



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)

**Haakon Industries (Canada) LTD**  
11851 Dyke Road  
Richmond, BC, Canada V7A-4X8

### 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: "Pentpak" Outdoor Style Air Handling Unit

**APPROVAL DOCUMENT:** Drawing No. 6945, titled "Outdoor Style Air Handling Unit, Pentpak", sheets 1 through 15 of 15, prepared by Haakon Industries, last revision #8 dated October 16, 2024, signed and sealed by Douglas J. Ruggiano, P.E., on October 21, 2024, bearing the Miami-Dade County Product Control Renewal 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 unit shall bear a permanent label with the manufacturer's name or logo, Cheney, WA or Kingston, 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 **renews** NOA #24-1023.05 and consists of this page 1, evidence submitted pages E-1, E-2 & E-3 as well as approval document mentioned above.

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



*Helmy A. Makar*  
12/18/25

NOA No. 25-1203.01  
Expiration Date: 03/10/2031  
Approval Date: 12/18/2025

**Haakon Industries (Canada) LTD**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA #10-1210.02**

**A. DRAWINGS**

1. *Drawing No. 6945, titled "Outdoor Style Air Handling Unit, Pentpak", sheets 1 through 15 of 15, prepared by Haakon Industries, last revision #1 dated January 12, 2011, signed and sealed by Douglas J. Ruggiano, P.E., on January 31, 2011.*

**B. TESTS**

1. *Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94 2) Large Missile Impact Test per FBC, TAS 201-94 3) Cyclic Wind Pressure Loading per FBC, TAS 203-94 4) ASTM E72-05 along with marked-up drawings and installation diagram of Steel Air Handler Model Pentpak, Outdoor Unit, prepared by Intertek Testing Services NA LTD, Test Report No. 100160907COQ-008, dated November 25, 2010, signed and sealed by Rick Curkeet, P.E.*

**C. CALCULATIONS**

1. *Finite Element Analysis on Outdoor-Style air Handling Unit, dated 12/02/10, revised on 01/12/11, signed & sealed by Douglas J. Ruggiano, P.E., on 01/31/11.*

**D. QUALITY ASSURANCE**

1. *By Miami-Dade County Building and Neighborhood Compliance Department.*

**E. MATERIAL CERTIFICATIONS**

1. *Tensile Test per ASTM E8 by Intertek Testing Services NA LTD, Test Report No. 100160907COQ-008, dated 11/25/2010, signed and sealed by Rick Curkeet, P.E.*

**F. STATEMENTS**

1. *Letter of conformance with FBC 2007 Edition, dated December 09, 2010, signed and sealed by Douglas J. Ruggiano, P.E.*
2. *No financial interest letter, dated 12/09/10, sign & sealed by D. J. Ruggiano, P.E.*
3. *Distributor Agreement.*

**2. EVIDENCE SUBMITTED UNDER PREVIOUS NOA #15-1027.06**

**A. DRAWINGS**

1. *Drawing No. 6945, titled "Outdoor Style Air Handling Unit, Pentpak", sheets 1 through 15 of 15, prepared by Haakon Industries, last revision #3 dated July 18, 2016, signed and sealed by Douglas J. Ruggiano, P.E., on July 18, 2016.*

**B. TESTS**

1. *None.*

**C. CALCULATIONS**

1. *None.*

**D. QUALITY ASSURANCE**

1. *By Miami-Dade County Department Regulatory and Economic Resources (RER).*

**E. MATERIAL CERTIFICATIONS**

1. *None.*



**Helmy A. Makar, P.E., M.S.**  
**Product Control Section Supervisor**  
**NOA No. 25-1203.01**  
**Expiration Date: 03/10/2031**  
**Approval Date: 12/18/2025**



**Haakon Industries (Canada) LTD**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**F. STATEMENTS**

1. *Letter of conformance with FBC 2014 Edition, dated July 18, 2016, signed and sealed by Douglas J. Ruggiano, P.E.*

**3. EVIDENCE SUBMITTED UNDER PREVIOUS NOA #20-1005.02**

**A. DRAWINGS**

1. *Drawing No. 6945, titled "Outdoor Style Air Handling Unit, Pentpak", sheets 1 through 15 of 15, prepared by Haakon Industries, last revision #7 dated March 10, 2021, signed and sealed by Douglas J. Ruggiano, P.E., on March 15, 2021.*

**B. TESTS**

1. *None.*

**C. CALCULATIONS**

1. *None.*

**D. QUALITY ASSURANCE**

1. *By Miami-Dade County Department Regulatory and Economic Resources (RER).*

**E. MATERIAL CERTIFICATIONS**

1. *None.*

**F. STATEMENTS**

1. *Letter of conformance with FBC 2020 Edition, dated March 15, 2021, signed and sealed by Douglas J. Ruggiano, P.E.*

**4. EVIDENCE SUBMITTED UNDER PREVIOUS NOA #24-1023.05**

**A. DRAWINGS**

1. *Drawing No. 6945, titled "Outdoor Style Air Handling Unit, Pentpak", sheets 1 through 15 of 15, prepared by Haakon Industries, last revision #8 dated October 16, 2024, signed and sealed by Douglas J. Ruggiano, P.E., on October 21, 2024.*

**B. TESTS**

1. *None.*

**C. CALCULATIONS**

1. *None.*

**D. QUALITY ASSURANCE**

1. *By Miami-Dade County Department Regulatory and Economic Resources (RER).*

**E. MATERIAL CERTIFICATIONS**

1. *None.*

**F. STATEMENTS**

1. *Letter of conformance with FBC 2023 Edition, dated October 16, 2024, signed and sealed by Douglas J. Ruggiano, P.E., on October 21, 2024.*



Helmy A. Makar, P.E., M.S.  
Product Control Section Supervisor  
NOA No. 25-1203.01  
Expiration Date: 03/10/2031  
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**Haakon Industries (Canada) LTD**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**5. NEW EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. *None.*

**B. TESTS**

1. *None.*

**C. CALCULATIONS**

1. *None.*

**D. QUALITY ASSURANCE**

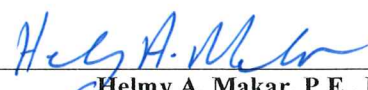
1. *By Miami-Dade County Department Regulatory and Economic Resources (RER).*

**E. MATERIAL CERTIFICATIONS**

1. *None.*

**F. STATEMENTS**

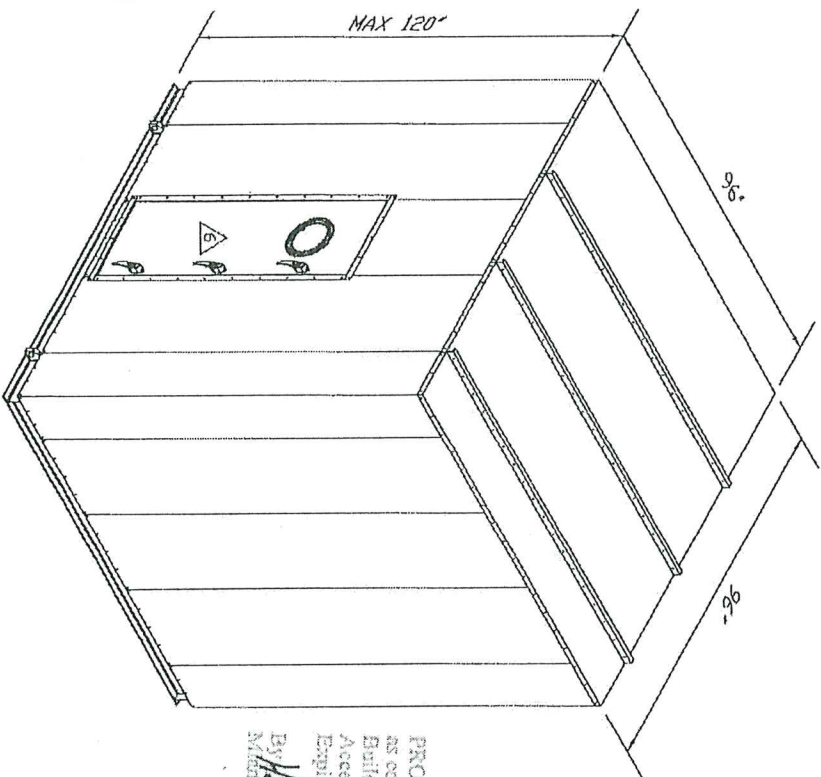
1. *Letter of conformance with FBC 2023 Edition, dated October 16, 2024, signed and sealed by Douglas J. Ruggiano, P.E., on October 21, 2024.*

  
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Helmy A. Makar, P.E., M.S.  
Product Control Section Supervisor  
NOA No. 25-1203.01  
Expiration Date: 03/10/2031  
Approval Date: 12/18/2025



OUTDOOR STYLE AIR HANDLING UNIT, PENTPAK

- A) THIS OUTDOOR STYLE AIR HANDLING UNIT IS DESIGNED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE, 2023 EDITION, INCLUDING THE PROVISIONS FOR HIGH VELOCITY HURRICANE ZONE (HVHZ).
- B) DESIGN LOADS MUST BE CALCULATED BY A PROFESSIONAL ENGINEER OR ARCHITECT FOR EACH PROJECT. THE PROJECT PRESSURE CANNOT EXCEED THE DESIGN PRESSURE LISTED.
- C) ATTACHMENT TO THE ROOF AND THE ROOF CURB TO PREVENT SLIDING AND OVERTURNING OF THE AIR HANDLING UNIT IS NOT PART OF THE SCOPE OF THIS PRODUCT APPROVAL. THEY SHALL BE REVIEWED BY THE CORRESPONDING BUILDING DEPARTMENT.
- D) THE UNIT DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. IF SITE CONDITIONS DEVIATE FROM THE CONDITIONS DETAILED HEREIN, SITE SPECIFIC DOCUMENTS PREPARED BY A LICENSED ENGINEER WILL BE REQUIRED.
- E) DISSIMILAR MATERIALS IN CONTACT WITH EACH OTHER SHALL BE PROTECTED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, 2023 EDITION.
- F) MECHANICAL EQUIPMENT INSIDE THE AIR HANDLING UNIT ARE NOT PART OF THIS NDA AND THEY SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES.



PRODUCT RENEWED  
as complying with the Florida  
Building Code  
Acceptance No 25-1203-01  
Expiration Date 03/10/2031  
By *Helga A. Miller*  
Miami Dade Product Control

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No 24-1023-05  
Expiration Date 03/10/2026  
By *Helga A. Miller*  
Miami Dade Product Control

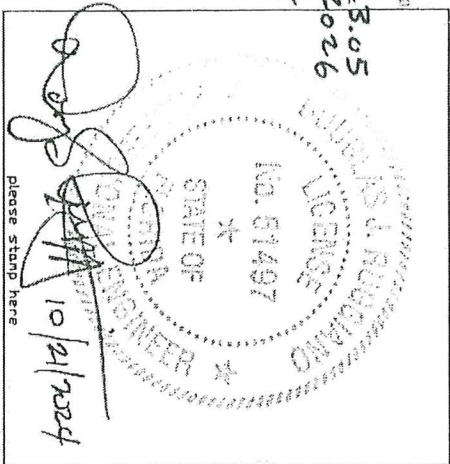
MAXIMUM DESIGN PRESSURE  
WALL: +66 PSF / -66 PSF  
ROOF: +50 PSF / -50 PSF

MAXIMUM NOMINAL DOOR SIZE  
WIDTH: 30"  
HEIGHT: 72"

MAXIMUM RACKING FORCE  
51.5 LBS/LIN. OF THE WALL  
PANEL

MAXIMUM COMPRESSION FORCE  
230 LBS/LIN. OF THE WALL  
PANEL

MAXIMUM TENSION FORCE  
26 LBS/LIN. OF THE WALL  
PANEL



PROJECT

OUTDOOR STYLE AIR HANDLING UNIT, PENTPAK

REVISION 6 (MAR 15, 2018)

REVISION 7 (MAR 10, 2021)

REVISION 8 (OCT 16, 2024)

JOB NO.	DRAWN BY	DY	DWG NO.	PAGE 1 OF 15
TAG	DATE	MAR 10, 2021	TYPE	OUTDOOR



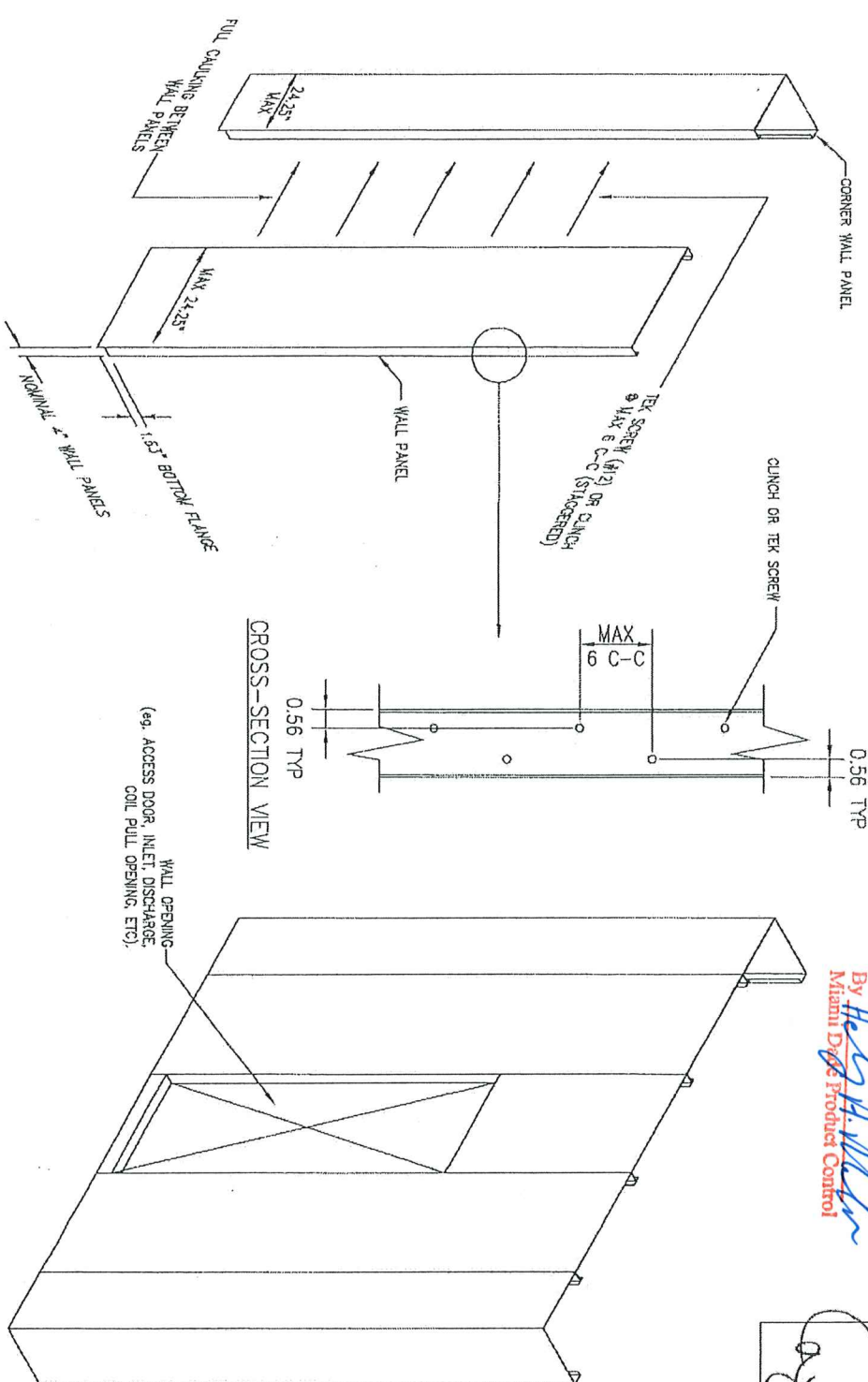




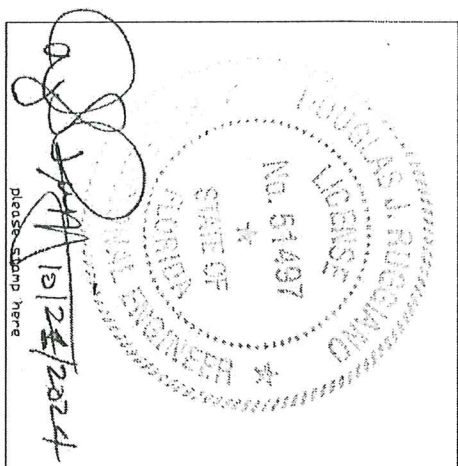
# WALL PANEL CONSTRUCTION DETAIL

## NOTES:

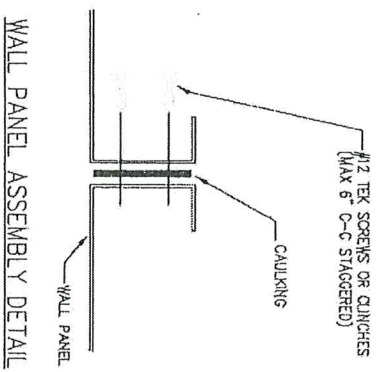
1. WALL PANELS ARE NOMINAL 4" THK AND THEY ARE JOINED TOGETHER BY #12 TEK SCREWS OR CLINCHES @ MAX 6" C-C (STAGGERED).
2. FULL CAULKING BETWEEN PANELS IS DONE TO PREVENT AIR LEAKAGE.
3. WALL PANEL IS FABRICATED FROM 16GA GALVANEALD SHEET METAL, UNLESS OTHERWISE SPECIFIED.
4. MAXIMUM PANEL WIDTH IS 24.25"
5. SEE DRAWING [PAGE 12 -- WALL\_PANEL\_STRUCTURAL\_PROPERTIES] FOR MECHANICAL PROPERTIES AND DIMENSIONS OF TYPICAL WALLS COMPLYING WITH THE FLORIDA BUILDING CODE



**PRODUCT RENEWED**  
 Building Code  
 Acceptance No 25-1203.01  
 Expiration Date 02/10/2031  
 By H. A. Miller  
 Miami Date Product Control



**PRODUCT REVISED**  
 as complying with the Florida Building Code  
 Acceptance No 25-1023.05  
 Expiration Date 03/10/2026  
 By H. A. Miller  
 Miami Date Product Control



WALL PANEL ASSEMBLY DETAIL

TITLE OUTDOOR STYLE AIR HANDLING UNIT, PENTPAK

JOB NO.	DRAWN BY	DATE	CHK NO.	PAGE	REV
TAG	DY	JAN 12, 2011	6945	3 OF 15	
			OUTDOOR	IN	



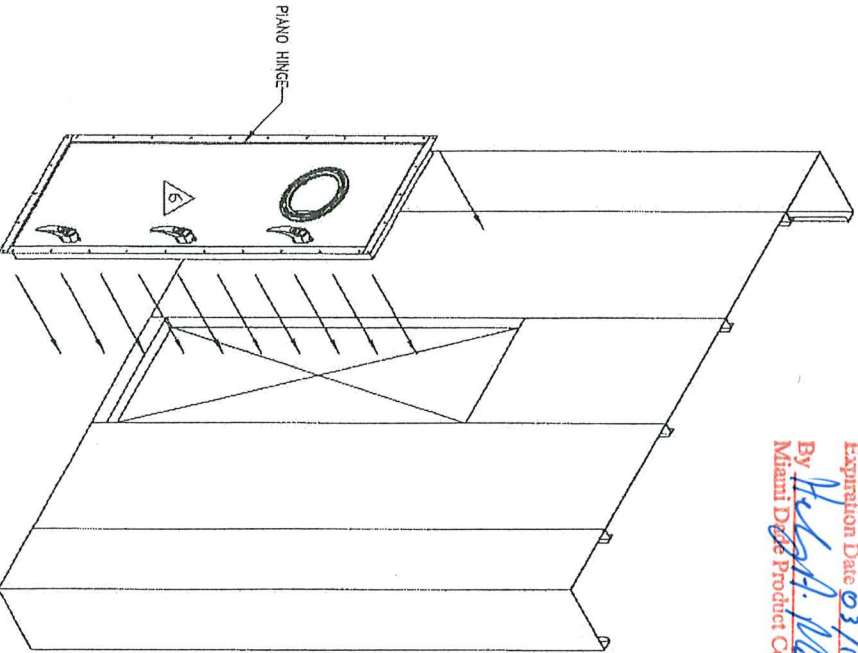


# STANDARD DOOR CONSTRUCTION DETAIL

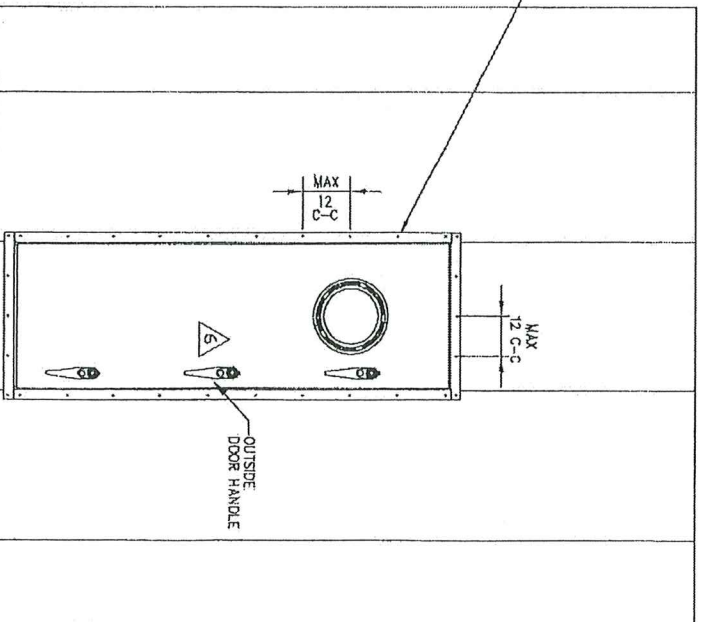
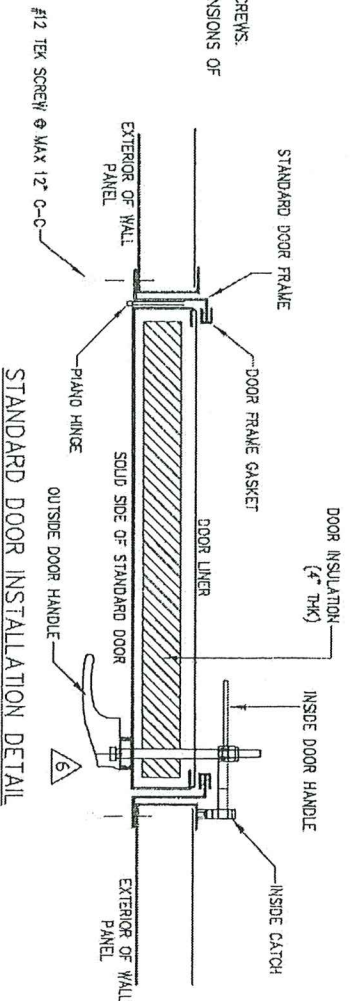
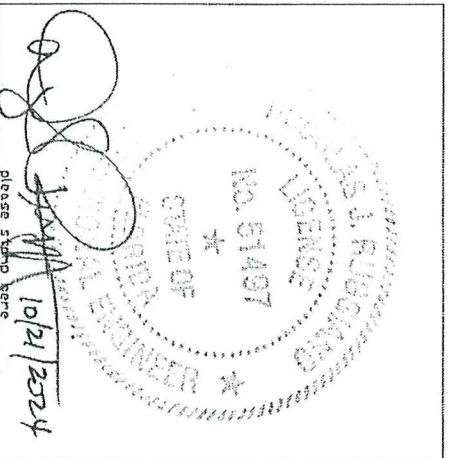
## NOTES:

1. STANDARD DOOR (OUTWARD SWINGING) IS ATTACHED TO DOOR FRAME WITH PLANO HINGE.
2. DOOR ASSEMBLY IS ATTACHED TO EXTERIOR OF AHU AS SHOWN. TYPICALLY @ MAX 12" C-C WITH #12 TEK SCREWS.
3. SEE DRAWING (PAGE 13) -- ACCESS\_DOOR\_STRUCTURAL\_PROPERTIES FOR MECHANICAL PROPERTIES AND DIMENSIONS OF ACCESS DOOR COMPONENTS.

**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
Acceptance No 25-1203.01  
Expiration Date 03/10/2031  
By Heidi A. Miller  
Miami Door Product Control



**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No 21-1023.05  
Expiration Date 03/10/2026  
By Heidi A. Miller  
Miami Door Product Control



## TITLE OUTDOOR STYLE AIR HANDLING UNIT, PENTPAK

JOB NO.	DRAWN BY	DATE	DWG NO.	PAGE	4 OF 15	REVISION	0 (DEC 02, 2016)
TAG	DATE	MAR 15, 2018	TYPE	OUTDOOR	DWG UNITS	IN	REVISION 1 (JAN 12, 2017)
							REVISION 3 (JUL 18, 2016)
							REVISION 6 (MAR 15, 2018)

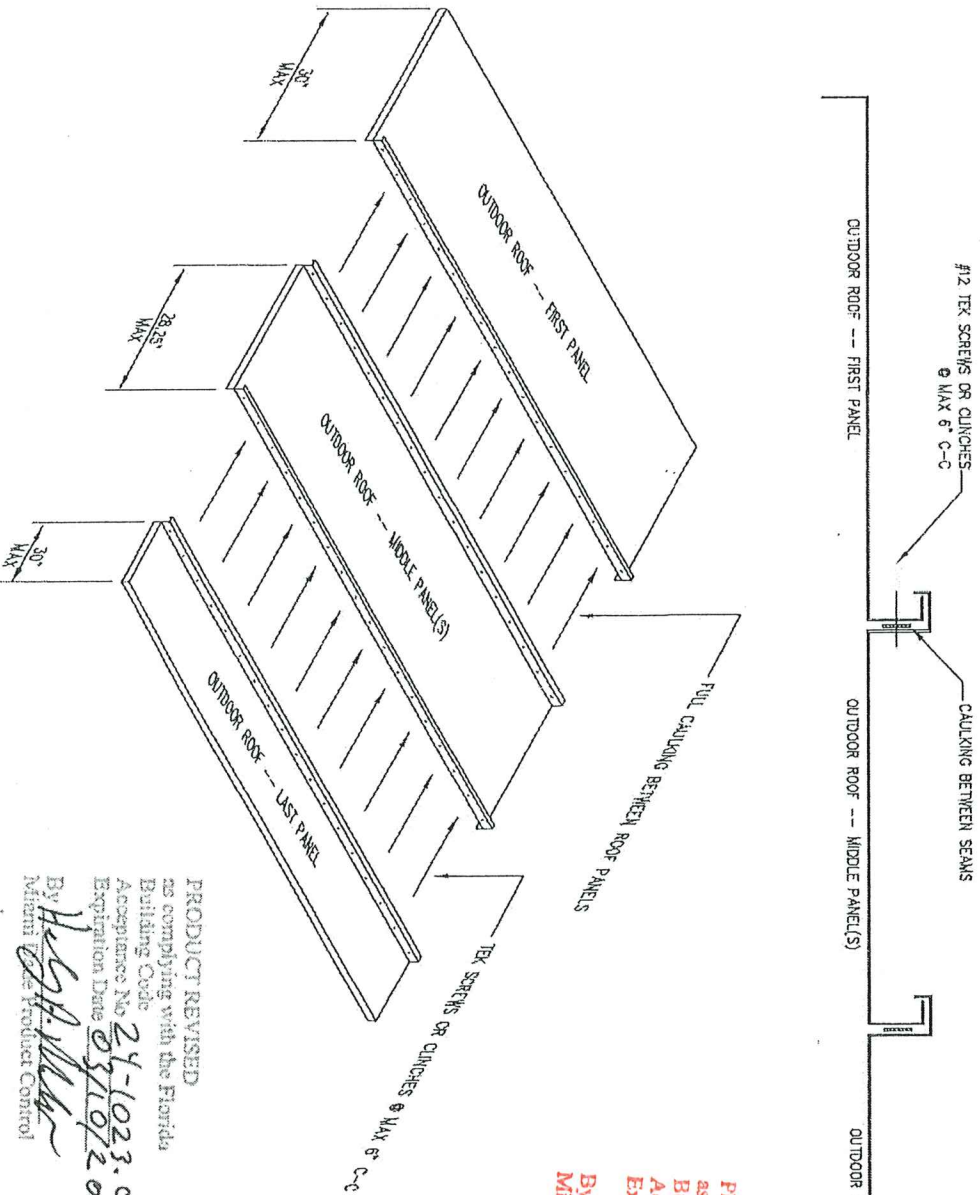
**HAAKON INDUSTRIES**  
1100 DOWNEY ROAD, RICHMOND, B.C. CANADA V7A 6S8



# OUTDOOR ROOF CONSTRUCTION DETAIL

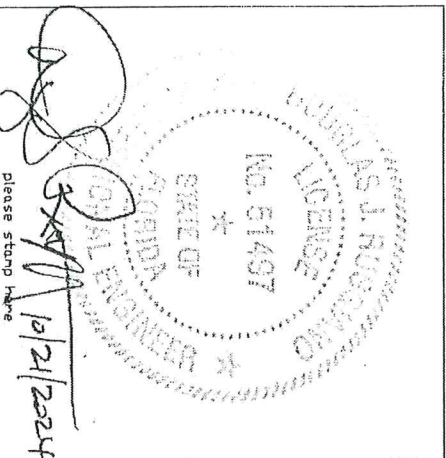
## NOTES:

1. OUTDOOR ROOF PANELS ARE JOINED TOGETHER BY TEK SCREWS OR CLINCHES @ MAX 6" C-C.
2. FULL CAULKING BETWEEN ROOF PANELS IS DONE TO PREVENT AIR LEAKAGE.
3. OUTDOOR ROOF PANEL IS FABRICATED FROM 16GA GALVANEAL SHEET METAL, UNLESS OTHERWISE SPECIFIED.
4. SEE DRAWING [PAGE 14 -- OUTDOOR ROOF PANEL STRUCTURAL PROPERTIES] FOR MECHANICAL PROPERTIES AND DIMENSIONS OF TYPICAL OUTDOOR ROOF COMPONENTS.



PRODUCT RENEWED  
as complying with the Florida  
Building Code  
Acceptance No 25-1203.01  
Expiration Date 03/10/2031  
By H. G. H. H. H.  
Miami Design Product Control

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No 24-1023.05  
Expiration Date 03/10/2026  
By H. G. H. H. H.  
Miami Design Product Control



TITLE OUTDOOR STYLE AIR HANDLING UNIT, PENTPAK

JOB NO.	DRAWN BY	DT	DWG NO.	PAGE	6 OF 15	REVISION	0 (DEC 02, 2010)
TAC	DATE	JAN 12, 2011	TYPE	OUTDOOR	DWG UNITS	IN	REVISION 1 (JAN 12, 2011)
							REVISION 3 (JUL 18, 2016)

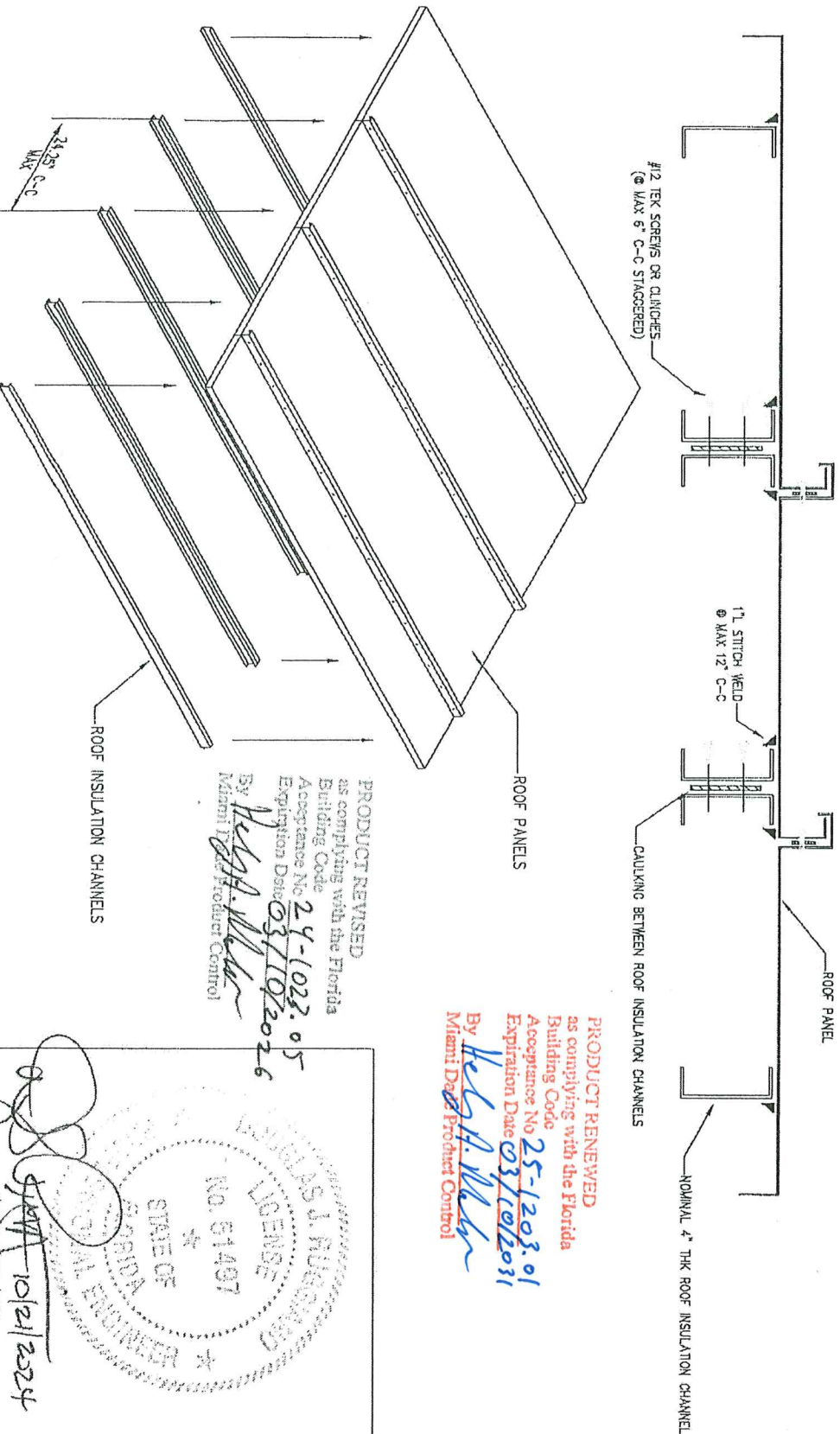




# OUTDOOR ROOF INSULATION CHANNEL CONSTRUCTION DETAIL

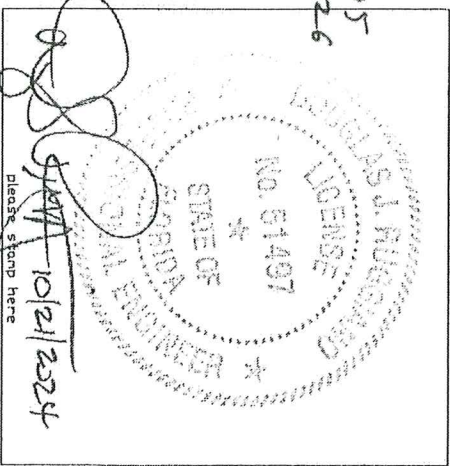
## NOTES:

1. ROOF INSULATION CHANNELS ARE JOINED TOGETHER BY #12 TEK SCREWS OR CLINCHES @ MAX 6" C-C.
2. ROOF INSULATION CHANNELS ARE TACK WELDED TO UNDERSIDE OF ROOF PANEL @ MAX 12" C-C.
3. ROOF INSULATION CHANNEL IS FABRICATED FROM 16GA GALVANEAL SHEET METAL, UNLESS OTHERWISE SPECIFIED.
4. SEE DRAWING [PAGE 14 - OUTDOOR ROOF PANEL STRUCTURAL PROPERTIES] FOR MECHANICAL PROPERTIES AND DIMENSIONS OF TYPICAL ROOF INSULATION CHANNELS.



PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 24-1023.05  
Expiration Date 03/19/2026  
By *Heidi A. Miller*  
Miami Dade Product Control

PRODUCT RENEWED  
as complying with the Florida  
Building Code  
Acceptance No. 25-1203.01  
Expiration Date 03/10/2031  
By *Heidi A. Miller*  
Miami Dade Product Control



TITLE OUTDOOR STYLE AIR HANDLING UNIT, PENTPAK

JOB NO.	DRAWN BY	DATE	DWG NO.	PAGE	OF	REVISION	0 (DEC 02, 2010)
TAC	DATE	JAN 12, 2011	TYPE	OUTDOOR	DWG UNITS	IN	REVISION 1 (JAN 12, 2011)
							REVISION 3 (JUL 18, 2016)

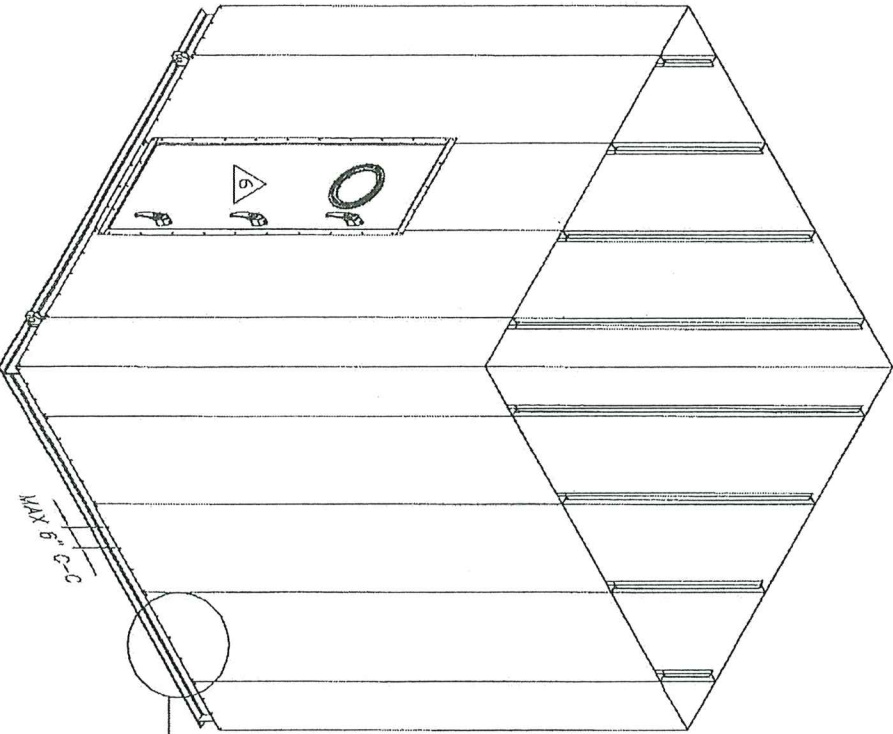


TRIP-DISK SEAL, PROCECO, B.L. CANADA, YEM, ARE

# WALL PANEL TO UNITBASE CONSTRUCTION DETAIL

## NOTES:

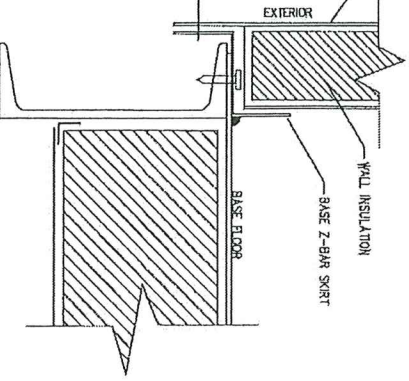
1. BOTTOM FLANGE OF WALL PANEL IS ATTACHED TO BASE Z-BAR SKIRT WITH #12 TEX SCREWS @ MAX 6" C-C.



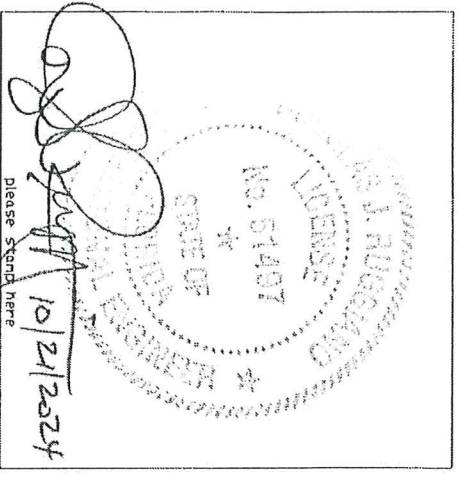
**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
Acceptance No 25-1203.01  
Expiration Date 03/10/2031  
By Heidi A. Miller  
Miami Data Product Control

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No 24-1023.05  
Expiration Date 03/10/2026  
By Heidi A. Miller  
Miami Data Product Control

#12 TEX SCREW @ MAX 6" C-C



WALL PANEL TO UNITBASE INSTALLATION DETAIL



Please Stamp here

## PROJECT OUTDOOR STYLE AIR HANDLING UNIT, PENTPAK

JOB NO.	DRAWN BY	DATE	DATE	DWG NO.	6945	PAGE	6 OF 15	IN	REVISION	0 (DEC 02, 2010)
TAC	DATE	MAR 15, 2018	TYPE	OUTDOOR	DWG UNITS	IN			REVISION	1 (JAN 12, 2011)
									REVISION	3 (JUL 18, 2016)
									REVISION	6 (MAR 15, 2018)



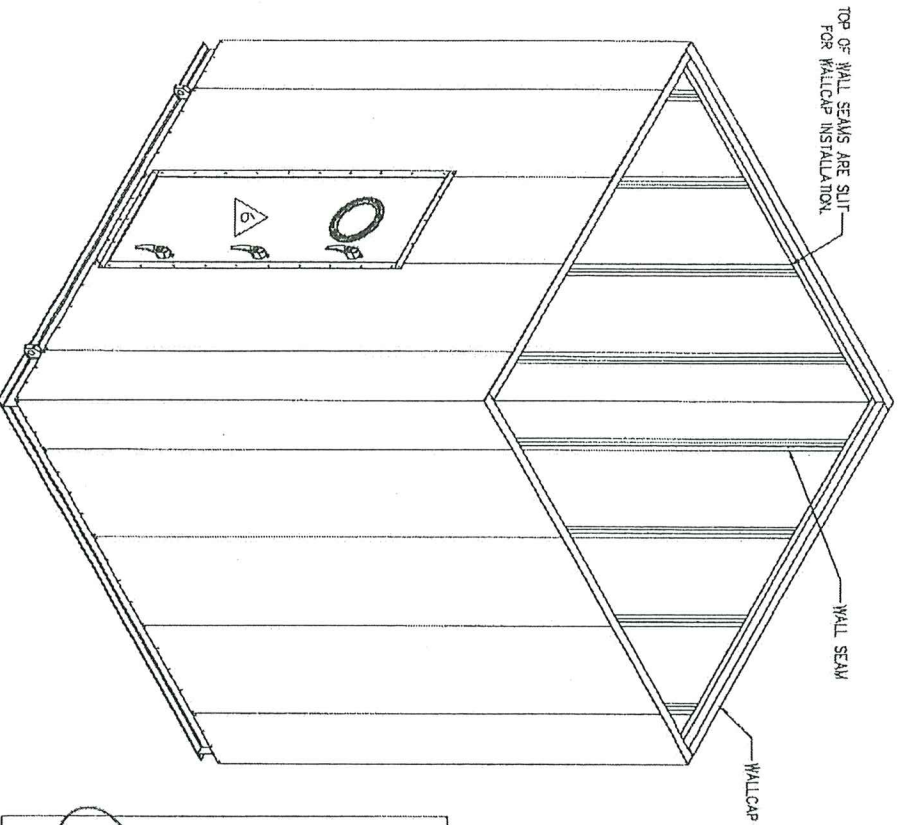
11801 DYKE ROAD, BIRMINGHAM, AL 35244-7974, 404-571-4438



# WALLCAP INSTALLATION DETAIL

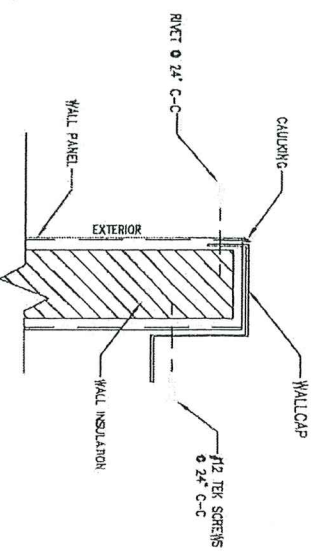
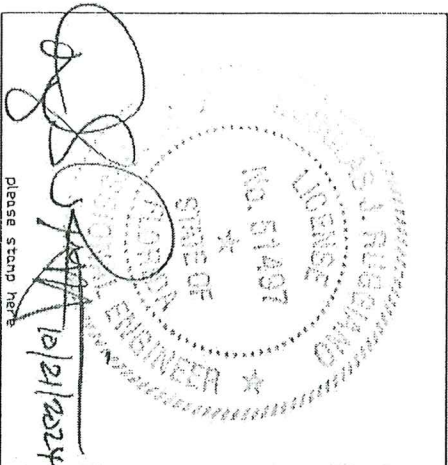
## NOTES:

1. WALLCAPS ARE INSTALLED ON TOP OF WALLS AS SHOWN. WALLCAPS ARE USED TO SUPPORT ROOF.
2. SEE DRAWING [PAGE 15 -- WALLCAP\_STRUCTURAL\_PROPERTIES] FOR MECHANICAL PROPERTIES AND DIMENSIONS OF WALLCAP.

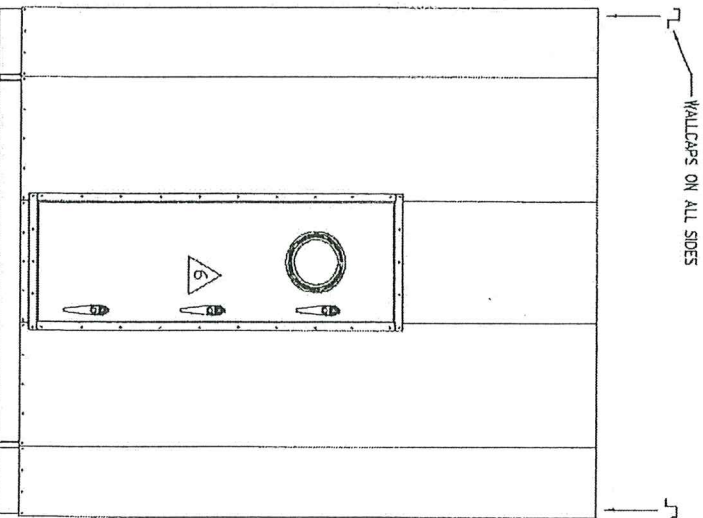


**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
Acceptance No 25-1203.01  
Expiration Date 03/10/2031  
By Heidi H. Miller  
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**PRODUCT REVISED**  
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By Heidi H. Miller  
Miami Dade Product Control



WALLCAP INSTALLATION DETAIL



## PROJECT OUTDOOR STYLE AIR HANDLING UNIT, PENTPAK

JOB NO.	DRAWN BY	DY	DWG NO.	PAGE	9 OF 15
TAC	DATE	MAR 15, 2018	TYPE	OUTDOOR	DWG UNITS
					IN

REVISION	0 (DEC 02, 2010)
REVISION	1 (JAN 12, 2011)
REVISION	3 (JUL 18, 2016)
REVISION	6 (MAR 15, 2018)



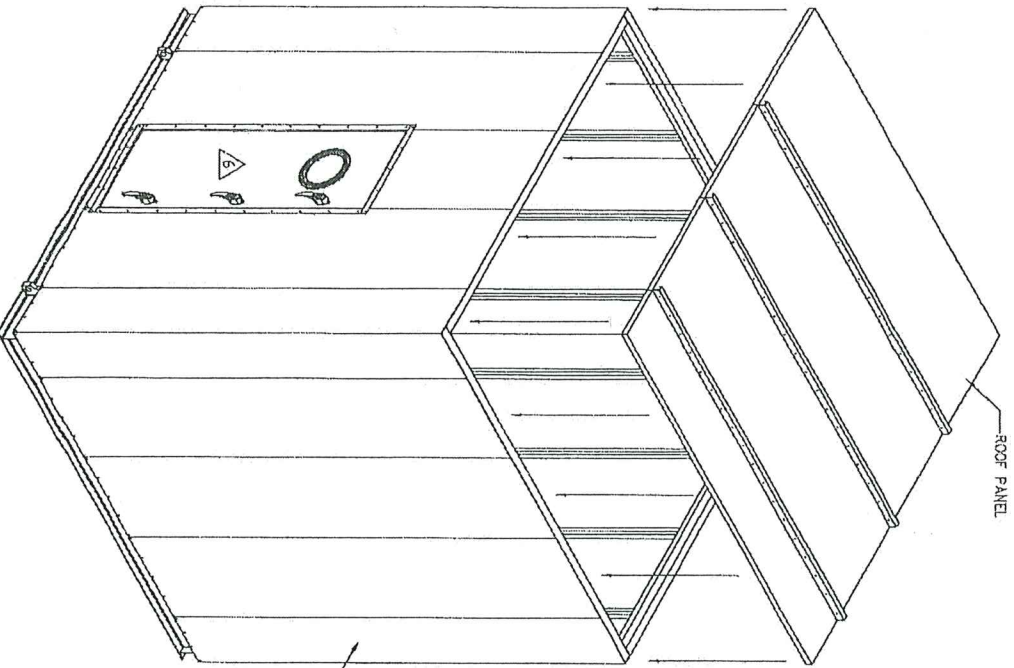
19831 DYKE ROAD, RICHMOND, B.C. CANADA V6V 0T6



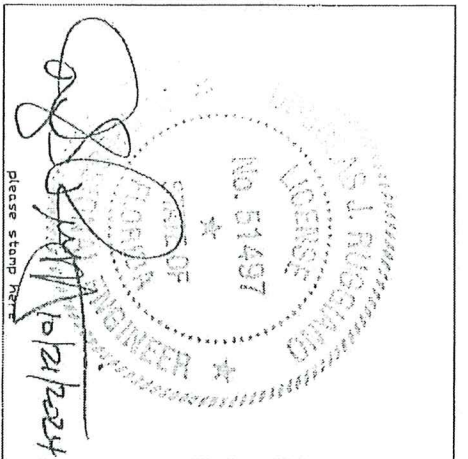
# ROOF INSTALLATION DETAIL

## NOTES:

1. ROOF PANEL IS ATTACHED TO WALL WITH #12 TEK SCREWS @ MAX 6" C-C.

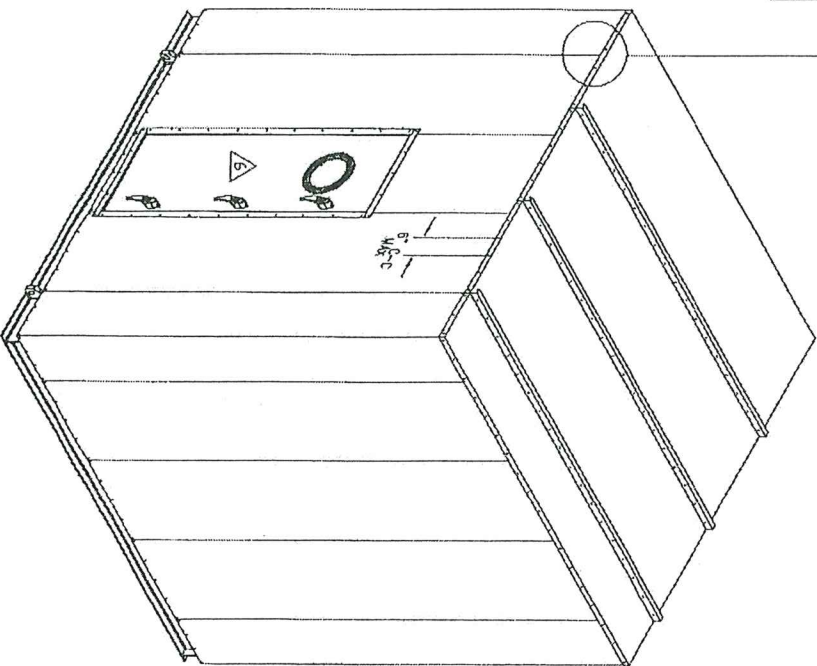


WALL PANEL

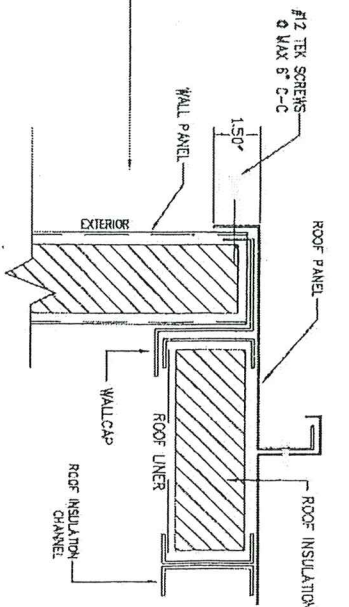


**PRODUCT RENEWED**  
as complying with the Florida  
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Acceptance No 25-1203.01  
Expiration Date 03/10/2011  
By Heidi A. Miller  
Miami Date Product Control

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No 24-1023.05  
Expiration Date 03/10/2026  
By Heidi A. Miller  
Miami Date Product Control



## ROOF INSTALLATION DETAIL

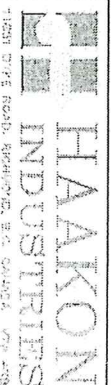


## PROJECT

## OUTDOOR STYLE AIR HANDLING UNIT, PENTPAK

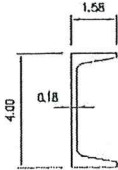
JOB NO.	DRAWN BY	DY	DWG NO.	PAGE	10 OF 15
716	DATE	MAR 15, 2018	TYPE	OUTDOOR	DWG UNITS

REVISION	0	(DEC 02, 2010)
REVISION	1	(JAN 12, 2011)
REVISION	3	(JUL 18, 2016)
REVISION	6	(MAR 15, 2018)



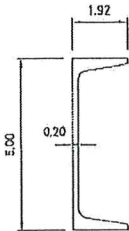
# Mechanical Properties of Typical Unitbase Components

## (A) CROSS-SECTION OF C4X5.4 CHANNEL



Material: ASTM A36 Mild Steel  
Weight Per Foot: 5.4 lbs/ft  
Cross-Section Area: 1.59 in<sup>2</sup>  
Yield Tensile Stress: 36 kpsi  
Ultimate Tensile Stress: 58 kpsi  
Modulus of Elasticity (E):  $29 \times 10^6$  psi  
Modulus of Rigidity (G):  $11.2 \times 10^6$  psi

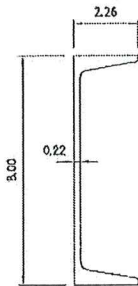
## (B) CROSS-SECTION OF C6X8.2 CHANNEL



Material: ASTM A36 Mild Steel  
Weight Per Foot: 8.2 lbs/ft  
Cross-Section Area: 2.40 in<sup>2</sup>  
Yield Tensile Stress: 36 kpsi  
Ultimate Tensile Stress: 58 kpsi  
Modulus of Elasticity (E):  $29 \times 10^6$  psi  
Modulus of Rigidity (G):  $11.2 \times 10^6$  psi

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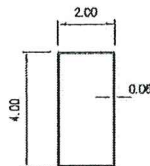
## (C) CROSS-SECTION OF C8X11.5 CHANNEL



Material: ASTM A36 Mild Steel  
Weight Per Foot: 11.5 lbs/ft  
Cross-Section Area: 3.38 in<sup>2</sup>  
Yield Tensile Stress: 36 kpsi  
Ultimate Tensile Stress: 58 kpsi  
Modulus of Elasticity (E):  $29 \times 10^6$  psi  
Modulus of Rigidity (G):  $11.2 \times 10^6$  psi

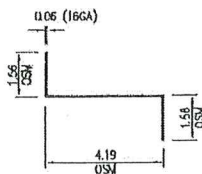
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Expiration Date 03/10/2028  
By: *[Signature]*  
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## (D) CROSS-SECTION OF 4x2x16ga. TUBE



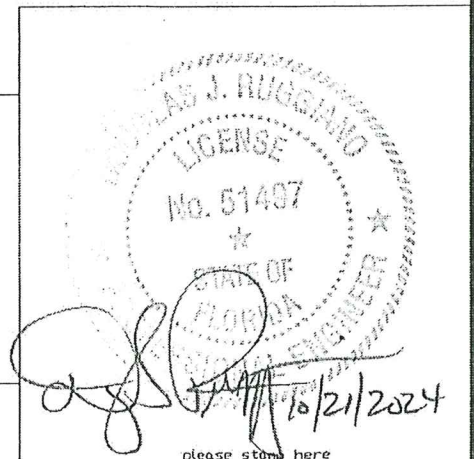
Material: ASTM A36 Hot Rolled Tubing  
Weight Per Foot: 2.5 lbs/ft  
Cross-Section Area: 0.734 in<sup>2</sup>  
Yield Tensile Stress: 36 kpsi  
Ultimate Tensile Stress: 58 kpsi  
Modulus of Elasticity (E):  $29 \times 10^6$  psi  
Modulus of Rigidity (G):  $11.2 \times 10^6$  psi

## (E) BREAK PROFILE OF BASE Z-BAR SKIRT



Material: 16ga Galvalume Sheet Metal Steel  
Cross-Section Area: 0.449 in<sup>2</sup>  
Yield Tensile Stress: 36 kpsi  
Ultimate Tensile Stress: 58 kpsi  
Modulus of Elasticity (E):  $29 \times 10^6$  psi  
Modulus of Rigidity (G):  $11.2 \times 10^6$  psi

NOTE:  
1. ALL DIMENSIONS ARE IN INCHES.



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TITLE OUTDOOR STYLE AIR HANDLING UNIT, PENTAK



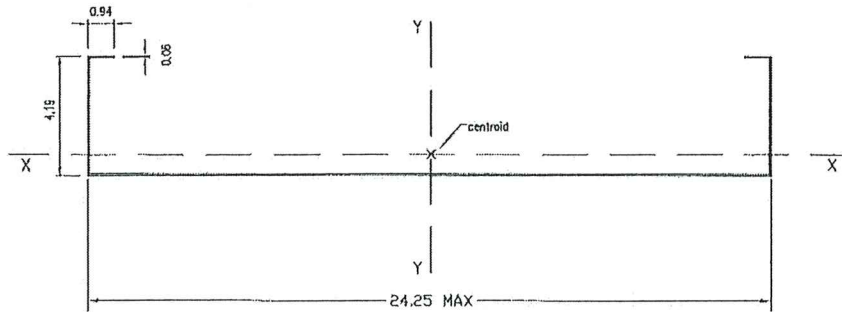
JOB NO.	DRAWN BY DY	DWG NO. 6945	PAGE 11 OF 15	REVISION 1 (JAN 12, 2011)
TAG	DATE JAN 12, 2011	TYPE OUTDOOR	DWG UNITS IN	REVISION 3 (JUL 18, 2016)



# Mechanical Properties of Typical Wall Panels

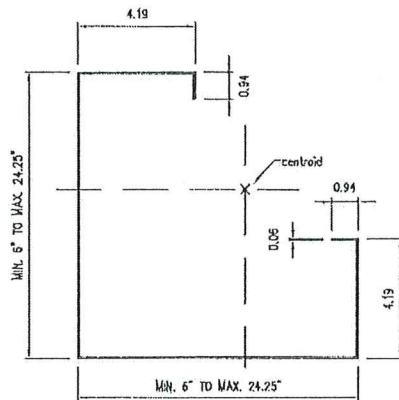
## (A) BREAK PROFILE OF NOMINAL 4" WALL PANEL

Material: 16ga Galvanealed Sheet Metal Steel



## (B) BREAK PROFILE OF NOMINAL 4" CORNER PANEL

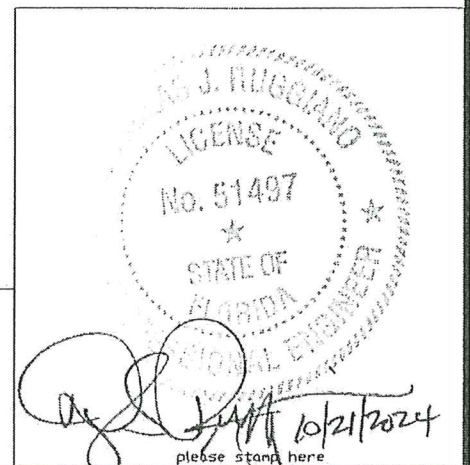
Material: 16ga Galvanealed Sheet Metal Steel



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Miami Dade Product Control

NOTE:  
1. ALL DIMENSIONS ARE IN INCHES.



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HAAKON  
INDUSTRIES  
11254 DUNE ROAD, RICHMOND, B.C. CANADA V7A 1M9

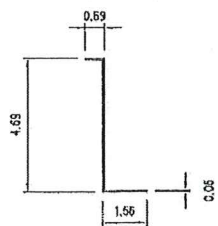
JOB NO.	DRAWN BY DY	DWG NO. 6945	PAGE 12 OF 15	REVISION 1 (JAN 12, 2011)
TAG	DATE JAN 12, 2011	TYPE OUTDOOR	DWG UNITS IN	REVISION 3 (JUL 18, 2016)



## Mechanical Properties of Typical Door Components

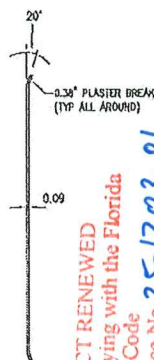
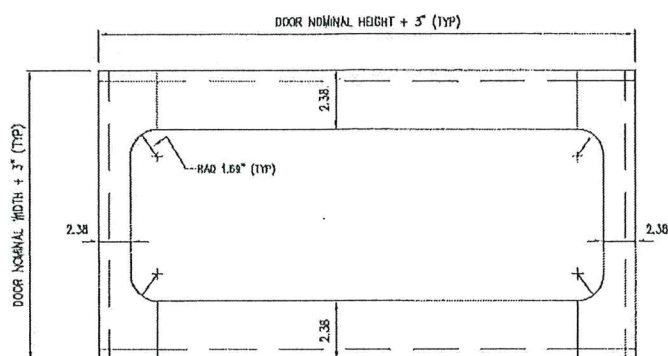
(A) BREAK PROFILE OF DOOR FRAME FOR STANDARD DOOR

Material: 16ga Galvanealed Sheet Metal Steel



(B) BREAK PROFILE OF DOOR FRAME FOR PRESSURE DOOR

Material: 12ga Galvanealed Sheet Metal Steel



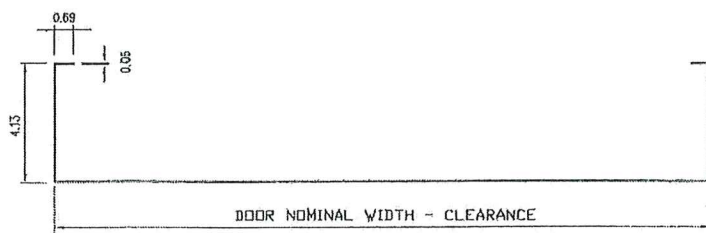
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By Feb A. Allen  
Miami Dept. Product Control

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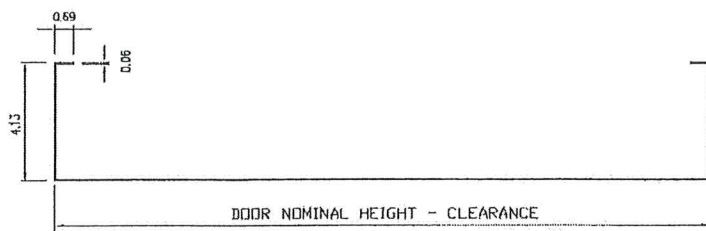
Building Code  
Acceptance No. 24-1023.05  
Expiration Date 03/10/2026  
By: *H. J. P. Miller*  
Miami Design Product Control

(C) BREAK PROFILE OF ACCESS DOOR

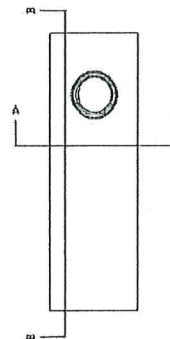
Material: 16ga Galvanealed Sheet Metal Steel



SECTION A-A



SECTION B-B



NOTE:  
1. ALL DIMENSIONS ARE IN INCHES.

AS J. RUDEN  
LICENSE  
No. 51497  
★  
STATE OF  
FLORIDA  
SOCIAL ENGINEER

*[Handwritten signature]* 10/21/2024

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TITLE

OUTDOOR STYLE AIR HANDLING UNIT, PENTAK



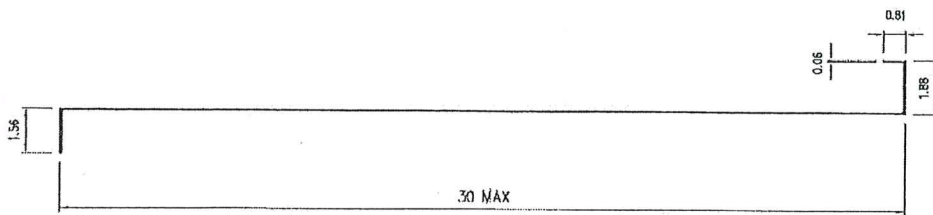
**HAKON  
INDUSTRIES**  
11801 DEER ROAD, RICHMOND, B.C. CANADA V6V 4A6

JOB NO.	DRAWN BY DY	DWG NO. 6945	PAGE 13 OF 15	REVISION 1 (JAN 12, 2011)
TAG	DATE JAN 12, 2011	TYPE OUTDOOR	DWG UNITS IN	REVISION 3 (JUL 18, 2016)

# Mechanical Properties of Typical Outdoor Roof Components

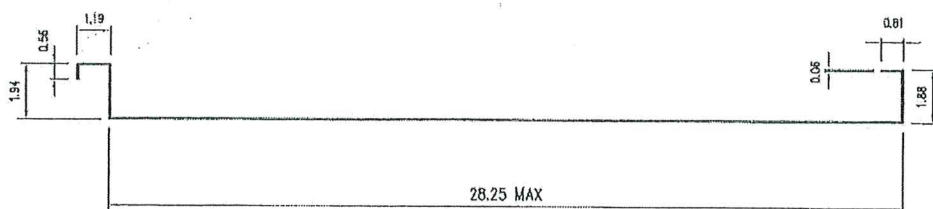
## (A) BREAK PROFILE OF TYPICAL OUTDOOR ROOF PANEL -- FIRST PANEL

Material: 16ga Galvanealed Sheet Metal Steel



## (B) BREAK PROFILE OF TYPICAL OUTDOOR ROOF PANEL -- MIDDLE PANEL(S)

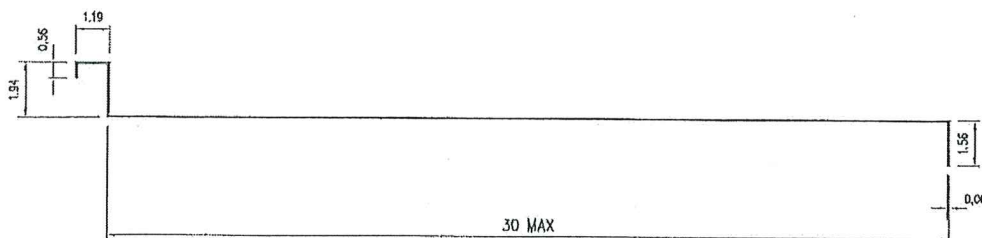
Material: 16ga Galvanealed Sheet Metal Steel



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## (C) BREAK PROFILE OF TYPICAL OUTDOOR ROOF PANEL -- LAST PANEL

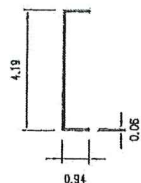
Material: 16ga Galvanealed Sheet Metal Steel



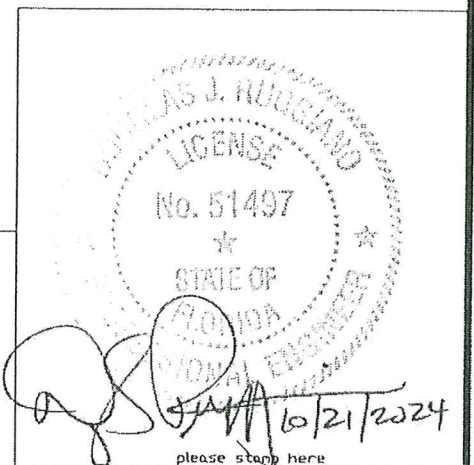
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Building Code  
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## (D) BREAK PROFILE OF TYPICAL ROOF INSULATION CHANNEL

Material: 16ga Galvanealed Sheet Metal Steel



NOTE:  
1. ALL DIMENSIONS ARE IN INCHES.



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TAC	DATE JAN 12, 2011	TYPE OUTDOOR	DWG UNITS IN	REVISION 3 (JUL 18, 2016)

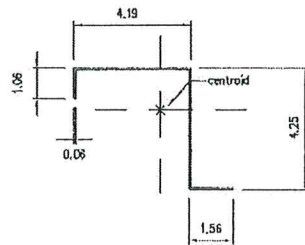
11851 DUBL ROAD, BIRMINGHAM, AL 35244 USA



# Mechanical Properties of Wallcap

(A) BREAK PROFILE OF WALLCAP

Material: 16ga Galvanealed Sheet Metal Steel



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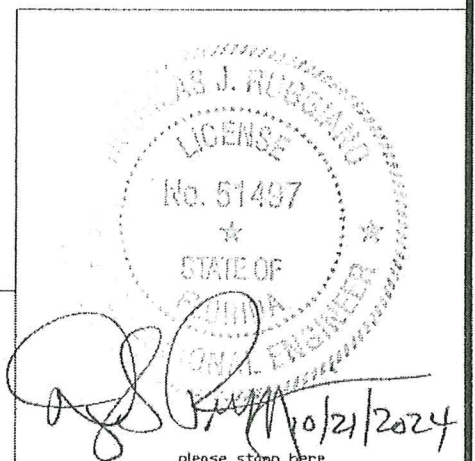
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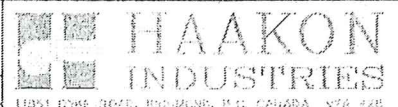
By *Heidi A. Miller*  
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