



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

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)

Kingspan Insulated Panels, Inc. Dba Kingspan-Benchmark
726 Summerhill Drive
Deland, FL 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 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: Designwall 4000, Designwall 2000 & Designwall 2000R Insulated Metal Wall Panels

APPROVAL DOCUMENT: Drawing titled "Designwall 4000, Designwall 2000 & Designwall 2000R Insulated Metal Wall Panels", sheets 1 through 5 of 5, prepared by Bala Sockalingam, P.E., dated December 20, 2023, signed and sealed by Bala Sockalingam, P.E., on December 21, 2023, 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 Resistant

LABELING: Each panel shall bear a permanent label with the manufacturer's name or logo, Deland, FL, Caledon, ON 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 NOA #23-0901.01 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.**



Helmy A. Makar
05/30/24

NOA No. 24-0501.02
Expiration Date: 05/18/2027
Approval Date: 05/30/2024

Kingspan Insulated Panels, Inc.
Db a Kingspan-Benchmark

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #16-0329.09

A. DRAWINGS

1. *Drawing No. C2070, titled "Designwall 2000 and Designwall 4000 Insulated Wall Metal Panels", sheets 1 through 4 of 4, prepared by Bala Sockalingam, P.E., dated May 04, 2017, signed and sealed by Bala Sockalingam, P.E., on May 04, 2017.*

B. TESTS

1. *Test report on Large Missile Impact Test per TAS 201, Cyclic Wind Pressure Test per TAS 203, and Uniform Static Air Pressure Test per TAS 202 on Designwall 2000 and Designwall 4000 Insulated Wall Metal Panels, prepared by Farabaugh Engineering and Testing, Report No. T298-15, dated November 19, 2015, signed and sealed by Daniel G. Farabaugh, P.E.*

C. CALCULATIONS

1. *Calculations titled "Designwall 2000 and Designwall 4000 Insulated Wall Metal Panels", dated February 10, 2016, 4 pages, prepared by Bala Sockalingam, P.E., signed and sealed by Bala Sockalingam, P.E., on February 10, 2016.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *Tensile Test per ASTM A370-10, Report # T298-15, issued by Farabaugh Engineering and Testing, dated 11/19/15, signed & sealed by Daniel G. Farabaugh, P.E.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #17-0921.12

A. DRAWINGS

1. *Drawing No. C2070, titled "Designwall 2000 and Designwall 4000 Insulated Wall Metal Panels", sheets 1 through 4 of 4, prepared by Bala Sockalingam, P.E., dated July 14, 2017, signed and sealed by Bala Sockalingam, P.E., on August 17, 2017.*

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.*



Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 24-0501.02
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #20-0625.06

A. DRAWINGS

1. *Drawing No. C2356, titled "Designwall 2000 and Designwall 4000 Insulated Wall Metal Panels", sheets 1 through 4 of 4, prepared by Bala Sockalingam, P.E., dated May 30, 2020, signed and sealed by Bala Sockalingam, P.E., on May 30, 2020.*

B. TESTS

1. *Test report on Transverse Load on Designwall 4000 Insulated Wall Metal Panels, prepared by Intertek, Report No. 103238238TOR-007, dated April 27, 2018, signed and sealed by Craig H. Wagner, P.E.*
2. *Flame Spread, Smoke Index Test by FM Approvals, dated 01/12/1.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *None.*

F. OTHERS

1. *Compliance letter to the FBC, 2017 Edition, issued by Bala Sockalingam, P.E., dated 05/30/2020, signed and sealed by Bala Sockalingam, P.E., on 05/30/2020.*

4. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #21-0419.01

A. DRAWINGS

1. *Drawing No. C2456, titled "Designwall 2000 and Designwall 4000 Insulated Wall Metal Panels", sheets 1 through 4 of 4, prepared by Bala Sockalingam, P.E., dated March 03, 2021, signed and sealed by Bala Sockalingam, P.E., on March 03, 2021.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

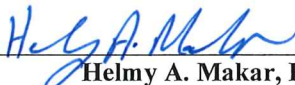
1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

E. MATERIAL CERTIFICATIONS

1. *None.*

F. OTHERS

1. *Compliance letter to the FBC, 2020 Edition, dated 03/03/2021, signed and sealed by Bala Sockalingam, P.E., on 05/30/2020.*




Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- 5. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #22-0822.08**
- 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. OTHERS**
1. *Compliance letter to the FBC, 2020 Edition, dated 03/03/2021, signed and sealed by Bala Sockalingam, P.E., on 05/30/2020.*
- 6. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #23-0901.01**
- A. DRAWINGS**
1. *Drawing No. C2720, titled "Designwall 2000 and Designwall 4000 Insulated Wall Metal Panels", sheets 1 through 4 of 4, prepared by Bala Sockalingam, P.E., dated August 28, 2023, signed and sealed by Bala Sockalingam, P.E., on August 28, 2023.*
- B. TESTS**
1. *Test report on Transverse Load per ASTM E72-15 on Designwall 2000 (Quadcore Foam) Insulated Wall Metal Panels, prepared by Farabaugh Engineering and Testing Inc., Report No. T235-22, dated July 20, 2022, signed and sealed by Daniel G. Farabaugh, P.E.*
- C. CALCULATIONS**
1. *None.*
- D. QUALITY ASSURANCE**
1. *By Miami-Dade County Department of Regulatory and Economic Resources.*
- E. MATERIAL CERTIFICATIONS**
1. *Spectrochemical Laboratories-Material Evaluation, Inc., Report of Tensile Testing, dated June 01, 2022, signed by Todd A. Ault.*
- F. OTHERS**
1. *Compliance letter to the FBC, 2023 Edition, dated 08/28/2023, signed and sealed by Bala Sockalingam, P.E., on 08/28/2023.*



Helmy A. Makar, P.E., M.S.
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

7. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing titled "Designwall 4000, Designwall 2000 & Designwall 2000R Insulated Metal Wall Panels", sheets 1 through 5 of 5, prepared by Bala Sockalingam, P.E., dated December 20, 2023, signed and sealed by Bala Sockalingam, P.E., on December 21, 2023.*

B. TESTS

1. *Test Proposal File #24-0001.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

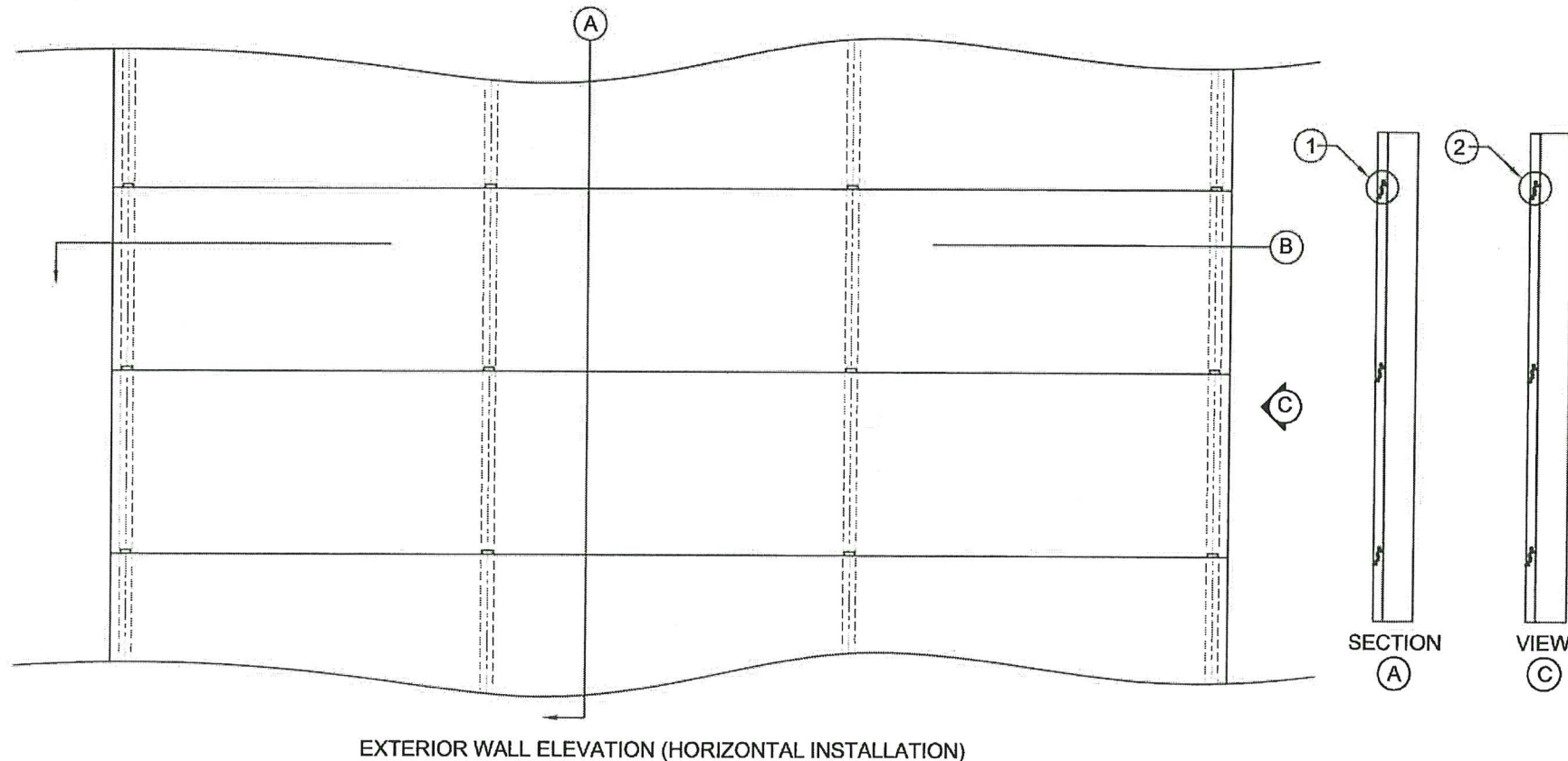
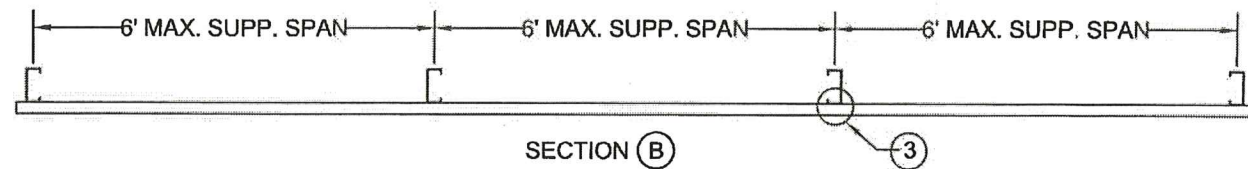
1. *Test Proposal File #24-0001.*

F. OTHERS

1. *Compliance letter to the FBC, 2023 Edition, dated 12/21/2023, signed and sealed by Bala Sockalingam, P.E., on 12/21/2023.*



Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 24-0501.02
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EXTERIOR WALL ELEVATION (HORIZONTAL INSTALLATION)

CODE COMPLIANCE

This structural wall panel has been designed in accordance with HVHZ 2023 Florida Building Code (FBC). The design pressures as determined from Section 1620 and ASCE 7-22 must be multiplied by 0.6

Installation

Each panel shall be fastened at one edge with two 1/4-14" self drilling steel fasteners and one load bearing clip as per details 1, 2, 3 of these drawings. Fasteners must be coated for corrosion resistance.

SUPPORTS & DESIGN LOAD

1. The support assembly must be designed and built by others
2. The support assembly will consist of horizontal or vertical studs for panels installed vertically or horizontally respectively.
3. The material of the studs shall be steel with a minimum Y.S. of 55 ksi
4. Thickness of the studs and spacing as dictated by the design loads in the span vs. load chart below.
5. Maximum support spacing and design load shall not be exceeded.
6. Support thickness in span vs. load chart shall be considered the minimum allowed.

Span (ft-in)	Max Design Load (+/- PSF)	Steel Supports Thickness
1' - 4"	80.0	16 Ga.
1' - 6"	80.0	12 Ga.
1' - 9"	80.0	12 Ga.
2' - 0"	80.0	12 Ga.
2' - 3"	80.0	12 Ga.
2' - 6"	80.0	12 Ga.
2' - 9"	80.0	12 Ga.
3' - 0"	80.0	12 Ga.
3' - 3"	80.0	12 Ga.
3' - 6"	80.0	12 Ga.
3' - 9"	80.0	12 Ga.
4' - 0"	79.5	12 Ga.
4' - 3"	74.8	12 Ga.
4' - 6"	70.7	12 Ga.
4' - 9"	66.9	12 Ga.
5' - 0"	63.6	12 Ga.
5' - 3"	60.6	12 Ga.
5' - 6"	57.8	12 Ga.
5' - 9"	55.3	12 Ga.
6' - 0"	53.0	12 Ga.

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No 24-0501.02
 Expiration Date 05/18/2027
 By *H. Sockalingam*
 Miami Dade Product Control



LIMITATIONS OF USE

1. Product approval is limited to panels and load bearing clips
2. Panels must be installed on structural framing complying with the 2023 Florida Building Code (FBC), High Velocity Hurricane Zone (HVHC) code section.
3. Panels shall not carry axial load, and are not intended/ designed to act as a diaphragm.
4. The engineer of record or architect shall verify 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

GENERAL NOTES ON DESIGNWALL (DW) 2000, 2000R AND 4000 PANELS

1. Kingspan's DW 2000, 2000R and 4000 panels are factory assembled Metal Insulated Panels (MIP), consisting of steel facings with a plastic foam core in between.
2. Panels are anchored to supports on one edge using bearing clips and screws and interlocking with the adjacent panel on the opposite.
3. Panels can be installed in vertical or horizontal installation.
4. Panel Width: 24" to 36" for DW 2000 and DW 4000; 12 to 24" for DW 2000R.
5. Panel Thickness: 2.0", 2.5", 3.0", 4.0" for DW 2000 and DW 4000; 2.5", 3.0", 4.0" for DW 2000R.
6. Panel Length: 1' to 30'

DESIGNWALL 4000, DESIGNWALL 2000 & DESIGNWALL 2000R INSULATED METAL WALL PANELS.

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 Scale: Date: 12/20/2023
 Drawn: O.L.

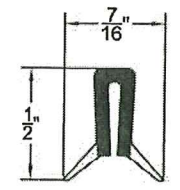


NO.	REVISION DESCRIPTION	BY	DATE
1	REVISE FBC 2014 TO FBC 2017	BS	7.14.17
2	DELETE FBC 2014	BS	5.30.20
3	REVISE FBC 2017 TO FBC 2020 & ASCE 7-10 TO 7-16	BS	3.3.21
4	REVISE FBC 2020 TO FBC 2023 & ASCE 7-16 TO 7-22	BS	7.22.23
5	ADD DW2000R	OL	12.20.23

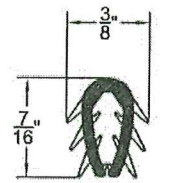
NO.	REVISION DESCRIPTION	BY	DATE

Kingspan Insulated Panels, Inc.
 726 Summerhill Dr. Deland, FL 32724
 Phone: (386) 626 6789
 Kingspan Benchmark
 720 Marion Rd, Columbus, OH 43207
 Phone: (614) 444-0110
 www.kingspan.com/us/en

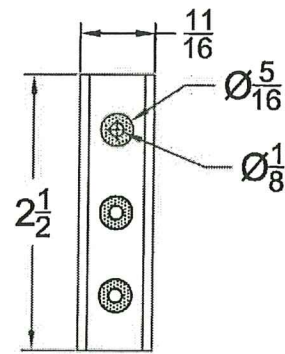
Consultant:
 Bala Sockalingam, PhD., P.E.
 1216 N Lansing Ave., Suite C
 Tulsa, OK 74106
 Phone: 918 492 5992



WEDGE GASKET
esc 1:1



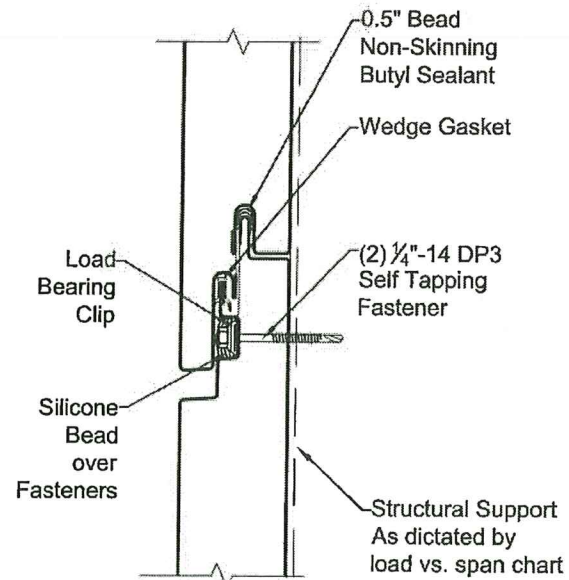
MULTI FIN GASKET
esc 1:1



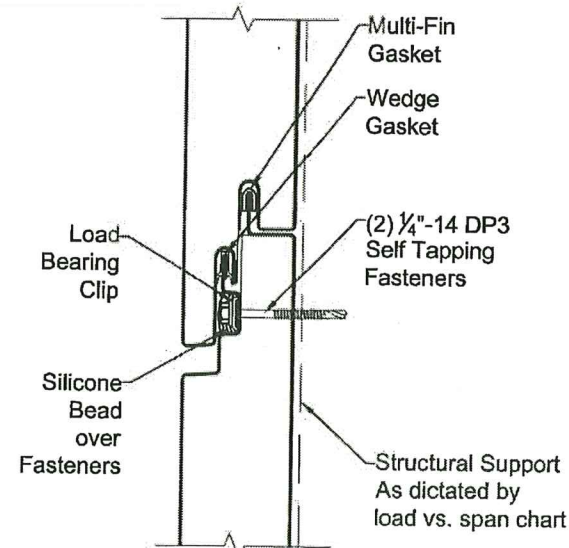
14 Ga. Stainless Steel

PVC Foam Tape

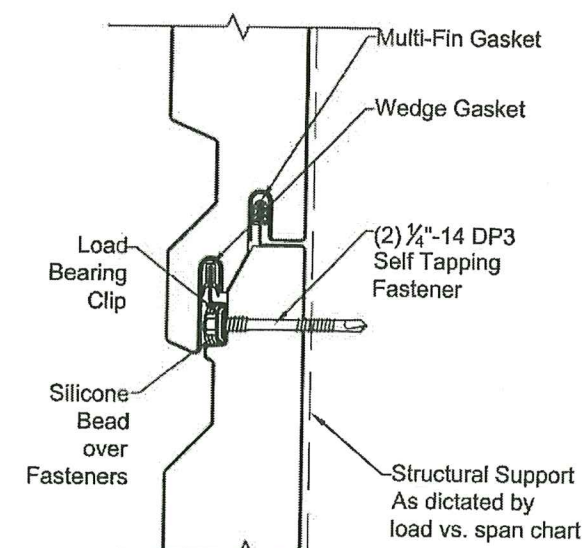
LOAD BEARING CLIP



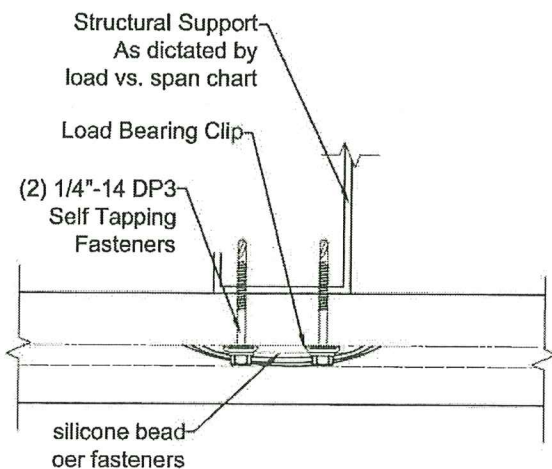
DW4000 PANEL
JOINT DETAIL AT SUPPORTS ①



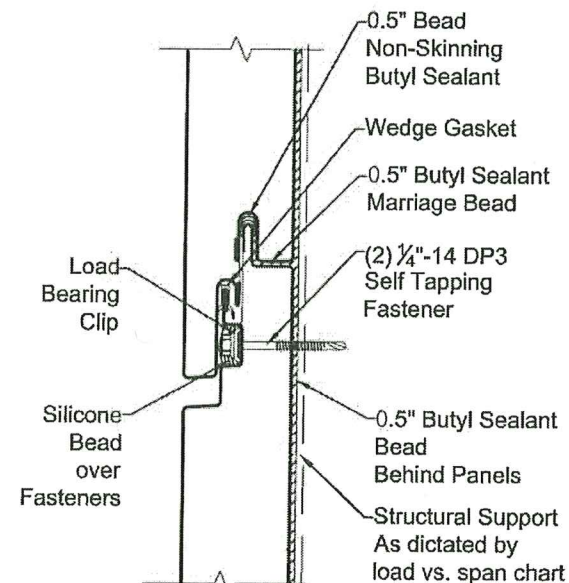
DW2000 PANEL
JOINT DETAIL AT SUPPORTS ①



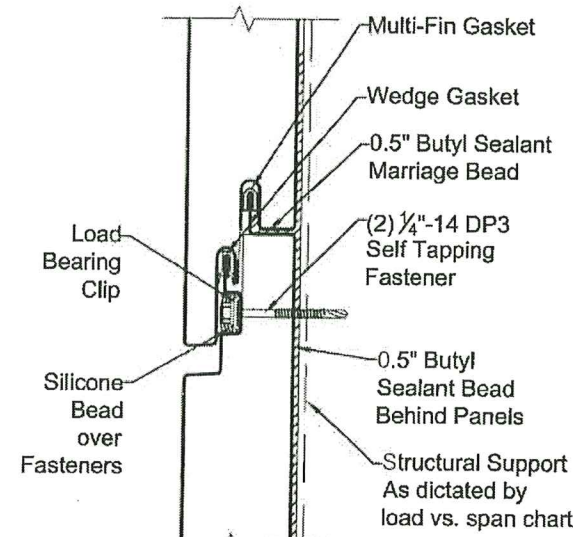
DW2000R
JOINT DETAIL AT SUPPORTS ①



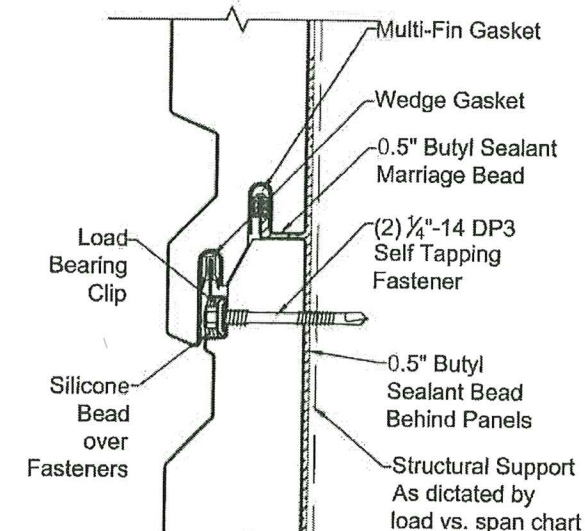
DW4000, DW2000 &
DW2000R PANELS
JOINT DETAIL AT SUPPORTS ③



DW4000 PANEL
JOINT DETAIL AT SUPPORTS
AT END OF PANEL ②

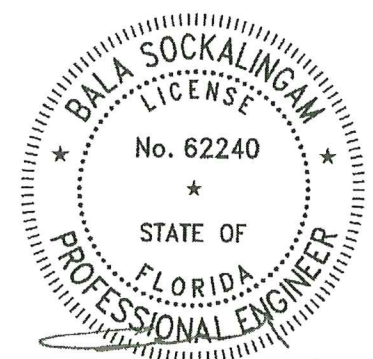


DW2000 PANEL
JOINT DETAIL AT SUPPORTS
AT END OF PANEL ②



DW2000R PANEL
JOINT DETAIL AT SUPPORTS
AT END OF PANEL ②

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 24-0501.02
Expiration Date 05/18/2027
By *H. Sockalingam*
Miami Date Product Control



12.21.2023

DESIGNWALL 4000, DESIGNWALL 2000,
& DESIGNWALL 2000R
INSULATED METAL WALL PANELS.

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DETAILS

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12/20/2023

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O.L.

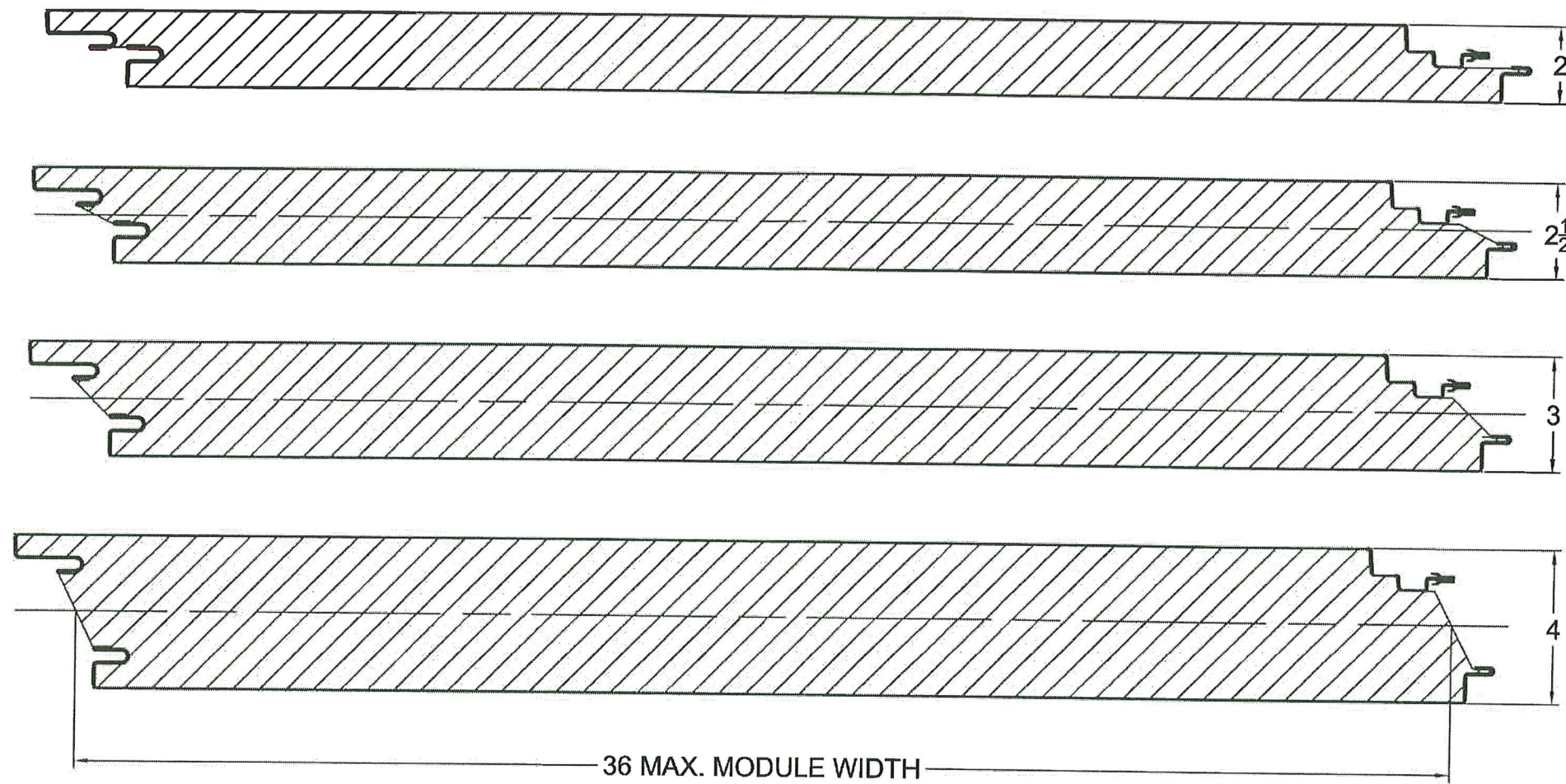


NO.	REVISION DESCRIPTION	BY	DATE
1	ADD DW2000R DETAILS	OL	12.20.23
1	CHANGE GASKET NAME FROM SINGLE-FIN TO WEDGE	OL	12.20.23

NO.	REVISION DESCRIPTION	BY	DATE

Kingspan Insulated Panels, Inc.
726 Summerhill Dr. Deland, FL 32724
Phone: (386) 626 6789
Kingspan Benchmark
720 Marion Rd, Columbus, OH 43207
Phone: (614) 444-0110
www.kingspan.com/us/en

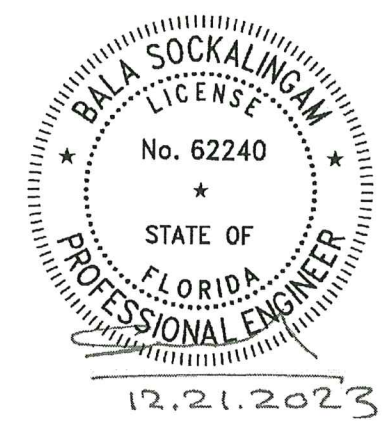
Consultant:
Bala Sockalingam, Ph.D., P.E.
1216 N Lansing Ave., Suite C
Tulsa, OK 74106
Phone: 918 492 5992



DESIGNWALL 4000 INSULATED METAL PANEL

1. Exterior Facing: 22 Ga. Steel with a minimum 55 ksi yield strength, with G90 galvanized or AZ50 Galvalume ®/Zincalume ® coating protection in accordance with ASTM A653 or ASTM A792 respectively.
2. Interior Facing: 24 Ga. Steel with a minimum 55 ksi yield strength, with G90 galvanized or AZ50 Galvalume ®/Zincalume ® coating protection in accordance with ASTM A653 or ASTM A792 respectively.
3. Core: Continuously foamed in place rigid polyisocyanurate & Quadcore foams.

PRODUCT REVISED
 as complying with the Flori.
 Building Code
 Acceptance No 24-0501.02
 Expiration Date 05/14/2027
 By *Kalyan Mohan*
 Miami Date Product Control



DESIGNWALL 4000, DESIGNWALL 2000,
 & DESIGNWALL 2000R
 INSULATED METAL WALL PANELS. Page: 3/5
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 Scale: Date: 12/20/2023

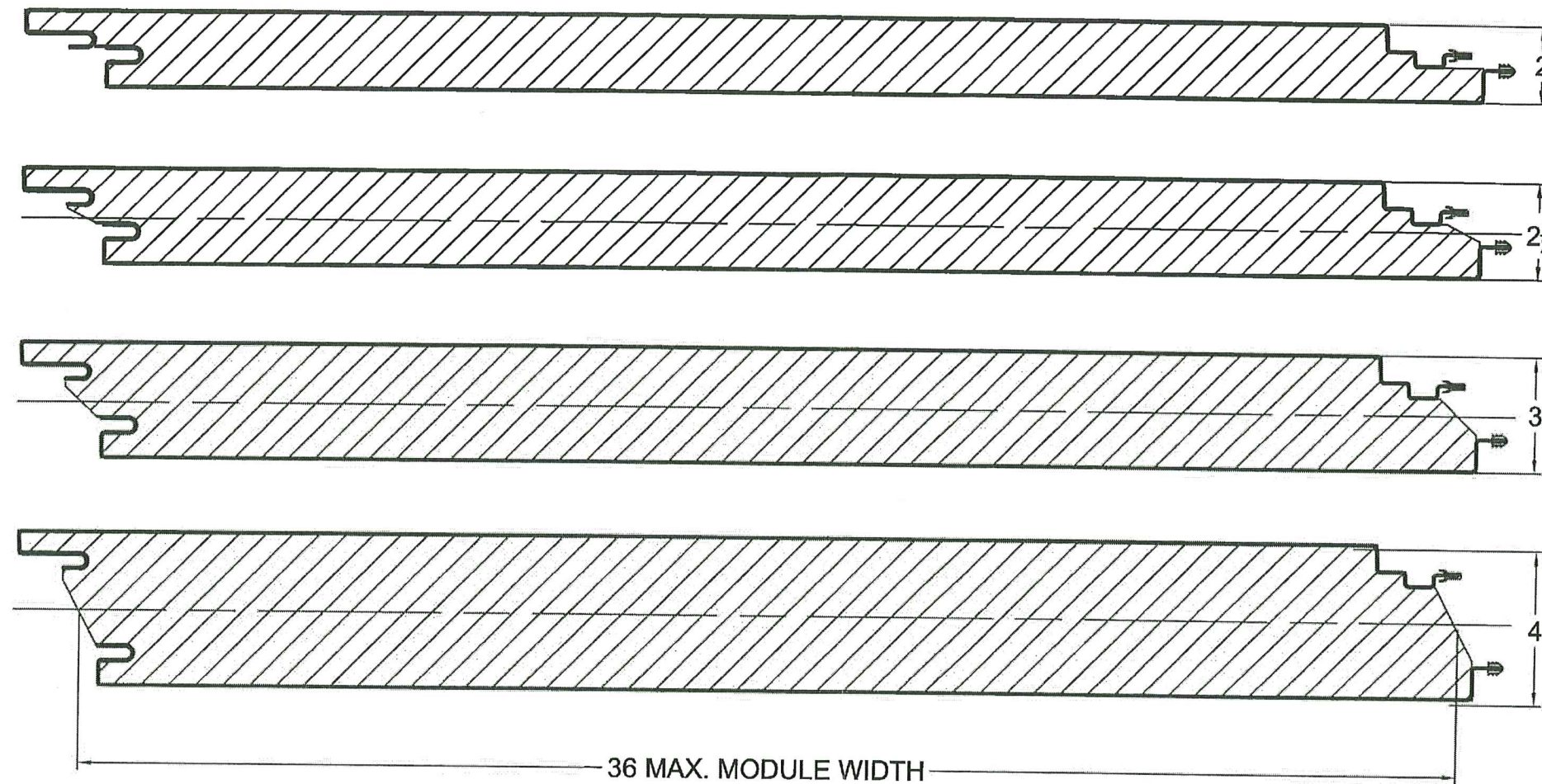


NO.	REVISION DESCRIPTION	BY	DATE
1	ADDED QUADCORE FOAM IN NOTE 3	BS	5.30.20

NO.	REVISION DESCRIPTION	BY	DATE

Kingspan Insulated Panels, Inc.
 726 Summerhill Dr. Deland, FL 32724
 Phone: (386) 626 6789
 Kingspan Benchmark
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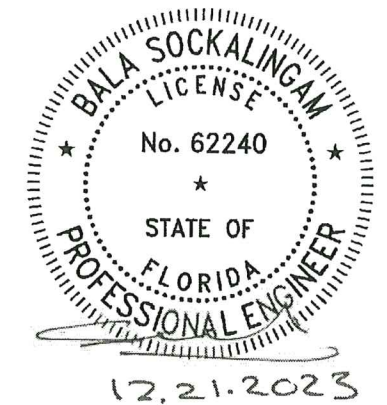
Consultant:
 Bala Sockalingam, PhD., P.E.
 1216 N Lansing Ave., Suite C
 Tulsa, OK 74106
 Phone: 918 492 5992



DESIGNWALL 2000 INSULATED METAL PANEL

1. Exterior Facing: 22 Ga. Steel with a minimum 55 ksi yield strength, with G90 galvanized or AZ50 Galvalume ®/Zincalume ® coating protection in accordance with ASTM A653 or ASTM A792 respectively.
2. Interior Facing: 24 Ga. Steel with a minimum 55 ksi yield strength, with G90 galvanized or AZ50 Galvalume ®/Zincalume ® coating protection in accordance with ASTM A653 or ASTM A792 respectively.
3. Core: Structurally laminated rigid polyisocyanurate & Quadcore-B foam.

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 Expiration Date 05/18/2027
 By *[Signature]*
 Miami Dept. Product Control



DESIGNWALL 4000, DESIGNWALL 2000
 & DESIGNWALL 2000R
 INSULATED METAL WALL PANELS. Page: 4/5
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 Scale: Date: 12/20/2023

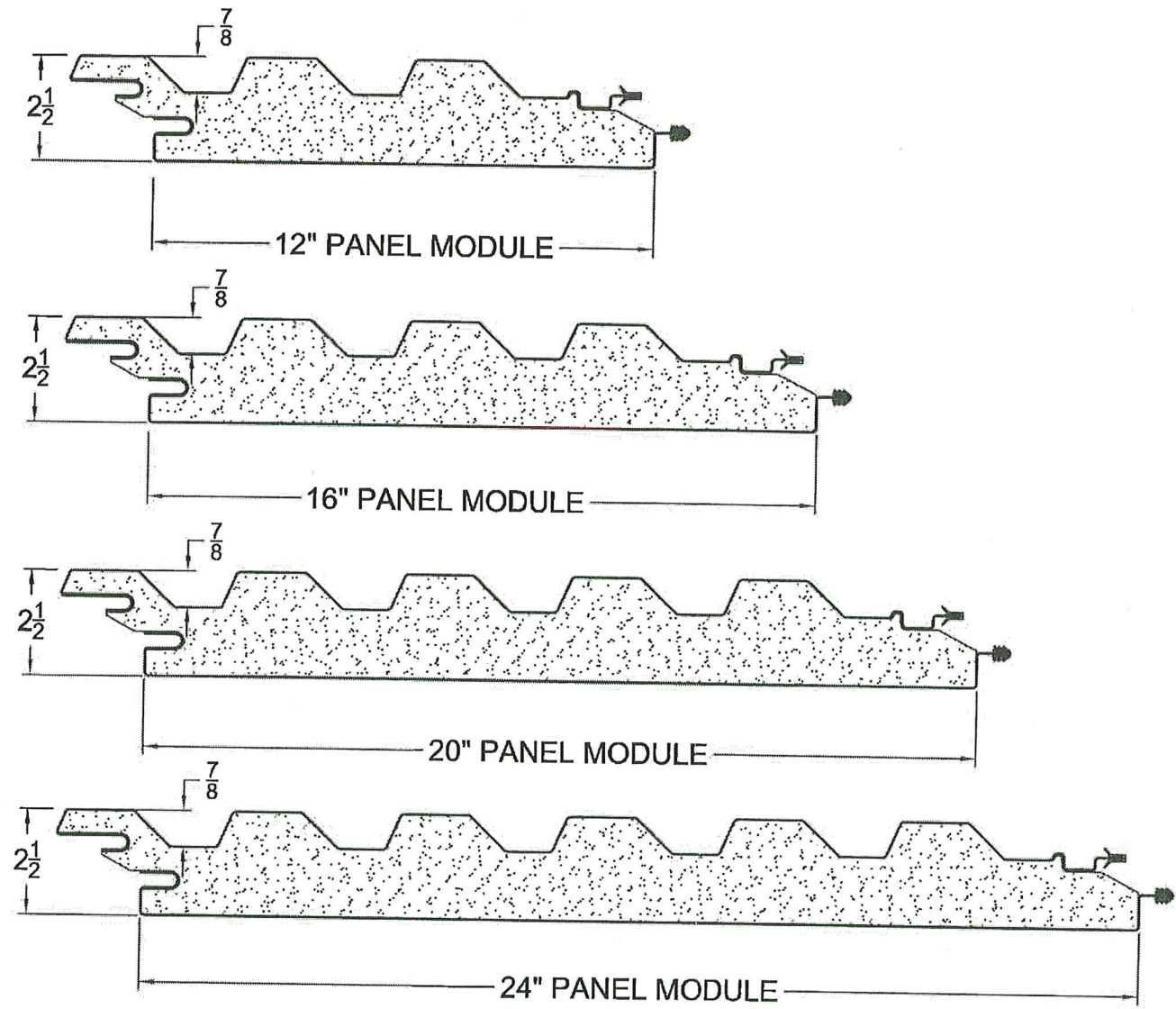


NO.	REVISION DESCRIPTION	BY	DATE
1	ADDED QUADCORE-B FOAM IN NOTE 3	OL	12.20.23

NO.	REVISION DESCRIPTION	BY	DATE

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 Phone: 918 492 5992



DESIGNWALL 2000R INSULATED METAL PANEL

1. Exterior Facing: 22 Ga. Steel with a minimum 55 ksi yield strength, with G90 galvanized or AZ50 Galvalume ®/Zincalume ® coating protection in accordance with ASTM A653 or ASTM A792 respectively.
2. Interior Facing: 24 Ga. Steel with a minimum 55 ksi yield strength, with G90 galvanized or AZ50 Galvalume ®/Zincalume ® coating protection in accordance with ASTM A653 or ASTM A792 respectively.
3. Core: Quadcore-B foam.

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 By *Helya M...*
 Miami Data Product Control



12.21.2023

DESIGNWALL 4000, DESIGNWALL 2000 & DESIGNWALL 2000R INSULATED METAL WALL PANELS.			Page: 5/5
DESIGNWALL 2000R	Scale:	Date: 12/20/2023	Drawn: O.L.



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Consultant:
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 Phone: 918 492 5992