MIAMI-DADE COUNTY
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

NOTICE OF ACCEPTANCE (NOA)

RE-STRUCTURE GROUP, LLC (USA)
15 Applegreen Drive
Old Westbury, NY 11568

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: "RSG 3-D" Structural Panel System

APPROVAL DOCUMENT: Drawing No. 05-070, titled " RSG 3-D Structural Panel Details ", sheets 1 through 12 of 12, prepared by PVE, LLC, dated April 23, 2025, signed and sealed by Jeremy Scott Urban, P.E., on April 23, 2025 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 Section.

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 #21-1028.04** and consists of this page 1, evidence submitted pages E-1, E-2, E-3 & E-4 as well as approval document mentioned above.
The submitted documentation was reviewed by **Helmy A. Makar, P.E., M.S.**

MIAMI-DADE COUNTY APPROVED

Helmy A. Makar
05/08/25

NOA No 25-0421.03
Expiration Date: 03/05/2030
Approval Date: 05/08/2025

RE-STRUCTURE GROUP, LLC (USA)

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #94-1006.01

A. DRAWINGS

1. *Drawing prepared by Roger C. Purcell, P.E. titled "Insteel 3-D Wall Panel Details" dated April 10, 1995, sheets 1 through 7 of 7, signed and sealed by Roger C. Purcell, P.E.*

B. TESTS

1. *Test report on Large Missile Impact Test, Cyclic Wind Pressure Test and Uniform Static Air Pressure Test of "Insteel Wall Panel System", prepared by Construction Research Laboratory, Inc., Report #6112, dated September 18, 1994, signed and sealed by Vipin Tolat, P.E.*

C. CALCULATIONS

1. *Calculations dated January 13, 1995, prepared by Roger C. Purcell, P.E., signed and sealed by Roger C. Purcell, P.E.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #98-0610.06

A. DRAWINGS

1. *Drawing prepared by Roger C. Purcell, P.E. titled "ICS 3-D Wall Panel Details" dated April 10, 1995, sheets 1 through 7 of 7, signed and sealed by Roger C. Purcell, P.E.*
2. *Drawings prepared by Roger C. Purcell, P.E. titled* "Standard 3-D Section; Minimum 3-D Section; Maximum 3-D Section; 2-hr Rated 3-D Section; Allowable Wind Loads on ICS 3-D Panels" *dated January 13, 1995,* revised August, 1989, *sheets 1 through 5 of 5, signed and sealed by Roger C. Purcell, P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. MATERIAL CERTIFICATIONS

1. *None.*

E. STATEMENTS

1. *Letter from ICS Panel Works, Inc., stating that the product has not changed since it was originally approved, only the name of manufacturer has changed from Insteel Construction Systems, Inc. to ICS 3-D Panel Works, Inc., dated June 8, 1998.*
2. *Letter from Pruitt & Purcell, P.C., stating that they are still in the engineering business, dated June 8, 1998.*

Helmy A. Makar, P. E.
Product Control Section Supervisor
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F. OTHER

1. *This file renews file No 94-1006.01.*
2. *National Research Council of Canada Approval*
3. *Government of the Virgin Islands of the U.S. Approval*
4. *Texas Department of Insurance Approval*
5. *City of Philadelphia Approval*
6. *Department of Public Safety and Corrections, State of Louisiana Approval*
7. *Department of Housing and Urban Development Approval*
8. *NES Evaluation Services, Inc. Evaluation Report.*

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #01-0614.07

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. MATERIAL CERTIFICATIONS

1. *None.*

4. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #05-0630.01

A. DRAWINGS

1. *Drawing No. 05-070, titled " EVG-3D Panels ", sheets 1 through 12 of 12, prepared by Tobias West Structural Engineers, dated October 20, 2005, signed and sealed by Eric W. Tobias, P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *None.*

Helmy A. Makar, P. E.
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5. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #06-0412.05

A. DRAWINGS

1. None.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

6. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #19-0829.03

A. DRAWINGS

1. Drawing No. 05-070, titled " RSG 3-D Structural Panel Details ", sheets 1 through 12 of 12, prepared by PVE, LLC, dated January 17, 2020, signed and sealed by Jeremy Scott Urban, P.E., on February 07, 2020.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Letter from PVE, LLC, dated December 16, 2019, signed and sealed by Jeremy Scott Urban, P.E., stating that this product is in compliance with the Florida Building Code, 2017 Edition.

2. Sales of asset purchase agreement.

Helmy A. Makar, P. E.
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7. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #21-1028.04

A. DRAWINGS

1. None.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Letter from PVE, LLC, dated June 07, 2021, signed and sealed by Jeremy Scott Urban, P.E., stating that this product is in compliance with the Florida Building Code, 2020 Edition.

8. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. 05-070, titled " RSG 3-D Structural Panel Details ", sheets 1 through 12 of 12, prepared by PVE, LLC, dated April 23, 2025, signed and sealed by Jeremy Scott Urban, P.E., on April 23, 2025.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Letter from PVE, LLC, dated Apeil 23, 2025, signed and sealed by Jeremy Scott Urban, P.E., stating that this product is in compliance with the Florida Building Code, 2023 Edition.

Helmy A. Makar, P. E.
Product Control Section Supervisor
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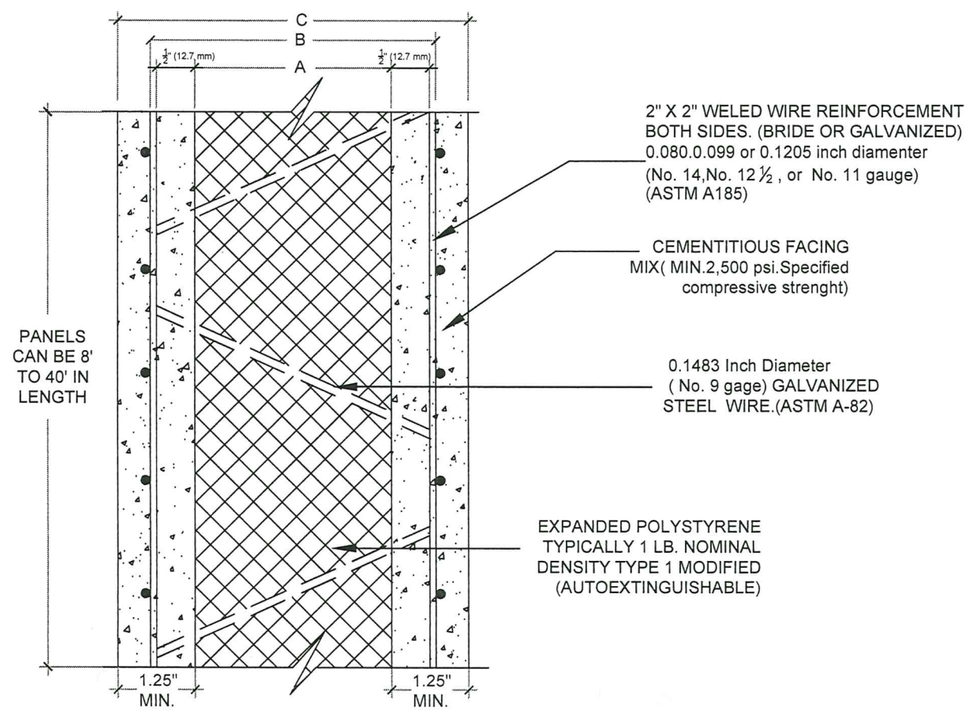
Approval Date: 05/08/2025

JEREMY SCOTT URBAN
LICENSE
No. 87660
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
2025.04.23

STRUCTURAL ANALYSIS OF RSG 3-D STRUCTURAL PANELS

DESCRIPTION:

The RSG 3-D Structural wall panel consists of a three-dimensional welded wire space frame integrated with a polystyrene insulation core. This reinforcement/insulation module is placed in position and wythes of concrete or mortar are applied to both sides, this is shown conceptually in Figure 1.



(PANEL WIDTH IS ALWAYS 4')

FIGURE 1: RSG 3-D STRUCTURAL PANEL

The RSG-3D wall panel receives its strength and rigidity by the diagonal cross wires welded to welded wire fabric on each side. This produces truss behavior which is very rigid and provides adequate shear transfer for full composite behavior.
The reinforcement/insulation module (RIM) is shop fabricated with highly automated equipment. This ensures consistent dimensional control and high quality welding.

All design parameters including, but not limited to materials, grades, thicknesses, reinforcement, dimensions, cover, spacings, and connections, shall be verified and provided by the Professional Engineer of Record in the governing jurisdiction in accordance with Chapter 16 and Chapter 19, specifically section 1908, 'Shotcrete', of the International Building Code (IBC) and the Florida Building Code (FBC) that references American Concrete Institute's ACI 318 'Building Code Requirements for Structural Concrete' and ACI 506.2 Specification for Shotcrete'

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NOTES:

1. ALL CONCRETE SHALL DEVELOP A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 2,500 PSI AS PER ICC ESR-2435.
2. REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM SPECIFICATION A-615.
3. CONCRETE COVERAGE UNLESS NOTED OTHERWISE OR SHOWN:
   A. FOOTINGS 3" FOR BOTTOM AND SIDES
   B. WALLS ¾" FOR SIDES
4. REINFORCING STEEL SHALL BE BENT LAPPED AND SPLICED IN ACCORDANCE WITH ACI STANDARD DETAILS AND SPECIFICATIONS MINIMUM LAP = 1' - 0".
5. THE SOIL CONDITIONS AT THIS SITE SHALL BE ADEQUATE TO SUPPORT A DESIGN LOAD OF 2000 PSF. SHOULD OTHER CONDITIONS OR MATERIALS BE ENCOUNTERED, THE ARCHITECT OR ENGINEER SHALL BE NOTIFIED BEFORE PROCEEDING WITH WORK.
6. SEE ARCHITECTURAL PLANS FOR ALL INFORMATION NOT SHOWN.
7. WHEN APPLICABLE, ALL WOOD TRUSSES SHALL BE DESIGNED BY THE FABRICATOR, SHOP DRAWINGS BEARING THE SEAL OF AN ENGINEER REGISTERED IN THE STATE OF FLORIDA SHALL BE SUBMITTED TO THE ARCHITECT OR ENGINEER FOR APPROVAL FRIOR TO FABRICATION.
8. ALL WORK SHALL BE IN ACCORDANCE TO THE "FLORIDA BUILDING CODE".
9. FOAM PLASTIC SHALL COMPLY WITH FLORIDA BUILDING CODE 3505.2 MINIMUM SELF IGNITION - 650 °F ASTM D1929 SMOKE DENSITY < 450 AND FLAME SPREAD < 75 ASTM E84.

JEREMY SCOTT URBAN LICENSE No. 87660 STATE OF FLORIDA PROFESSIONAL ENGINEER
2025.04.23

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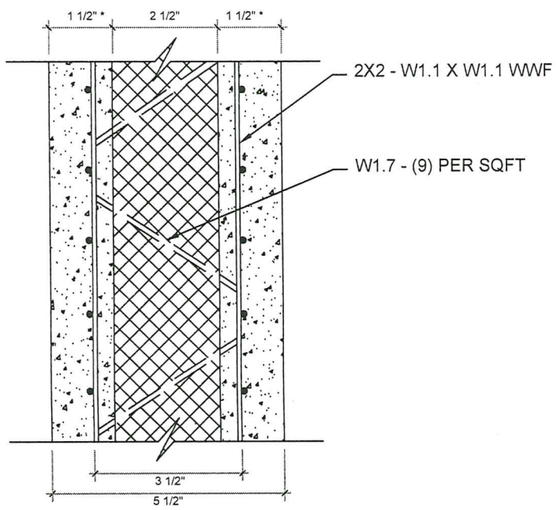

FIGURE 2: STANDARD RSG 3-D STRUCTURAL PANEL SECTION

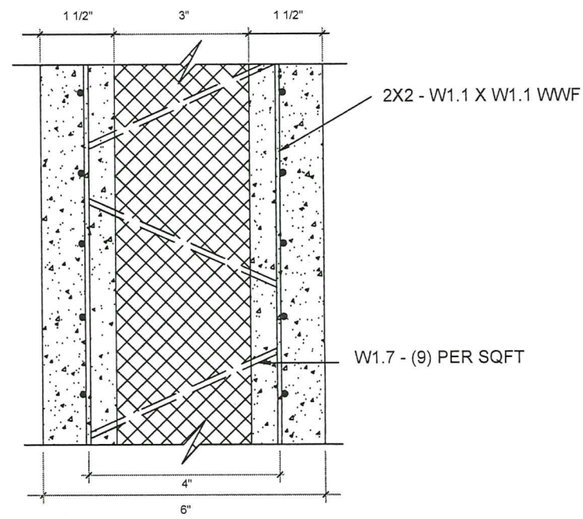

FIGURE 3: MINIMUM RSG 3-D STRUCTURAL PANEL SECTION

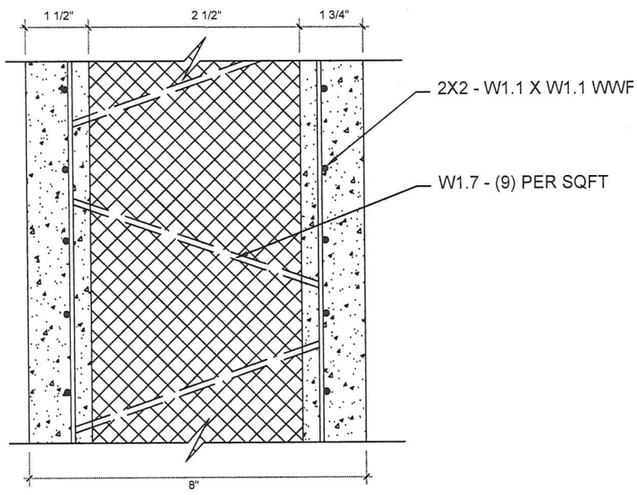

FIGURE 4: MAXIMUM RSG 3-D STRUCTURAL PANEL SECTION

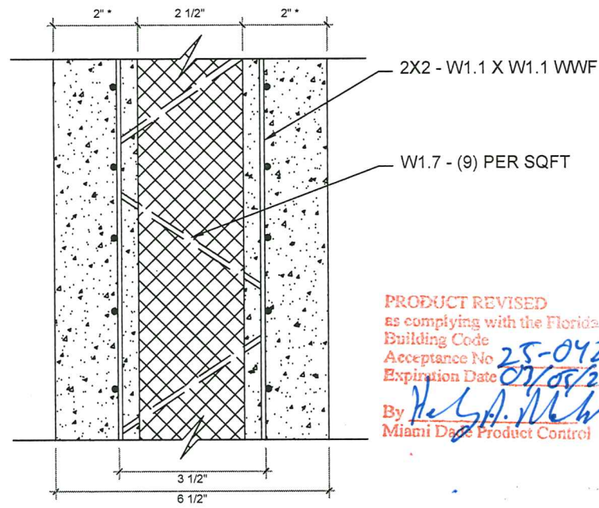

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FIGURE 5: 2-HR RATED RSG 3-D STRUCTURAL PANEL SECTION

RE-STRUCTURE GROUP, LLC (USA)

OLD WESTBURY, NEW YORK 11568

RSG 3-D STRUCTURAL PANEL DETAILS

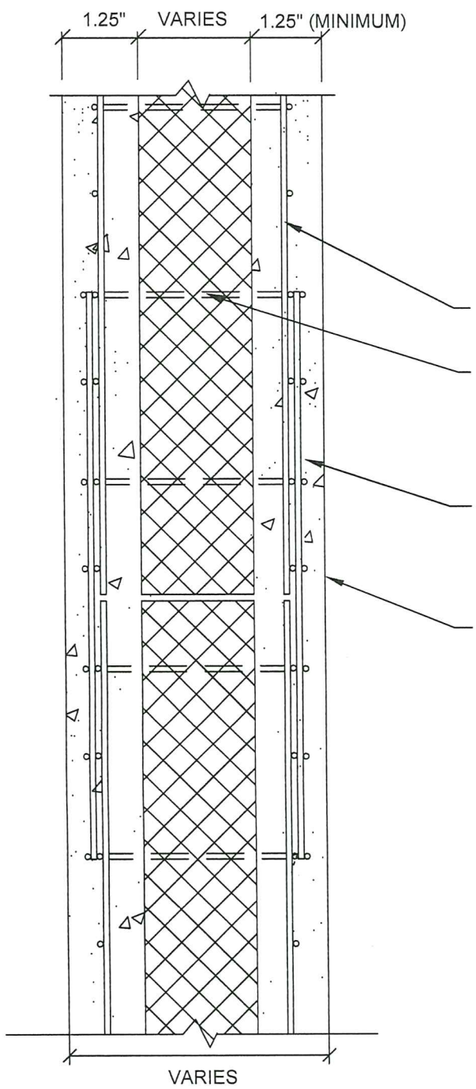
www.rsg3d.com

PVE, LLC
Jeremy S. Urban, PE
Regional Director

2000 GEORGETOWN DRIVE
SEWICKLEY, PA 15143
724.444.1100
www.pve-llc.com

DRAWN BY: David Rivera B.
DESIGNED BY: Jeremy S. Urban, P.E
CHECKED BY: Jeremy S. Urban, P.E
APPROVED BY: Jeremy S. Urban, P.E
DATE: 04-23-25
PROJECT NO: 05-070

JEREMY SCOTT URBAN
LICENSE
No. 87660
STATE OF FLORIDA
PROFESSIONAL ENGINEER
2025.04.23



2" x 2" WIRE MESH
EA. FACE TYPICAL

GALV. TRUSS WIRE
9 GA. TYPICAL

12" LAP-MESH (FLAT)
TYPICAL EA. FACE

CEMENTITIOUS SKIN (SMALL AGGREGATE CONCRETE) CAN BE APPLIED USING PNEUMATIC EQUIPMENT OR BY HAND.
THE MIN PSI SHALL BE 2,500.
PLEASE REFER TO ICC ESR 2435 SECTIONS 3.2.2 & 3.2.4

THICKNESS : 1.25 " (31 mm) MINIMUM
1.50 " (38 mm) STANDARD
2.0 " (50 mm) MINIMUM

FIRE RATING: 1.5 " = 1.5 HRS

PLEASE REFER TO ICC ESR 2435 PAGE 4, TABLE 1

TYPICAL RSG 3-D STRUCTURAL PANEL WALL SPLICE (PLAN VIEW)

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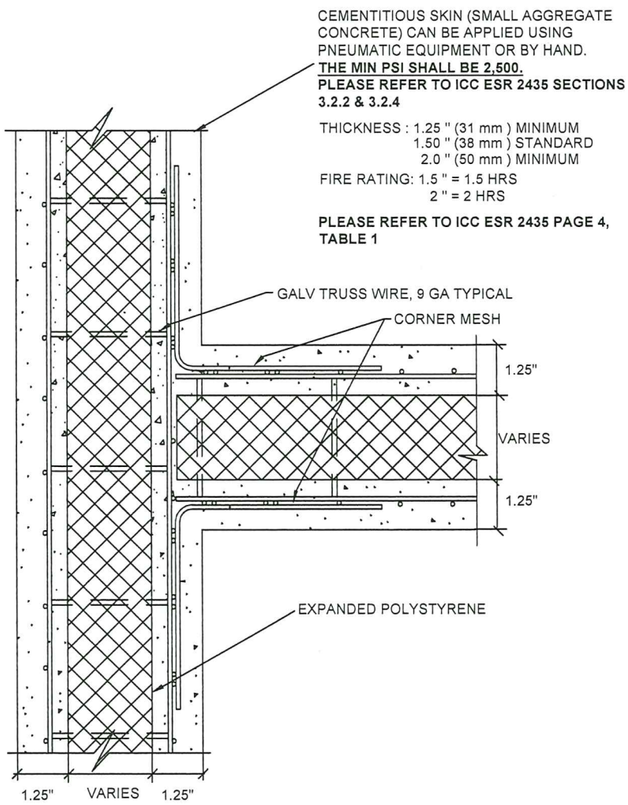
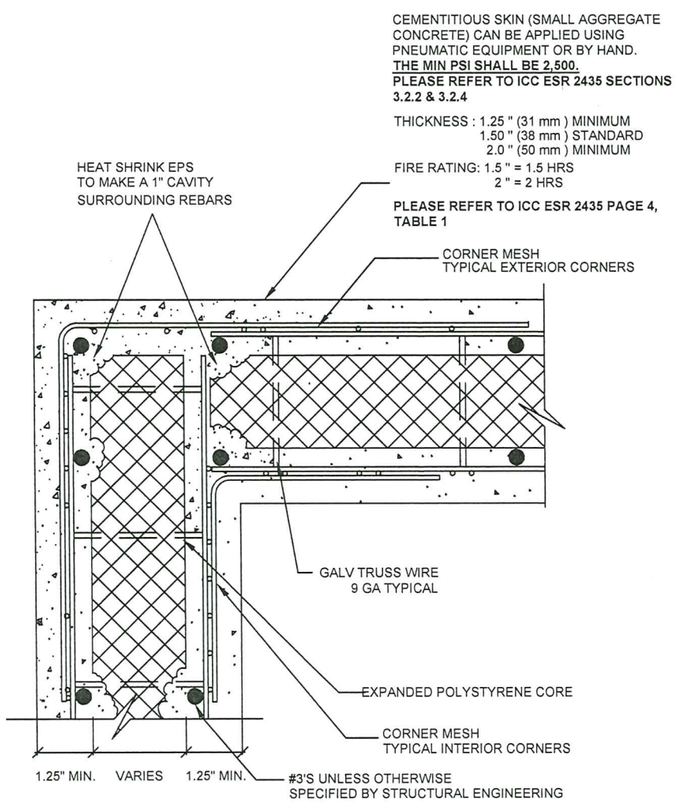


TYPICAL RSG 3-D STRUCTURAL PANEL WALL INTERSECTION



TYPICAL RSG 3-D STRUCTURAL PANEL CORNER DETAIL

JEREMY SCOTT URBAN LICENSE No. 87660 STATE OF FLORIDA PROFESSIONAL ENGINEER
2025.04.23

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RE-STRUCTURE GROUP, LLC (USA)

OLD WESTBURY, NEW YORK 11568

RSG 3-D STRUCTURAL PANEL DETAILS

www.rsg3d.com

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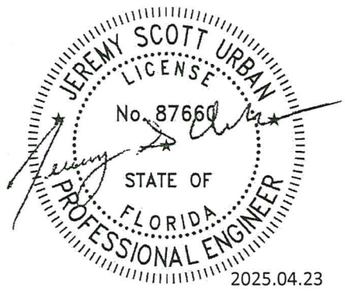
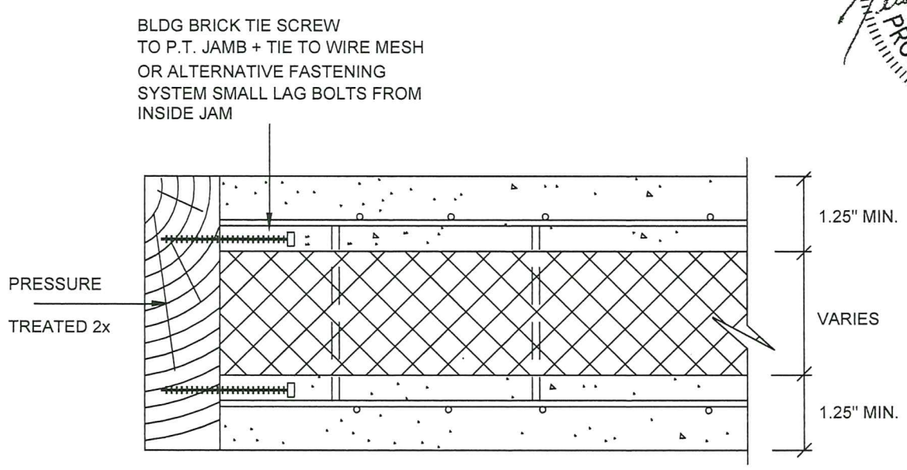
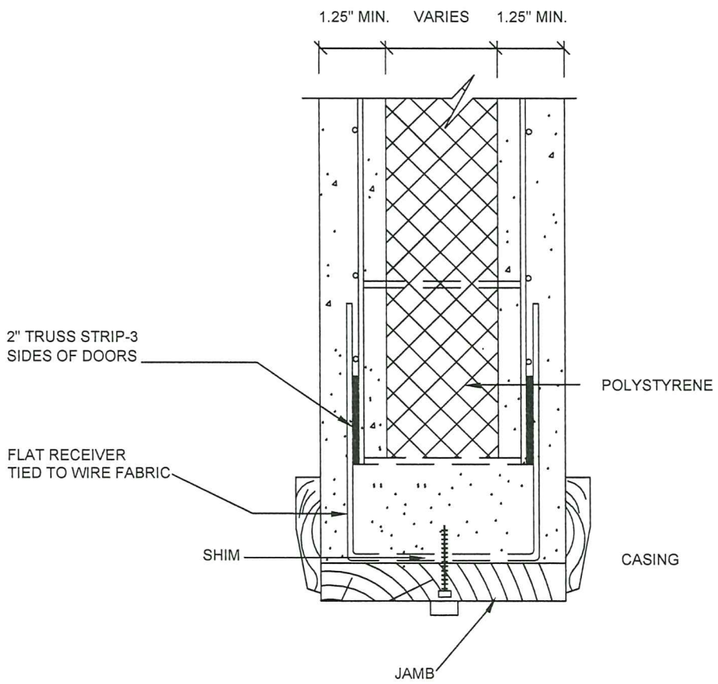




TYPICAL RSG 3-D STRUCTURAL PANEL WINDOW/DOOR JAMB



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TYPICAL RSG 3-D STRUCTURAL PANEL WINDOW/DOOR FRAME

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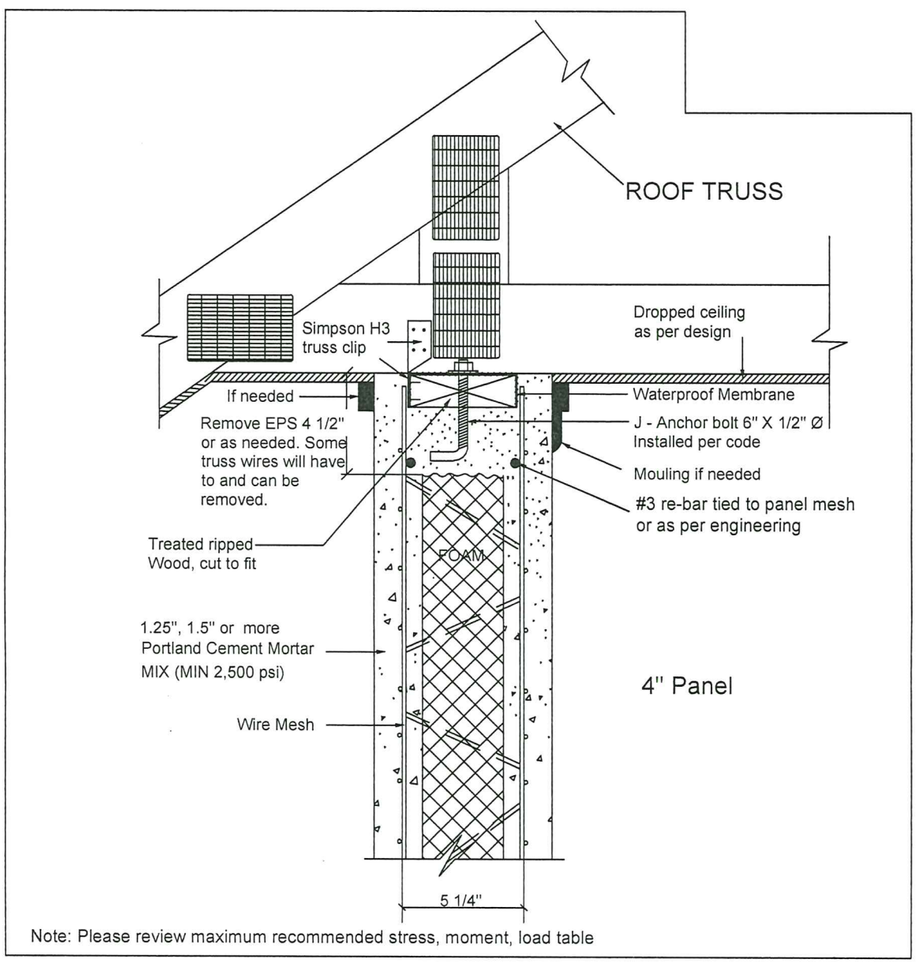

Note: Please review maximum recommended stress, moment, load table

TYPICAL RSG 3-D STRUCTURAL PANEL
TRUSS SUPPORT

All design parameters including, but not limited to materials, grades, thicknesses, reinforcement, dimensions, cover, spacings, and connections, shall be verified and provided by the Professional Engineer of Record in the governing jurisdiction in accordance with Chapter 16 and Chapter 19, specifically section 1908, 'Shotcrete', of the International Building Code (IBC) and the Florida Building Code (FBC) that references American Concrete Institute's ACI 318 'Building Code Requirements for Structural Concrete' and ACI 506.2 Specification for Shotcrete'

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PVE

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DATE: 04-23-25
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SHEET: 6/12

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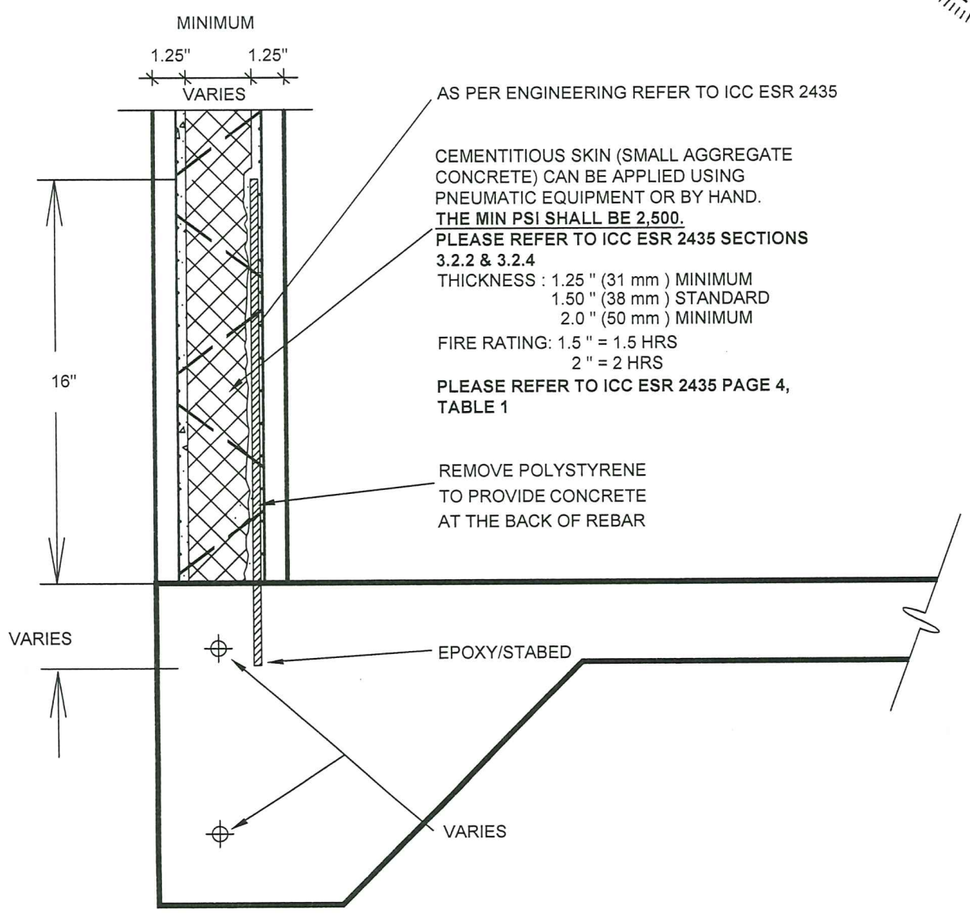

TYPICAL FOOTING WALL SECTION

All design parameters including, but not limited to materials, grades, thicknesses, reinforcement, dimensions, cover, spacings, and connections, shall be verified and provided by the Professional Engineer of Record in the governing jurisdiction in accordance with Chapter 16 and Chapter 19, specifically section 1908, 'Shotcrete', of the International Building Code (IBC) and the Florida Building Code (FBC) that references American Concrete Institute's ACI 318 'Building Code Requirements for Structural Concrete' and ACI 506.2 Specification for Shotcrete'

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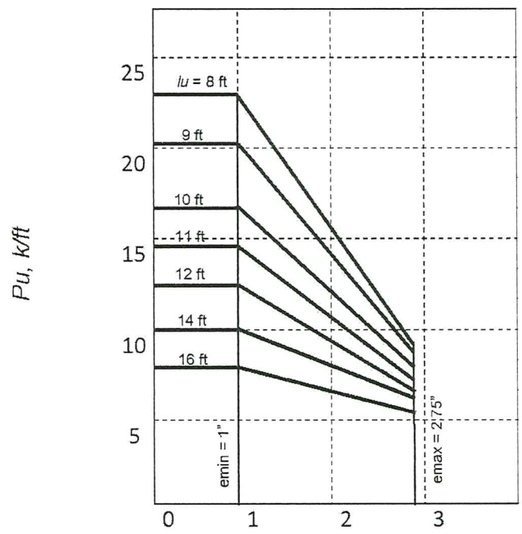
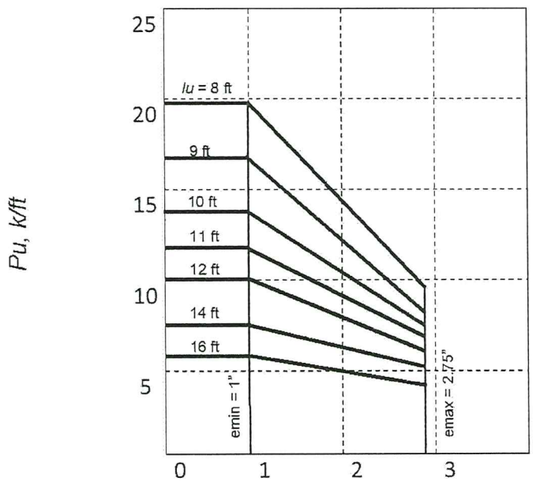


Structures with steel or wood floors or roofs
$\beta_d = 0.3$

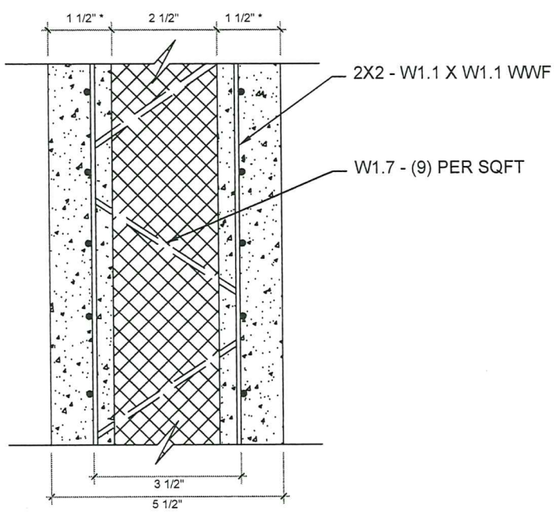


Structures with steel or wood floors or roofs
$\beta_d = 0.7$

Concrete Thickness	- 1.5 in. ea. side
Insulation Thickness	- 2.5 in.
Wythe Reinforcement	- 2 x 2 - W1.1 x W1.1 WWF
Diagonal Reinforcement	- W1.7 - (9) per sq. FT

Use with Pu = 1.4D + 1.7 L

FIGURE D - 1 STANDARD RSG 3-D STRUCTURAL PANEL DESIGN LOADS AND ECCENTRICITIES



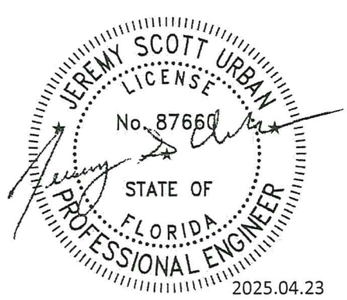


FIGURE 1 STANDARD RSG 3-D STRUCTURAL PANEL SECTION

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NOTE
* 1.25" MINIMUM CONCRETE THICKNESS (ESR-2435)

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RSG 3-D STRUCTURAL PANEL DETAILS
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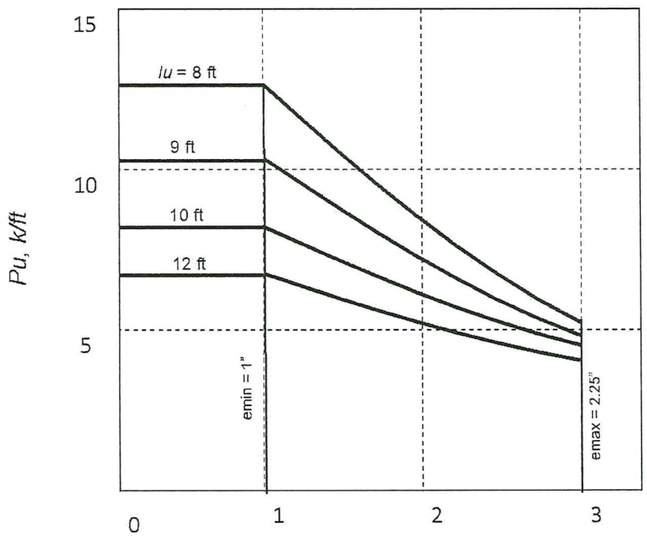
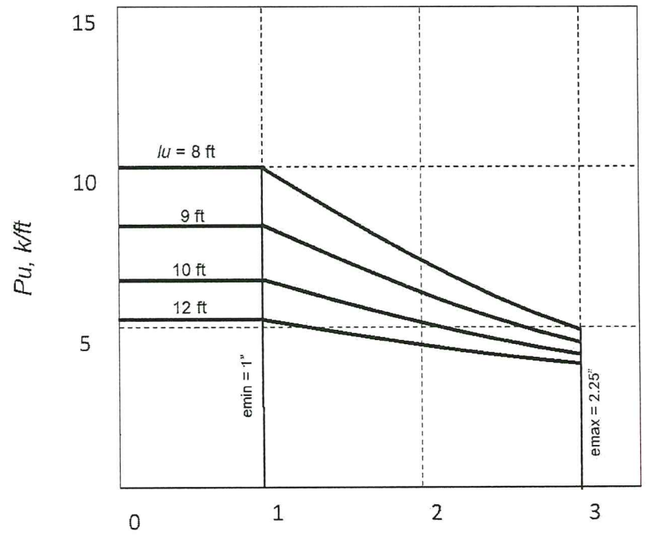


Structures with steel or wood floors or roofs
$\beta_d = 0.3$

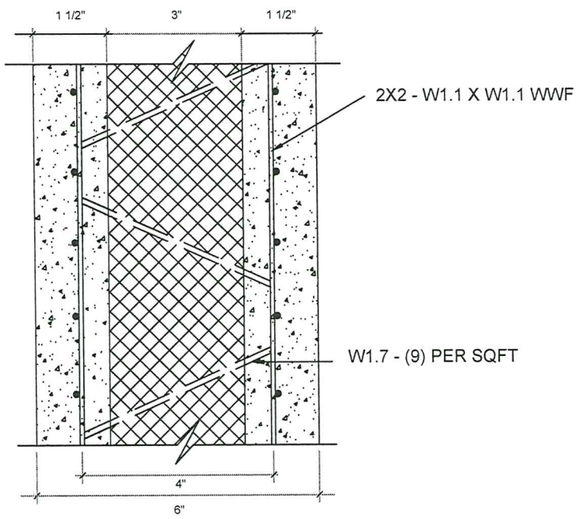


Structures with steel or wood floors or roofs
$\beta_d = 0.7$

Concrete Thickness	- 1.5 in. ea. side
Insulation Thickness	- 1.5 in.
Wythe Reinforcement	- 2 x 2 - W1.1 x W1.1 WWF
Diagonal Reinforcement	- W1.7 - (9) per sq. FT

Use with Pu = 1.4D + 1.7 L

FIGURE D - 2 MINIMUM RSG 3-D STRUCTURAL PANEL DESIGN LOADS AND ECCENTRICITIES



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STATE OF
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PROFESSIONAL ENGINEER
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FIGURE 2 MINIMUM RSG 3-D STRUCTURAL PANEL SECTION

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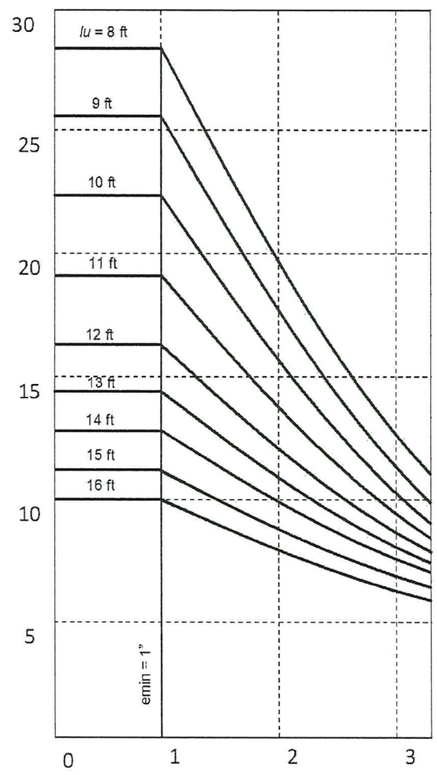
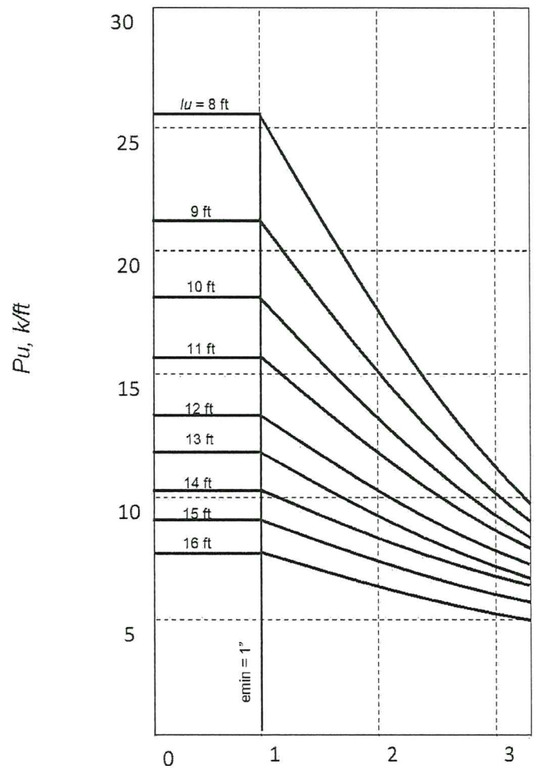


Structures with steel or wood floors or roofs
$\beta_d = 0.3$

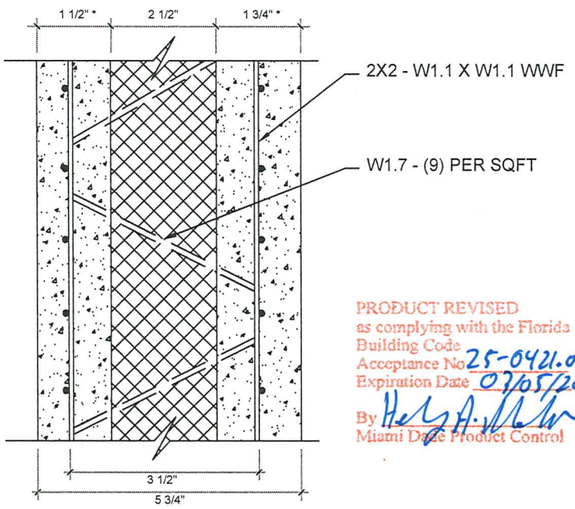


Structures with steel or wood floors or roofs
$\beta_d = 0.7$

Concrete Thickness	- 1.5 in. and 1.75 in.
Insulation Thickness	- 2.5 in.
Wythe Reinforcement	- 2 x 2 - W1.1 x W1.1 WWF
Diagonal Reinforcement	- W1.7 - (9) per sq. FT

Use with Pu = 1.4D + 1.7 L

FIGURE D - 3 MAXIMUM RSG 3-D STRUCTURAL PANEL DESIGN LOADS AND ECCENTRICITIES



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PROFESSIONAL ENGINEER
2025.04.23

FIGURE 3 MAXIMUM RSG 3-D STRUCTURAL PANEL SECTION

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NOTE
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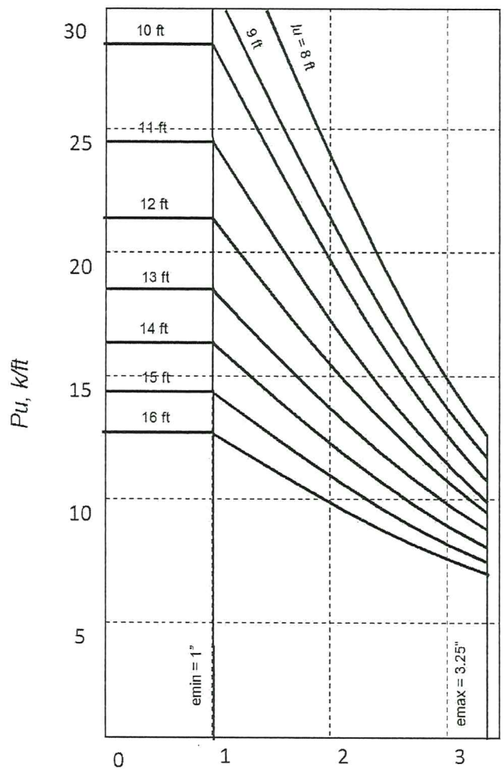
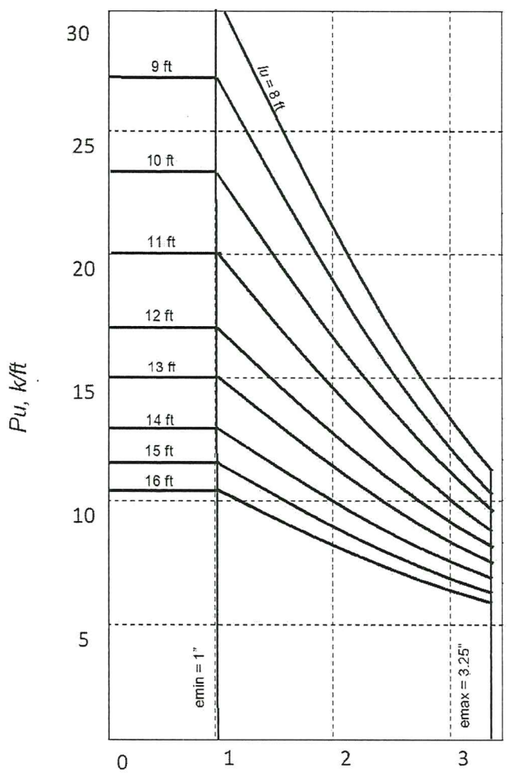


Structures with steel or wood floors or roofs
$\beta_d = 0.3$

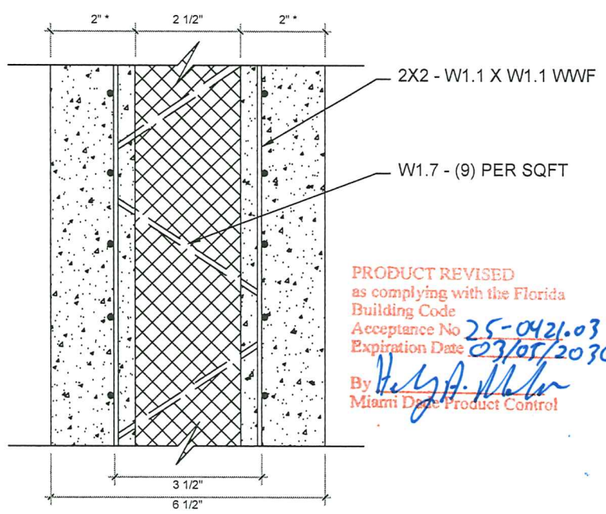


Structures with steel or wood floors or roofs
$\beta_d = 0.7$

Concrete Thickness - 2 in. ea. side
Insulation Thickness - 2.5 in.
Wythe Reinforcement - 2 x 2 - W1.1 x W1.1 WWF
Diagonal Reinforcement - W1.7 - (9) per sq. FT

Use with Pu = 1.4D + 1.7 L

FIGURE D - 4 2-HR RATED RSG 3-D STRUCTURAL PANEL DESIGN LOADS AND ECCENTRICITIES



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Miami Dade Product Control

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LICENSE
No. 87660
STATE OF FLORIDA
PROFESSIONAL ENGINEER
2025.04.23

FIGURE 4 2-HR RATED RSG 3-D STRUCTURAL PANEL SECTION

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NOTE
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3-D Wind Load Capacity

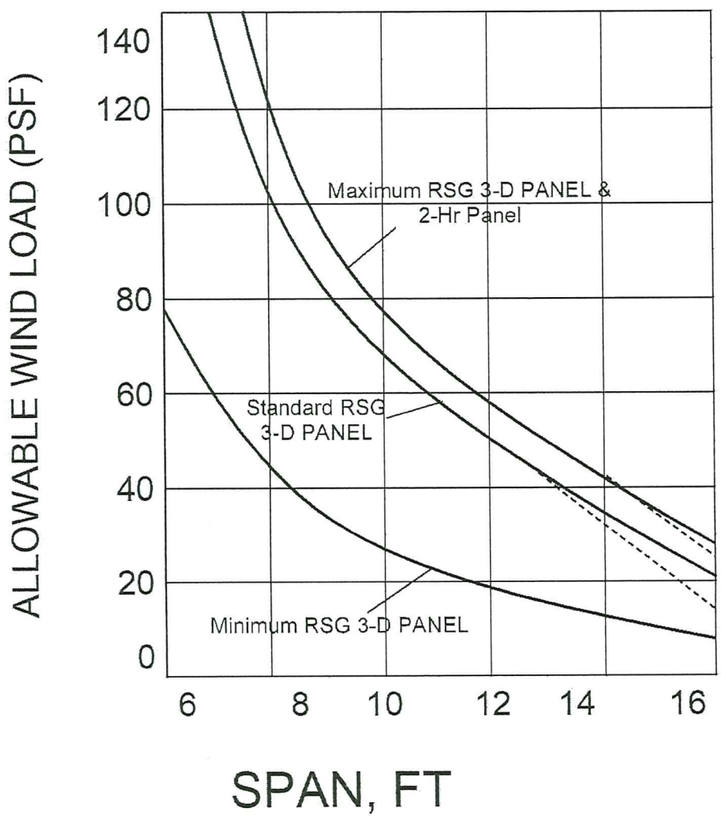

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FIG. D - 5 ALLOWABLE WIND LOADS ON RSG 3-D STRUCTURAL PANELS

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