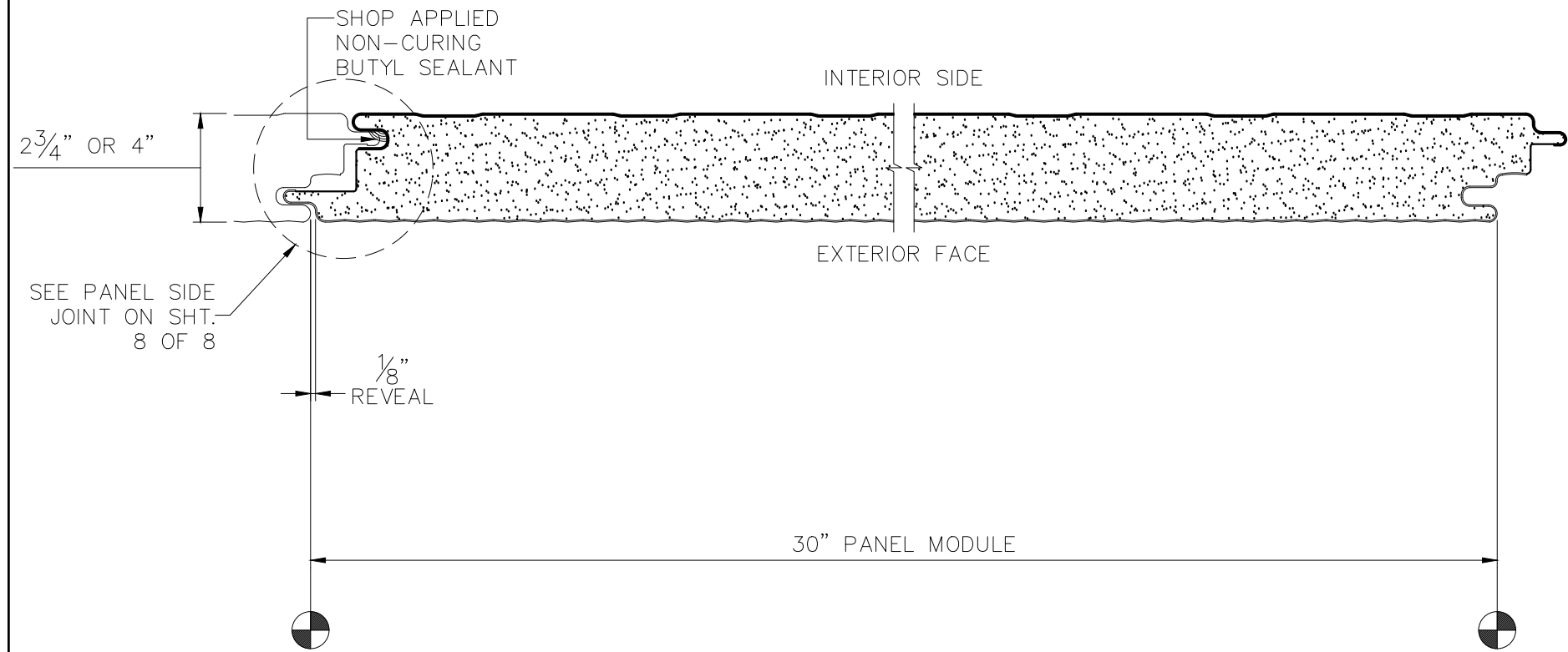


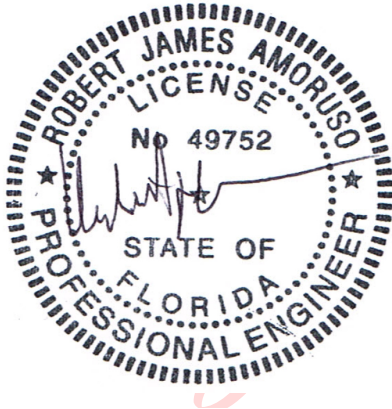


VERSAWALL PANEL – HVHZ

PANEL SPECIFICATIONS

1. INTERIOR SKIN SHALL BE ASTM A653, GRADE 50, G90 GALVANIZED STEEL WITH 0.029" MINIMUM THICKNESS.
2. EXTERIOR SKIN SHALL BE ASTM A653, GRADE 50, G90 GALVANIZED STEEL WITH 0.029" MINIMUM THICKNESS.
3. SHOP APPLIED SEALANT SHALL BE 3/8"x3/8" CONTINUOUS BEAD OF NON-CURING BUTYL (JS-773) MANUFACTURED BY TREMCO, BEACHWOOD, OHIO.
4. FIELD APPLIED SEALANT SHALL BE TREMCO JS-773, NON CURING BUTYL BY TREMCO, BEACHWOOD, OHIO.
5. CORE MATERIAL IS HUNTSMAN RUBITHERM POLYISOCYANURATE (PIR) INSULATING FOAM CORE WITH A DENSITY OF 2.4 (MIN.) PCF TO 2.7 PCF.
6. POLYISOCYANURATE FOAM PLASTIC PROPERTIES:
 - 6.1. SELF IGNITION TEMPERATURE per ASTM D1929 – 932°F GREATER THAN 650°F
 - 6.2. FLASH IGNITION TEMPERATURE per ASTM D1929 – 824°F.
 - 6.3. FLAME SPREAD INDEX per ASTM E84 – LESS THAN 75.
 - 6.4. SMOKE DEVELOPED per ASTM E84 – LESS THAN 450.

Robert J. Amoruso, P.E.
Florida P.E. No. 49752



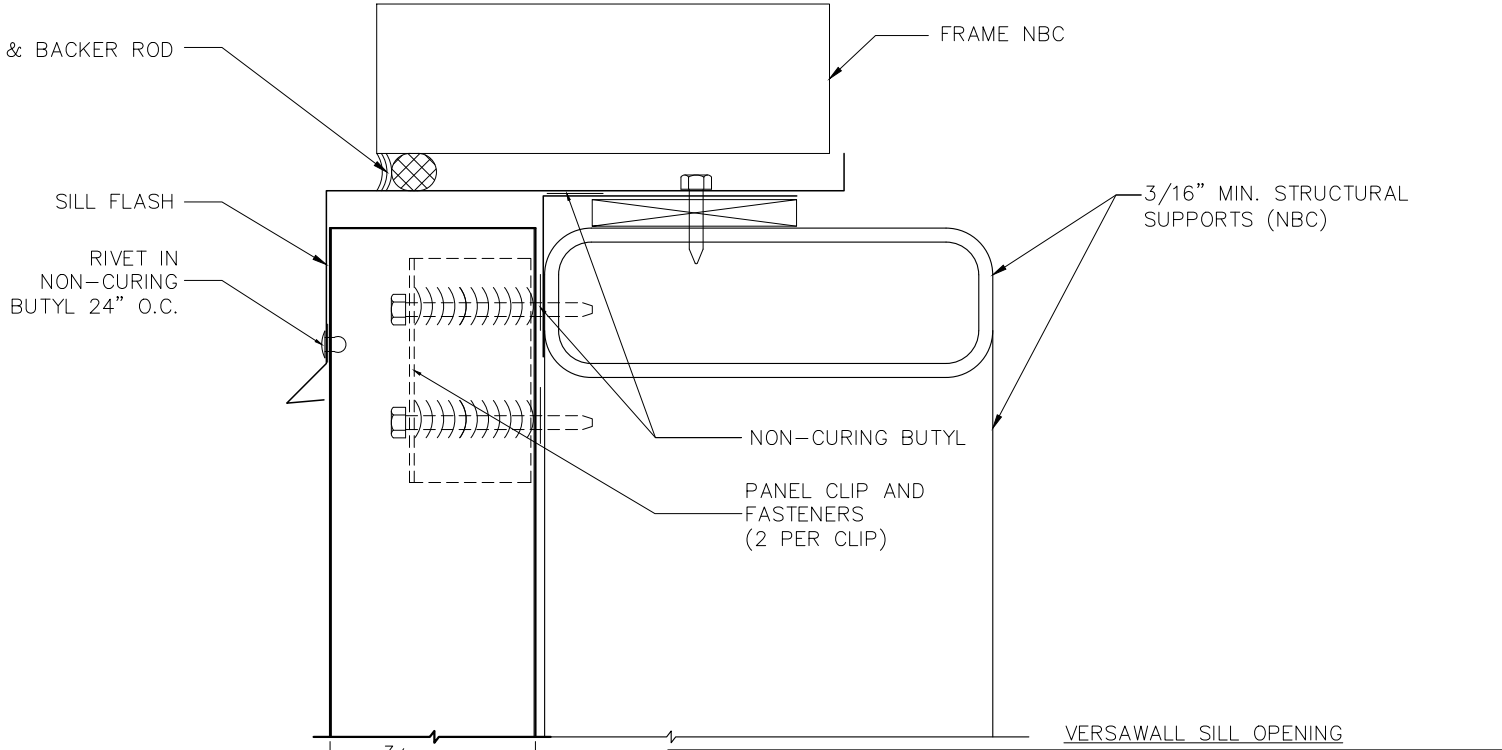
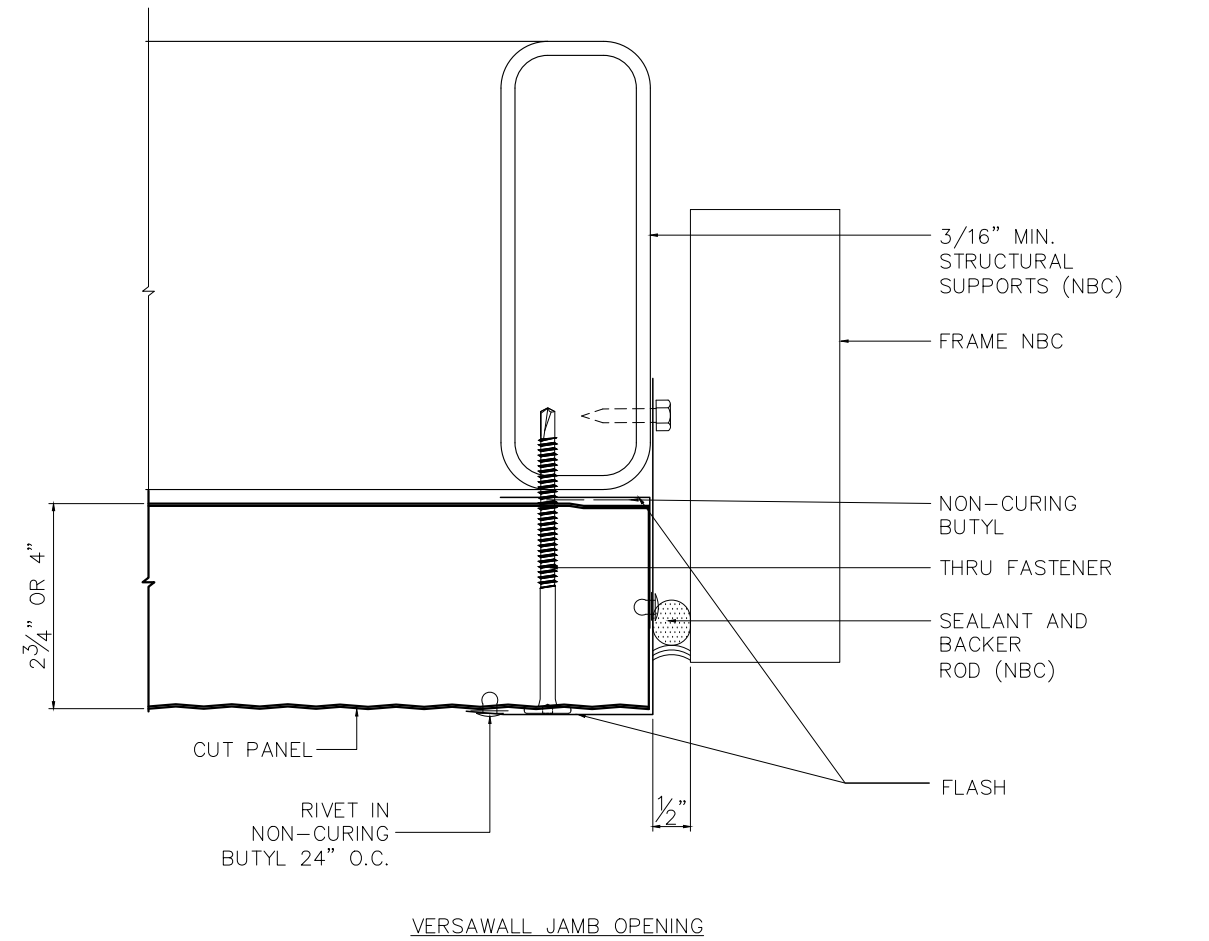
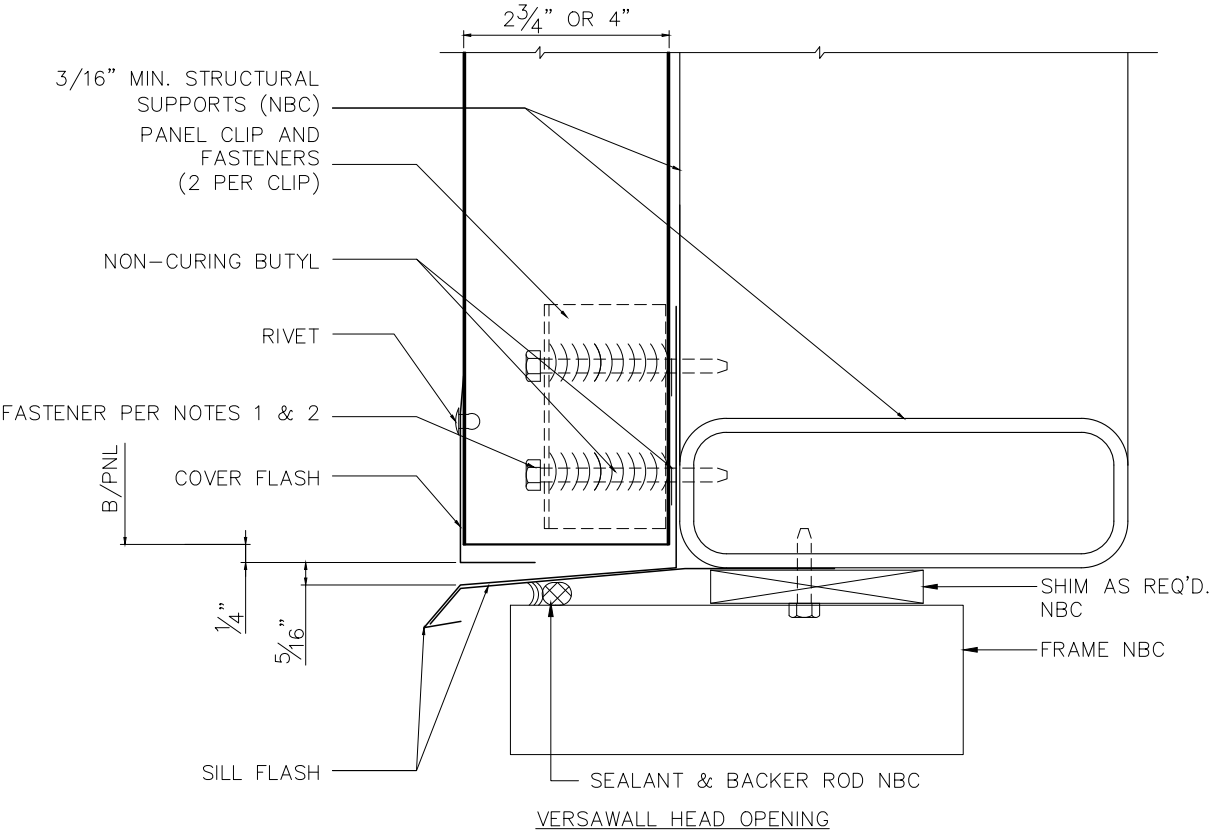
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Amoruso, P.E.
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PTC PRODUCT DESIGN GROUP, LLC
P.O. BOX 520775
Longwood, FL 37252-0775
FBPE Cert. of Auth. No. 25935



1005 BEAVER GRADE ROAD MOON TWP., PA 15108-2944
PHONE: (412) 299-8000 FAX: (412) 299-8317

				CUSTOMER: OWNER: PROJECT: LOCATION:		BY	DATE	CONTRACT No. N/A		
					DRAWN	S.J.A.	1/17/19	DRAWING No. 1 of 8		ISSUE 1
					CHECKED					
					SECTION MANAGER					
1	UPDATE TO 2017 FBC	RJA	2/12/19							
ISSUE	DESCRIPTION	BY	DATE							



Versawall 2.75, 22/22 GA., 30" Module	
Attached into 3/16" steel w/ 2 Fasteners per clip	
Span (FT)	Design Pressure (PSF)
8.00	65.3
7.75	67.4
7.50	69.6
7.25	72.0
7.00	74.6
6.75	77.3
6.50	80.3
6.25	83.5
6.00	87.0
5.75	90.8
5.50	94.9
5.25	99.5
5.00	104.4
4.75	109.9
4.50	116.0
4.25	122.9
4.00	130.6
3.75	139.3
3.50	149.2
3.25	154.1
3.00	159.1
2.75	164.0
2.50	169.0
2.33	177.5
Also applicable to Versawall 4, 22/22 GA. 30" Module	

- * MAXIMUM PANEL SPAN = 8'-0" AND MINIMUM PANEL SPAN = 2'-4". FOR MAXIMUM DESIGN PRESSURE, SEE TABLE.
- ** MINIMUM STRUCTURAL SUPPORT MATERIAL THICKNESS "t" SHALL BE AS FOLLOWS:
 $8'-0" \leq \text{PANEL SPAN} \leq 2'-4": t = \frac{3}{16}"$ MINIMUM
- 1. FASTENERS TO BE 1/4-14 HEX HEAD 304 STAINLESS STEEL-2 PER CLIP.
- 2. FASTENERS TO BE ONLY THOSE APPROVED HEREIN.
- 3. THE MAXIMUM PANEL DEFLECTION SHALL BE L/180.
- 4. PANEL SHALL BE ATTACHED TO STEEL SUPPORTS USING CLIPS IN THE SIDE JOINT AND FLASHINGS AS SHOWN.
- 5. PANELS PROVIDE NO DIAPHRAGM CAPACITY.

NOTE: PRODUCT APPROVAL IS LIMITED TO THE WALL PANEL AND ITS FASTENER ATTACHMENT TO THE STRUCTURAL STEEL FRAMING. THE STRUCTURAL ADEQUACY OF THE STEEL FRAMING AND ALL OTHER STRUCTURAL MEMBERS, CONNECTIONS, AND FOUNDATION SHALL BE REVIEWED BY THE STRUCTURAL PLANS EXAMINER OF THE APPROPRIATE BUILDING DEPARTMENT.

DETAILS SHOWN WITH VERSAWALL PANEL IN VERTICAL ORIENTATION.

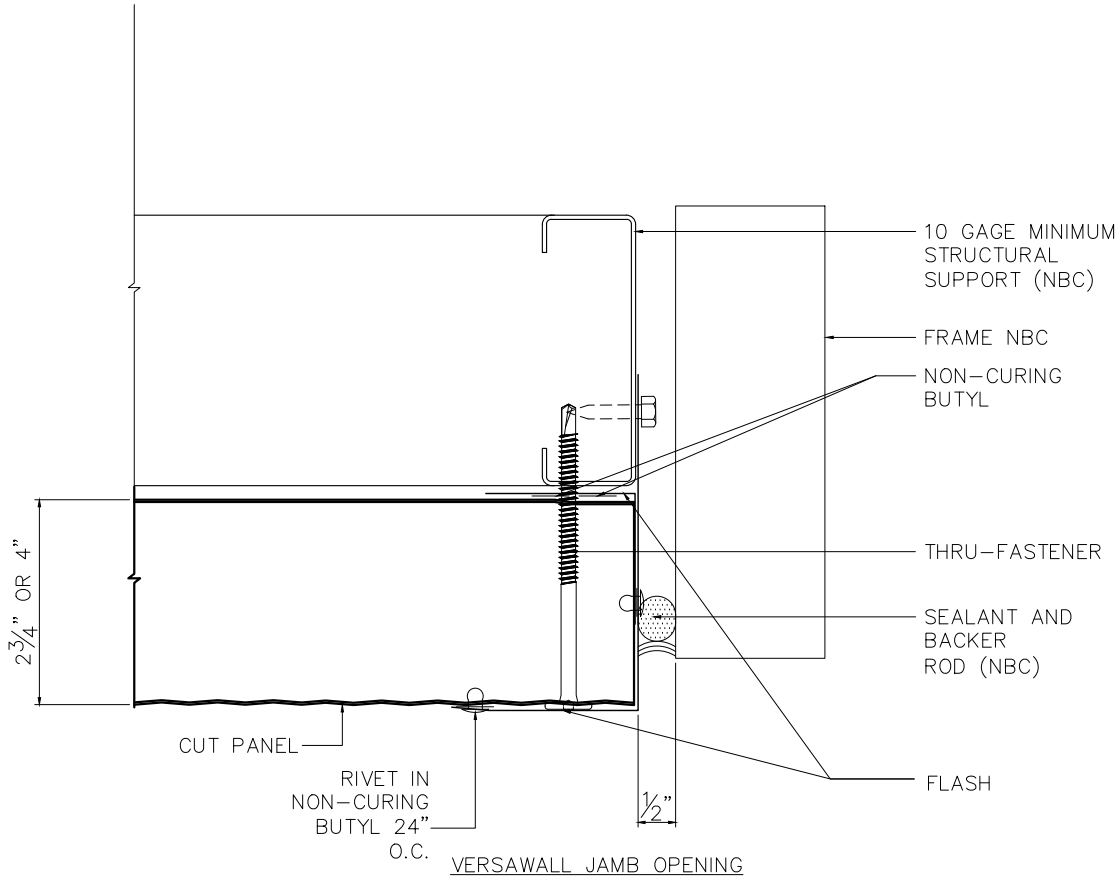
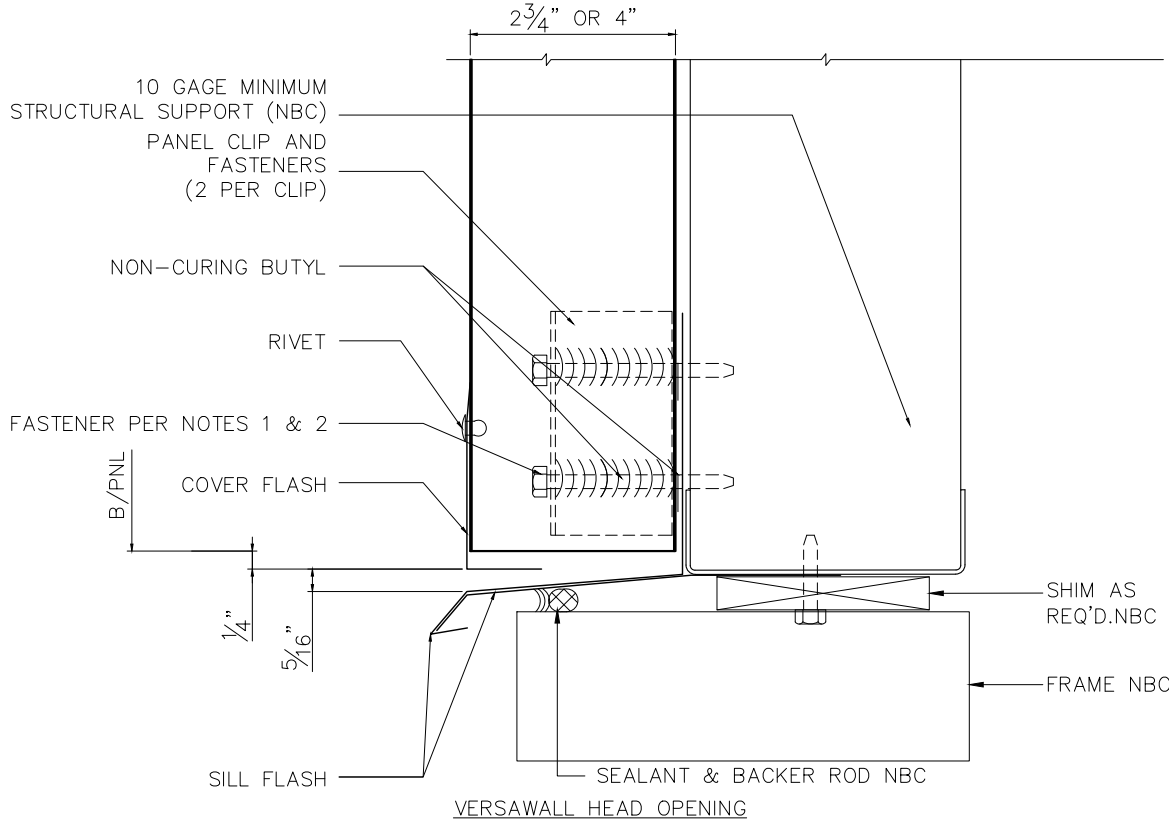
Robert J. Amoruso, P.E.
Florida P.E. No. 49752

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Amoruso, P.E.
Date: 2019.02.21
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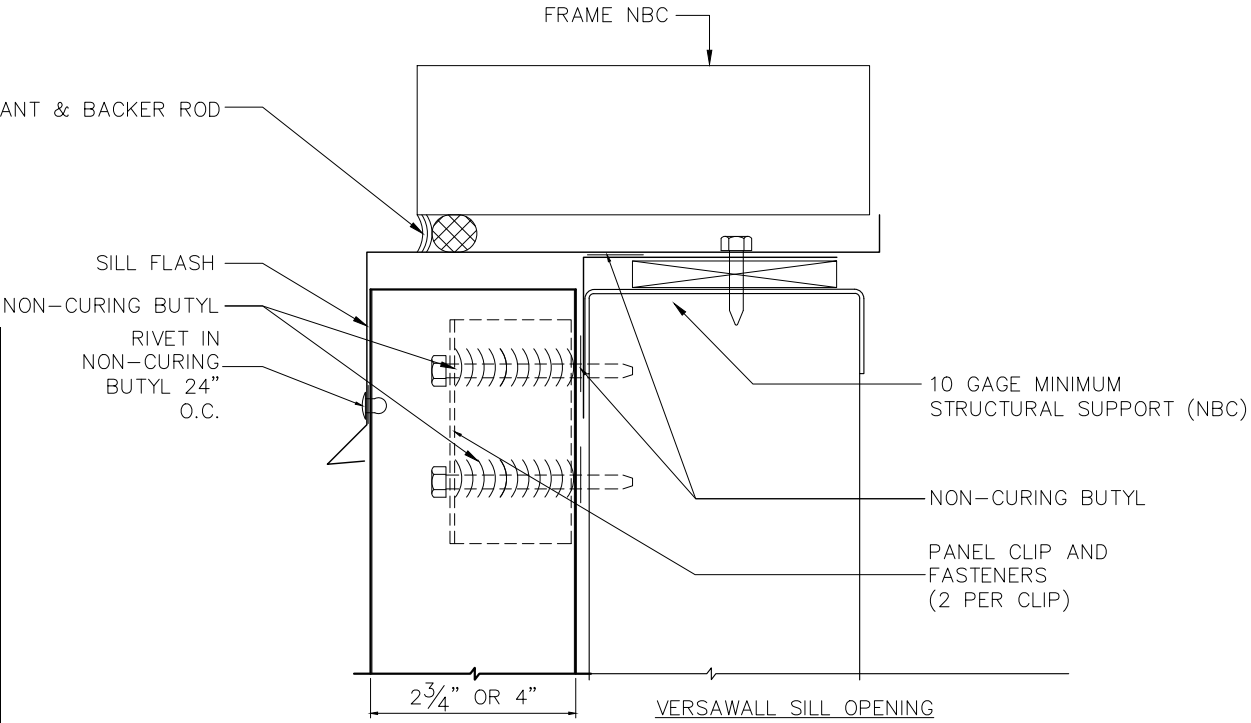
PTC PRODUCT DESIGN GROUP, LLC
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Longwood, FL 37252-0775
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1005 BEAVER GRADE ROAD MOON TWP., PA 15108-2944
PHONE: (412) 299-8000 FAX: (412) 299-8317

				CUSTOMER: OWNER: PROJECT: LOCATION:		BY	DATE	CONTRACT No. N/A	
					DRAWN	S.L.M.	4/14/14	DRAWING No. 2 of 8	ISSUE 1
					CHECKED				
					SECTION MANAGER				
1	UPDATE TO 2017 FBC	RJA	2/12/19						
ISSUE	DESCRIPTION	BY	DATE						



Versawall 2.75, 22/22 GA., 30" Module	
Attached into 10 GA. steel (0.1242" minimum) w/ 2 Fasteners per clip	
Span (FT)	Design Pressure (PSF)
8.00	48.3
7.75	49.8
7.50	51.5
7.25	53.3
7.00	55.2
6.75	57.2
6.50	59.4
6.25	61.8
6.00	64.4
5.75	67.2
5.50	70.2
5.25	73.6
5.00	77.3
4.75	81.3
4.50	85.9
4.25	90.9
4.00	96.6
3.75	103.0
3.50	110.4
3.25	118.9
3.00	128.8
2.75	140.5
2.50	154.6
2.25	171.8
2.00	193.2
1.75	220.9
1.50	257.7
1.33	290.6
Also applicable to Versawall 4, 22/22 GA. 30" Module	



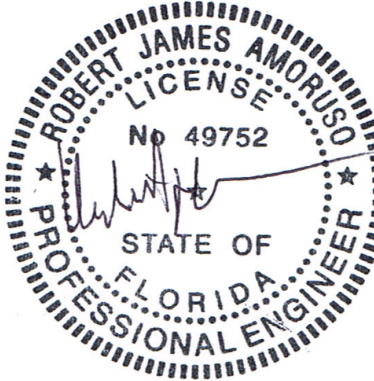
- * MAXIMUM PANEL SPAN = 8'-0" AND MINIMUM PANEL SPAN = 1'-4". FOR MAXIMUM DESIGN PRESSURE, SEE TABLE.
- ** MINIMUM STRUCTURAL SUPPORT MATERIAL THICKNESS "t" SHALL BE AS FOLLOWS: 8'-0" ≤ PANEL SPAN ≥ 1'-4": t = 10 GAGE MINIMUM

- FASTENERS TO BE 1/4-14 HEX HEAD 304 STAINLESS STEEL-2 PER CLIP.
- FASTENERS TO BE ONLY THOSE APPROVED HEREIN.
- THE MAXIMUM PANEL DEFLECTION SHALL BE L/180.
- PANEL SHALL BE ATTACHED TO STEEL SUPPORTS USING CLIPS IN THE SIDE JOINT AND FLASHINGS AS SHOWN.
- PANELS PROVIDE NO DIAPHRAGM CAPACITY.

NOTE: PRODUCT APPROVAL IS LIMITED TO THE WALL PANEL AND ITS FASTENER ATTACHMENT. TO THE STRUCTURAL STEEL FRAMING. THE STRUCTURAL ADEQUACY OF THE STEEL FRAMING AND ALL OTHER STRUCTURAL MEMBERS, CONNECTIONS, AND FOUNDATION SHALL BE REVIEWED BY THE STRUCTURAL PLANS EXAMINER OF THE APPROPRIATE BUILDING DEPARTMENT.

DETAILS SHOWN WITH VERSAWALL PANEL IN VERTICAL ORIENTATION.

Robert J. Amoruso, P.E.
 Florida P.E. No. 49752



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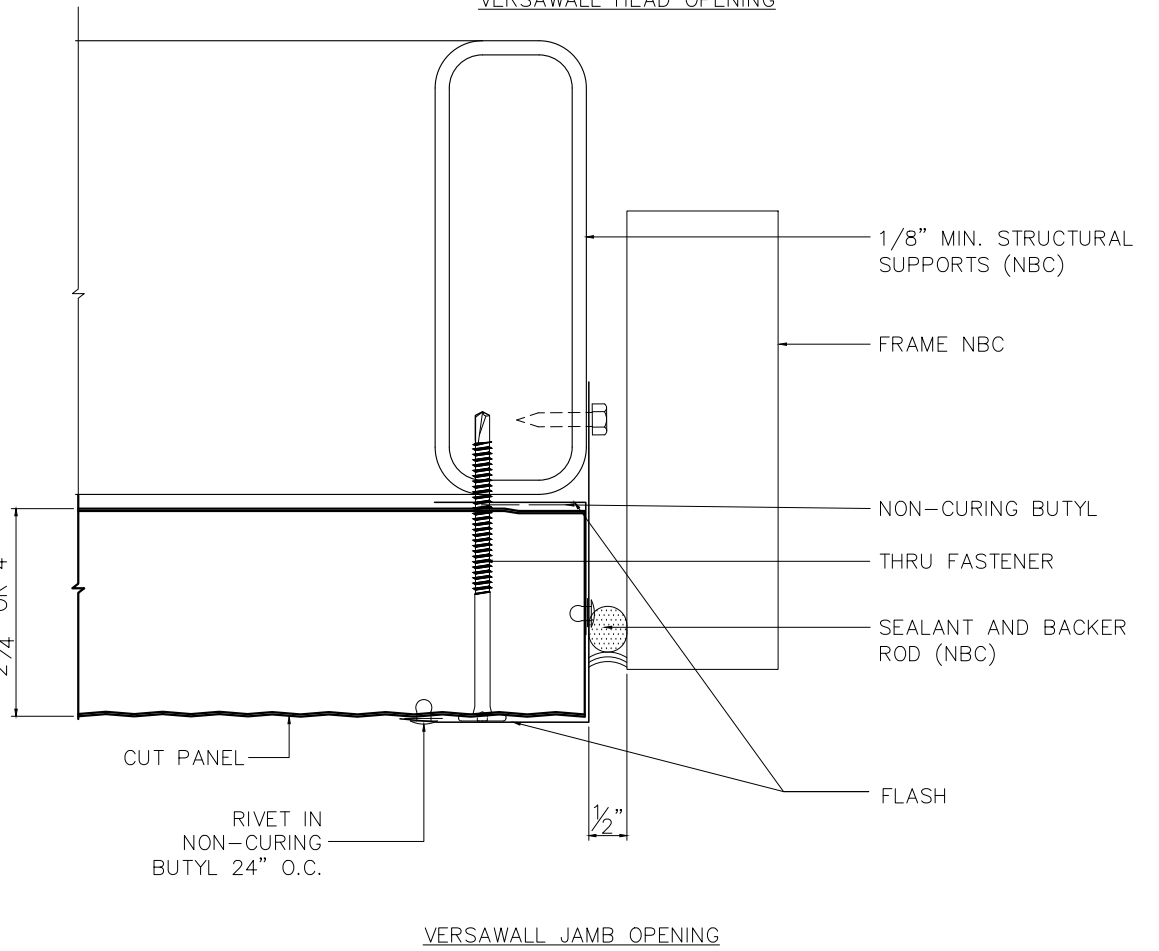
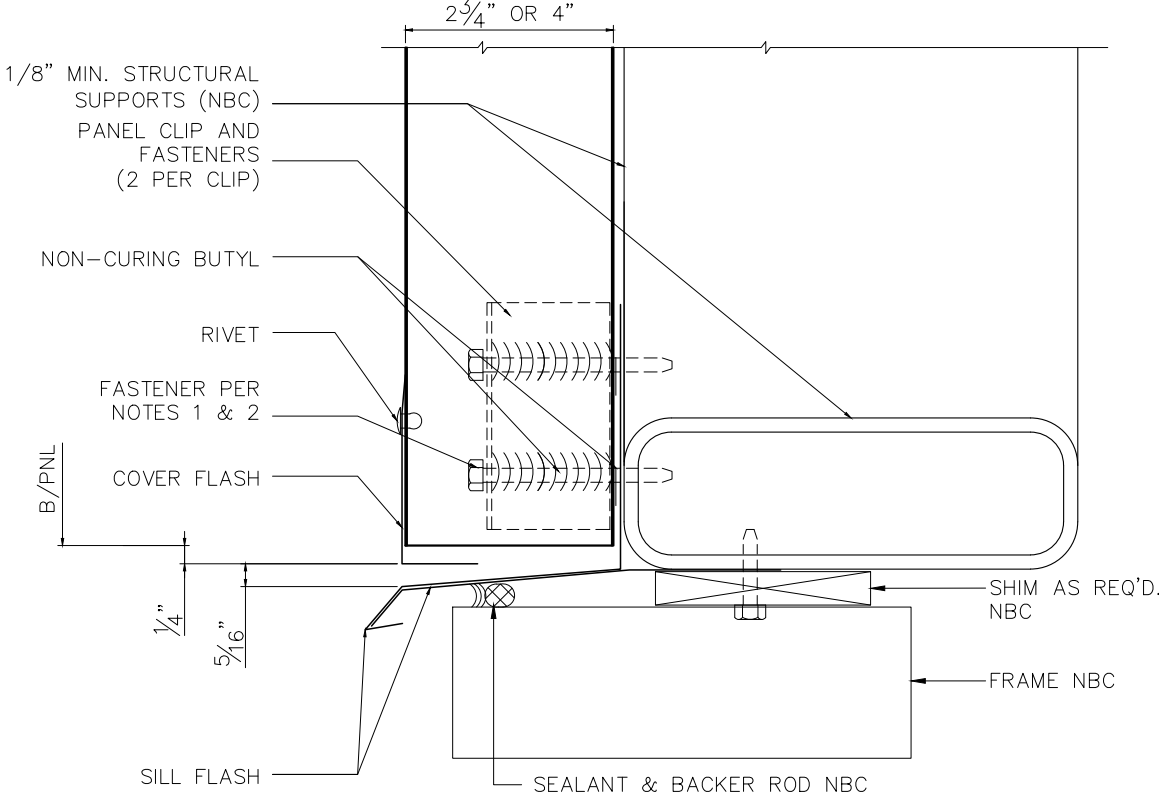
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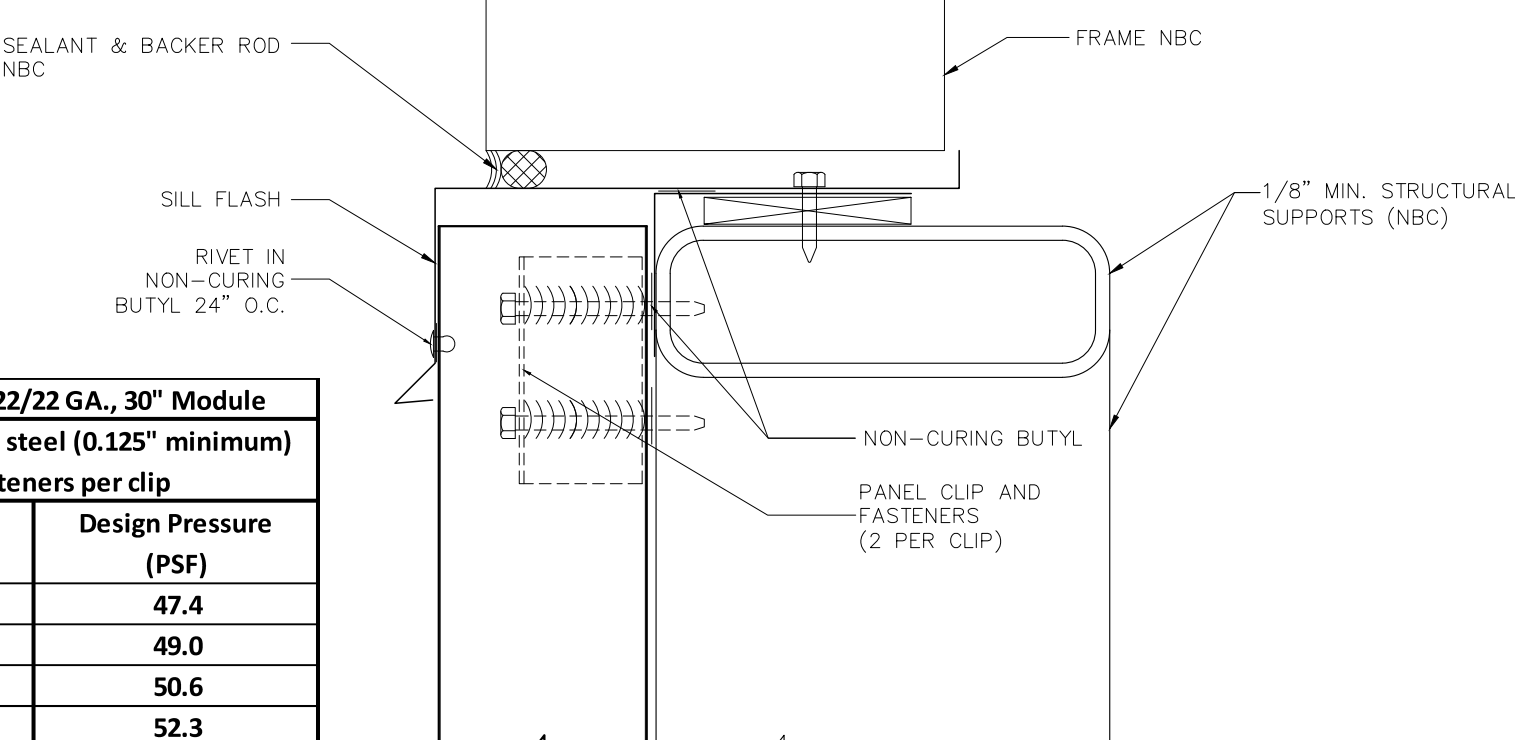
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				CUSTOMER: OWNER: PROJECT: LOCATION:		BY	DATE	CONTRACT No.	
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					CHECKED			DRAWING No.	ISSUE
1	UPDATE TO 2017 FBC	RJA	2/12/19		SECTION			3 of 8	1
ISSUE	DESCRIPTION	BY	DATE		MANAGER				



Versawall 2.75, 22/22 GA., 30" Module	
Attached into 1/8" steel (0.125" minimum) w/ 2 Fasteners per clip	
Span (FT)	Design Pressure (PSF)
8.00	47.4
7.75	49.0
7.50	50.6
7.25	52.3
7.00	54.2
6.75	56.2
6.50	58.4
6.25	60.7
6.00	63.2
5.75	66.0
5.50	69.0
5.25	72.3
5.00	75.9
4.75	79.9
4.50	84.3
4.25	89.3
4.00	94.9
3.75	101.2
3.50	108.5
3.25	116.8
3.00	126.5
2.75	138.0
2.50	151.9
2.25	168.7
2.00	189.8
1.75	217.0
1.50	253.0
1.33	285.5
Also applicable to Versawall 4, 22/22 GA. 30" Module	



- * MAXIMUM PANEL SPAN = 8'-0" AND MINIMUM PANEL SPAN = 1'-4". FOR MAXIMUM DESIGN PRESSURE, SEE TABLE.
- ** MINIMUM STRUCTURAL SUPPORT MATERIAL THICKNESS "t" SHALL BE AS FOLLOWS: 8'-0" ≤ PANEL SPAN ≥ 1'-4": t = 1/8" MINIMUM
1. FASTENERS TO BE 1/4-14 HEX HEAD 304 STAINLESS STEEL-2 PER CLIP.
 2. FASTENERS TO BE ONLY THOSE APPROVED HEREIN.
 3. THE MAXIMUM PANEL DEFLECTION SHALL BE L/180.
 4. PANEL SHALL BE ATTACHED TO STEEL SUPPORTS USING CLIPS IN THE SIDE JOINT AND FLASHINGS AS SHOWN.
 5. PANELS PROVIDE NO DIAPHRAGM CAPACITY.

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DETAILS SHOWN WITH VERSAWALL PANEL IN VERTICAL ORIENTATION.

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Florida P.E. No. 49752

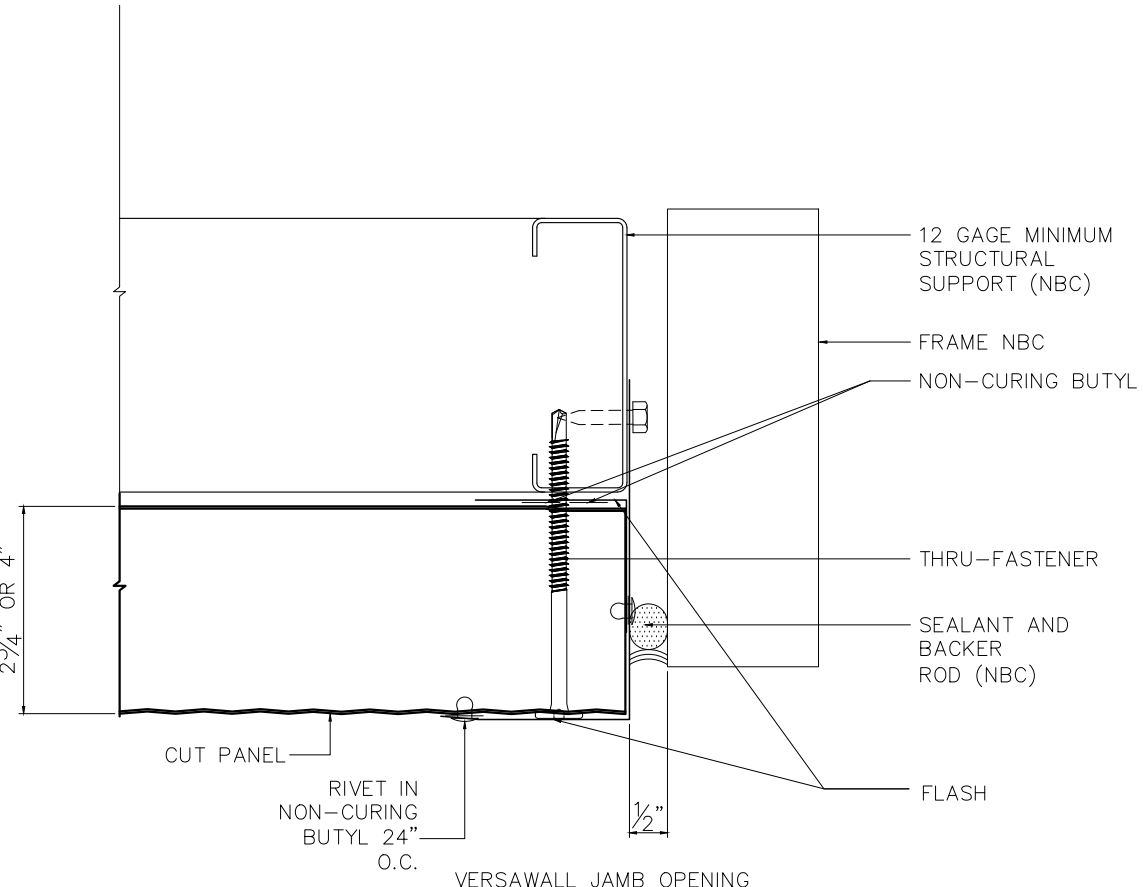
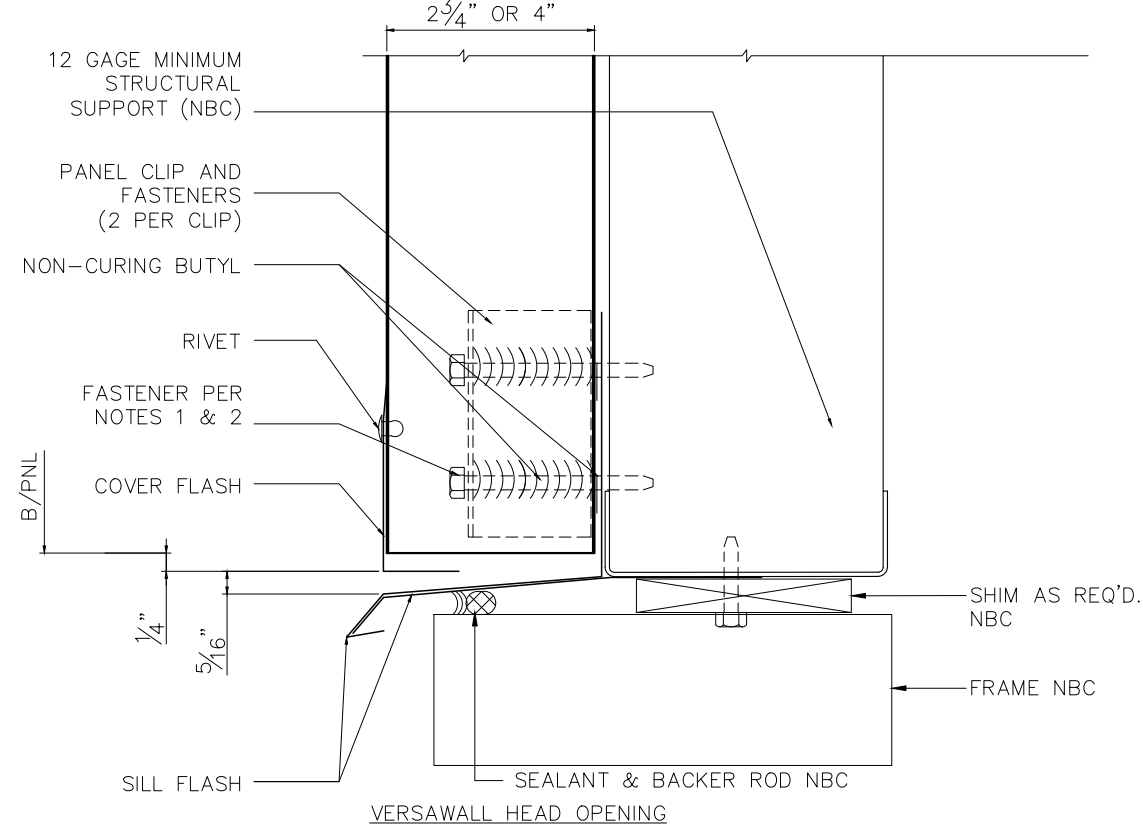
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Amoruso, P.E.
Date: 2019.02.21
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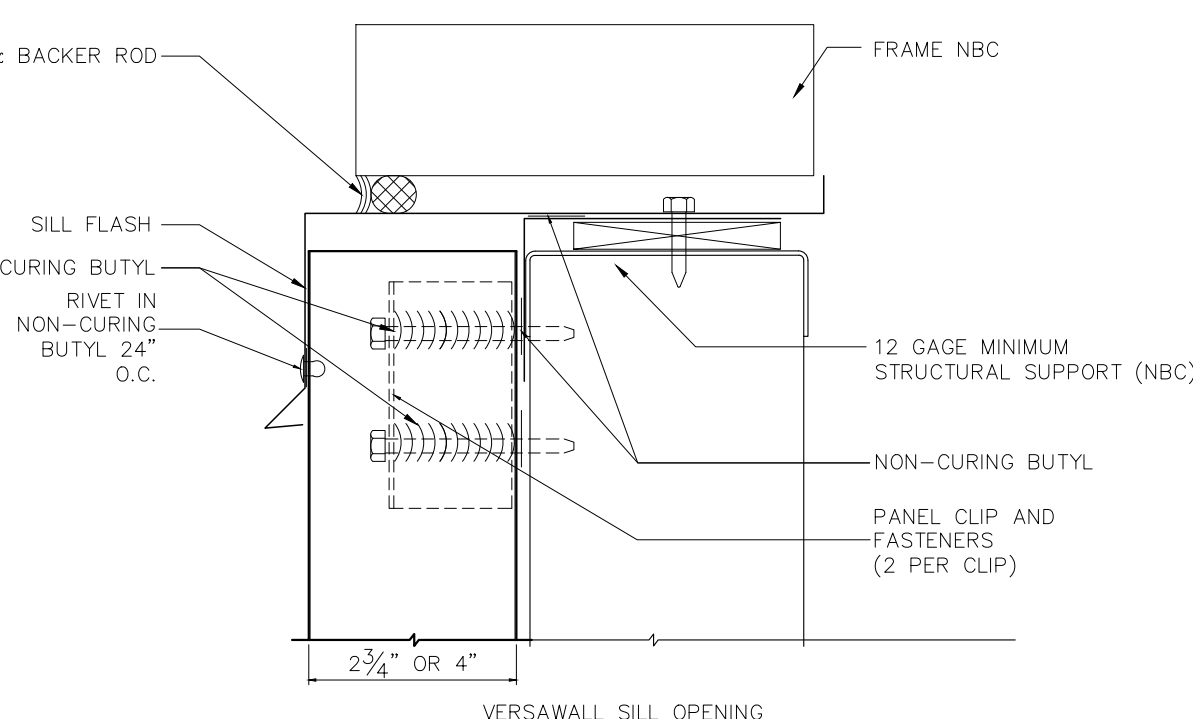


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					CHECKED			DRAWING No.	
1	UPDATE TO 2017 FBC	RJA	2/12/19		SECTION			4 of 8	
ISSUE	DESCRIPTION	BY	DATE		MANAGER			1	



Versawall 2.75, 22/22 GA., 30" Module	
Attached into 12 GA. steel (0.1017" minimum)	
w/ 2 Fasteners per clip	
Span (FT)	Design Pressure (PSF)
8.00	44.8
7.75	46.2
7.50	47.8
7.25	49.4
7.00	51.2
6.75	53.1
6.50	55.1
6.25	57.3
6.00	59.7
5.75	62.3
5.50	65.2
5.25	68.3
5.00	71.7
4.75	75.5
4.50	79.7
4.25	84.4
4.00	89.6
3.75	95.6
3.50	102.4
3.25	110.3
3.00	119.5
2.75	130.4
2.50	143.4
2.25	159.4
2.00	179.3
1.75	204.9
1.50	239.1
1.33	269.6
Also applicable to Versawall 4, 22/22 GA. 30" Module	



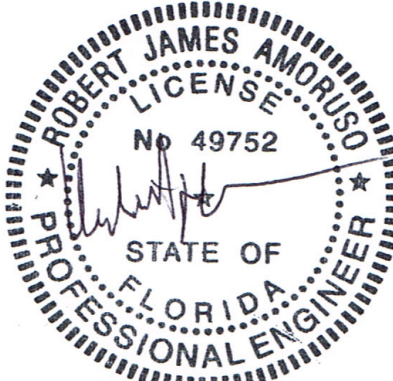
- * MAXIMUM PANEL SPAN = 8'-0" AND MINIMUM PANEL SPAN = 1'-4". FOR MAXIMUM DESIGN PRESSURE, SEE TABLE.
- ** MINIMUM STRUCTURAL SUPPORT MATERIAL THICKNESS "t" SHALL BE AS FOLLOWS:
8'-0" ≤ PANEL SPAN ≥ 1'-4": t = 12 GAGE MINIMUM

1. FASTENERS TO BE 1/4-14 HEX HEAD 304 STAINLESS STEEL-2 PER CLIP.
2. FASTENERS TO BE ONLY THOSE APPROVED HEREIN.
3. THE MAXIMUM PANEL DEFLECTION SHALL BE L/180.
4. PANEL SHALL BE ATTACHED TO STEEL SUPPORTS USING CLIPS IN THE SIDE JOINT AND FLASHINGS AS SHOWN.
5. PANELS PROVIDE NO DIAPHRAGM CAPACITY.

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DETAILS SHOWN WITH VERSAWALL PANEL IN VERTICAL ORIENTATION.

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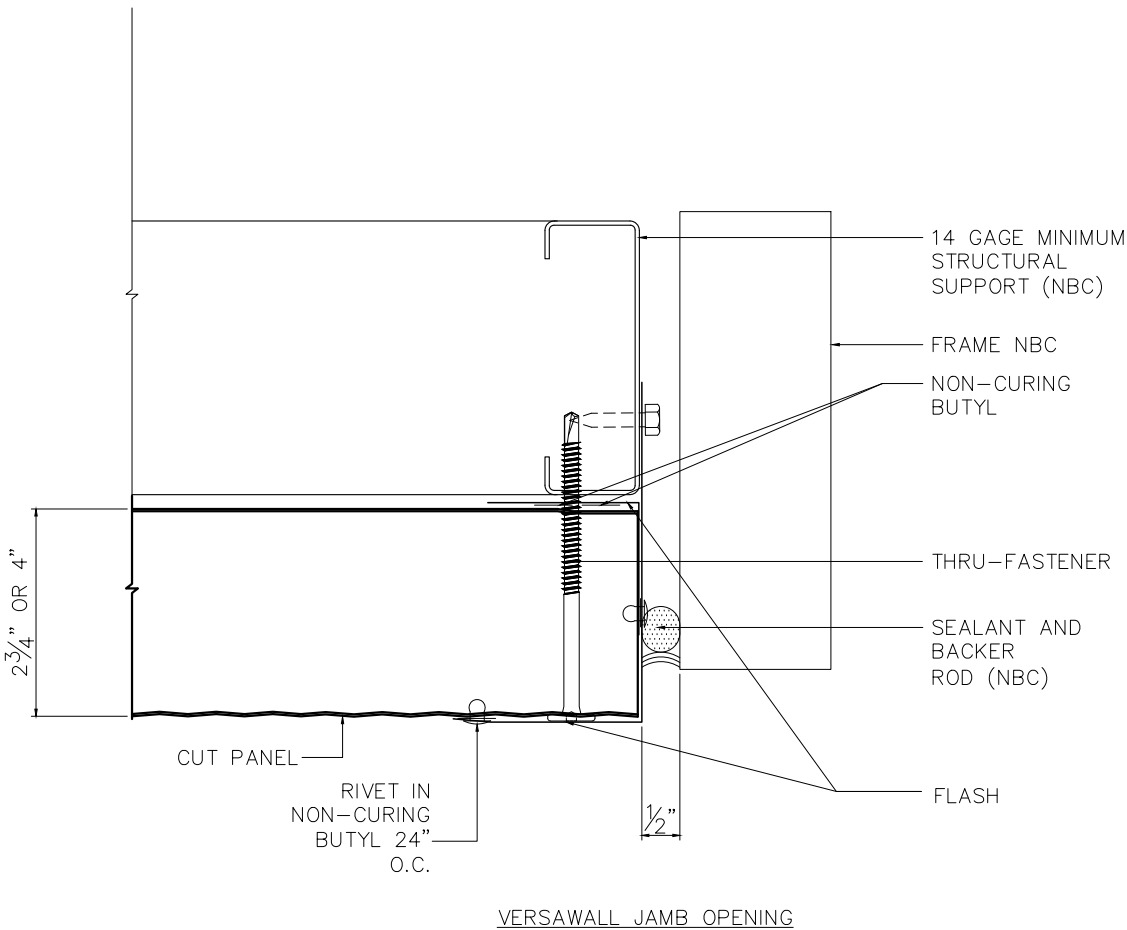
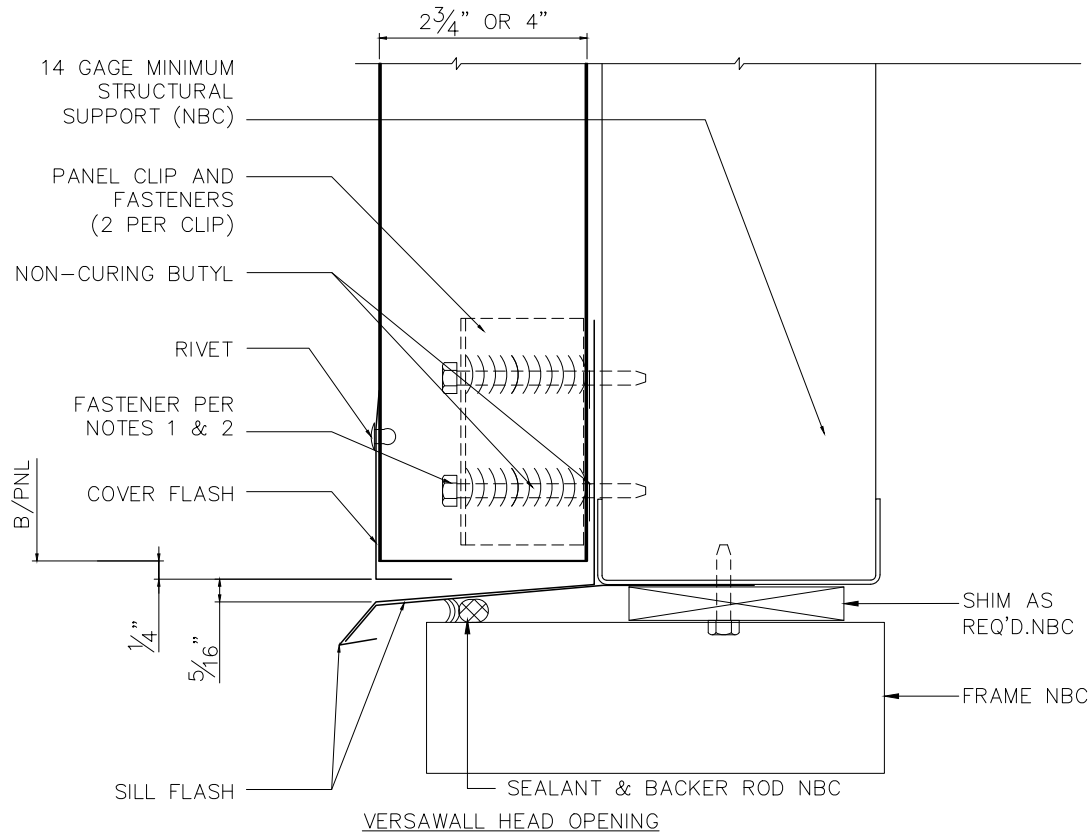
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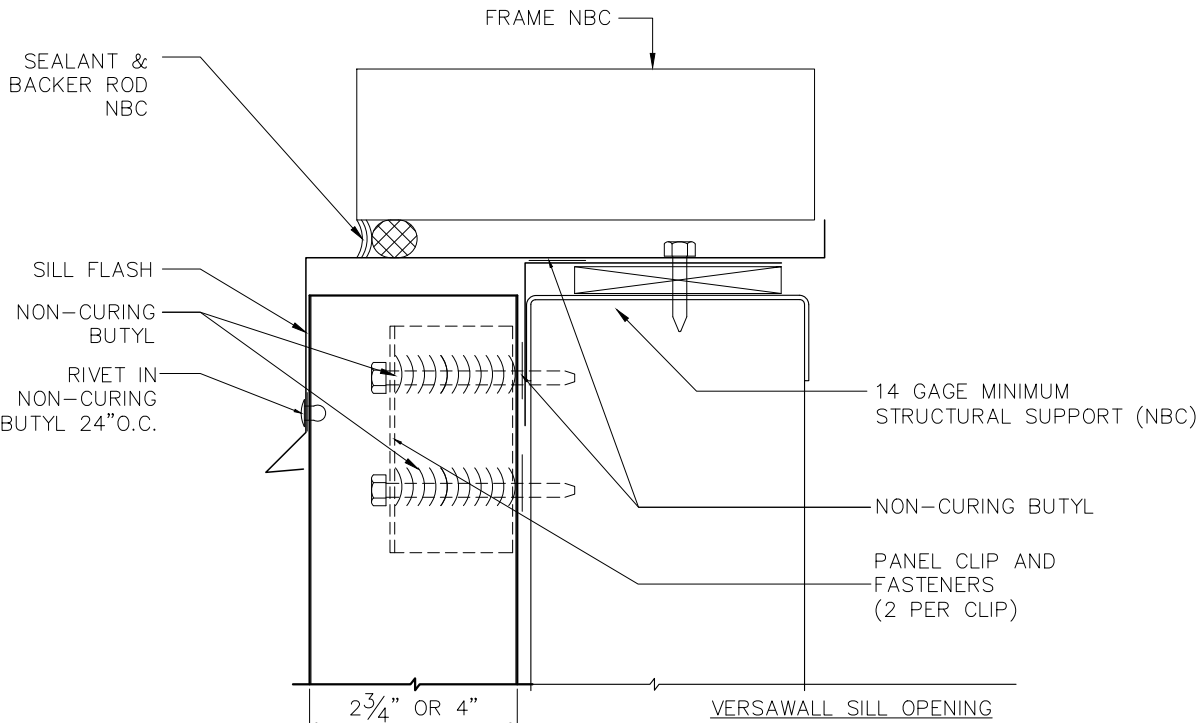


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					CHECKED			DRAWING No.	
1	UPDATE TO 2017 FBC	RJA	2/12/19		SECTION			5 of 8	
ISSUE	DESCRIPTION	BY	DATE		MANAGER			1	



Versawall 2.75, 22/22 GA., 30" Module	
Attached into 14 GA. steel (0.0713" minimum) w/ 2 Fasteners per clip	
Span (FT)	Design Pressure (PSF)
8.00	35.1
7.75	36.2
7.50	37.4
7.25	38.7
7.00	40.1
6.75	41.6
6.50	43.2
6.25	44.9
6.00	46.8
5.75	48.9
5.50	51.1
5.25	53.5
5.00	56.2
4.75	59.1
4.50	62.4
4.25	66.1
4.00	70.2
3.75	74.9
3.50	80.3
3.25	86.5
3.00	93.7
2.75	102.2
2.50	112.4
2.25	124.9
2.00	140.5
1.75	160.6
1.50	187.4
1.33	211.4
Also applicable to Versawall 4, 22/22 GA. 30" Module	



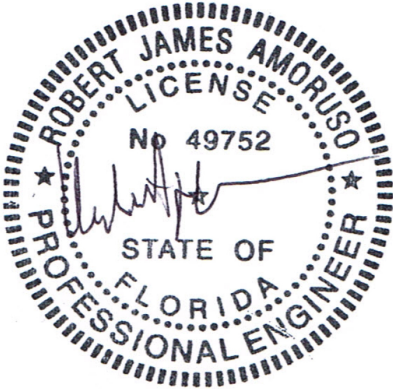
- * MAXIMUM PANEL SPAN = 8'-0" AND MINIMUM PANEL SPAN = 1'-4". FOR MAXIMUM DESIGN PRESSURE, SEE TABLE.
- ** MINIMUM STRUCTURAL SUPPORT MATERIAL THICKNESS "t" SHALL BE AS FOLLOWS:
8'-0" ≤ PANEL SPAN ≤ 1'-4": t = 14 GAGE MINIMUM

1. FASTENERS TO BE 1/4"-14 HEX HEAD 304 STAINLESS STEEL-2 PER CLIP.
2. FASTENERS TO BE ONLY THOSE APPROVED HEREIN.
3. THE MAXIMUM PANEL DEFLECTION SHALL BE L/180.
4. PANEL SHALL BE ATTACHED TO STEEL SUPPORTS USING CLIPS IN THE SIDE JOINT AND FLASHINGS AS SHOWN.
5. PANELS PROVIDE NO DIAPHRAGM CAPACITY.

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DETAILS SHOWN WITH VERSAWALL PANEL IN VERTICAL ORIENTATION.

Robert J. Amoruso, P.E.
Florida P.E. No. 49752



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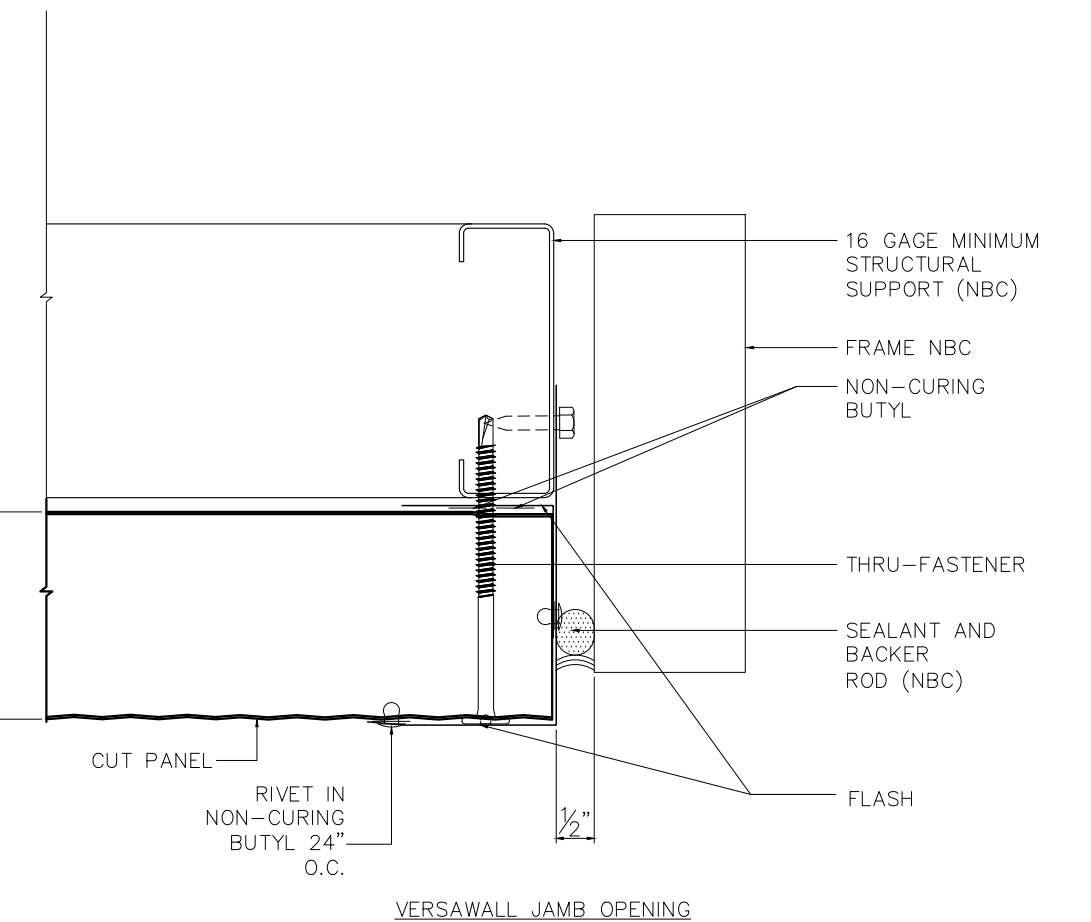
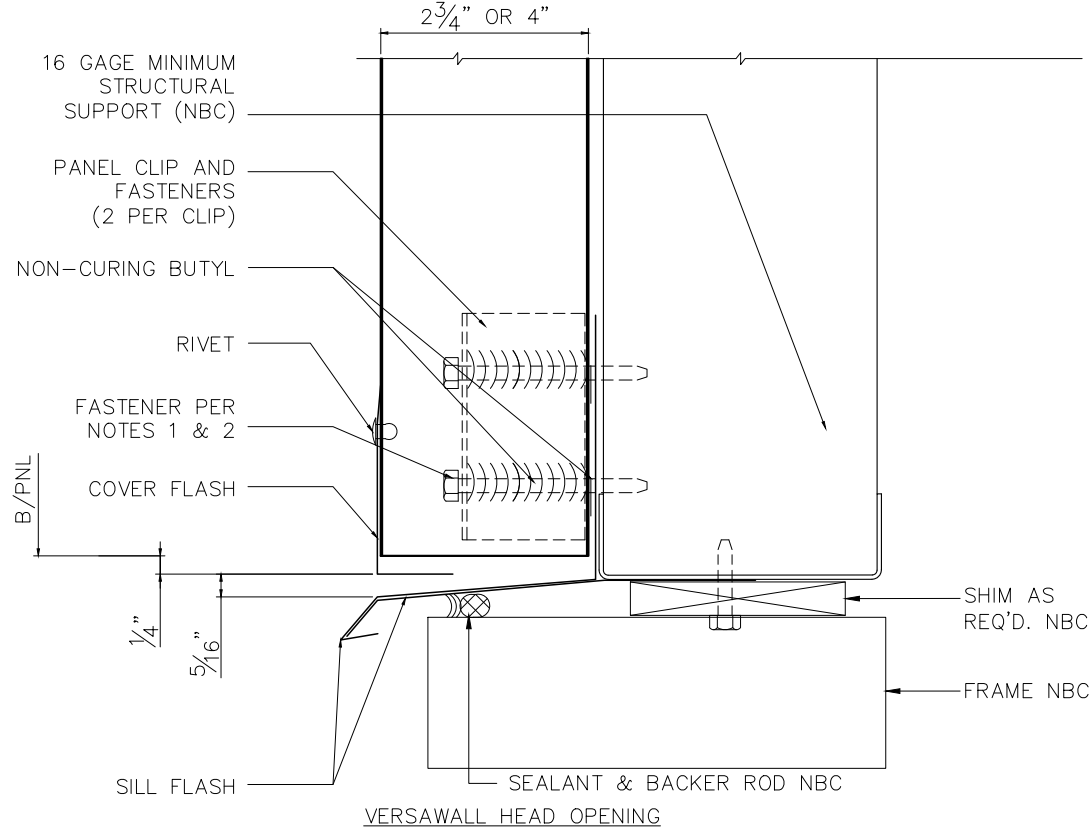
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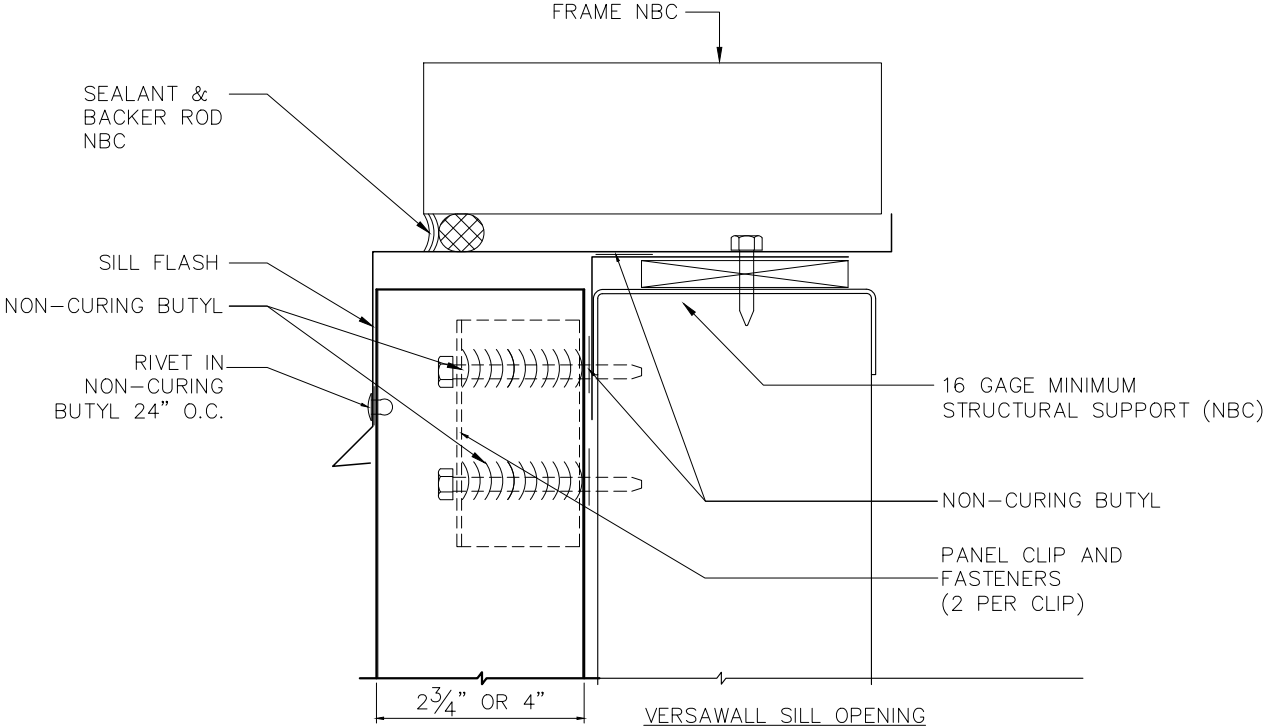
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ISSUE	DESCRIPTION	BY	DATE

CUSTOMER:
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	BY	DATE	CONTRACT No.	
DRAWN	S.L.M.	4/14/14	N/A	
CHECKED			DRAWING No.	ISSUE
SECTION MANAGER			6 of 8	1



Versawall 2.75, 22/22 GA., 30" Module	
Attached into 16 GA. steel (0.0538" minimum) w/ 2 Fasteners per clip	
Span (FT)	Design Pressure (PSF)
8.00	22.7
7.75	23.4
7.50	24.1
7.25	25.0
7.00	25.9
6.75	26.8
6.50	27.9
6.25	29.0
6.00	30.2
5.75	31.5
5.50	32.9
5.25	34.5
5.00	36.2
4.75	38.1
4.50	40.3
4.25	42.6
4.00	45.3
3.75	48.3
3.50	51.8
3.25	55.8
3.00	60.4
2.75	65.9
2.50	72.5
2.25	80.6
2.00	90.6
1.75	103.6
1.50	120.9
1.33	136.0
Also applicable to Versawall 4, 22/22 GA. 30" Module	



- * MAXIMUM PANEL SPAN = 8'-0" AND MINIMUM PANEL SPAN = 1'-4". FOR MAXIMUM DESIGN PRESSURE, SEE TABLE.
- ** MINIMUM STRUCTURAL SUPPORT MATERIAL THICKNESS "t" SHALL BE AS FOLLOWS:
8'-0" ≤ PANEL SPAN ≥ 1'-4": t = 16 GAGE MINIMUM
- 1. FASTENERS TO BE 1/4-14 HEX HEAD 304 STAINLESS STEEL-2 PER CLIP.
- 2. FASTENERS TO BE ONLY THOSE APPROVED HEREIN.
- 3. THE MAXIMUM PANEL DEFLECTION SHALL BE L/180.
- 4. PANEL SHALL BE ATTACHED TO STEEL SUPPORTS USING CLIPS IN THE SIDE JOINT AND FLASHINGS AS SHOWN.
- 5. PANELS PROVIDE NO DIAPHRAGM CAPACITY.

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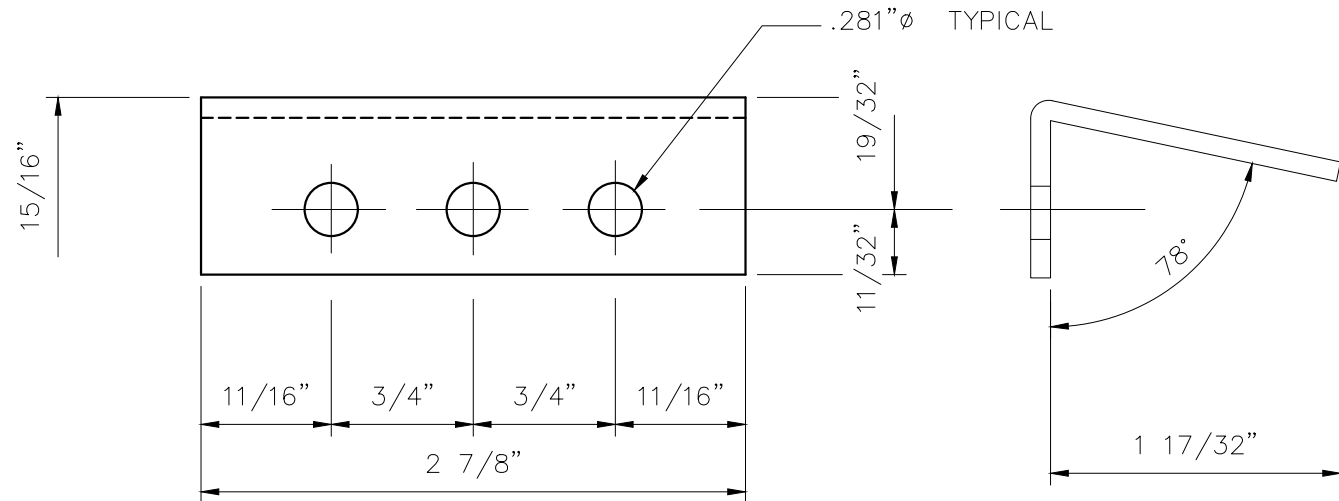
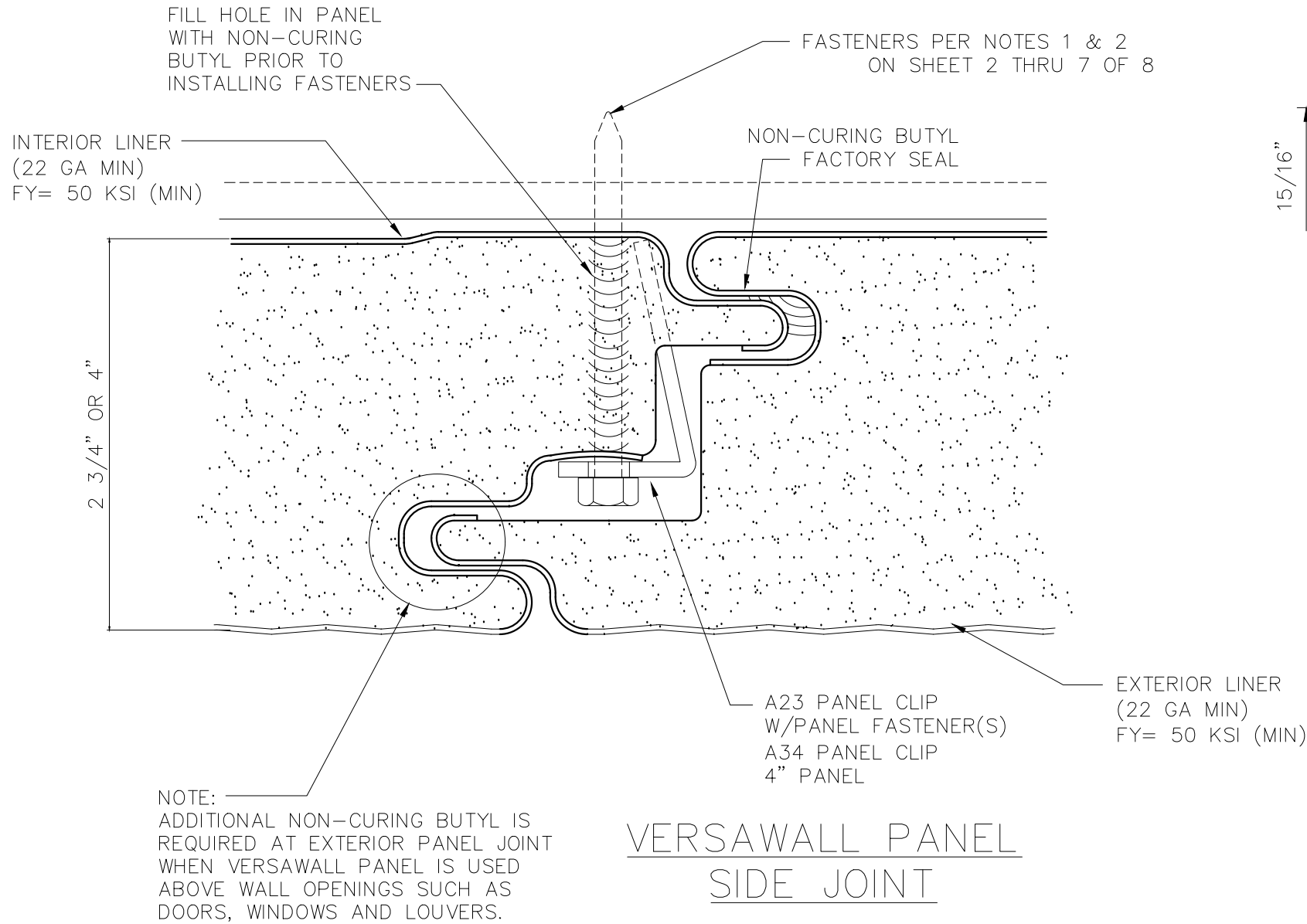
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Longwood, FL 37252-0775
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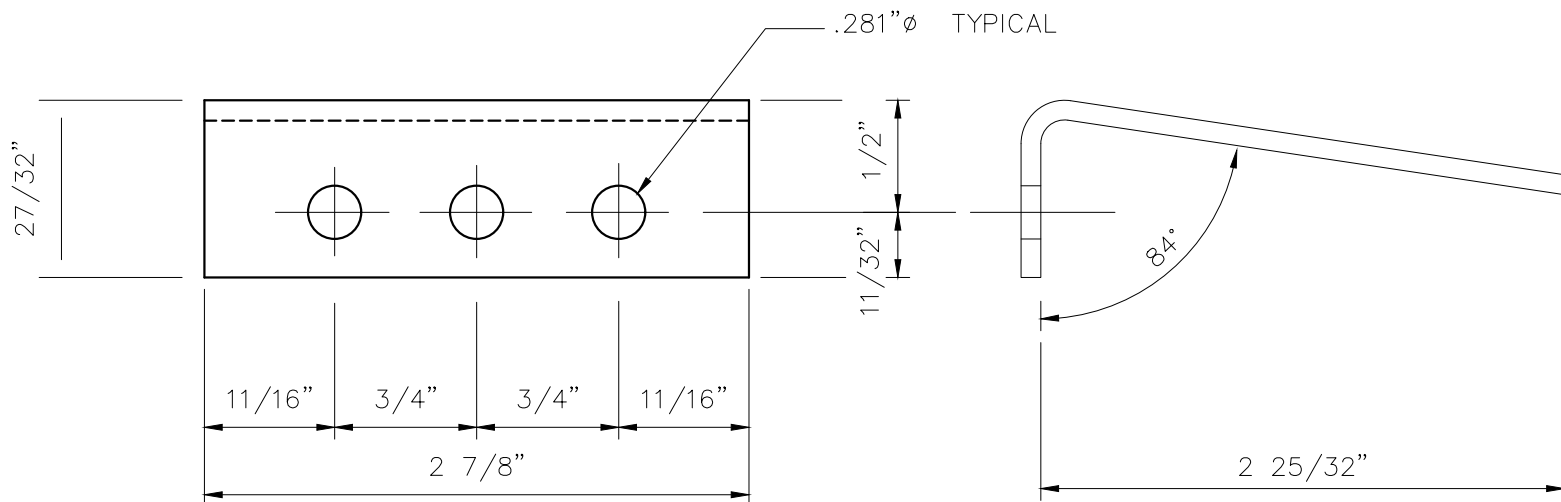


1005 BEAVER GRADE ROAD MOON TWP., PA 15108-2944
PHONE: (412) 299-8000 FAX: (412) 299-8317

				CUSTOMER: OWNER: PROJECT: LOCATION:		BY	DATE	CONTRACT No.	
					DRAWN	S.L.M.	4/14/14	N/A	
					CHECKED			DRAWING No.	
1	UPDATE TO 2017 FBC	RJA	2/12/19		SECTION MANAGER			7 of 8	
ISSUE	DESCRIPTION	BY	DATE					1	

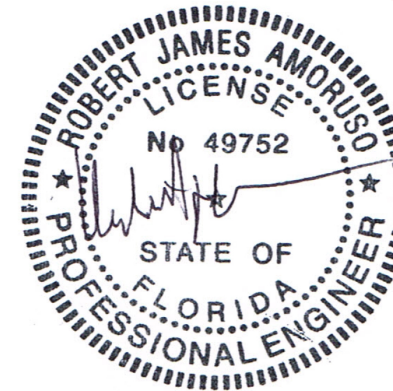


A-23 ATTACHMENT CLIP FOR 2.75" VERSAWALL PANEL
12 GAGE ASTM-653
GRADE 50, G90 GALV.
ATTACHED WITH 1/4"-14-2 1/2" SS HEX HEAD FASTENERS
(2 FASTENERS PER CLIP)



A-34 ATTACHMENT CLIP FOR 4" VERSAWALL PANEL
12 GAGE ASTM-653
GRADE 50, G90 GALV.
ATTACHED WITH 1/4"-14 X 4" SS HEX HEAD FASTENERS
(2 FASTENERS PER CLIP)

Robert J. Amoruso, P.E.
Florida P.E. No. 49752



Digitally signed
by Robert J.
Amoruso, P.E.
Date: 2019.02.21
10:32:15 -05'00'

PTC PRODUCT DESIGN GROUP, LLC
P.O. BOX 520775
Longwood, FL 32752-0775
FBPE Cert. of Auth. No. 25935



CENTRIA

1005 BEAVER GRADE ROAD MOON TWP., PA 15108-2944
PHONE: (412) 299-8000 FAX: (412) 299-8317

1	UPDATE TO 2017 FBC	RJA	2/12/19
ISSUE	DESCRIPTION	BY	DATE

CUSTOMER: OWNER: PROJECT: LOCATION:			

	BY	DATE	CONTRACT No.	
	S.L.M.	4/14/14	N/A	
	CHECKED		DRAWING No.	ISSUE
	SECTION MANAGER		8 of 8	1