



# PRODUCT & ENGINEERING MANUAL

## INSULATED METAL WALL PANEL SYSTEMS TABLE OF CONTENTS

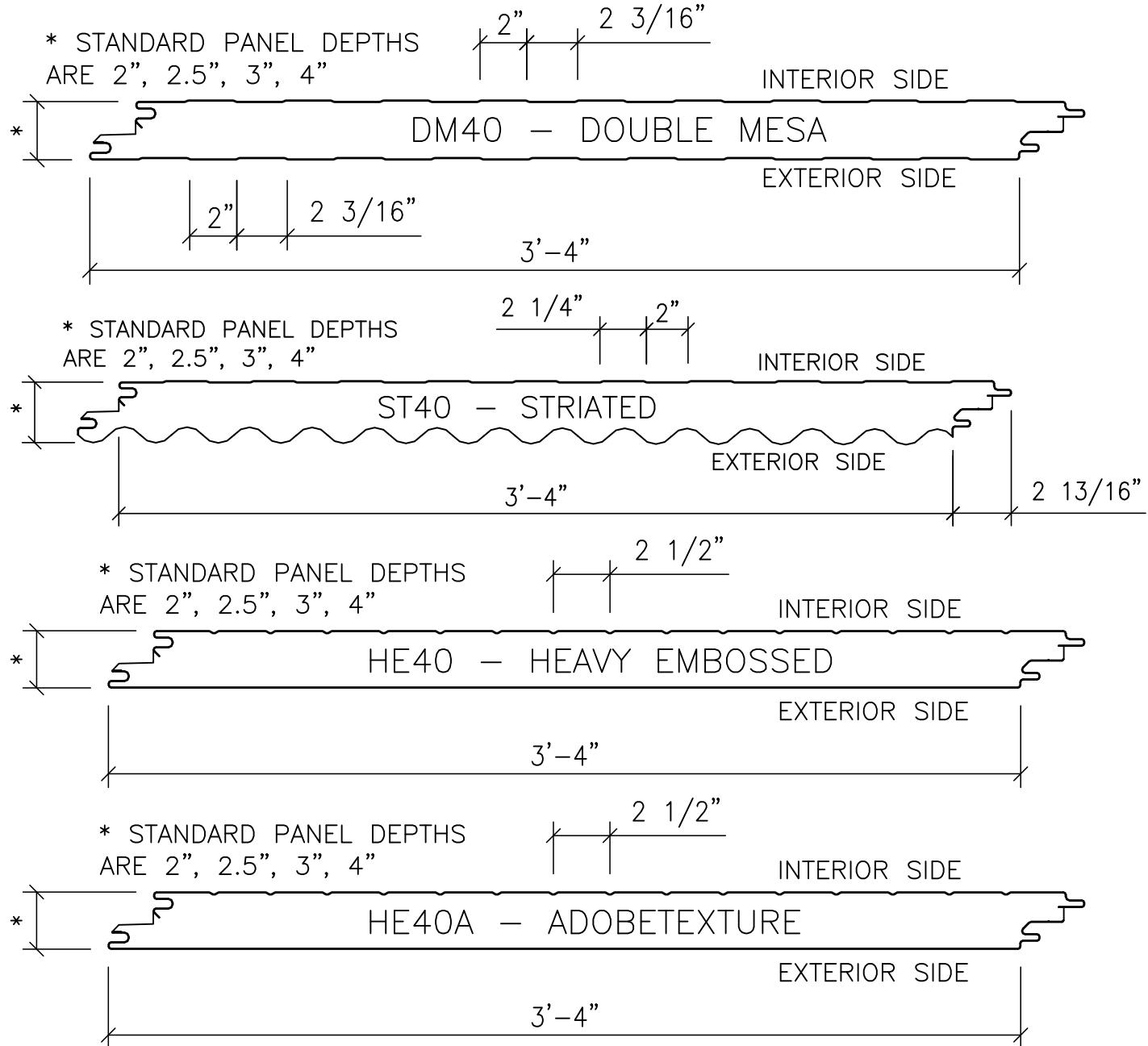
Insulated Wall Panel Profiles .....	2
Insulated Metal Wall Panel Span Tables .....	4
2" Panel Thickness – Standard (2) Fasteners .....	4
2" Panel Thickness – Optional (3) Fasteners.....	5
2-1/2" Panel Thickness – Standard (2) Fasteners.....	6
2-1/2" Panel Thickness – Optional (3) Fasteners.....	7
3" Panel Thickness – Standard (2) Fasteners .....	8
3" Panel Thickness – Optional (3) Fasteners.....	9
4" Panel Thickness – Standard (2) Fasteners .....	10
4" Panel Thickness – Optional (3) Fasteners.....	11
Standard Details.....	12
GB2300 - Base Trim .....	12
GA2042 - Horizontal Joint.....	13
GC2021PE - Outside Corner Trim .....	14
GC2051PE - Inside Corner Trim.....	15
GD2020PE - Jamb Trim.....	16
GD2040PE - Header Trim.....	17
GD2070PE - Sill Trim.....	18



# PRODUCT & ENGINEERING MANUAL

## INSULATED WALL PANEL PROFILES

The below insulated metal wall panel system panels are available as components of one of Nucor Building Systems' Standard Metal Wall and Insulated Wall Systems.





# PRODUCT & ENGINEERING MANUAL

Information about the available panel thickness options, R and U factors, exterior and interior colors and finishes, available panel lengths, performance and testing information, and much more is available at the Nucor Building Systems website at the below links.

## [Insulated Metal Wall Panel Systems](#)

The following pages outline span capacities for typical panel configurations as well as provide Nucor standard details for these wall systems.



# PRODUCT & ENGINEERING MANUAL

## INSULATED METAL WALL PANEL SPAN TABLES

### 2" PANEL THICKNESS – STANDARD (2) FASTENERS

2" Insulated Metal Wall Panels (All Profiles)			– 26 Gauge Exterior/Interior – Standard (2) Fasteners						
Span (ft.)	Panel Capacity Pressure/Suction (psf)	Deflection L/180	Wind Pressure/Suction Capacity (psf) per Support Thickness						
			0.060	0.067	0.075	0.089	0.099	0.105	0.120
5	65	n/c	65	65	65	65	65	65	65
6	49	n/c	49	49	49	49	49	49	49
7	38	n/c	38	38	38	38	38	38	38
8	30	n/c	30	30	30	30	30	30	30
9	24	n/c	24	24	24	24	24	24	24
10	19	n/c	19	19	19	19	19	19	19
11	15	n/c	15	15	15	15	15	15	15
12	13	n/c	13	13	13	13	13	13	13
Multiple (2+) Spans									
Span (ft.)	Panel Capacity Pressure/Suction (psf)	Deflection L/180	Wind Pressure/Suction Capacity (psf) per Support Thickness						
			0.060	0.067	0.075	0.089	0.099	0.105	0.120
5	70	n/c	28	32	36	47	50	50	50
6	55	n/c	23	26	30	39	42	42	42
7	44	n/c	20	22	26	33	36	36	36
8	36	n/c	17	20	22	29	31	31	31
9	30	n/c	15	17	20	26	28	28	28
10	25	n/c	14	16	18	23	25	25	25
11	21	n/c	12	14	16	21	21	21	21
12	18	n/c	11	13	15	18	18	18	18

Insulated wall panel deflections are held to L/180. Contact the engineering team for minimum panel lengths, span capacities with different exterior or interior panel thicknesses, fastener configurations, or parapet conditions.



# PRODUCT & ENGINEERING MANUAL

## 2" PANEL THICKNESS – OPTIONAL (3) FASTENERS

2" Insulated Metal Wall Panels (All Profiles)			– 26 Gauge Exterior/Interior – Optional (3) Fasteners						
Simple Span									
Span (ft.)	Panel Capacity Pressure/Suction (psf)	Deflection L/180	Wind Pressure/Suction Capacity (psf) per Support Thickness						
			0.060	0.067	0.075	0.089	0.099	0.105	0.120
5	65	n/c	65	65	65	65	65	65	65
6	49	n/c	49	49	49	49	49	49	49
7	38	n/c	38	38	38	38	38	38	38
8	30	n/c	30	30	30	30	30	30	30
9	24	n/c	24	24	24	24	24	24	24
10	19	n/c	19	19	19	19	19	19	19
11	15	n/c	15	15	15	15	15	15	15
12	13	n/c	13	13	13	13	13	13	13
Multiple (2+) Spans									
Span (ft.)	Panel Capacity Pressure/Suction (psf)	Deflection L/180	Wind Pressure/Suction Capacity (psf) per Support Thickness						
			0.060	0.067	0.075	0.089	0.099	0.105	0.120
5	70	n/c	42	48	50	50	50	50	50
6	55	n/c	35	40	42	42	42	42	42
7	44	n/c	30	34	36	36	36	36	36
8	36	n/c	26	30	31	31	31	31	31
9	30	n/c	23	26	28	28	28	28	28
10	25	n/c	21	24	25	25	25	25	25
11	21	n/c	19	21	21	21	21	21	21
12	18	n/c	17	18	18	18	18	18	18

Insulated wall panel deflections are held to L/180. Contact the engineering team for minimum panel lengths, span capacities with different exterior or interior panel thicknesses, fastener configurations, or parapet conditions.



# PRODUCT & ENGINEERING MANUAL

## 2-1/2" PANEL THICKNESS – STANDARD (2) FASTENERS

2-1/2" Insulated Metal Wall Panels (All Profiles)			– 26 Gauge Exterior/Interior – Standard (2) Fasteners						
Simple Span									
Span (ft.)	Panel Capacity Pressure/Suction (psf)	Deflection L/180	Wind Pressure/Suction Capacity (psf) per Support Thickness						
			0.060	0.067	0.075	0.089	0.099	0.105	0.120
5	85	n/c	70	80	85	85	85	85	85
6	65	n/c	58	65	65	65	65	65	65
7	51	n/c	50	51	51	51	51	51	51
8	41	n/c	41	41	41	41	41	41	41
9	33	n/c	33	33	33	33	33	33	33
10	27	n/c	27	27	27	27	27	27	27
11	22	n/c	22	22	22	22	22	22	22
12	18	n/c	18	18	18	18	18	18	18
Multiple (2+) Spans									
Span (ft.)	Panel Capacity Pressure/Suction (psf)	Deflection L/180	Wind Pressure/Suction Capacity (psf) per Support Thickness						
			0.060	0.067	0.075	0.089	0.099	0.105	0.120
5	90	n/c	28	32	36	47	50	50	50
6	72	n/c	23	26	30	39	42	42	42
7	58	n/c	20	22	26	33	36	36	36
8	48	n/c	17	20	22	29	31	31	31
9	40	n/c	15	17	20	26	28	28	28
10	34	n/c	14	16	18	23	25	25	25
11	29	n/c	12	14	16	21	22	22	22
12	24	n/c	11	13	15	19	21	21	21

Insulated wall panel deflections are held to L/180. Contact the engineering team for minimum panel lengths, span capacities with different exterior or interior panel thicknesses, fastener configurations, or parapet conditions.



# PRODUCT & ENGINEERING MANUAL

## 2-1/2" PANEL THICKNESS – OPTIONAL (3) FASTENERS

2-1/2" Insulated Metal Wall Panels (All Profiles)			– 26 Gauge Exterior/Interior – Optional (3) Fasteners						
Simple Span									
Span (ft.)	Panel Capacity Pressure/Suction (psf)	Deflection L/180	Wind Pressure/Suction Capacity (psf) per Support Thickness						
			0.060	0.067	0.075	0.089	0.099	0.105	0.120
5	85	n/c	85	85	85	85	85	85	85
6	65	n/c	65	65	65	65	65	65	65
7	51	n/c	51	51	51	51	51	51	51
8	41	n/c	41	41	41	41	41	41	41
9	33	n/c	33	33	33	33	33	33	33
10	27	n/c	27	27	27	27	27	27	27
11	22	n/c	22	22	22	22	22	22	22
12	18	n/c	18	18	18	18	18	18	18
Multiple (2+) Spans									
Span (ft.)	Panel Capacity Pressure/Suction (psf)	Deflection L/180	Wind Pressure/Suction Capacity (psf) per Support Thickness						
			0.060	0.067	0.075	0.089	0.099	0.105	0.120
5	90	n/c	42	48	50	50	50	50	50
6	72	n/c	35	40	42	42	42	42	42
7	58	n/c	30	34	36	36	36	36	36
8	48	n/c	26	30	31	31	31	31	31
9	40	n/c	23	26	28	28	28	28	28
10	34	n/c	21	24	25	25	25	25	25
11	29	n/c	19	21	22	22	22	22	22
12	24	n/c	17	20	21	21	21	21	21

Insulated wall panel deflections are held to L/180. Contact the engineering team for minimum panel lengths, span capacities with different exterior or interior panel thicknesses, fastener configurations, or parapet conditions.



# PRODUCT & ENGINEERING MANUAL

## 3" PANEL THICKNESS – STANDARD (2) FASTENERS

3" Insulated Metal Wall Panels (All Profiles)			– 26 Gauge Exterior/Interior – Standard (2) Fasteners						
Simple Span									
Span (ft.)	Panel Capacity Pressure/Suction (psf)	Deflection L/180	Wind Pressure/Suction Capacity (psf) per Support Thickness						
			0.060	0.067	0.075	0.089	0.099	0.105	0.120
5	106	n/c	70	80	91	106	106	106	106
6	82	n/c	58	66	76	82	82	82	82
7	65	n/c	50	57	65	65	65	65	65
8	53	n/c	44	50	53	53	53	53	53
9	43	n/c	39	43	43	43	43	43	43
10	35	n/c	35	35	35	35	35	35	35
11	29	n/c	29	29	29	29	29	29	29
12	25	n/c	25	25	25	25	25	25	25
Multiple (2+) Spans									
Span (ft.)	Panel Capacity Pressure/Suction (psf)	Deflection L/180	Wind Pressure/Suction Capacity (psf) per Support Thickness						
			0.060	0.067	0.075	0.089	0.099	0.105	0.120
5	111	n/c	28	32	36	47	50	50	50
6	89	n/c	23	26	30	39	42	42	42
7	72	n/c	20	22	26	33	36	36	36
8	60	n/c	17	20	22	29	31	31	31
9	51	n/c	15	17	20	26	28	28	28
10	43	n/c	14	16	18	23	25	25	25
11	37	n/c	12	14	16	21	22	22	22
12	32	n/c	11	13	15	19	21	21	21

Insulated wall panel deflections are held to L/180. Contact the engineering team for minimum panel lengths, span capacities with different exterior or interior panel thicknesses, fastener configurations, or parapet conditions.



# PRODUCT & ENGINEERING MANUAL

## 3" PANEL THICKNESS – OPTIONAL (3) FASTENERS

3" Insulated Metal Wall Panels (All Profiles)			– 26 Gauge Exterior/Interior – Optional (3) Fasteners						
Simple Span									
Span (ft.)	Panel Capacity Pressure/Suction (psf)	Deflection L/180	Wind Pressure/Suction Capacity (psf) per Support Thickness						
			0.060	0.067	0.075	0.089	0.099	0.105	0.120
5	106	n/c	105	106	106	106	106	106	106
6	82	n/c	82	82	82	82	82	82	82
7	65	n/c	65	65	65	65	65	65	65
8	53	n/c	53	53	53	53	53	53	53
9	43	n/c	43	43	43	43	43	43	43
10	35	n/c	35	35	35	35	35	35	35
11	29	n/c	29	29	29	29	29	29	29
12	25	n/c	25	25	25	25	25	25	25
Multiple (2+) Spans									
Span (ft.)	Panel Capacity Pressure/Suction (psf)	Deflection L/180	Wind Pressure/Suction Capacity (psf) per Support Thickness						
			0.060	0.067	0.075	0.089	0.099	0.105	0.120
5	111	n/c	42	48	50	50	50	50	50
6	89	n/c	35	40	42	42	42	42	42
7	72	n/c	30	34	36	36	36	36	36
8	60	n/c	26	30	31	31	31	31	31
9	51	n/c	23	26	28	28	28	28	28
10	43	n/c	21	24	25	25	25	25	25
11	37	n/c	19	21	22	22	22	22	22
12	32	n/c	17	20	21	21	21	21	21

Insulated wall panel deflections are held to L/180. Contact the engineering team for minimum panel lengths, span capacities with different exterior or interior panel thicknesses, fastener configurations, or parapet conditions.



# PRODUCT & ENGINEERING MANUAL

## 4" PANEL THICKNESS – STANDARD (2) FASTENERS

4" Insulated Metal Wall Panels (All Profiles)			– 26 Gauge Exterior/Interior – Standard (2) Fasteners						
Simple Span									
Span (ft.)	Panel Capacity Pressure/Suction (psf)	Deflection L/180	Wind Pressure/Suction Capacity (psf) per Support Thickness						
			0.060	0.067	0.075	0.089	0.099	0.105	0.120
5	147	n/c	70	80	91	118	126	126	126
6	116	n/c	58	66	76	99	105	105	105
7	94	n/c	50	57	65	84	90	90	90
8	77	n/c	44	50	57	74	77	77	77
9	64	n/c	39	44	50	64	64	64	64
10	53	n/c	35	40	45	53	53	53	53
11	45	n/c	32	36	41	45	45	45	45
12	38	n/c	29	33	38	38	38	38	38
Multiple (2+) Spans									
Span (ft.)	Panel Capacity Pressure/Suction (psf)	Deflection L/180	Wind Pressure/Suction Capacity (psf) per Support Thickness						
			0.060	0.067	0.075	0.089	0.099	0.105	0.120
5	153	n/c	28	32	36	47	50	50	50
6	123	n/c	23	26	30	39	42	42	42
7	101	n/c	20	22	26	33	36	36	36
8	85	n/c	17	20	22	29	31	31	31
9	72	n/c	15	17	20	26	28	28	28
10	62	n/c	14	16	18	23	25	25	25
11	54	n/c	12	14	16	21	22	22	22
12	47	n/c	11	13	15	19	21	21	21

Insulated wall panel deflections are held to L/180. Contact the engineering team for minimum panel lengths, span capacities with different exterior or interior panel thicknesses, fastener configurations, or parapet conditions.



# PRODUCT & ENGINEERING MANUAL

## 4" PANEL THICKNESS – OPTIONAL (3) FASTENERS

4" Insulated Metal Wall Panels (All Profiles)			– 26 Gauge Exterior/Interior – Optional (3) Fasteners						
Simple Span									
Span (ft.)	Panel Capacity Pressure/Suction (psf)	Deflection L/180	Wind Pressure/Suction Capacity (psf) per Support Thickness						
			0.060	0.067	0.075	0.089	0.099	0.105	0.120
5	147	n/c	105	120	126	126	126	126	126
6	116	n/c	88	100	105	105	105	105	105
7	94	n/c	75	86	90	90	90	90	90
8	77	n/c	66	75	77	77	77	77	77
9	64	n/c	58	64	64	64	64	64	64
10	53	n/c	52	53	53	53	53	53	53
11	45	n/c	45	45	45	45	45	45	45
12	38	n/c	38	38	38	38	38	38	38
Multiple (2+) Spans									
Span (ft.)	Panel Capacity Pressure/Suction (psf)	Deflection L/180	Wind Pressure/Suction Capacity (psf) per Support Thickness						
			0.060	0.067	0.075	0.089	0.099	0.105	0.120
5	153	n/c	42	48	50	50	50	50	50
6	123	n/c	35	40	42	42	42	42	42
7	101	n/c	30	34	36	36	36	36	36
8	85	n/c	26	30	31	31	31	31	31
9	72	n/c	23	26	28	28	28	28	28
10	62	n/c	21	24	25	25	25	25	25
11	54	n/c	19	21	22	22	22	22	22
12	47	n/c	17	20	21	21	21	21	21

Insulated wall panel deflections are held to L/180. Contact the engineering team for minimum panel lengths, span capacities with different exterior or interior panel thicknesses, fastener configurations, or parapet conditions.



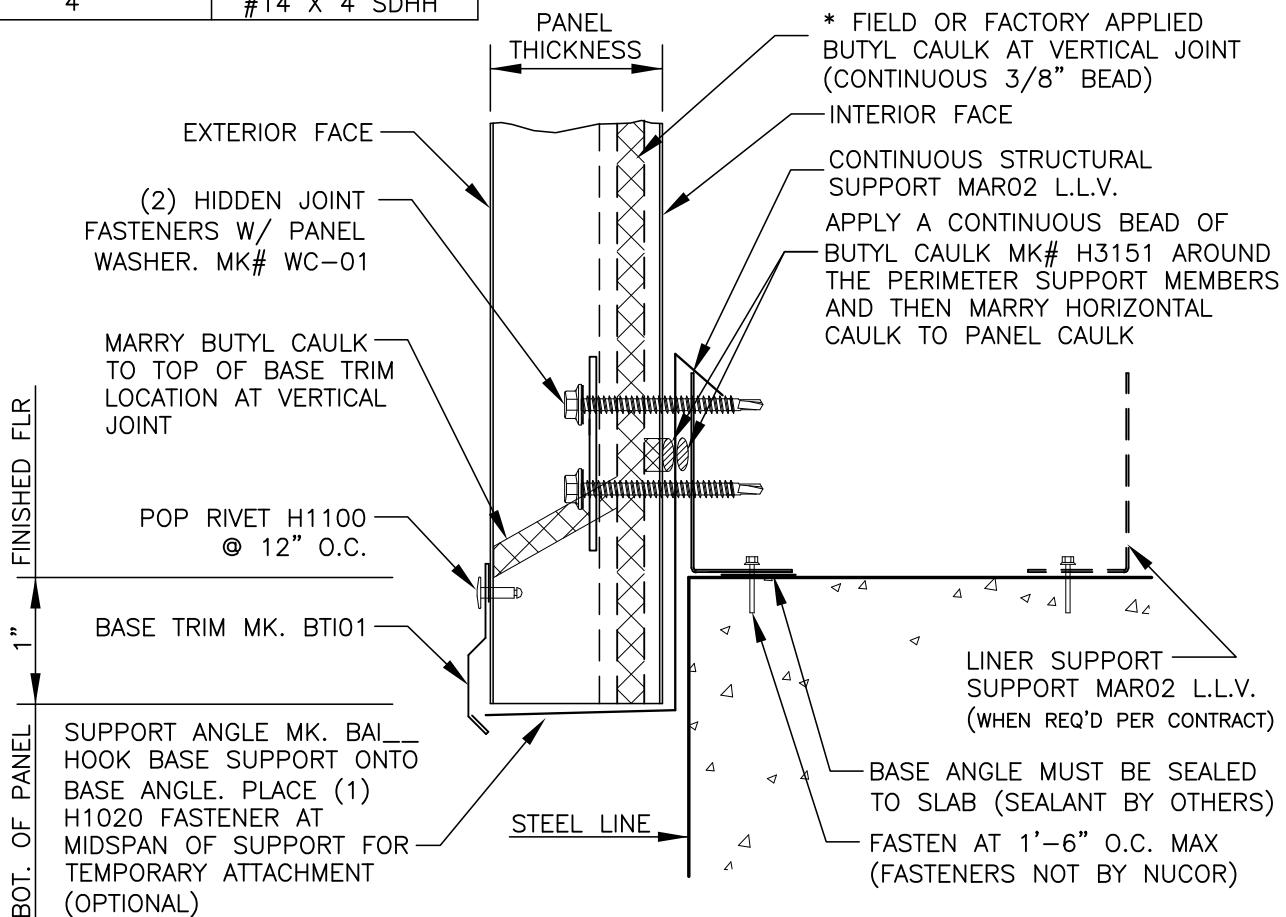
# PRODUCT & ENGINEERING MANUAL

## STANDARD DETAILS

### GB2300 - BASE TRIM

PANEL THICKNESS	HIDDEN FASTENER
2"	#14 X 2 SDHH
2 1/2"	#14 X 3 SDHH
3"	#14 X 3 SDHH
4"	#14 X 4 SDHH

\* ENSURE CAULK IS  
CONTINUOUS, IF NO CAULK IS  
PRESENT OR IF CAULK IS NOT  
CONTINUOUS, FIELD APPLY  
CONTINUOUS CAULK MK# H3151



## BASE TRIM DETAIL

BASE TRIM WITH PANEL SUPPORT  
SEE INSULATED WALL PANEL SHEETING ERECTION NOTES  
FOR PANEL FASTENER LOCATIONS.

**GB2300**

LAST REVISION  
DATE: 02/16/15  
BY: AK CHK: EGB

DETAIL NAME IF APPLICABLE

[GB2300.dwg](#)

**6.7.12**



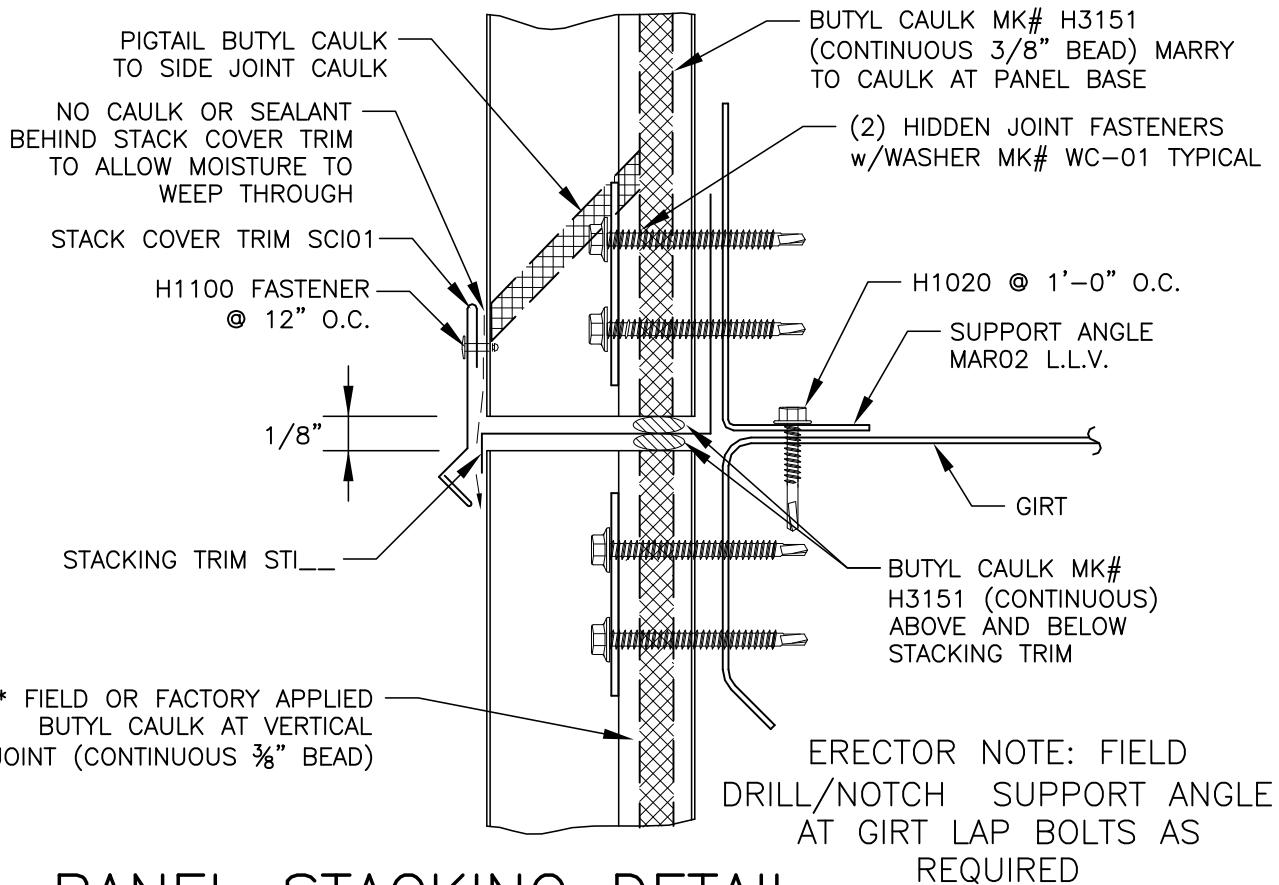
# PRODUCT & ENGINEERING MANUAL

## GA2042 - HORIZONTAL JOINT

PANEL THICKNESS	HIDDEN FASTENER
2"	#14 X 2 SDHH
2 1/2"	#14 X 3 SDHH
3"	#14 X 3 SDHH
4"	#14 X 4 SDHH

UNTIL WALL PANELS ARE  
INSTALLED, POP RIVETS ARE TO  
BE USED FOR TEMPORARY  
INSTALLATION OF STACKING TRIM.

\* ENSURE CAULK IS  
CONTINUOUS, IF NO CAULK IS  
PRESENT OR IF CAULK IS NOT  
CONTINUOUS, FIELD APPLY  
CONTINUOUS CAULK H3151



## PANEL STACKING DETAIL

INSULATED WALL PANELS

PANEL SHIMMING MAY BE REQUIRED. PANEL SHIMS BY OTHERS

**GA2042**

This is the *standard* splice when panel lengths violate the Solar Load Chart length requirements.  
An alternate Exterior Relief Cut is available if you prefer longer length panels.

LAST REVISION  
DATE: 02/16/15  
BY: AK CHK: EGB

DETAIL NAME IF APPLICABLE  
[GA2042.dwg](#)

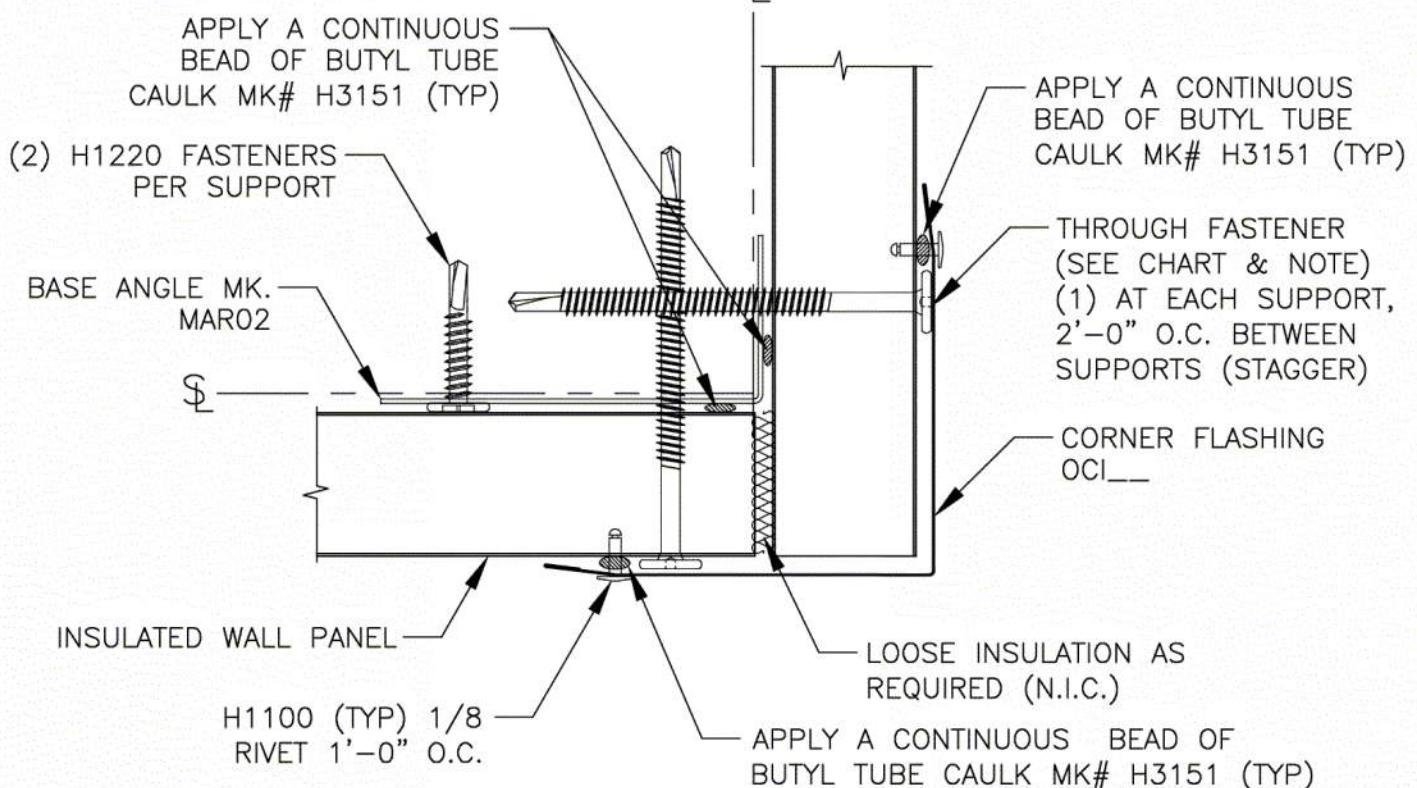
**6.7.13**



# PRODUCT & ENGINEERING MANUAL

## GC2021PE - OUTSIDE CORNER TRIM

PANEL THICKNESS	THROUGH FASTENER
2"	#14 X 3 SDHH
2 1/2"	#14 X 4 SDHH
3"	#14 X 4 SDHH
4"	#14 X 5 SDHH



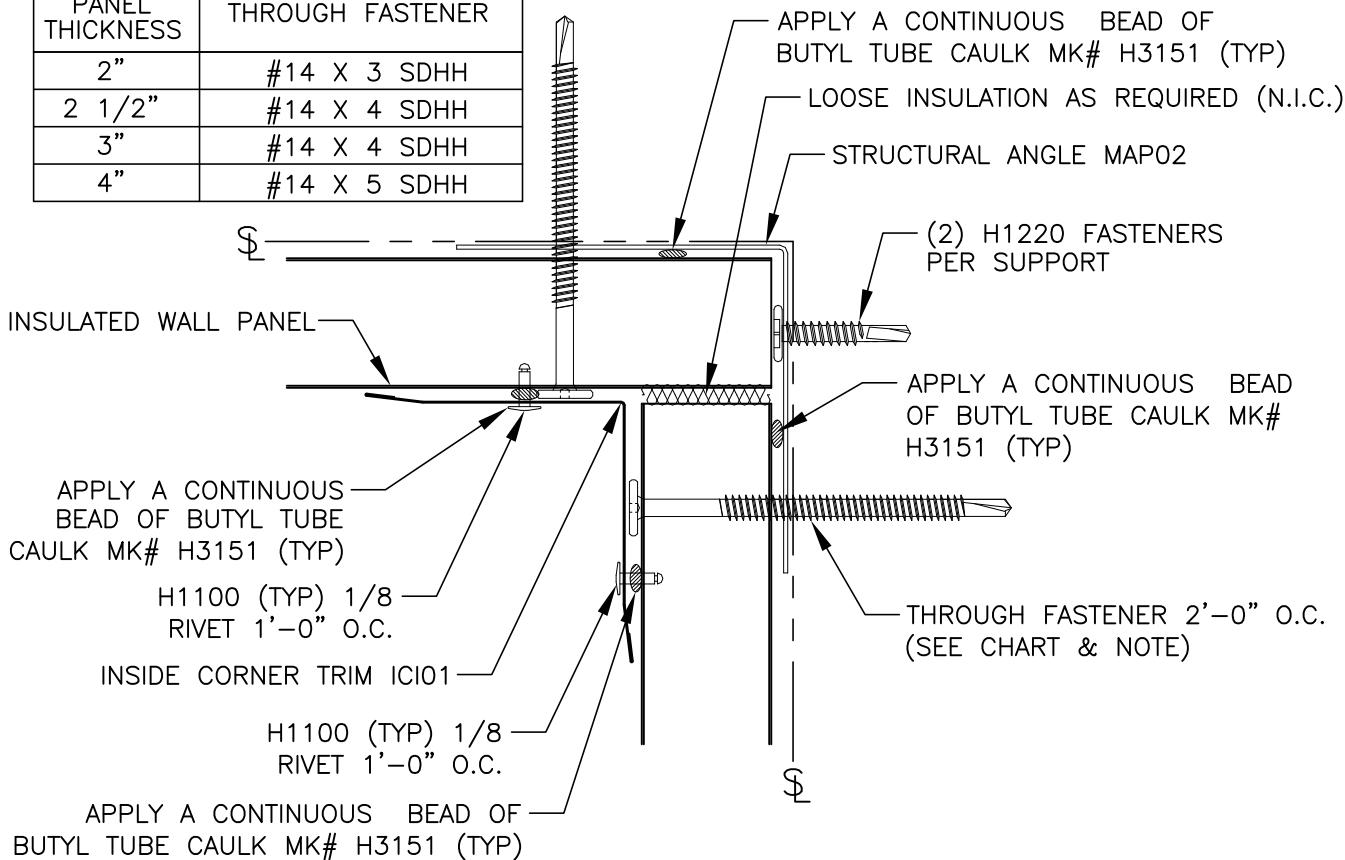
## OUTSIDE CORNER DETAIL



# PRODUCT & ENGINEERING MANUAL

## GC2051PE - INSIDE CORNER TRIM

PANEL THICKNESS	THROUGH FASTENER
2"	#14 X 3 SDHH
2 1/2"	#14 X 4 SDHH
3"	#14 X 4 SDHH
4"	#14 X 5 SDHH



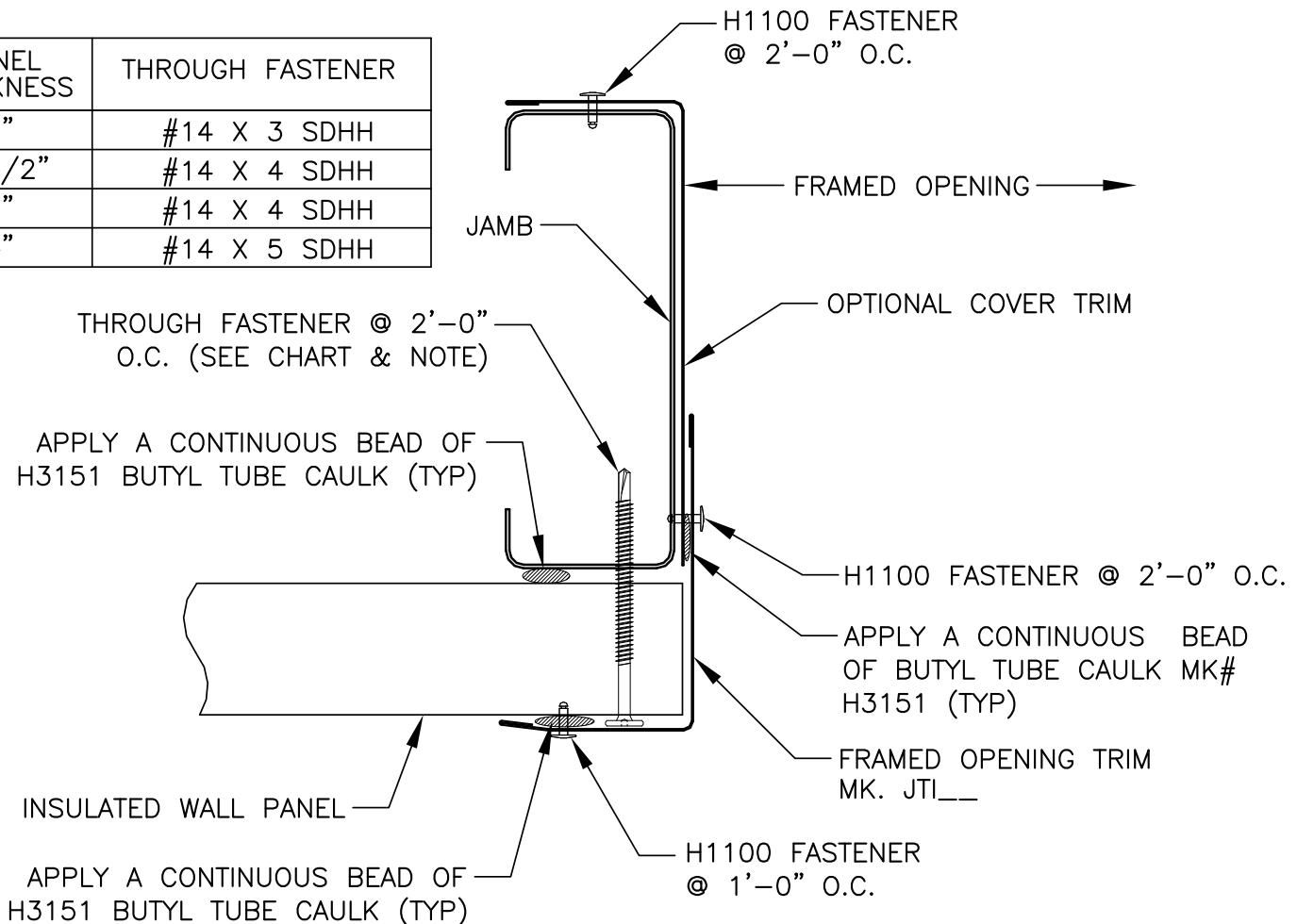
## INSIDE CORNER DETAIL



# PRODUCT & ENGINEERING MANUAL

## GD2020PE - JAMB TRIM

PANEL THICKNESS	THROUGH FASTENER
2"	#14 X 3 SDHH
2 1/2"	#14 X 4 SDHH
3"	#14 X 4 SDHH
4"	#14 X 5 SDHH

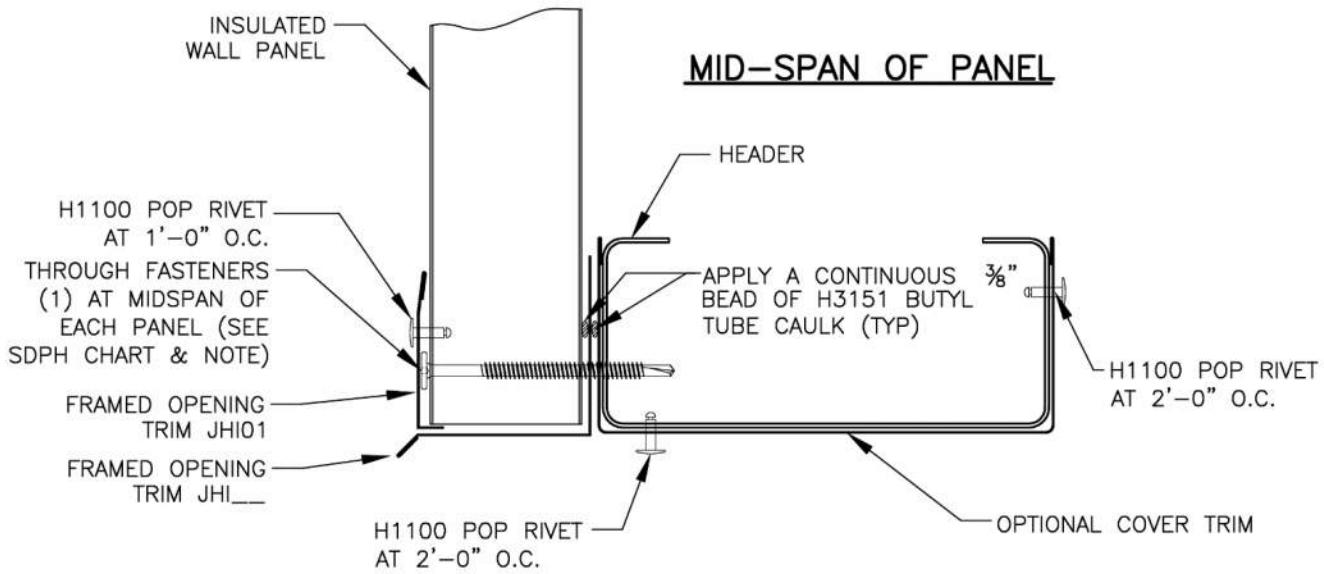


## JAMB DETAIL

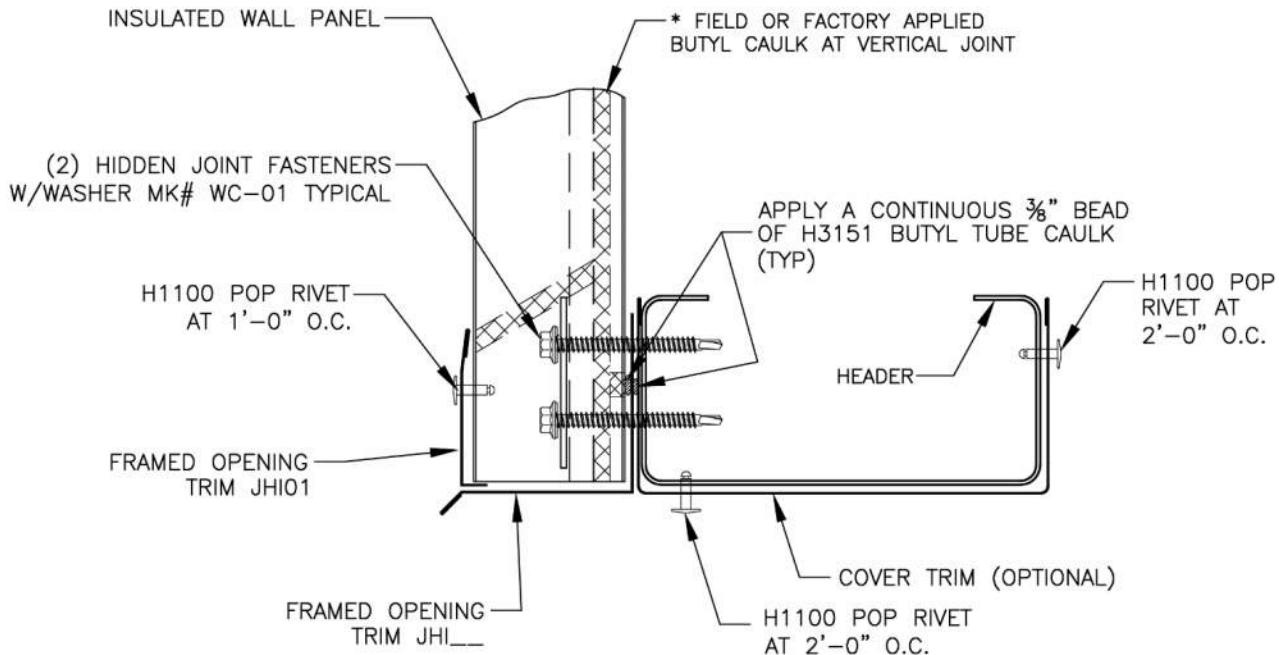


# PRODUCT & ENGINEERING MANUAL

## GD2040PE - HEADER TRIM



PANEL THICKNESS	THROUGH FASTENER	HIDDEN FASTENER
2"	#14 X 3 SDPH	#14 X 2 SDHH
2 1/2"	#14 X 4 SDPH	#14 X 3 SDHH
3"	#14 X 4 SDPH	#14 X 3 SDHH
4"	#14 X 5 SDPH	#14 X 4 SDHH



## SIDE JOINT OF PANEL



# PRODUCT & ENGINEERING MANUAL

## GD2070PE - SILL TRIM

