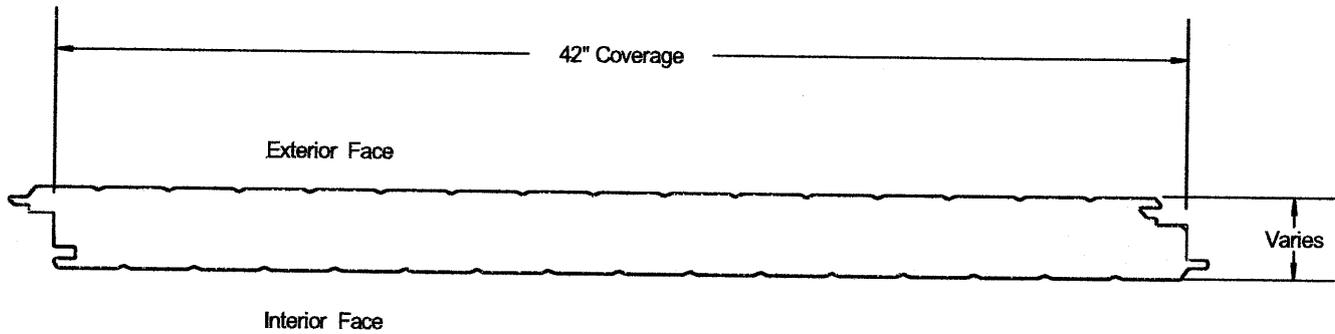
JLB
JAMES L. BUCKNER, P.E.
FLORIDA P.E. #31242
10/26/09

TITLE: ENGINEERING REPORT

CBUCK Engineering
CBUCK, Inc. COA #8064
1334 S. Killian Dr., Ste 4
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MANUFACTURER:
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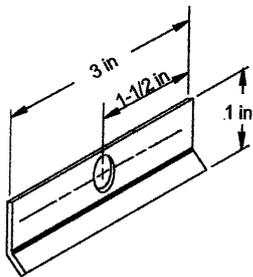
DATE:	10/26/09
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Typical Panel Profile

Panel Thicknesses

- 2 in
- 2-1/2 in
- 3 in
- 4 in
- 5 in
- 6 in



Hidden Fastener Clip

14 Ga Steel Channel Bottom Track Schedule	
Wall Panel Thicknesses	Minimum Channel Width
2 in	2-1/4 in
2-1/2 in	2-3/4 in
3 in	3-1/4 in
4 in	4-1/4 in
5 in	5-1/4 in
6 in	6-1/4 in

#14 Fastener Schedule	
Wall Panel Thicknesses	Minimum Fastener Length
2 in	2 in
2-1/2 in	2-1/2 in
3 in	3 in
4 in	4 in
5 in	5 in
6 in	6 in

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 By Helmy H. Helo
 Miami Dade Product Control
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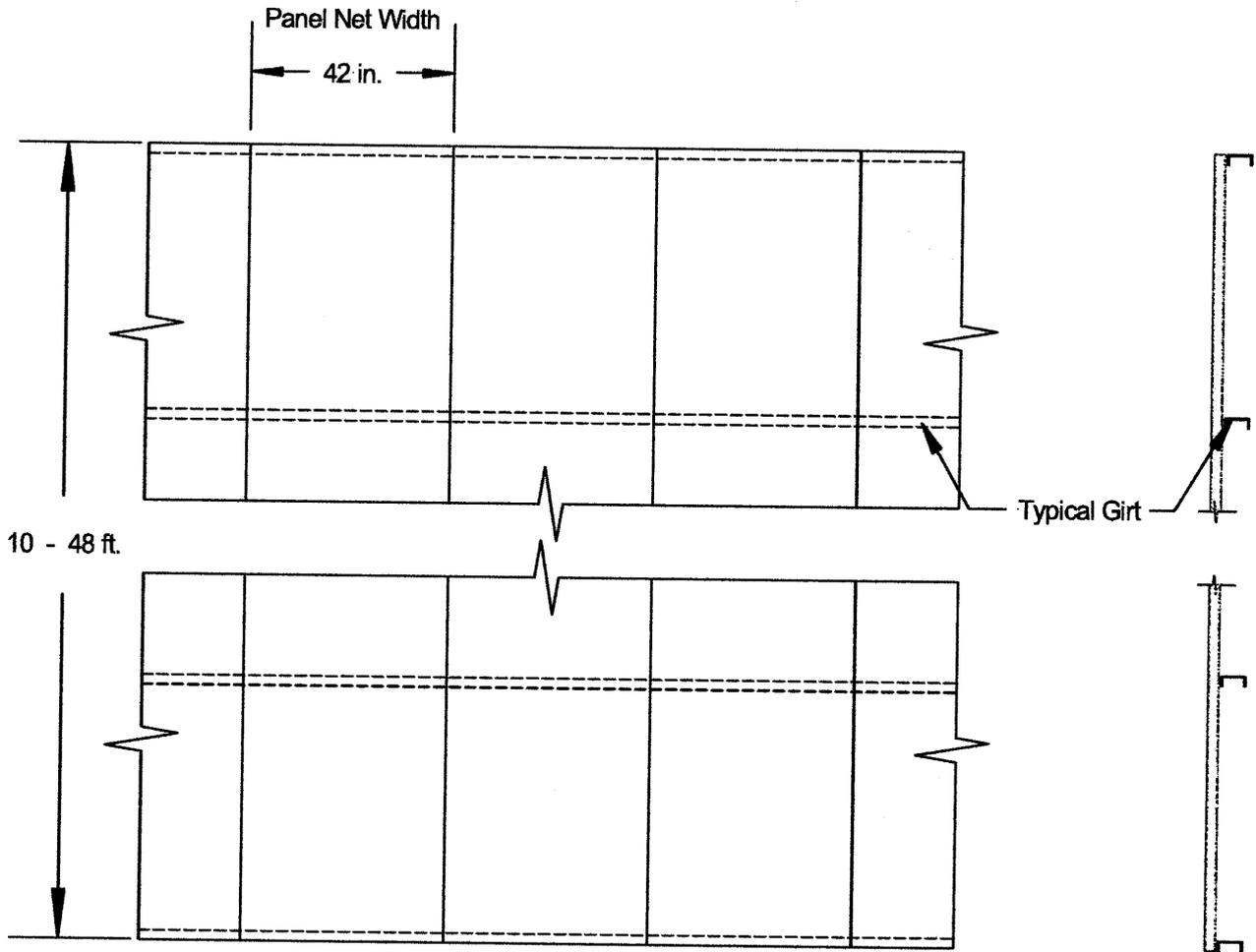
TITLE: WALL COMPONENTS

J. L. Buckner
 JAMES L. BUCKNER, P.E.
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 10/26/09

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**Typical Elevation View
Outside of Wall Assembly**

Typical Section View

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By *Helmut H. Miller*
Miami Dade Product Control
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NOTE:
Girt Spacing: 4 ft. o.c. Maximum

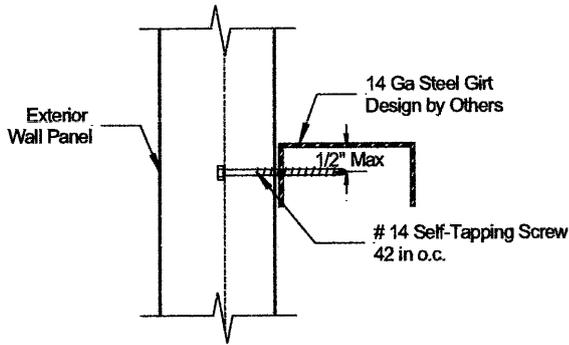
J. L. Buckner
JAMES L. BUCKNER, P.E.
FLORIDA P.E. #31242
10/26/09

TITLE: WALL ELEVATION & SECTION

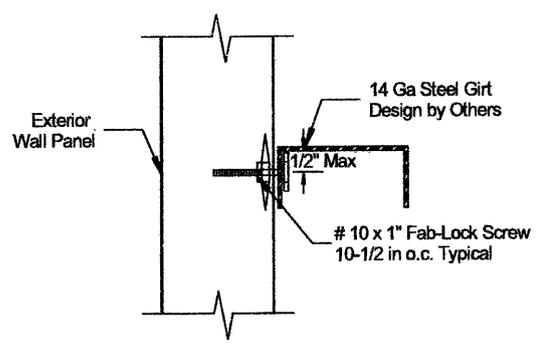
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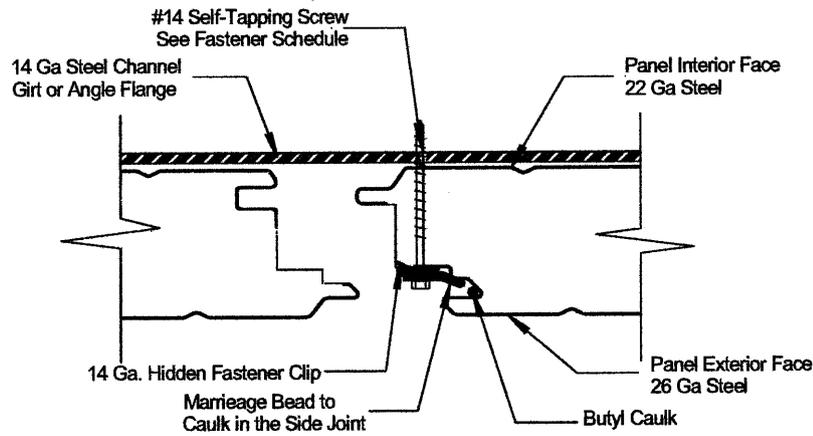
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**Typical Side Section View
Clip & Fastener At Joint to Studs**



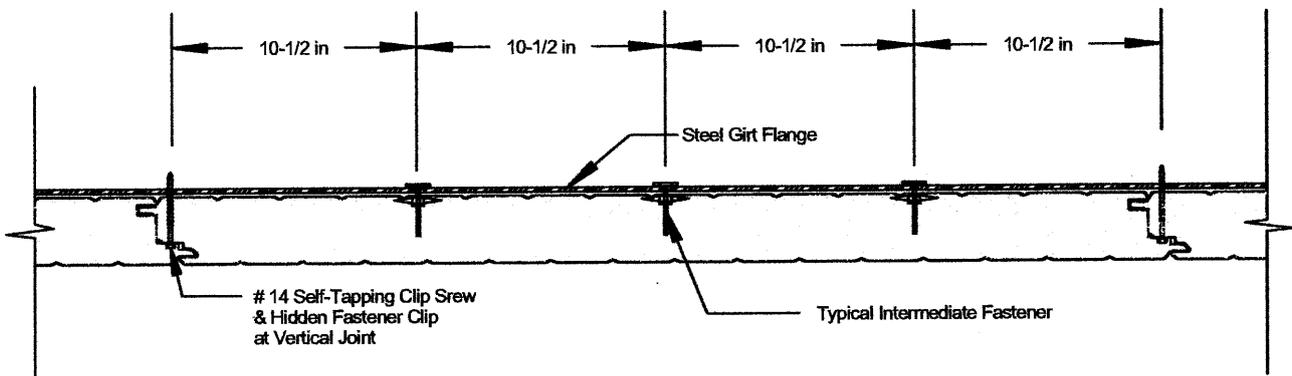
**Typical Side Section View
Intermediate Fastener at Studs**



**Typical Top Section View
Clip & Fastener At Joint
Panels Shown Disengaged for Clarity**

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Expiration Date 09-25-2013
By *Helmut A. Weber*
Miami Dade Product Control
Division

NOTE:
All fasteners shall penetrate the Steel
support by 3/4 in. Minimum.



**Typical Panel Assembly
Section View**

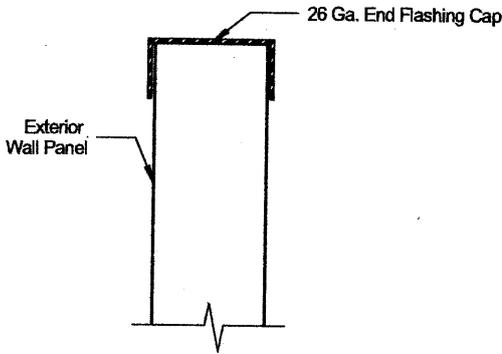
TITLE: TYPICAL PANEL CONNECTION SECTION VIEWS

J. L. Buckner
JAMES L. BUCKNER, P.E.
FLORIDA P.E., #31242
10/26/09

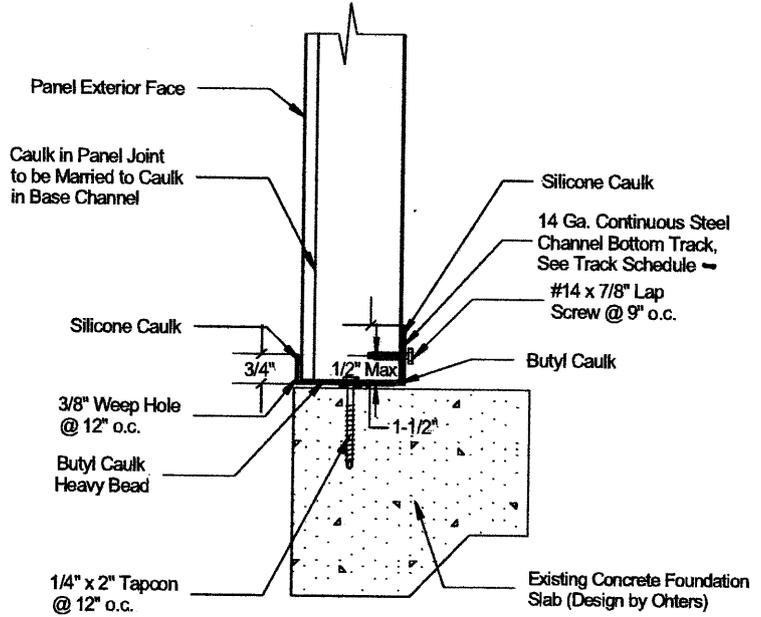
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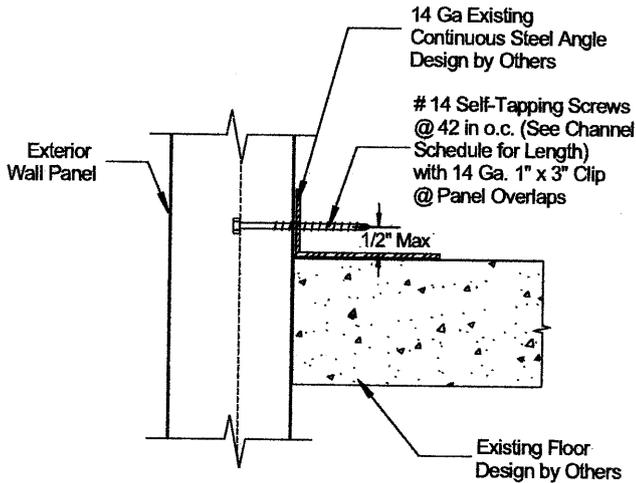


Typical Top Condition

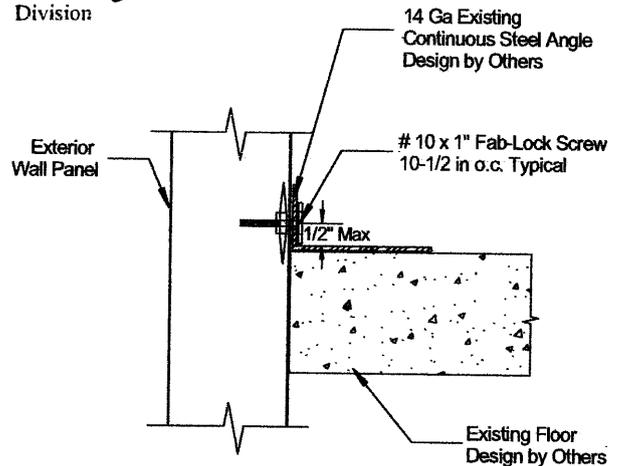


Typical Base Condition

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 Miami Dade Product Control
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Typical Wall To Floor Conditions



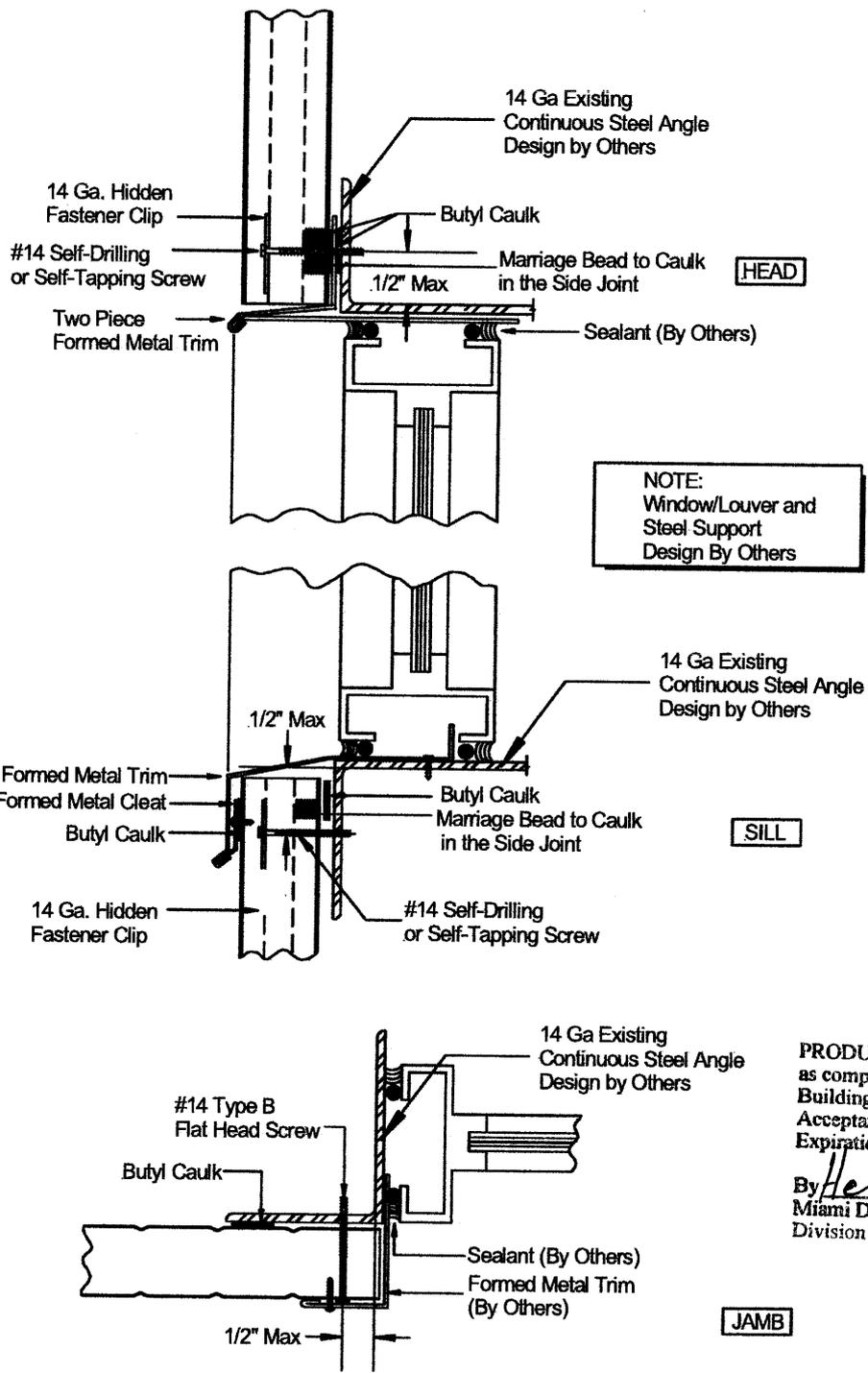
J. L. Buckner
 JAMES L. BUCKNER, P.E.
 FLORIDA P.E. #31242
 10/26/09

TITLE: TYPICAL TOP, BASE & WALL TO FLOOR DETAILS

CBUCK Engineering
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 (561) 491-9927

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Miami Date Product Control
Division

Typical Window/Louver Opening Details

J. L. Buckner
JAMES L. BUCKNER, P.E.
FLORIDA P.E. #31242
10/26/09

TITLE: TYPICAL WINDOW / LOUVER DETAILS

CBUCK Engineering
CBUCK, Inc. COA #8064
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