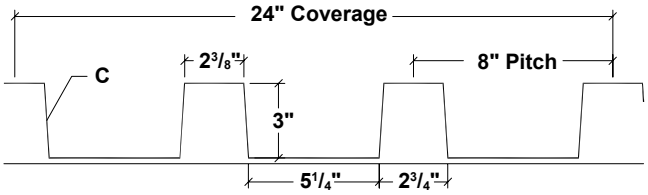
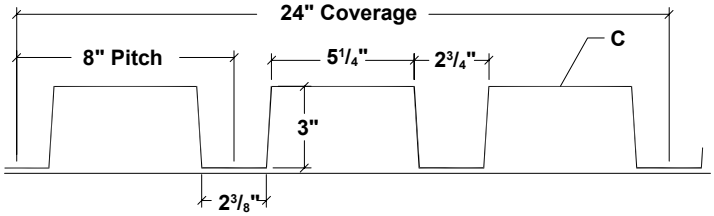
TABLE OF CONTENTS

T13 PANEL OVERVIEW

T13 ROOF PANEL PROFILE



T13 WALL PANEL PROFILE



SLOPE

The minimum recommended slope for any T13 roof panel is 1:12. Metal Sales recommends that in all roof applications sealant be used on sidelaps.

SUBSTRATE

T13 panel is designed to be utilized over open structural framing, but can easily be used with a solid substrate. The recommended substrate is 5/8" plywood with a 30 pound felt moisture barrier. To avoid panel distortion, use a properly aligned and uniform substructure.

COVERAGE

Each panel has a coverage of 24"

LENGTH

Lengths under 5'-0" are available with some cutting restrictions. Maximum recommended panel length is 45'-0". Longer panels require additional consideration in packaging, shipping, and erection. Please consult your Metal Sales branch for recommendations (see PGI-2 and PGI-3 for locations).

AVAILABILITY

Panels are available in 24 through 16 gauge. Minimum quantities may apply.
Custom capabilities include:
-Crimp curving on numerous panel profiles.
-Curving may be convex, concave, or "S" curves.
-Perforated panels for wind screens and liner panels.

APPLICATION

Commercial, Industrial, and Architectural panels.

FASTENING SYSTEM

Direct Fastened (exposed).

FASTENERS

The fastener selection guide should be consulted for choosing proper fasteners for specific applications. Quantity and type of fastener must meet necessary loading and code requirements (see PGI-12-14).

MATERIALS

Steel grade 50, per ASTM A-792, Optional material: stainless steel, copper, and aluminum.

FINISHES

- *Acrylic Coated Galvalume® (ACG) / ASTM A-792 - AZ55
- Prepainted Galvalume / ASTM A-792 - AZ50
- MS Colorfast45®
- **Fluorocarbon (PVDF)
- Multi-Pass Kynar
- Marbilique
- Plastisol
- Polyester

* Differential appearance of Acrylic Coated Galvalume roofing materials is not a cause for rejection.
** Meets both Kynar 500 and Hylar 5000 specifications.

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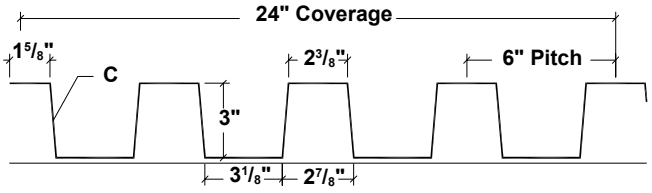
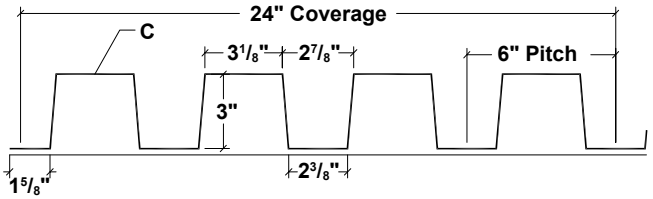
T13-A PANEL OVERVIEW

T13-A ROOF PANEL PROFILE



T13-A WALL PANEL PROFILE



SLOPE

The minimum recommended slope for any T13A roof panel is 1:12. Metal Sales recommends that in all roof applications sealant be used on sidelaps.

SUBSTRATE

T13A panel is designed to be utilized over open structural framing, but can easily be used with a solid substrate. The recommended substrate is 5/8" plywood with a 30 pound felt moisture barrier. To avoid panel distortion, use a properly aligned and uniform substructure.

COVERAGE

Each panel has a coverage of 24"

LENGTH

Lengths under 5'-0" are available with some cutting restrictions. Maximum recommended panel length is 45'-0". Longer panels require additional consideration in packaging, shipping, and erection. Please consult your Metal Sales branch for recommendations (see PGI-2 and PGI-3 for locations).

AVAILABILITY

Panels are available in 24 through 16 gauge. Minimum quantities may apply.
Custom capabilities include:
-Crimp curving on numerous panel profiles.
-Curving may be convex, concave, or "S" curves.
-Perforated panels for wind screens and liner panels.

APPLICATION

Commercial, Industrial, and Architectural panels.

FASTENING SYSTEM

Direct Fastened (exposed).

FASTENERS

The fastener selection guide should be consulted for choosing proper fasteners for specific applications. Quantity and type of fastener must meet necessary loading and code requirements (see PGI-12-14).

MATERIALS

Steel grade 50, per ASTM A-792, Optional material: stainless steel, copper, and aluminum.

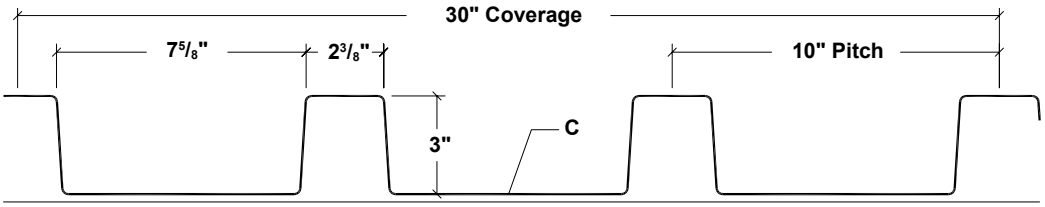
FINISHES

- *Acrylic Coated Galvalume® (ACG) / ASTM A-792 - AZ55
- Prepainted Galvalume / ASTM A-792 - AZ50
- MS Colorfast45®
- **Fluorocarbon (PVDF)
- Multi-Pass Kynar
- Marbilique
- Plastisol
- Polyester

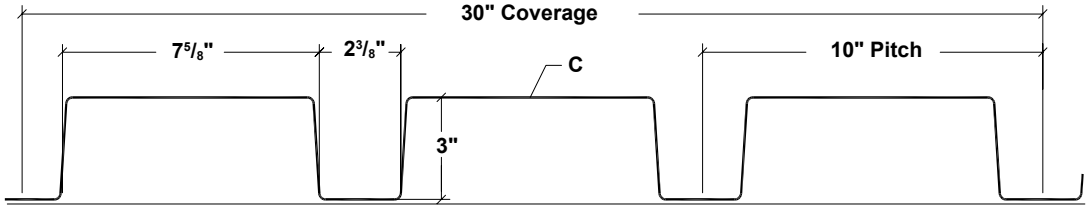
* Differential appearance of Acrylic Coated Galvalume roofing materials is not a cause for rejection.
** Meets both Kynar 500 and Hylar 5000 specifications.

T13-B PANEL OVERVIEW

T13-B ROOF PANEL PROFILE



T13-B WALL PANEL PROFILE



SLOPE

The minimum recommended slope for any T13-B roof panel is 1:12. Metal Sales recommends that in all roof applications sealant be used on sidelaps.

SUBSTRATE

T13-B panel is designed to be utilized over open structural framing, but can easily be used with a solid substrate. The recommended substrate is 5/8" plywood with a 30 pound felt moisture barrier. To avoid panel distortion, use a properly aligned and uniform substructure.

COVERAGE

Each panel has a coverage of 30"

LENGTH

Lengths under 5'-0" are available with some cutting restrictions. Maximum recommended panel length is 45'-0". Longer panels require additional consideration in packaging, shipping, and erection. Please consult your Metal Sales branch for recommendations (see PGI-2 and PGI-3 for locations).

AVAILABILITY

Panels are available in 24 through 16 gauge. Minimum quantities may apply.
Custom capabilities include:
-Crimp curving on numerous panel profiles.
-Curving may be convex, concave, or "S" curves.
-Perforated panels for wind screens and liner panels.

APPLICATION

Commercial, Industrial, and Architectural panels.

FASTENING SYSTEM

Direct Fastened (exposed).

FASTENERS

The fastener selection guide should be consulted for choosing proper fasteners for specific applications. Quantity and type of fastener must meet necessary loading and code requirements (see PGI-12-14).

MATERIALS

Steel grade 50, per ASTM A-792, Optional material: stainless steel, copper, and aluminum.

FINISHES

- *Acrylic Coated Galvalume® (ACG) / ASTM A-792 - AZ55
- Prepainted Galvalume / ASTM A-792 - AZ50
- MS Colorfast45®
- **Fluorocarbon (PVDF)
- Multi-Pass Kynar
- Marbilique
- Plastisol
- Polyester

* Differential appearance of Acrylic Coated Galvalume roofing materials is not a cause for rejection.
** Meets both Kynar 500 and Hylar 5000 specifications.

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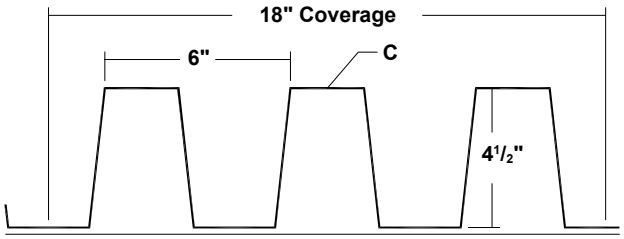
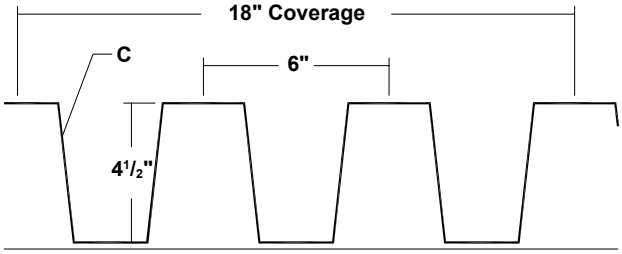
TDR-6 PANEL OVERVIEW

TDR-6 ROOF PANEL PROFILE



TDR-6 WALL PANEL PROFILE



SLOPE

The minimum recommended slope for any TDR-6 roof panel is 1:12. Metal Sales recommends that in all roof applications sealant be used on sidelaps.

SUBSTRATE

TDR-6 panel is designed to be utilized over open structural framing, but can easily be used with a solid substrate. The recommended substrate is 5/8" plywood with a 30 pound felt moisture barrier. To avoid panel distortion, use a properly aligned and uniform substructure.

COVERAGE

Each panel has a coverage of 18"

LENGTH

Lengths under 5'-0" are available with some cutting restrictions. Maximum recommended panel length is 45'-0". Longer panels require additional consideration in packaging, shipping, and erection. Please consult your Metal Sales branch for recommendations (see PGI-2 and PGI-3 for locations).

AVAILABILITY

Panels are available in 24 through 16 gauge. Minimum quantities may apply.
Custom capabilities include:
-Crimp curving on numerous panel profiles.
-Curving may be convex, concave, or "S" curves.
-Perforated panels for wind screens and liner panels.

APPLICATION

Commercial, Industrial, and Architectural panels.

FASTENING SYSTEM

Direct Fastened (exposed).

FASTENERS

The fastener selection guide should be consulted for choosing proper fasteners for specific applications. Quantity and type of fastener must meet necessary loading and code requirements (see PGI-12-14).

MATERIALS

Steel grade 50, per ASTM A-792, Optional material: stainless steel, copper, and aluminum.

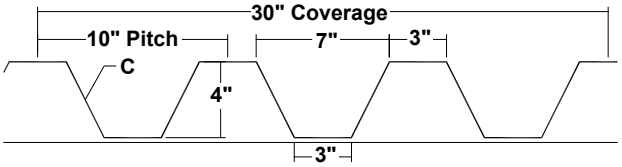
FINISHES

- *Acrylic Coated Galvalume® (ACG) / ASTM A-792 - AZ55
- Prepainted Galvalume / ASTM A-792 - AZ50
- MS Colorfast45®
- **Fluorocarbon (PVDF)
- Multi-Pass Kynar
- Marbilique
- Plastisol
- Polyester

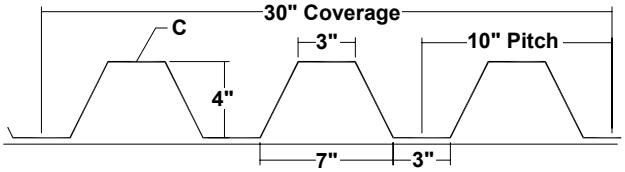
* Differential appearance of Acrylic Coated Galvalume roofing materials is not a cause for rejection.
** Meets both Kynar 500 and Hylar 5000 specifications.

T15 PANEL OVERVIEW

T15 ROOFING PANEL PROFILE



T15 SIDING PANEL PROFILE



SLOPE

The minimum recommended slope for any T15 roof panel is 1:12. Metal Sales recommends that in all roof applications sealant be used on sidelaps.

SUBSTRATE

T15 panel is designed to be utilized over open structural framing, but can easily be used with a solid substrate. The recommended substrate is $^{5}/_{8}$" plywood with a 30 pound felt moisture barrier. To avoid panel distortion, use a properly aligned and uniform substructure.

COVERAGE

Each panel has a coverage of 30"

LENGTH

Lengths under 5'-0" are available with some cutting restrictions. Maximum recommended panel length is 45'-0". Longer panels require additional consideration in packaging, shipping, and erection. Please consult your Metal Sales branch for recommendations (see PGI-2 and PGI-3 for locations).

AVAILABILITY

Panels are available in 24 through 16 gauge. Minimum quantities may apply.
Custom capabilities include:
-Crimp curving on numerous panel profiles.
-Curving may be convex, concave, or "S" curves.
-Perforated panels for wind screens and liner panels.

APPLICATION

Commercial, Industrial, and Architectural panels.

FASTENING SYSTEM

Direct Fastened (exposed).

FASTENERS

The fastener selection guide should be consulted for choosing proper fasteners for specific applications. Quantity and type of fastener must meet necessary loading and code requirements (see PGI-12-14).

MATERIALS

Steel grade 50, per ASTM A-792, Optional material: stainless steel, copper, and aluminum.

FINISHES

- *Acrylic Coated Galvalume® (ACG) / ASTM A-792 - AZ55
- Prepainted Galvalume / ASTM A-792 - AZ50
- MS Colorfast45®
- **Fluorocarbon (PVDF)
- Multi-Pass Kynar
- Marbilique
- Plastisol
- Polyester

* Differential appearance of Acrylic Coated Galvalume roofing materials is not a cause for rejection.
** Meets both Kynar 500 and Hylar 5000 specifications.

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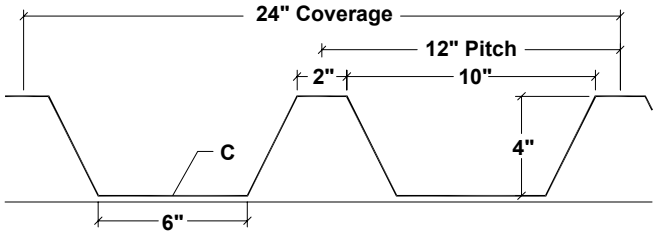
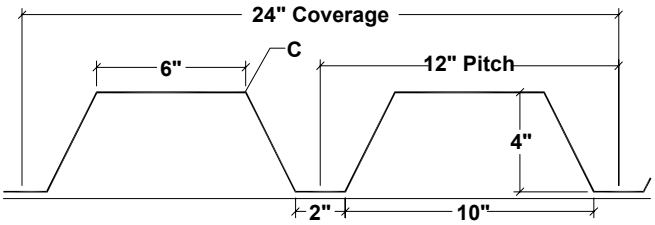
T25 PANEL OVERVIEW

T25 ROOFING PANEL PROFILE



T25 SIDING PANEL PROFILE



SLOPE

The minimum recommended slope for any T25 roof panel is 1:12. Metal Sales recommends that in all roof applications sealant be used on sidelaps.

SUBSTRATE

T25 panel is designed to be utilized over open structural framing, but can easily be used with a solid substrate. The recommended substrate is $^{5}/_{8}$" plywood with a 30 pound felt moisture barrier. To avoid panel distortion, use a properly aligned and uniform substructure.

COVERAGE

Each panel has a coverage of 24"

LENGTH

Lengths under 5'-0" are available with some cutting restrictions. Maximum recommended panel length is 45'-0". Longer panels require additional consideration in packaging, shipping, and erection. Please consult your Metal Sales branch for recommendations (see PGI-2 and PGI-3 for locations).

AVAILABILITY

Panels are available in 24 through 16 gauge. Minimum quantities may apply.
Custom capabilities include:
-Crimp curving on numerous panel profiles.
-Curving may be convex, concave, or "S" curves.
-Perforated panels for wind screens and liner panels.

APPLICATION

Commercial, Industrial, and Architectural panels.

FASTENING SYSTEM

Direct Fastened (exposed).

FASTENERS

The fastener selection guide should be consulted for choosing proper fasteners for specific applications. Quantity and type of fastener must meet necessary loading and code requirements (see PGI-12-14).

MATERIALS

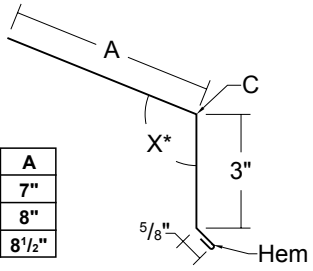
Steel grade 50, per ASTM A-792, Optional material: stainless steel, copper, and aluminum.

FINISHES

- *Acrylic Coated Galvalume® (ACG) / ASTM A-792 - AZ55
- Prepainted Galvalume / ASTM A-792 - AZ50
- MS Colorfast45®
- **Fluorocarbon (PVDF)
- Multi-Pass Kynar
- Marbilique
- Plastisol
- Polyester

* Differential appearance of Acrylic Coated Galvalume roofing materials is not a cause for rejection.
** Meets both Kynar 500 and Hylar 5000 specifications.

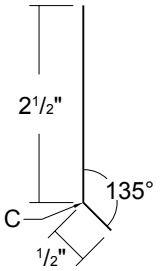
CUSTOM EAVE



	A
T13, T13A, T13B	7"
T15, T25	8"
TDR6	8 1/2"

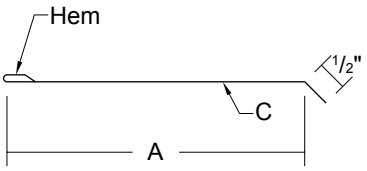
*Length 10'-2" - *Specify Slope Angle*

CLEAT



Length 10'-2"

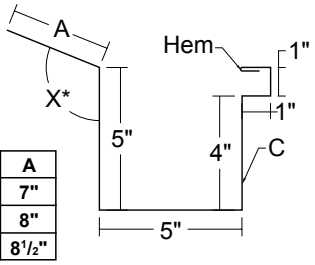
CUSTOM SOFFIT CLEAT



	A
T13, T13A, T13B	5 1/2"
T15, T25	6 1/2"
TDR6	7"

Length 10'-2"

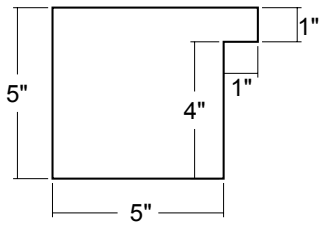
CUSTOM BOX GUTTER



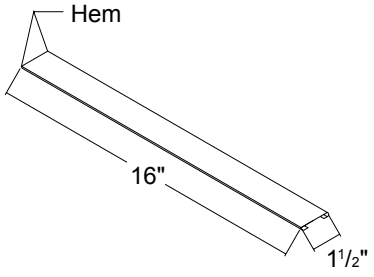
	A
T13, T13A, T13B	7"
T15, T25	8"
TDR6	8 1/2"

*Length 10'-2" - *Specify Slope Angle*

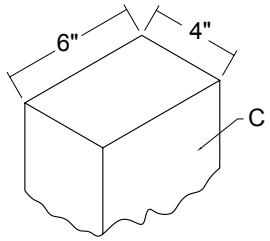
BOX GUTTER END (RIGHT AND LEFT)



UNIVERSAL GUTTER/ DOWNSPOUT BRACKET

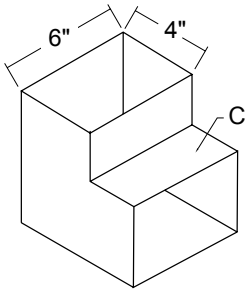


DOWNSPOUT 6" x 4"



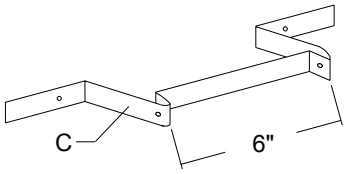
Length 10'-0"
(Also available 4" x 3 1/2")

95° ELBOW 6" x 4"



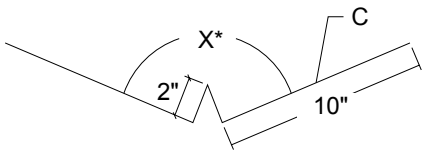
(Also available 4" x 3 1/2")
(Also available in 45°)

DOWNSPOUT BRACKET



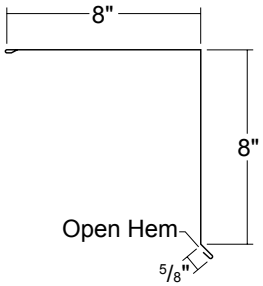
(Also available 4")

VALLEY



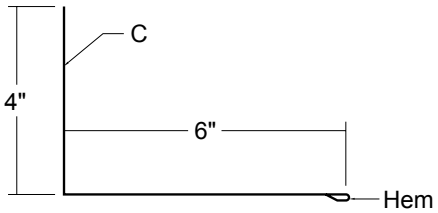
*Length 10'-0" - *Specify Slope Angle*

CUSTOM RAKE



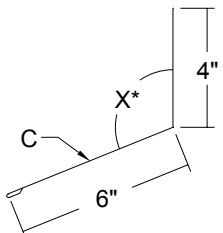
Length 10'-2"

RAKEWALL



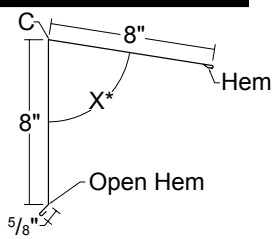
Length 10'-2"

PITCH BREAK



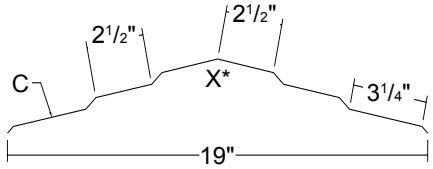
*Length 10'-2" - *Specify Slope Angle*

CUSTOM PEAK



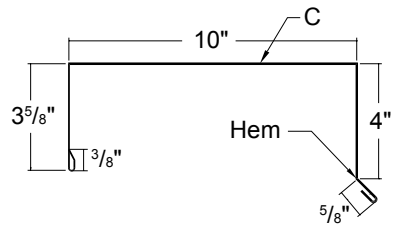
*Length 10'-0" - *Specify Slope Angle*

UNIVERSAL RIDGE COVER



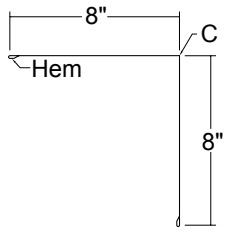
*Length 10'-0" - *Specify Slope Angle*

COPING



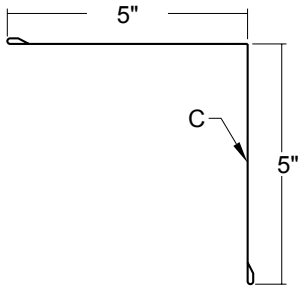
Length 10'-0"

CUSTOM OUTSIDE CORNER



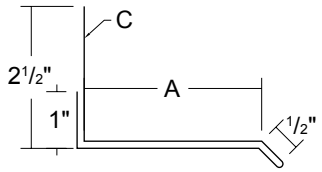
Length 10'-0"

INSIDE CORNER



Length 10'-0"

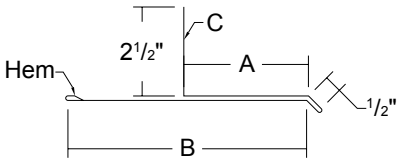
CUSTOM SILL/HEAD



	A
T13, T13A, T13B	3 1/4"
T15, T25	4 1/4"
TDR6	4 3/4"

Length 10'-0"

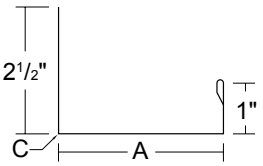
CUSTOM SILL TO SOFFIT



	A	B
T13, T13A, T13B	3 1/4"	5 1/2"
T15, T25	4 1/4"	6 1/2"
TDR6	4 3/4"	7"

Length 10'-0"

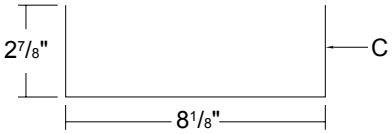
CUSTOM JAMB



	A
T13, T13A, T13B	3 1/4"
T15, T25	4 1/4"
TDR6	4 3/4"

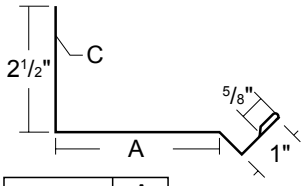
Length 10'-0"

HEAD/JAMB COVER



Length 10'-0"

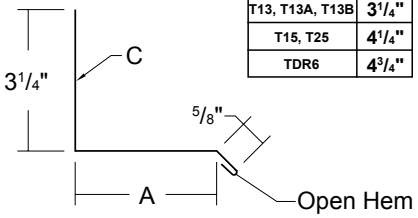
CUSTOM HEAD CHANNEL



	A
T13, T13A, T13B	3"
T15, T25	4"
TDR6	4 1/2"

Length 10'-0"

CUSTOM BASE

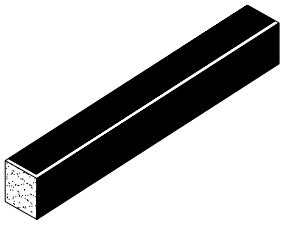


	A
T13, T13A, T13B	3 1/4"
T15, T25	4 1/4"
TDR6	4 3/4"

Length 10'-0"

C- Indicates color side of flashing.

UNIVERSAL CLOSURE

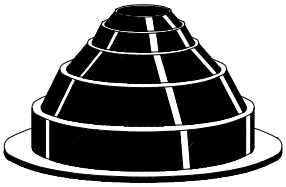


1" x 1 1/2" x 50' Polyethylene Foam
1" x 1 1/2" x 10' Polyethylene Foam

TAPE SEALANT

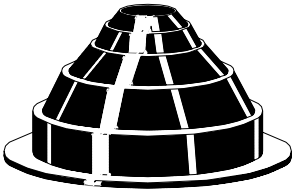
3/8" X 3/32" X 50'
Single Bead
Butyl - Gray

RUBBER ROOF JACK



MINI (1/4" to 1 1/8" O.D. Pipe)
#2 (1 3/4" to 3" O.D. Pipe)
#4 (3" to 6" O.D. Pipe)
#6 (6" to 9" O.D. Pipe)
#8 (7" to 13" O.D. Pipe)

RETRO ROOF JACK

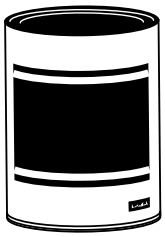


#801RETRO (3/4" to 2 3/4" O.D. Pipe)
#802RETRO (2" to 7 1/4" O.D. Pipe)
#803RETRO (3 1/4" to 10" O.D. Pipe)

RUBBER ROOF FLASH KIT

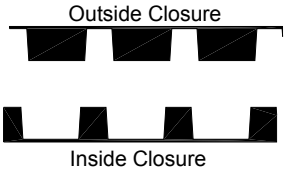
12" x 50'-0" Flash Kit
18" x 50'-0" Flash Kit

TOUCH-UP PAINT

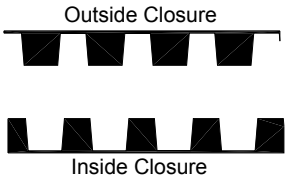


Available in pints
PVDF / MS Colorfast45

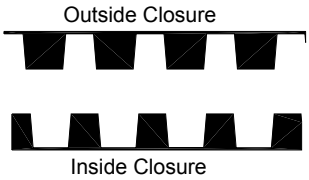
T13 CLOSURES



T13-A CLOSURES



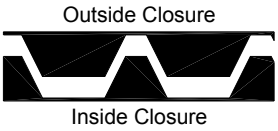
T13-B CLOSURE



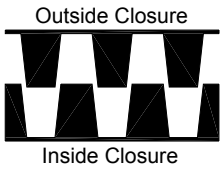
T15 CLOSURES

Inside/Outside Closure

T25 CLOSURES



TDR-6 CLOSURES



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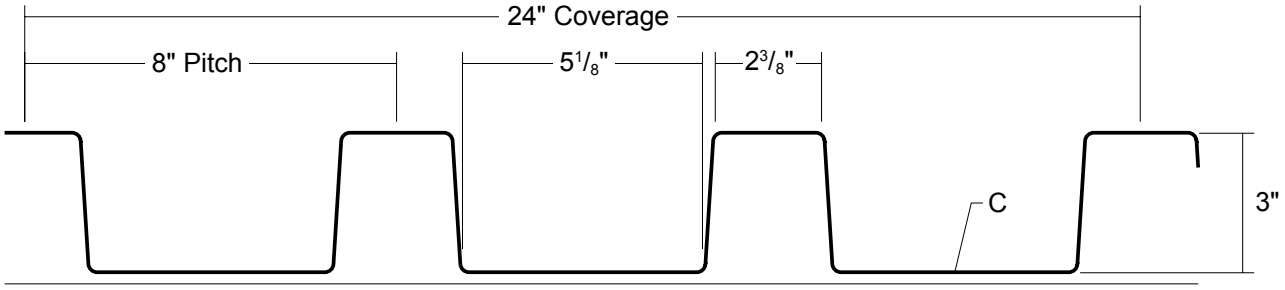
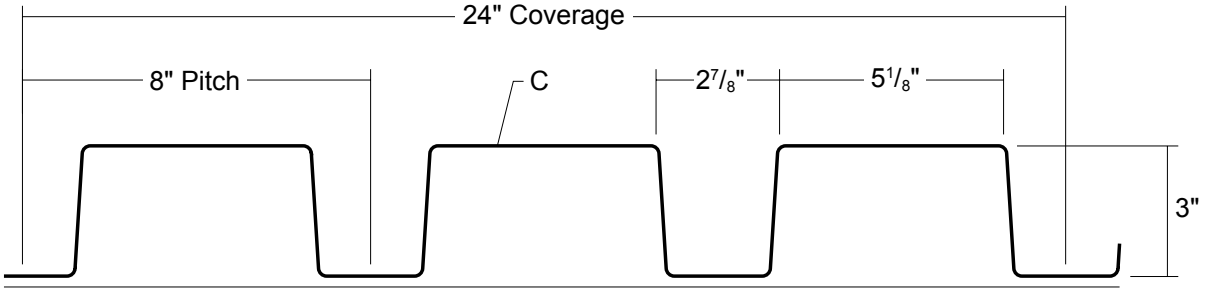
ROOF PANEL PROFILE



SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS PSF (3 or More Equal Spans)											
Ga.	Width (in.)	Yield KSI	Weight PSF	Top in Compression		Bottom in Compression		Inward Load						Outward / Uplift Load					
				Ixx In⁴/ft	Sxx In³/ft	Ixx In⁴/ft	Sxx In³/ft	5'	6'	7'	8'	10'	12'	5'	6'	7'	8'	10'	12'
24	24"	50	1.58	0.5010	0.2470	0.4140	0.2306	188	136	102	79	52	36	198	143	108	84	55	39
22	24"	50	2.10	0.7570	0.4006	0.6045	0.3560	312	221	164	127	82	57	346	246	183	142	92	64
20	24"	33	2.48	0.9810	0.5408	0.7890	0.4886	290	204	151	116	75	52	319	224	166	128	82	57
18	24"	33	3.27	1.3635	0.7724	1.1190	0.7259	429	302	223	172	111	77	454	320	237	183	118	76

1. Theoretical section properties have been calculated per AISI 2001. "Specifications for the Design of Cold-formed Steel Structural Members." Ixx and Sxx are effective section properties for deflection and bending.
2. Allowable load is calculated in accordance with AISI 2001 specifications considering bending, shear, combined bending and shear and deflection. Allowable load considers both 3 or more equal span conditions. Allowable load does not address web crippling or fasteners/support connection. Panel weight is not considered.
3. Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
4. Allowable loads do not include a 1/3 stress increase in uplift.

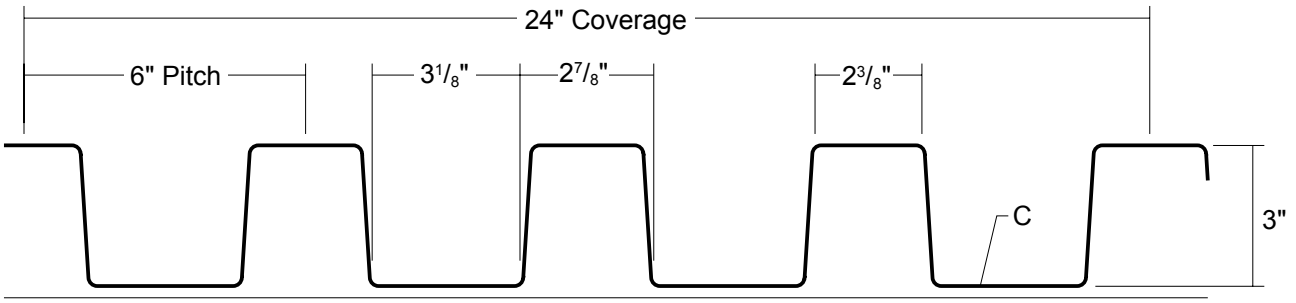
WALL PANEL PROFILE



SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS PSF (3 or More Equal Spans)											
Ga.	Width (in.)	Yield KSI	Weight PSF	Top in Compression		Bottom in Compression		Inward Load						Outward Load					
				Ixx In⁴/ft	Sxx In³/ft	Ixx In⁴/ft	Sxx In³/ft	5'	6'	7'	8'	10'	12'	5'	6'	7'	8'	10'	12'
24	24"	50	1.58	0.4140	0.2306	0.5010	0.2470	198	143	108	84	55	39	188	136	102	79	52	36
22	24"	50	2.10	0.6045	0.3560	0.7570	0.4006	346	246	183	142	92	64	312	221	164	127	82	57
20	24"	33	2.48	0.7890	0.4886	0.9810	0.5408	319	224	166	128	82	57	290	204	151	116	75	52
18	24"	33	3.27	1.1190	0.7259	1.3635	0.7724	454	320	237	183	118	82	429	302	223	172	111	77

1. Theoretical section properties have been calculated per AISI 2001. "Specifications for the Design of Cold-formed Steel Structural Members." Ixx and Sxx are effective section properties for deflection and bending.
2. Allowable load is calculated in accordance with AISI 2001 specifications considering bending, shear, combined bending and shear and deflection. Allowable load considers both 3 or more equal span conditions. Allowable load does not address web crippling or fasteners/support connection. Panel weight is not considered.
3. Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
4. Allowable loads do not include a 1/3 stress increase in uplift.

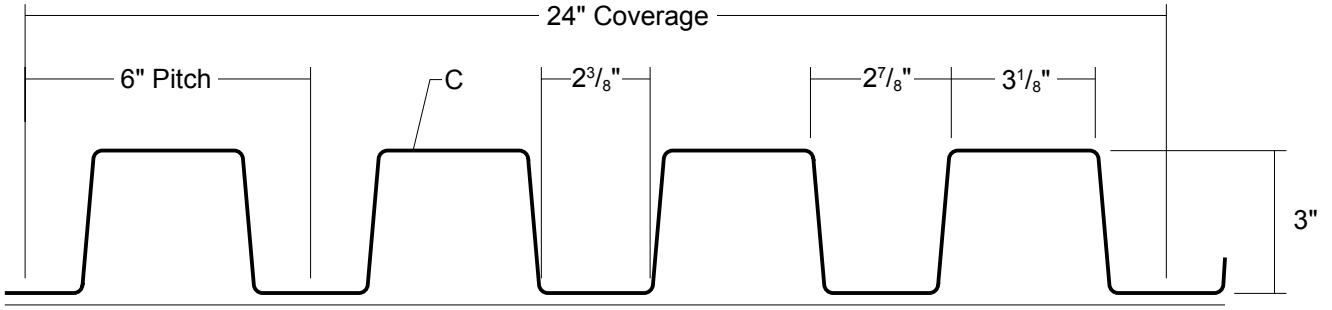
ROOF PANEL PROFILE



SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS PSF (3 or More Equal Spans)											
Ga.	Width (in.)	Yield KSI	Weight PSF	Top in Compression		Bottom in Compression		Inward Load						Outward / Uplift Load					
				Ixx In^4/ft	Sxx In^3/ft	Ixx In^4/ft	Sxx In^3/ft	5'	6'	7'	8'	10'	12'	5'	6'	7'	8'	10'	12'
24	24"	50	1.78	0.5785	0.3264	0.5390	0.3037	248	179	134	105	68	48	261	189	143	112	73	51
22	24"	50	2.35	0.8325	0.4934	0.7795	0.4620	406	287	213	164	106	74	430	305	227	175	113	79
20	24"	33	2.79	0.0660	0.6587	1.0060	0.6235	371	261	193	148	95	66	391	274	203	156	101	70
18	24"	33	3.67	1.4750	0.9404	1.4100	0.9068	539	378	280	215	138	96	557	392	290	223	144	100

1. Theoretical section properties have been calculated per AISI 2001. "Specifications for the Design of Cold-formed Steel Structural Members." Ixx and Sxx are effective section properties for deflection and bending.
2. Allowable load is calculated in accordance with AISI 2001 specifications considering bending, shear, combined bending and shear and deflection. Allowable load considers both 3 or more equal span conditions. Allowable load does not address web crippling or fasteners/support connection. Panel weight is not considered.
3. Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
4. Allowable loads do not include a 1/3 stress increase in uplift.

WALL PANEL PROFILE



SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS PSF (3 or More Equal Spans)											
Ga.	Width (in.)	Yield KSI	Weight PSF	Top in Compression		Bottom in Compression		Inward Load						Outward Load					
				Ixx In^4/ft	Sxx In^3/ft	Ixx In^4/ft	Sxx In^3/ft	5'	6'	7'	8'	10'	12'	5'	6'	7'	8'	10'	12'
24	24"	50	1.78	0.5390	0.3037	0.5785	0.3264	261	189	143	112	73	51	248	179	134	105	68	48
22	24"	50	2.35	0.7795	0.4620	0.8325	0.4934	430	305	227	175	113	79	406	287	213	164	106	74
20	24"	33	2.79	1.0060	0.6235	1.0660	0.6587	391	274	203	156	101	70	371	261	193	148	95	66
18	24"	33	3.67	1.4100	0.9068	1.4750	0.9404	557	392	290	223	144	100	539	378	280	215	138	95

1. Theoretical section properties have been calculated per AISI 2001. "Specifications for the Design of Cold-formed Steel Structural Members." Ixx and Sxx are effective section properties for deflection and bending.
2. Allowable load is calculated in accordance with AISI 2001 specifications considering bending, shear, combined bending and shear and deflection. Allowable load considers both 3 or more equal span conditions. Allowable load does not address web crippling or fasteners/support connection. Panel weight is not considered.
3. Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
4. Allowable loads do not include a 1/3 stress increase in uplift.

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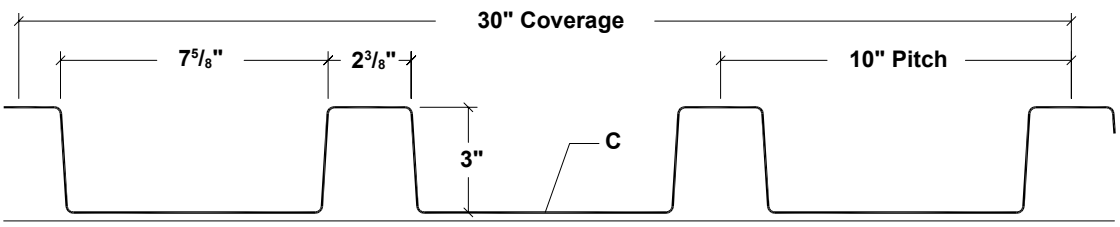
T13-B SECTION PROPERTIES

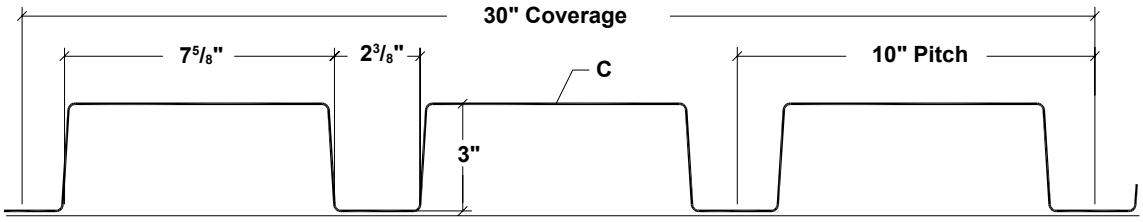
ROOF PANEL PROFILE



SECTION PROPERTIES								ALLOWABLE UNIFORM LIVE LOADS PSF (3 or More Equal Spans)											
Ga.	Width (in.)	Yield KSI	Weight PSF	Top in Compression		Bottom in Compression		Inward (Gravity / Deflection) Load						Outward Uplift (Stress) Load					
				Ixx In^4/ft	Sxx In^3/ft	Ixx In^4/ft	Sxx In^3/ft	5'	6'	7'	8'	10'	12'	5'	6'	7'	8'	10'	12'
24	30"	50	1.58	0.4032	0.1774	0.3156	0.1697	137	99	75	58	38	27	189	137	104	81	53	37
22	30"	50	2.06	0.6224	0.2926	0.4804	0.2794	242	172	128	99	64	45	335	238	178	137	89	62
20	30"	33	2.41	0.8760	0.4399	0.6320	0.3880	230	162	120	92	59	41	345	243	180	138	89	62
18	30"	33	3.15	1.2360	0.6364	0.9040	0.5836	347	244	180	138	89	62	502	353	261	201	129	90

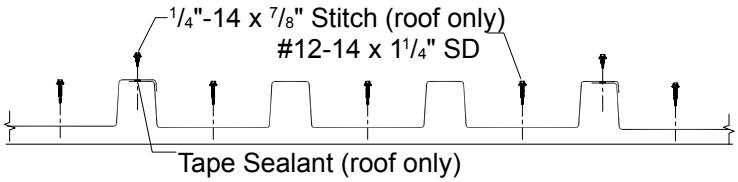
1. Theoretical section properties have been calculated per AISI 2001 "Specification for the Design of Cold-formed Steel Structural Members." Ixx and Sxx are effective section properties for deflection and bending.
2. Allowable load is calculated in accordance with AISI 2001 specifications considering bending, shear, combined bending and shear, deflection, and applicable testing when available. Allowable load considers the worst case of 3 and 4 equal span conditions. Allowable load does not address web crippling or fasteners/support connection and panel weight is not considered.
3. Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
4. Allowable loads do not include a 1/3 stress increase in uplift.

WALL PANEL PROFILE

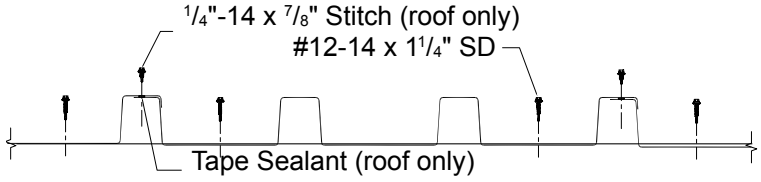


FASTENING PATTERNS

Fastening Pattern (Ends)

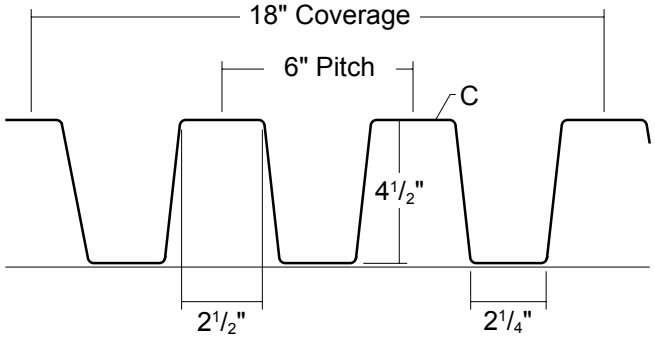


Fastening Pattern (Field)



TDR-6 SECTION PROPERTIES

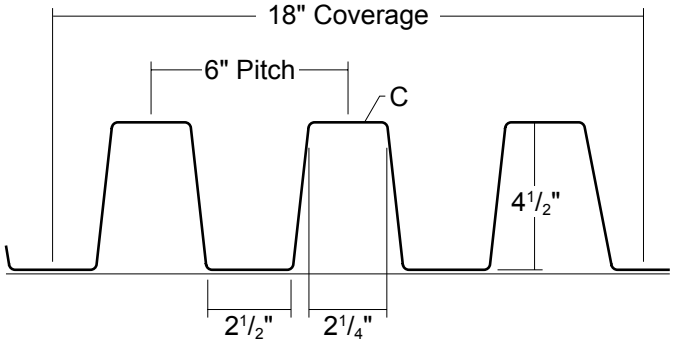
ROOF PANEL PROFILE



SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS PSF (3 or More Equal Spans)											
Ga.	Width (in.)	Yield KSI	Weight PSF	Top in Compression		Bottom in Compression		Inward Load						Outward/Uplift Load					
				Ixx In^4/ft	Sxx In^3/ft	Ixx In^4/ft	Sxx In^3/ft	6'	7'	8'	10'	12'	14'	6'	7'	8'	10'	12'	14'
24	18"	50	2.20	1.3404	0.5100	1.3140	0.4551	195	155	126	88	64	49	204	164	135	95	70	53
22	18"	50	2.92	2.0407	0.8525	2.0020	0.7509	380	295	235	158	113	85	409	321	257	175	126	95
20	18"	33	3.45	2.6373	1.1611	2.7187	1.1059	429	323	252	164	115	85	447	337	263	172	121	89
18	18"	33	4.55	3.6493	1.5833	3.7460	1.5610	634	472	365	236	165	122	643	479	370	239	167	123

1. Theoretical section properties have been calculated per AISI 2001 "Specification for the Design of Cold-formed Steel Structural Members." Ixx and Sxx are effective section properties for deflection and bending.
2. Allowable load is calculated in accordance with AISI 2001 specifications considering bending, shear, combined bending and shear, deflection, and applicable testing when available. Allowable load considers the worst case of 3 and 4 equal span conditions. Allowable load does not address web crippling or fasteners/support connection and panel weight is not considered.
3. Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
4. Allowable loads do not include a 1/3 stress increase in uplift.

WALL PANEL PROFILE



SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS PSF (3 or More Equal Spans)											
Ga.	Width (in.)	Yield KSI	Weight PSF	Top in Compression		Bottom in Compression		Inward Load						Outward/Uplift Load					
				Ixx In^4/ft	Sxx In^3/ft	Ixx In^4/ft	Sxx In^3/ft	6'	7'	8'	10'	12'	14'	6'	7'	8'	10'	12'	14'
24	18"	50	2.20	1.3140	0.4551	1.3407	0.5100	204	164	135	95	70	53	195	155	126	88	64	49
22	18"	50	2.92	2.0020	0.7509	2.0407	0.8525	410	321	257	175	126	95	381	295	235	158	113	85
20	18"	33	3.45	2.7187	1.1059	2.6373	1.1611	447	337	263	172	121	89	429	323	252	164	115	85
18	18"	33	4.55	3.7460	1.5433	3.6493	1.5833	643	479	370	239	167	123	628	467	361	233	163	126

1. Theoretical section properties have been calculated per AISI 2001 "Specification for the Design of Cold-formed Steel Structural Members." Ixx and Sxx are effective section properties for deflection and bending.
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3. Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
4. Allowable loads do not include a 1/3 stress increase in uplift.

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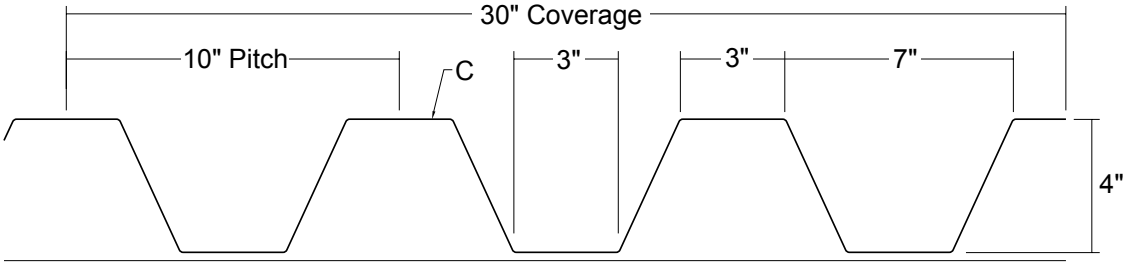
ROOF PANEL PROFILE



SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS PSF (3 or More Equal Spans)											
Ga.	Width (in.)	Yield KSI	Weight PSF	Top in Compression		Bottom in Compression		Inward Load						Outward / Uplift Load					
				Ixx In^4/ft	Sxx In^3/ft	Ixx In^4/ft	Sxx In^3/ft	5'	6'	7'	8'	10'	12'	5'	6'	7'	8'	10'	12'
24	30"	50	1.42	0.6536	0.2635	0.6340	0.2344	134	103	82	66	46	33	139	109	87	71	50	37
22	30"	50	1.89	1.0008	0.4404	0.9792	0.3908	268	201	156	124	83	59	285	216	169	135	91	66
20	30"	33	2.24	1.3480	0.6404	1.3880	0.6137	328	237	179	139	91	64	339	246	185	145	95	67
18	30"	33	2.95	1.8640	0.9084	1.9400	0.8796	502	357	266	205	133	93	516	367	274	212	137	96

1. Theoretical section properties have been calculated per AISI 2001. "Specifications for the Design of Cold-formed Steel Structural Members." Ixx and Sxx are effective section properties for deflection and bending.
2. Allowable load is calculated in accordance with AISI 2001 specifications considering bending, shear, combined bending and shear and deflection. Allowable load considers both 3 or more equal span conditions. Allowable load does not address web crippling or fasteners/support connection. Panel weight is not considered.
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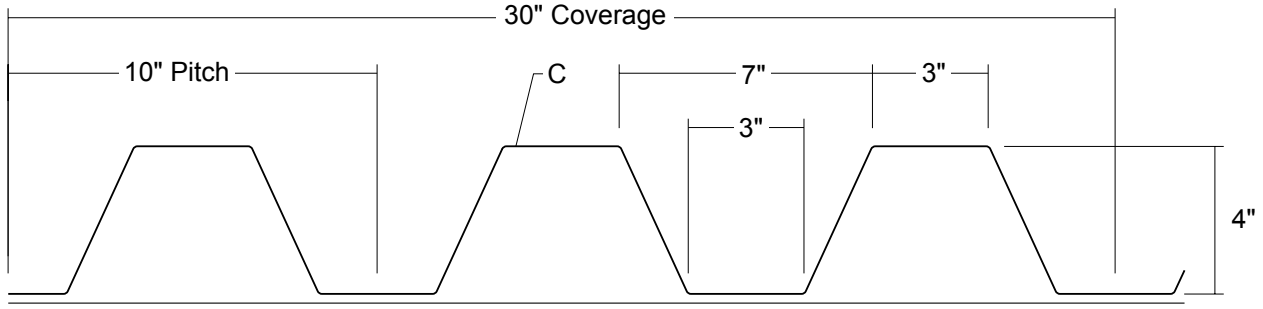
4. Allowable loads do not include a 1/3 stress increase in uplift.

WALL PANEL PROFILE

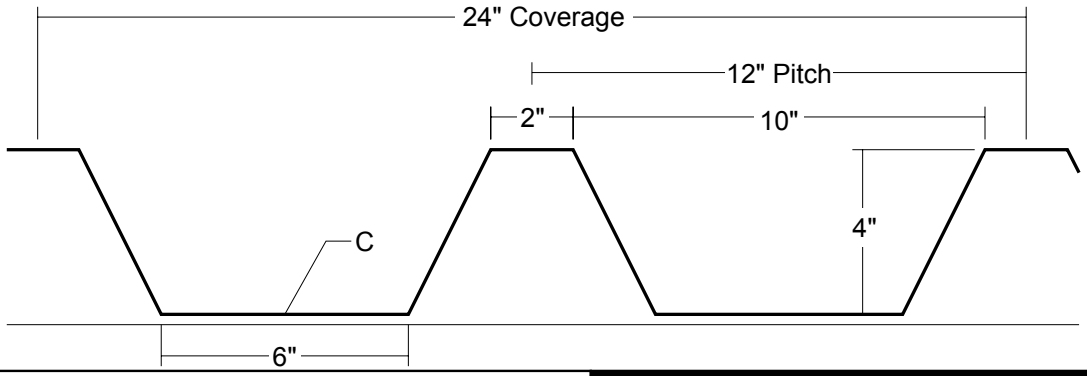


SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS PSF (3 or More Equal Spans)											
Ga.	Width (in.)	Yield KSI	Weight PSF	Top in Compression		Bottom in Compression		Inward Load						Outward Load					
				Ixx In^4/ft	Sxx In^3/ft	Ixx In^4/ft	Sxx In^3/ft	5'	6'	7'	8'	10'	12'	5'	6'	7'	8'	10'	12'
24	30"	50	1.42	0.6340	0.2344	0.6536	0.2635	139	109	87	71	50	37	134	103	82	66	46	33
22	30"	50	1.89	0.9792	0.3908	1.0008	0.4404	285	216	169	169	91	66	268	201	156	124	83	59
20	30"	33	2.24	1.3880	0.6137	1.3480	0.6404	339	246	185	185	95	67	328	237	179	139	91	64
18	30"	33	2.95	1.9400	0.8796	1.8640	0.9084	516	367	274	274	137	96	502	357	266	205	133	93

1. Theoretical section properties have been calculated per AISI 2001. "Specifications for the Design of Cold-formed Steel Structural Members." Ixx and Sxx are effective section properties for deflection and bending.
2. Allowable load is calculated in accordance with AISI 2001 specifications considering bending, shear, combined bending and shear and deflection. Allowable load considers both 3 or more equal span conditions. Allowable load does not address web crippling or fasteners/support connection. Panel weight is not considered.
3. Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
4. Allowable loads do not include a 1/3 stress increase in uplift.

T25 SECTION PROPERTIES

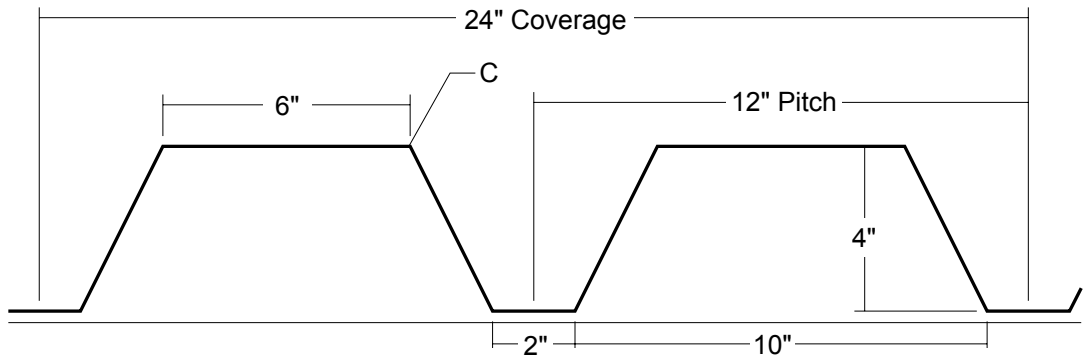
ROOF PANEL PROFILE



SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS PSF (3 or More Equal Spans)											
Ga.	Width (in.)	Yield KSI	Weight PSF	Top in Compression		Bottom in Compression		Inward Load						Outward / Uplift Load					
				Ixx In^4/ft	Sxx In^3/ft	Ixx In^4/ft	Sxx In^3/ft	6'	7'	8'	10'	12'	14'	6'	7'	8'	10'	12'	14'
24	24"	50	1.36	0.6465	0.2242	0.5120	0.1991	87	69	56	39	28	21	92	74	60	42	31	24
22	24"	50	1.80	0.9900	0.3654	0.7950	0.3373	172	133	106	71	51	38	180	141	112	76	55	41
20	24"	33	2.14	1.4195	0.5791	1.1045	0.5142	199	150	117	76	54	40	219	166	129	85	60	44
18	24"	33	2.82	1.9630	0.8189	1.5615	0.7542	305	227	176	114	80	59	328	245	190	123	86	64

1. Theoretical section properties have been calculated per AISI 2001 "Specification for the Design of Cold-formed Steel Structural Members." Ixx and Sxx are effective section properties for deflection and bending.
2. Allowable load is calculated in accordance with AISI 2001 specifications considering bending, shear, combined bending and shear, deflection, and applicable testing when available. Allowable load considers the worst case of 3 and 4 equal span conditions. Allowable load does not address web crippling or fasteners/support connection and panel weight is not considered.
3. Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
4. Allowable loads do not include a 1/3 stress increase in uplift.

WALL PANEL PROFILE



SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS PSF (3 or More Equal Spans)											
Ga.	Width (in.)	Yield KSI	Weight PSF	Top in Compression		Bottom in Compression		Inward Load						Outward Load					
				Ixx In^4/ft	Sxx In^3/ft	Ixx In^4/ft	Sxx In^3/ft	6'	7'	8'	10'	12'	14'	6'	7'	8'	10'	12'	14'
24	24"	50	1.36	0.5120	0.1991	0.6465	0.2242	92	74	60	42	31	24	87	69	56	39	28	21
22	24"	50	1.80	0.7950	0.3373	0.9900	0.3654	180	141	112	76	55	41	172	133	106	71	51	38
20	24"	33	2.14	1.1045	0.5142	1.4195	0.5791	219	166	129	85	60	44	199	150	117	76	54	40
18	24"	33	2.82	1.5615	0.7542	1.9630	0.8189	328	245	190	123	86	64	305	227	176	114	80	61

1. Theoretical section properties have been calculated per AISI 2001 "Specification for the Design of Cold-formed Steel Structural Members." Ixx and Sxx are effective section properties for deflection and bending.
2. Allowable load is calculated in accordance with AISI 2001 specifications considering bending, shear, combined bending and shear, deflection, and applicable testing when available. Allowable load considers the worst case of 3 and 4 equal span conditions. Allowable load does not address web crippling or fasteners/support connection and panel weight is not considered.
3. Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
4. Allowable loads do not include a 1/3 stress increase in uplift.

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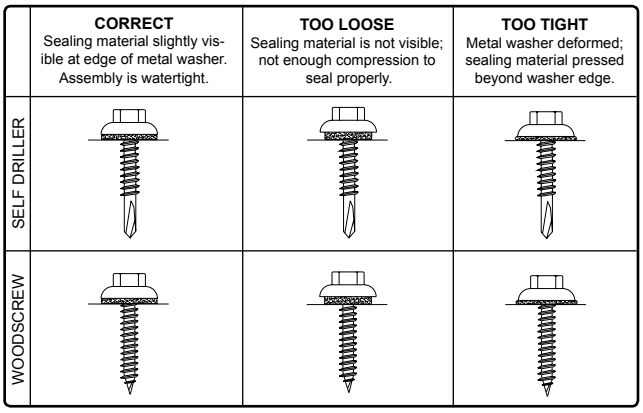
FASTENER INSTALLATION TECHNIQUE

Recommended Tool Type - Use depth locating nose or adjustable clutch on screw gun to prevent overdrilling and strip out. **Do not use impact tools or runners.**

Seating the washer - Apply sufficient torque to seat the washer - do not overdrive the fastener.



To prevent wobbling - Make sure fastener head is completely engaged in the socket. If the head does not go all the way in the socket - tap the magnet deeper into the socket to allow full head engagement. Metal chips will build up from drilling and should be removed from time to time.

Protect drill point - Push only hard enough on the screw gun to engage clutch. This prevents excess friction and burn out of the drill point. Correct pressure will allow screw to drill and tap without binding.

Drilling through sheet and insulation - Ease up on pressure when drilling through insulation to avoid striking the purlin or girt with the point - apply more pressure after drill point contacts purlin or girt.

Drilling through purlin overlaps - Drilling through lapped purlins requires extra care. Excessive voids between purlins sometimes damages drill points and two self-drillers might be necessary to complete the operation. It is sometimes advantageous to predrill.

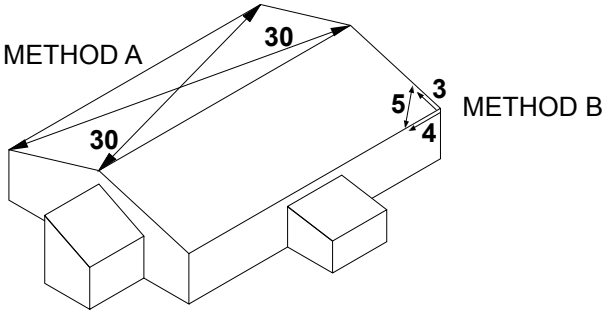
CONDITION OF SUBSTRUCTURE

Whether over solid substrate or open structural framing, panel distortion may occur if not applied over properly aligned and uniform substructure.

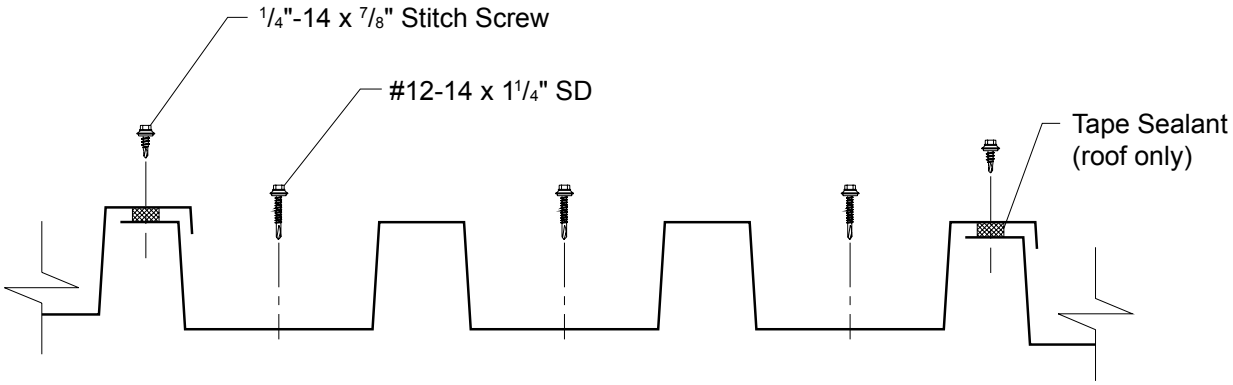
The installer should check the roof deck for squareness before installing Industrial Rib / Deep Rib panels. Several methods can be used to verify squareness of the structure for proper installation of the panels.

METHOD "A" - One method for checking the roof for squareness is to measure diagonally across one slope of the roof from similar points at the ridge and eave and obtain the same dimension.

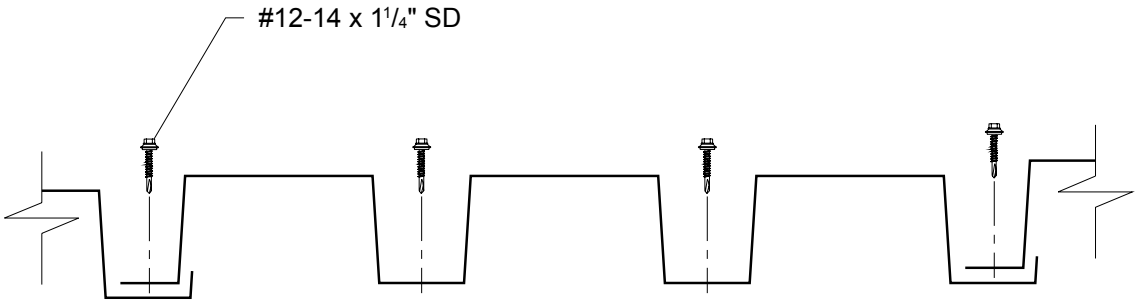
METHOD "B" - The 3-4-5 triangle system may also be used. To use this system measure a point from the corner along the edge of the roof at a module of three (3). Measure a point from the same corner along another edge at a module of four (4). Then by measuring diagonally between the two points established, the dimension should be exactly a module of five (5) to have a square corner. Multiple uses of this system may be required to determine building squareness. If the endwall cannot be made square, the roof system cannot be installed as shown in these instructions.



T13 FASTENING PATTERNS

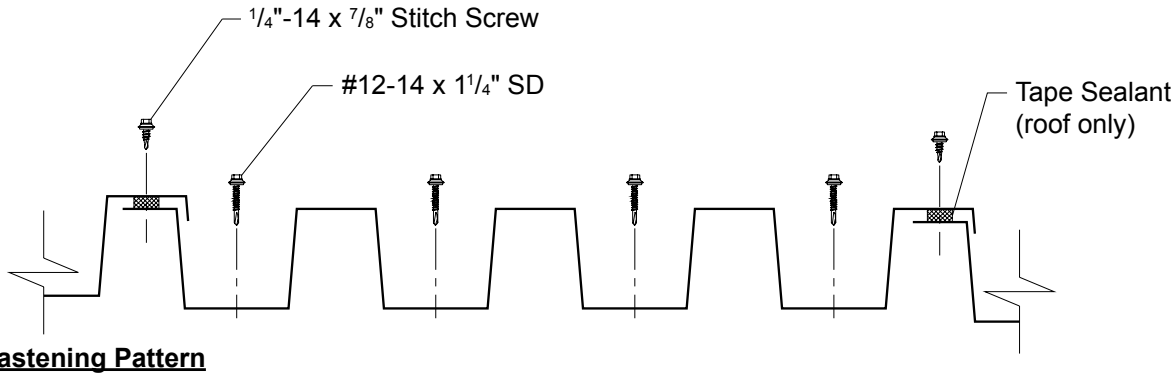


Roof Panel Fastening Pattern

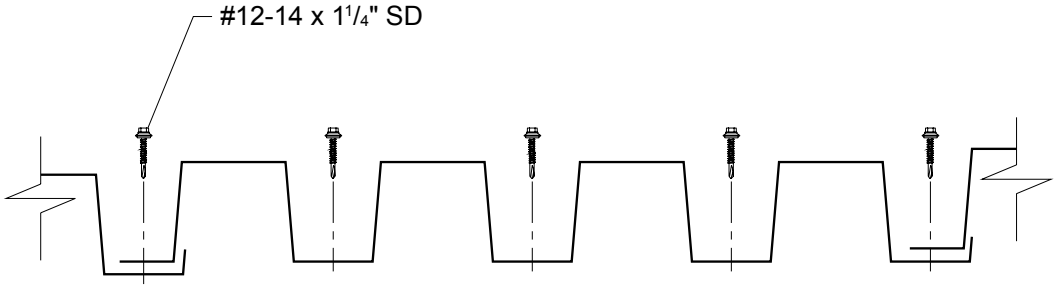


Wall Panel Fastening Pattern

T13A FASTENING PATTERNS

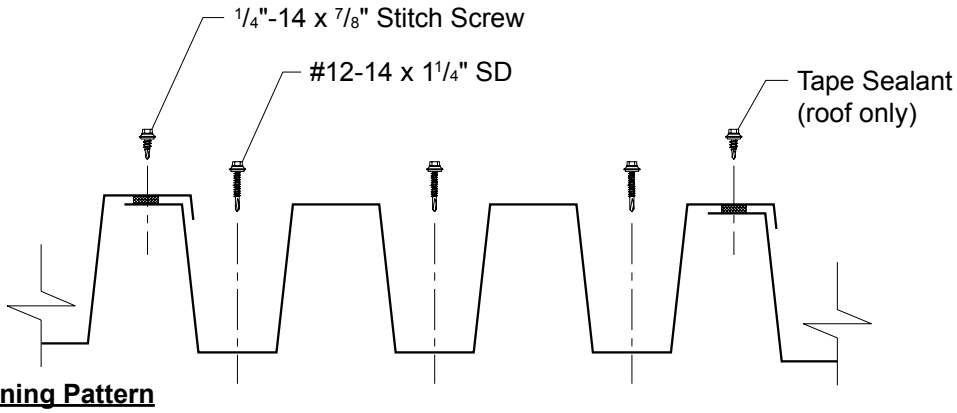


Roof Panel Fastening Pattern

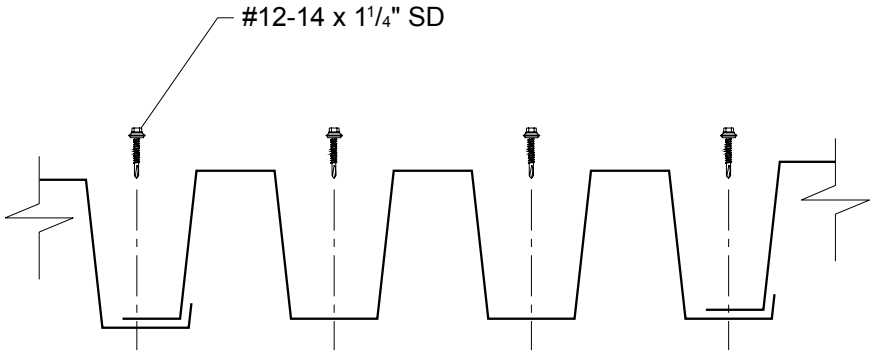


Wall Panel Fastening Pattern

TDR-6 FASTENING PATTERNS

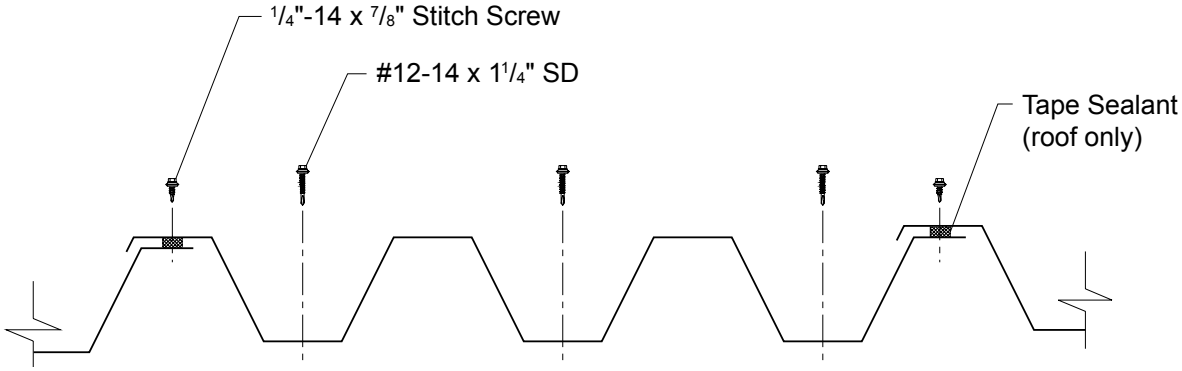


Roof Panel Fastening Pattern

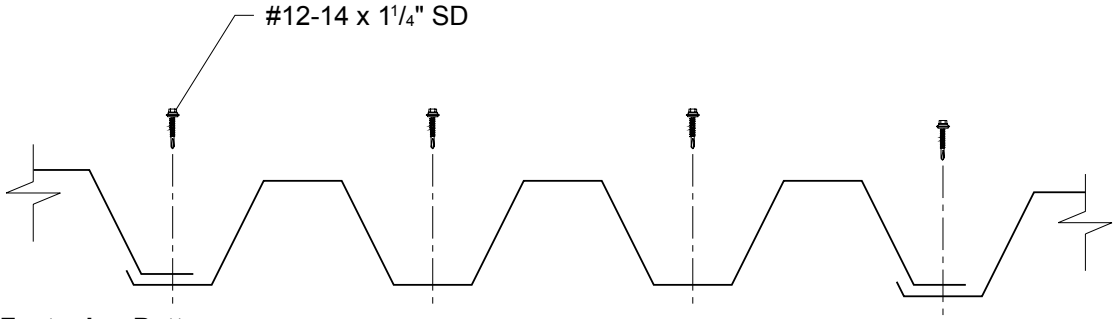


Wall Panel Fastening Pattern

T15 FASTENING PATTERNS

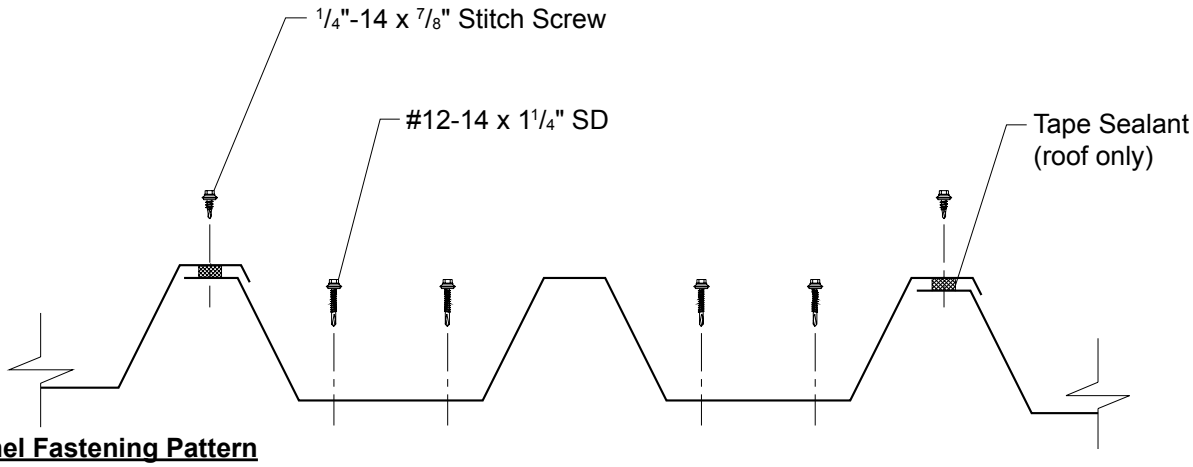


Roof Panel Fastening Pattern

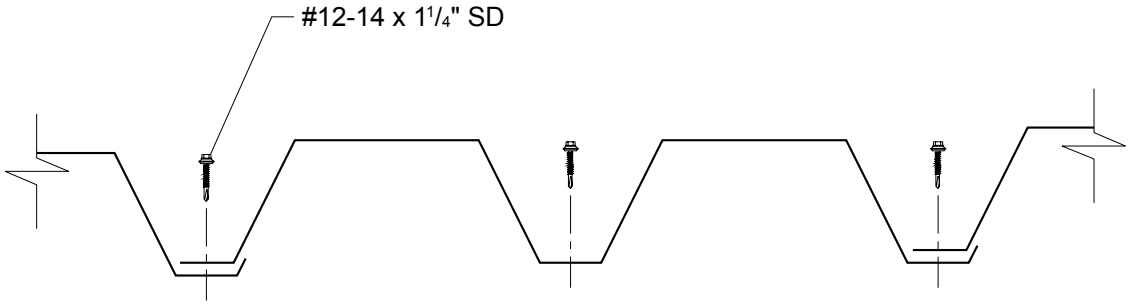


Wall Panel Fastening Pattern

T25 FASTENING PATTERNS

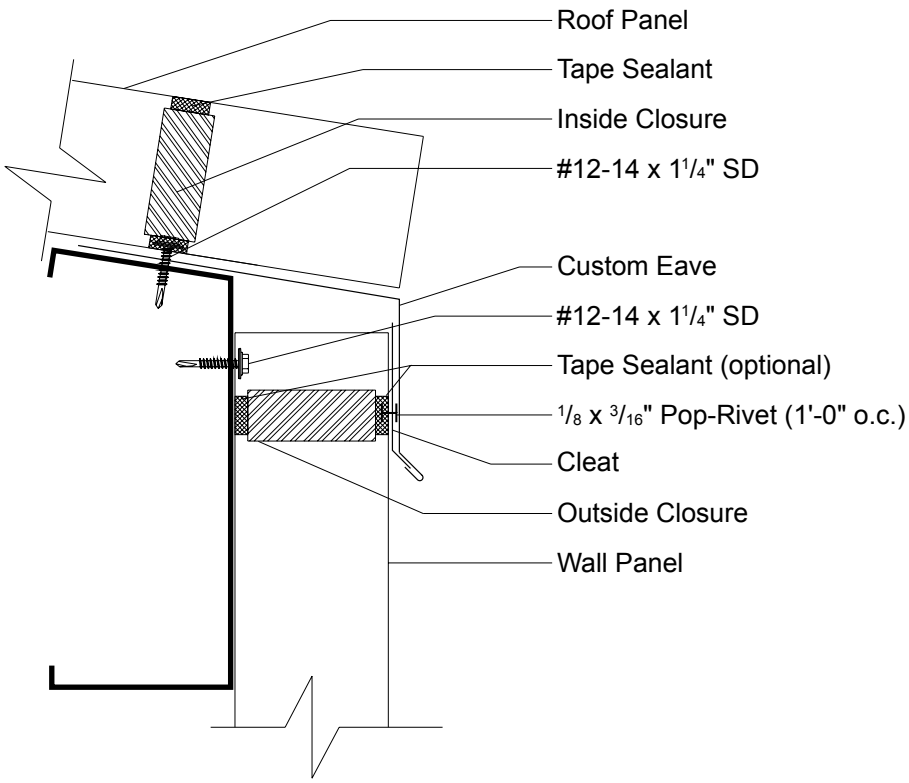


Roof Panel Fastening Pattern

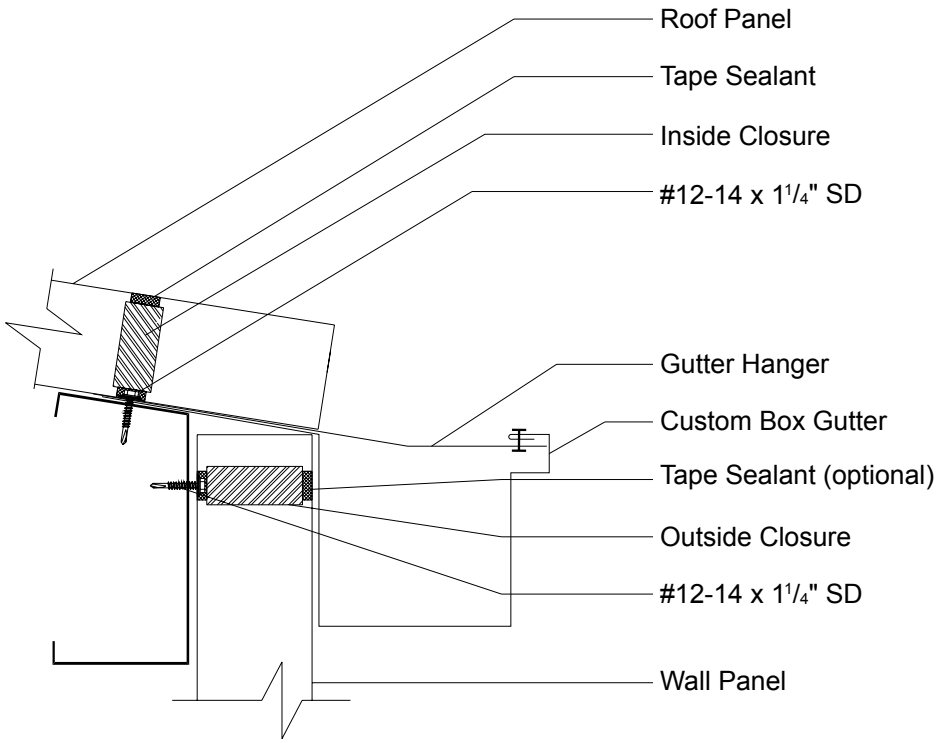


Wall Panel Fastening Pattern

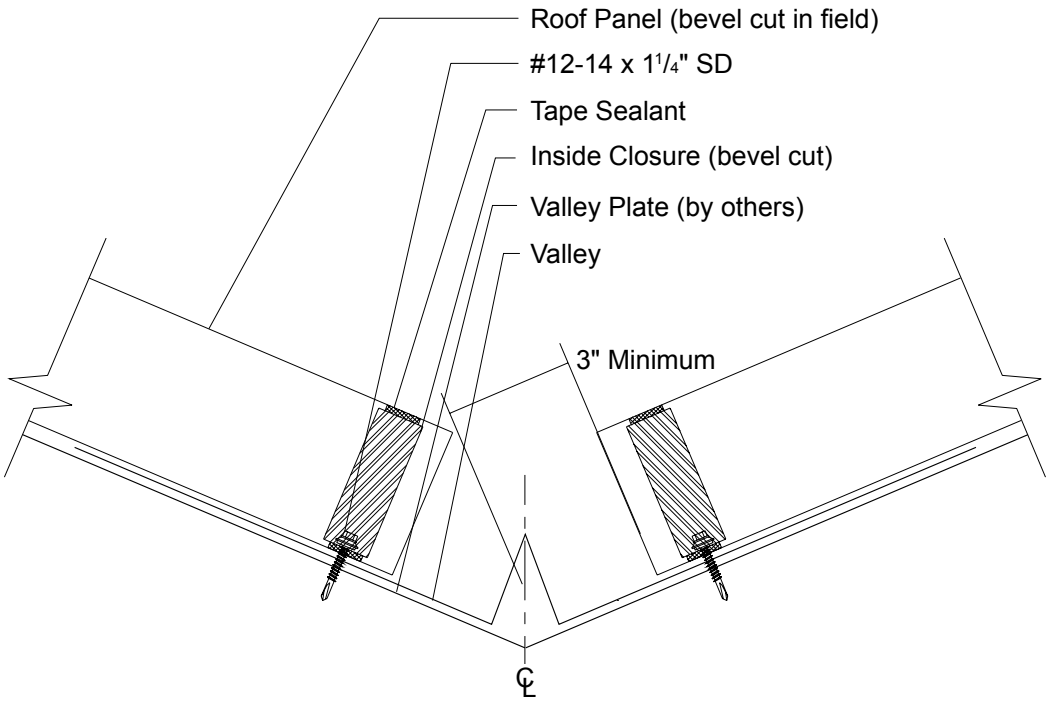
Industrial Rib / Deep Rib Series — Eave Detail



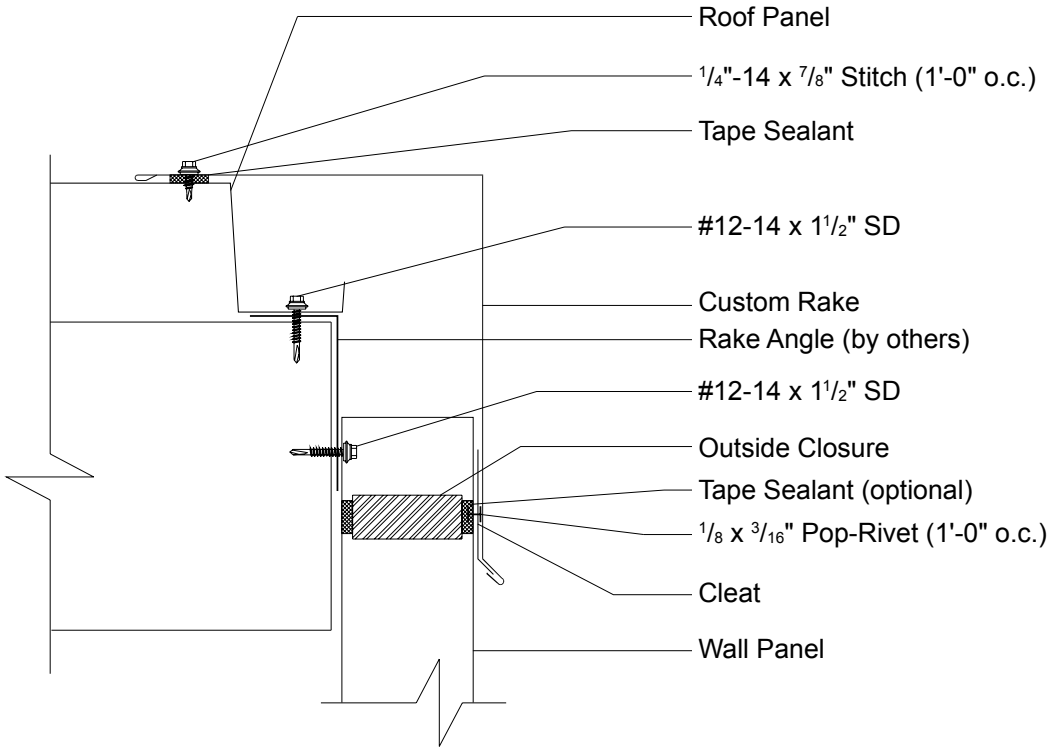
Industrial Rib / Deep Rib Series — Box Gutter Detail



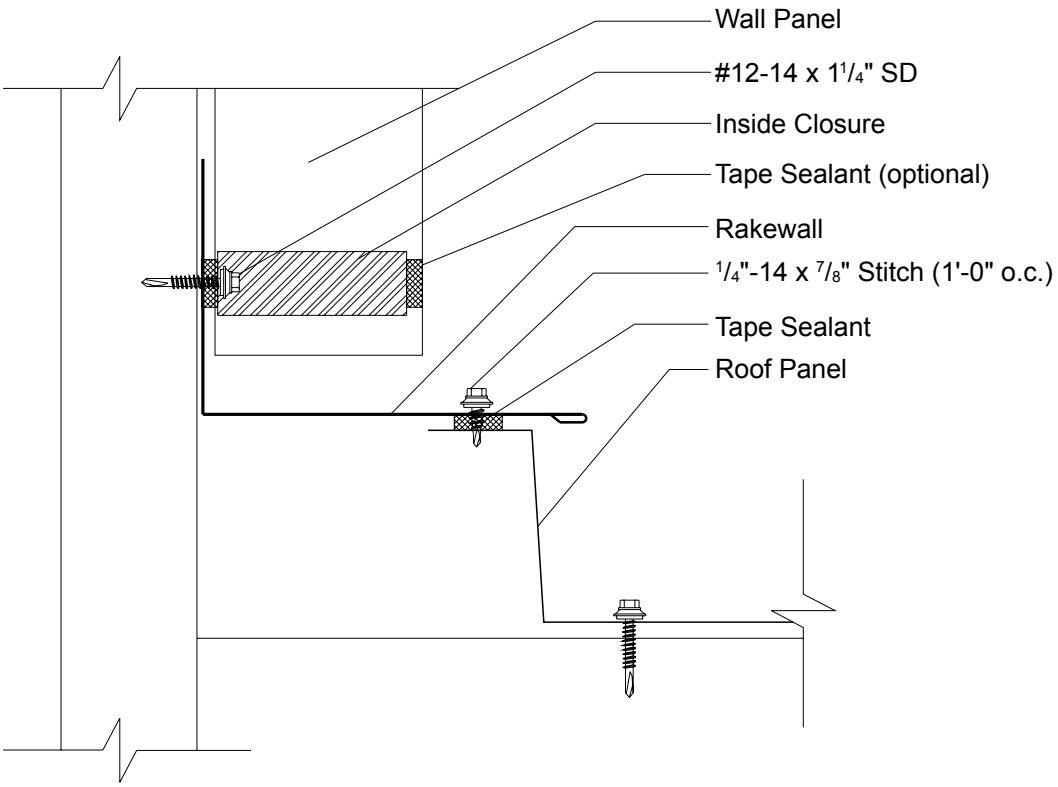
Industrial Rib / Deep Rib Series — Valley Detail



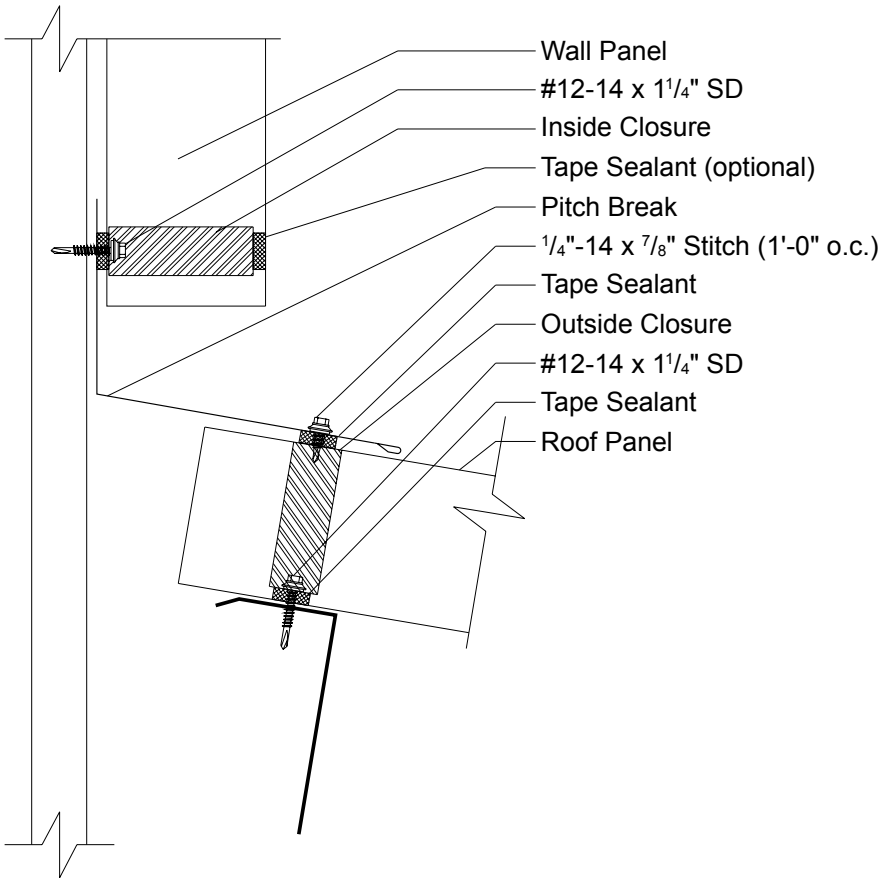
Industrial Rib / Deep Rib Series — Rake Detail



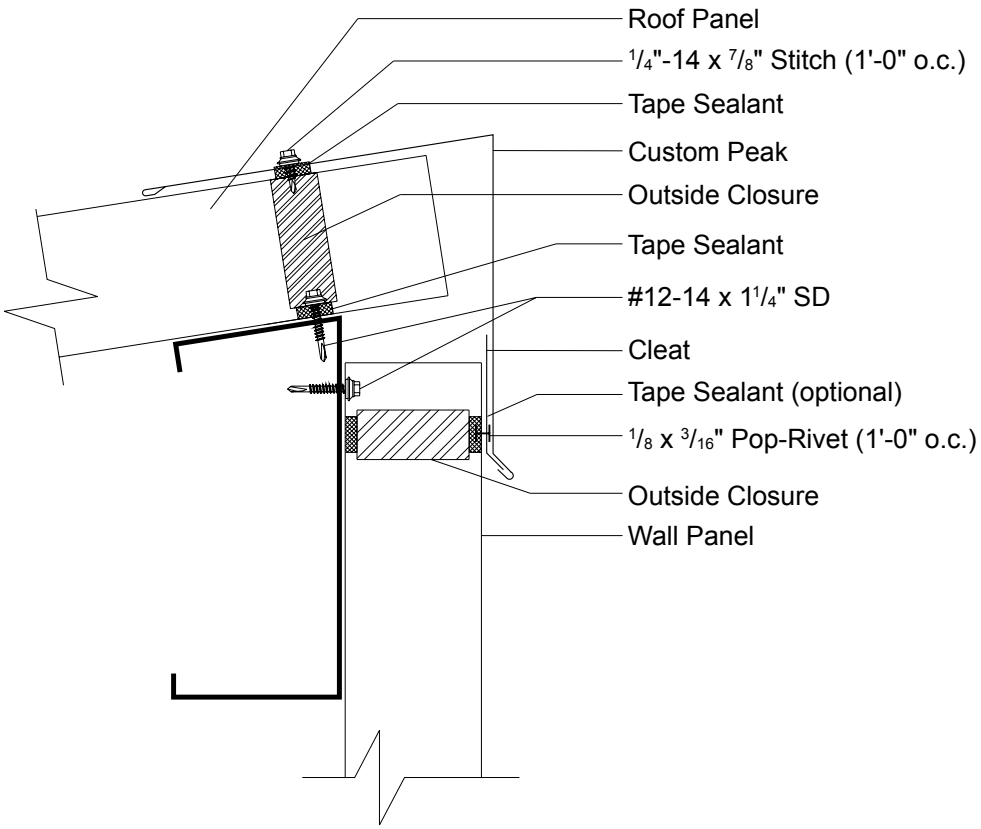
Industrial Rib / Deep Rib Series — Rakewall Detail



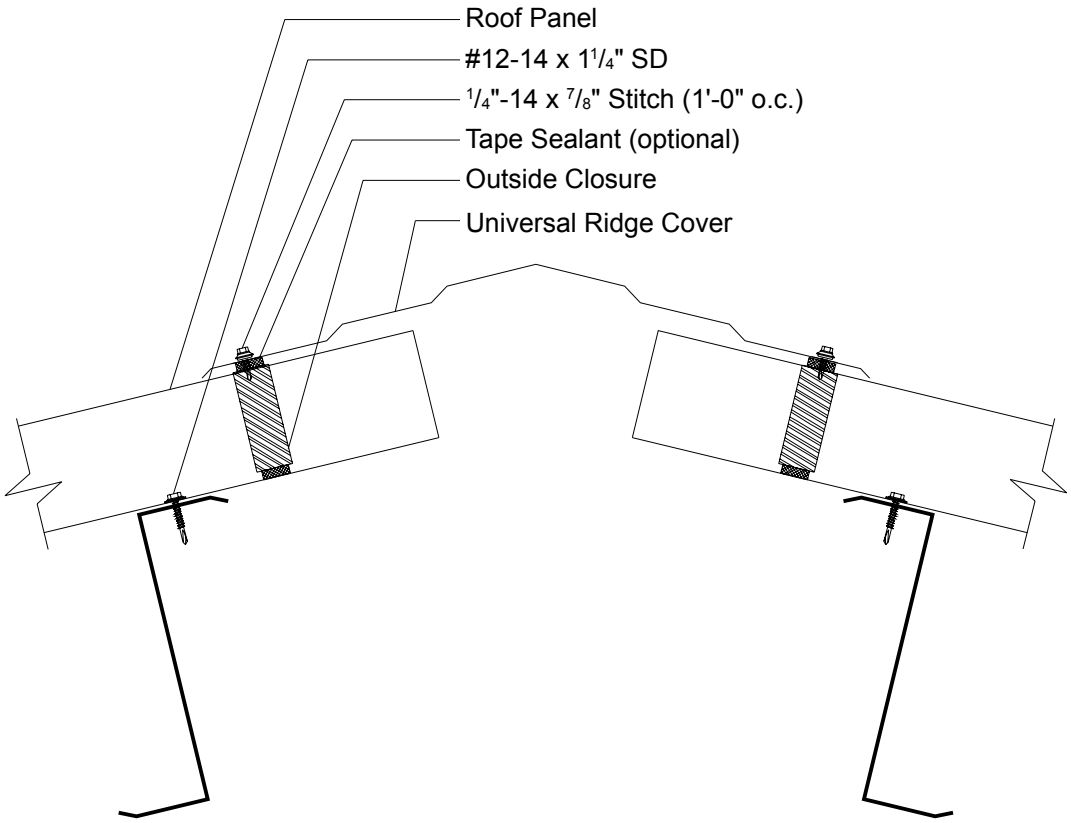
Industrial Rib / Deep Rib Series — Endwall Detail



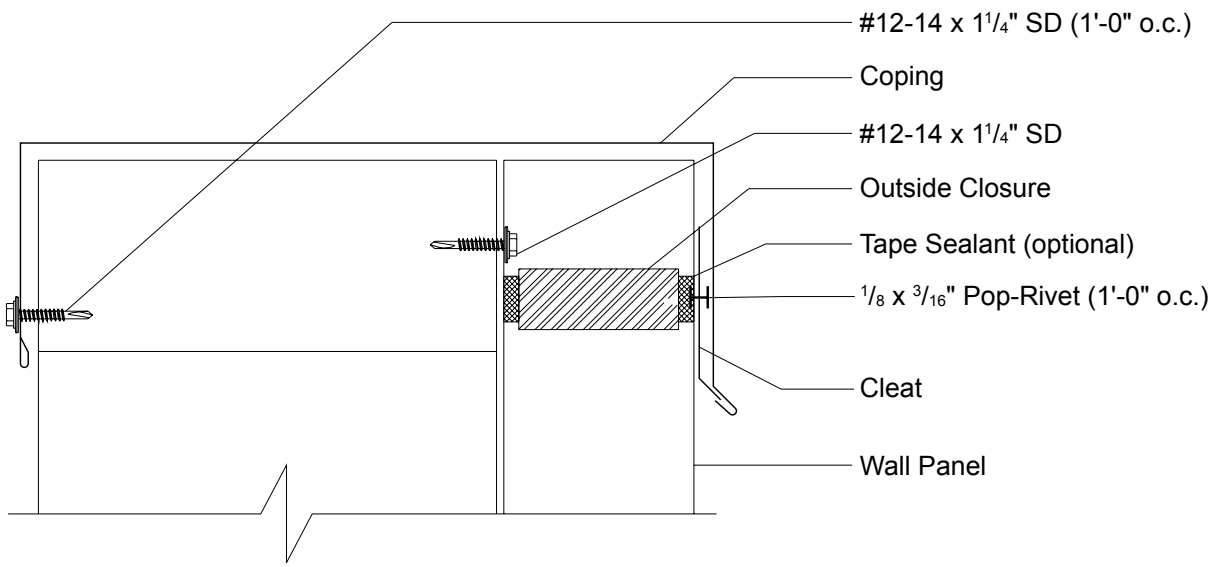
Industrial Rib / Deep Rib Series — Peak Detail



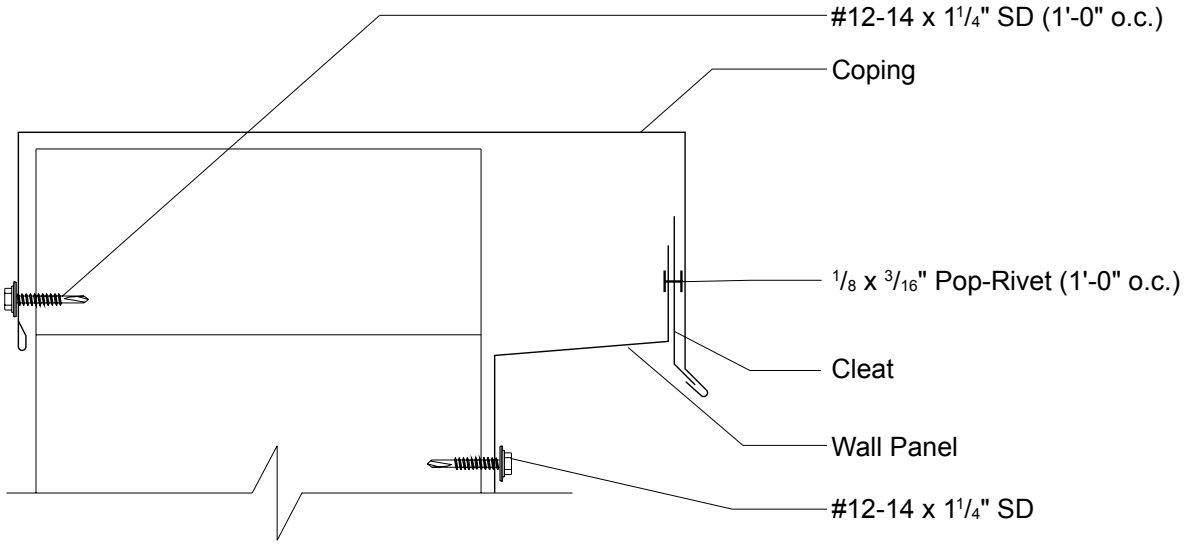
Industrial Rib / Deep Rib Series — Universal Ridge Detail



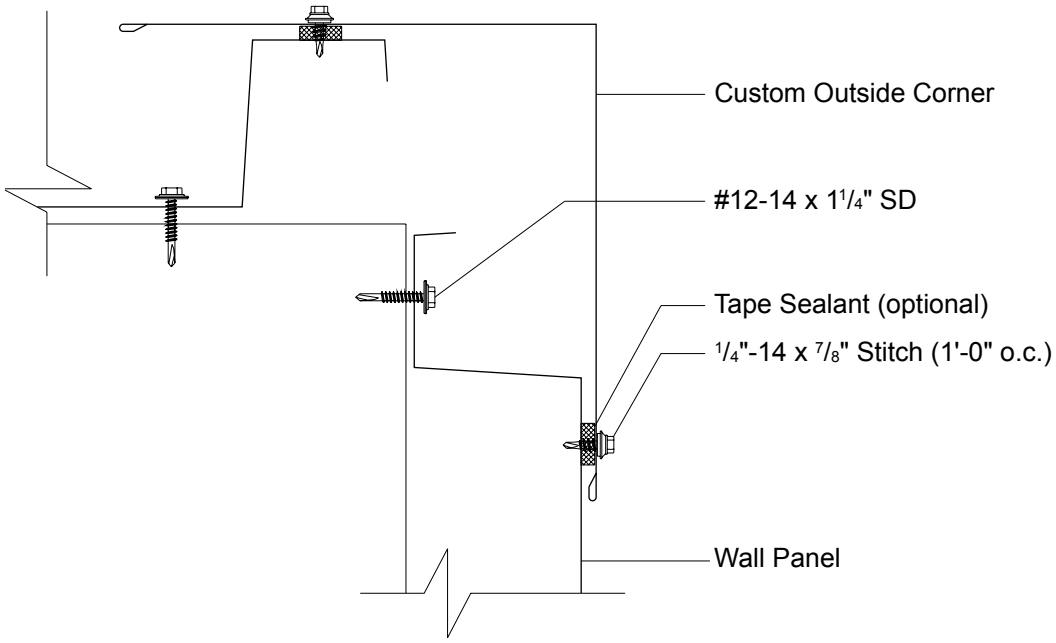
Industrial Rib / Deep Rib Series — Coping Detail (Vertical)



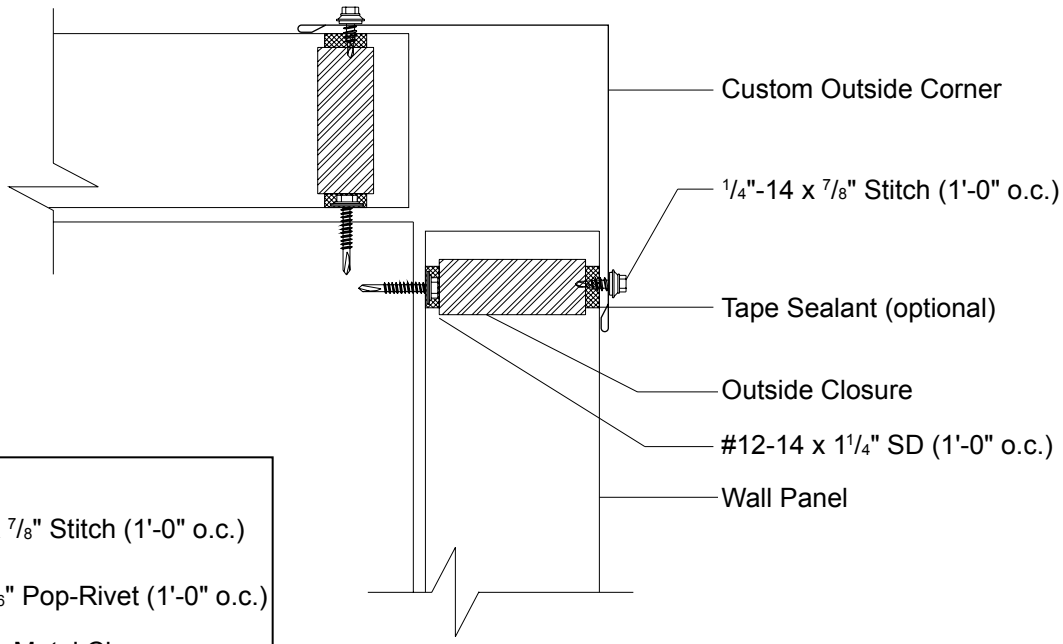
Industrial Rib / Deep Rib Series — Coping Detail (Horizontal)



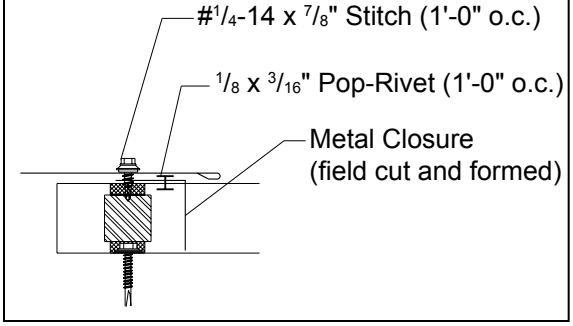
INDUSTRIAL RIB / DEEP RIB SERIES — OUTSIDE CORNER DETAIL (VERTICAL)



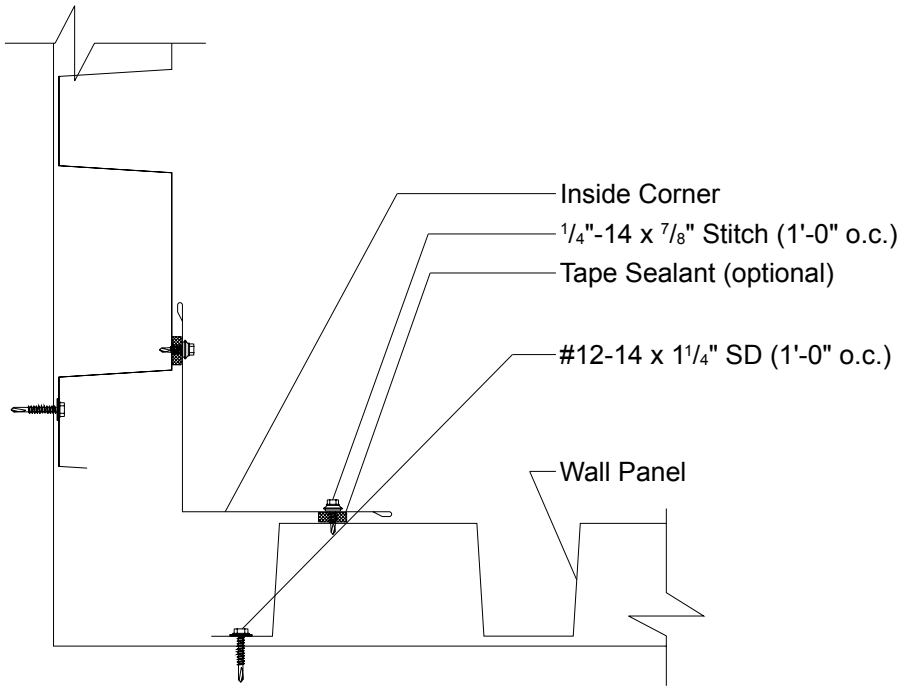
INDUSTRIAL RIB / DEEP RIB SERIES — OUTSIDE CORNER DETAIL (HORIZONTAL) (AND OPTION)



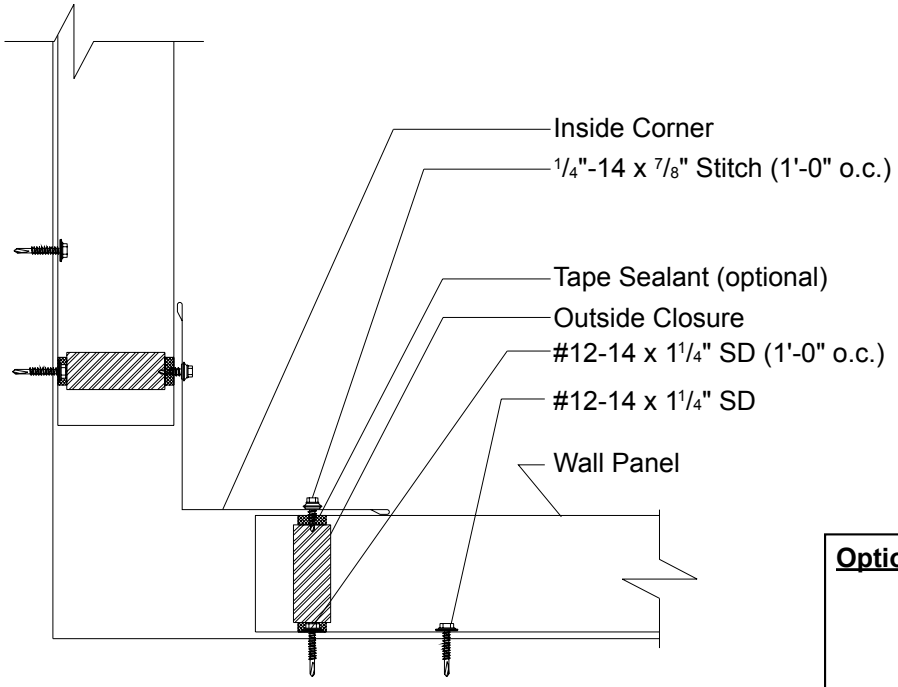
Optional Detail



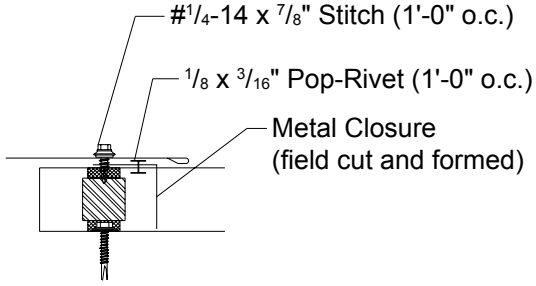
Industrial Rib / Deep Rib Series — Inside Corner Detail (Vertical)



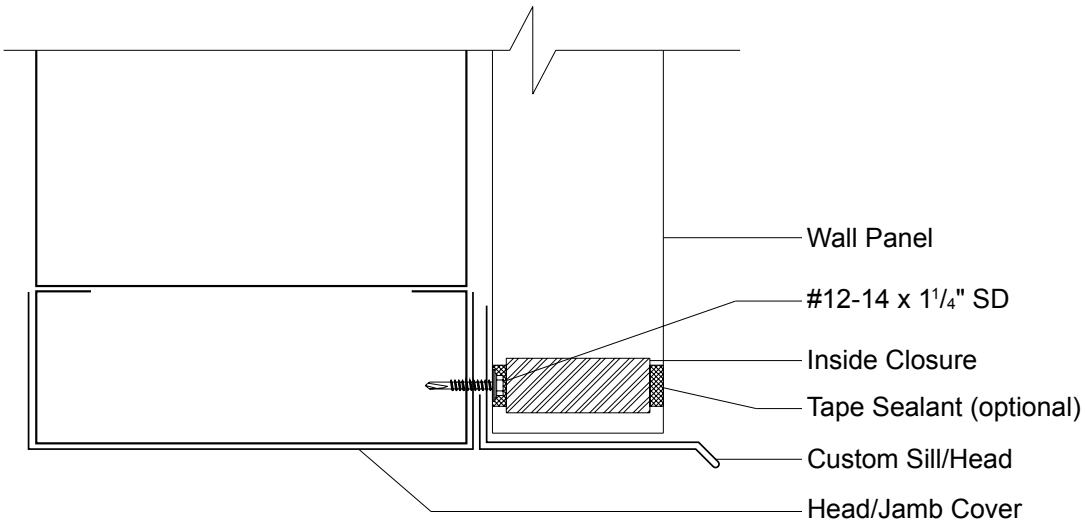
Industrial Rib / Deep Rib Series — Inside Corner Detail (Horizontal) (and Option)



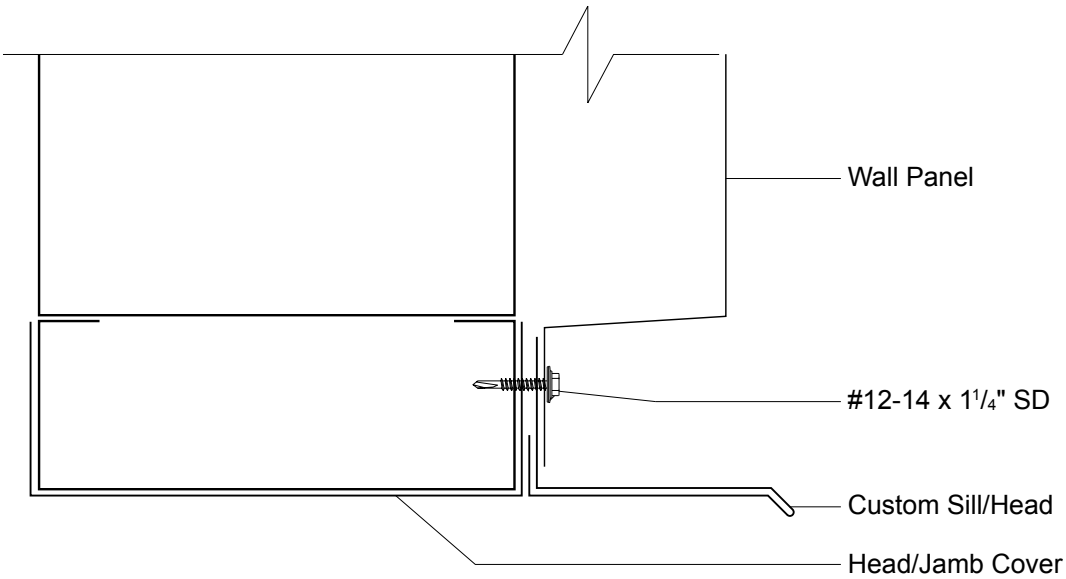
Optional Detail



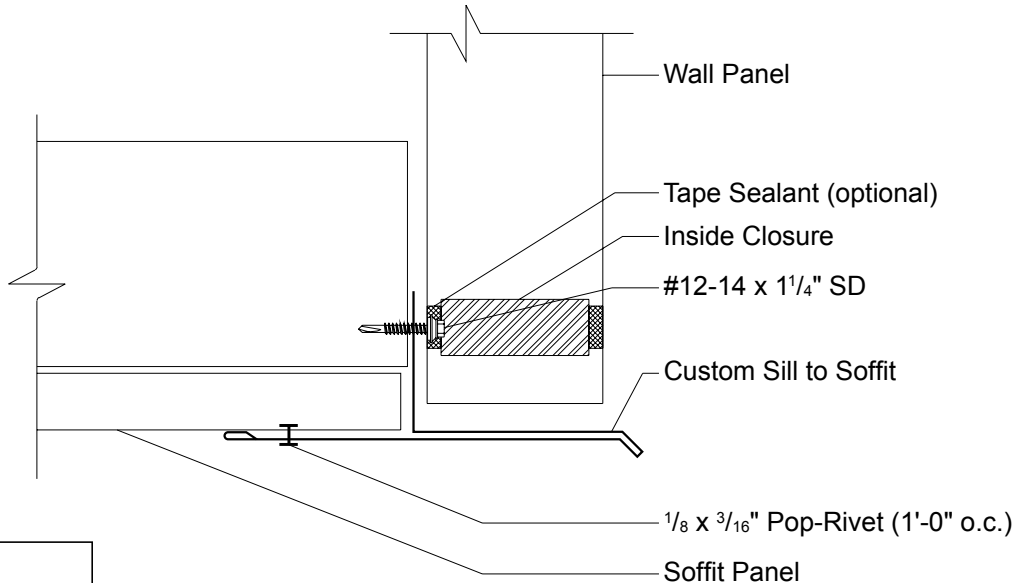
Industrial Rib / Deep Rib Series — Sill/Head Detail (Vertical)



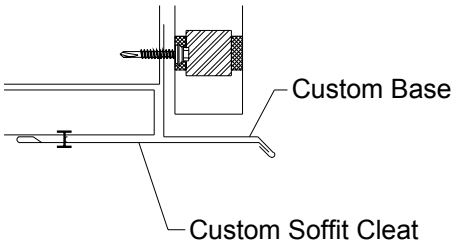
Industrial Rib / Deep Rib Series — Sill/Head Detail (Horizontal)



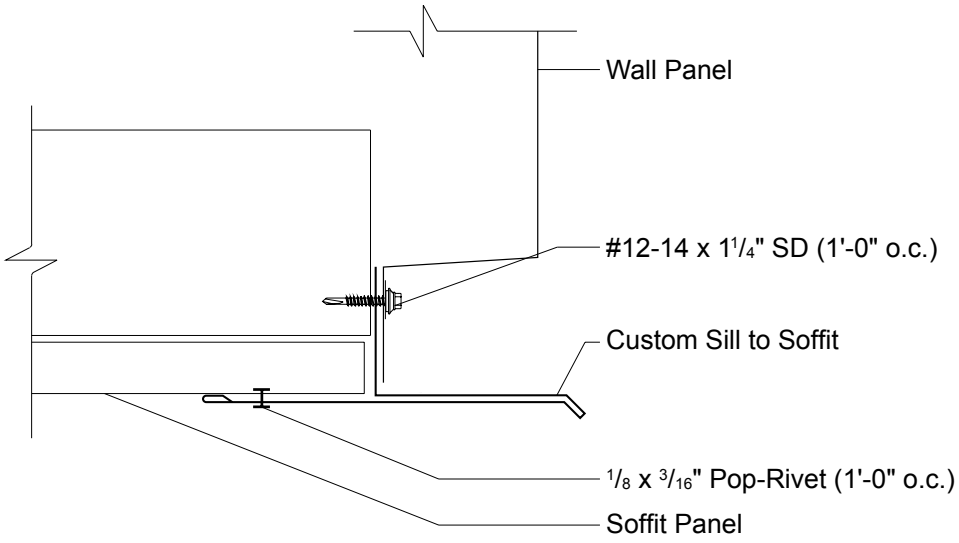
Industrial Rib / Deep Rib Series — Sill to Soffit Detail (Vertical) (and Option)



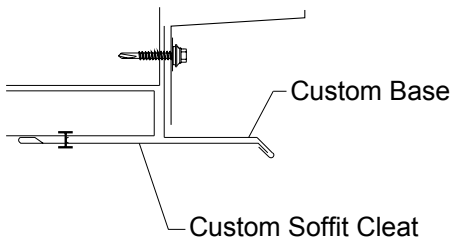
Optional Detail



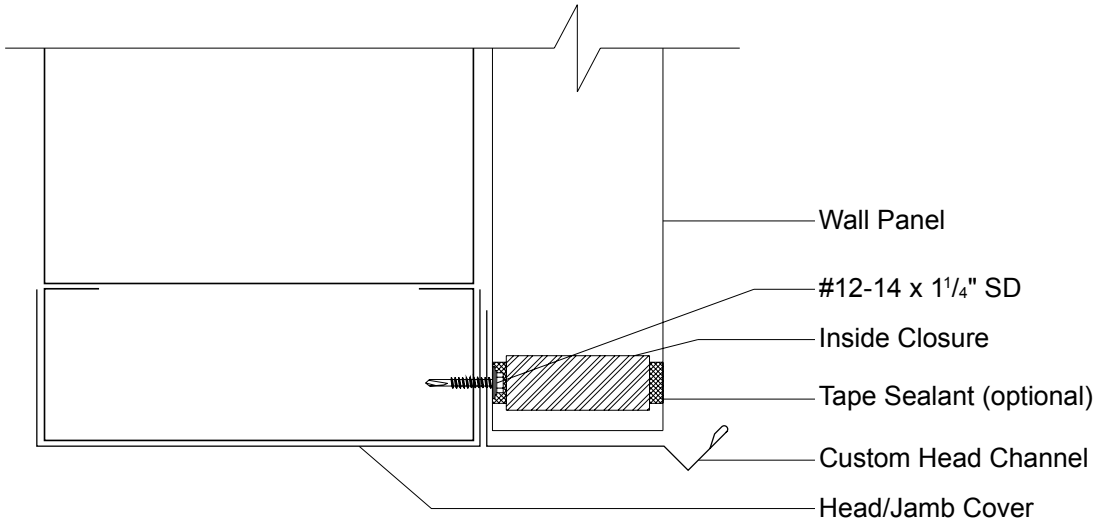
Industrial Rib / Deep Rib Series — Sill to Soffit Detail (Horizontal) (and Option)



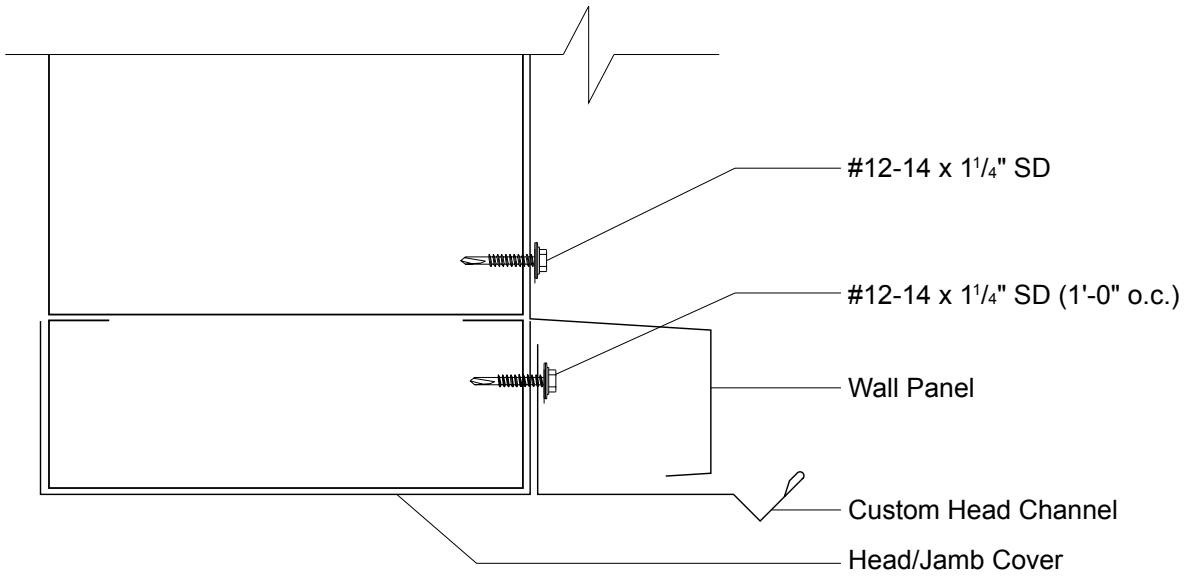
Optional Detail



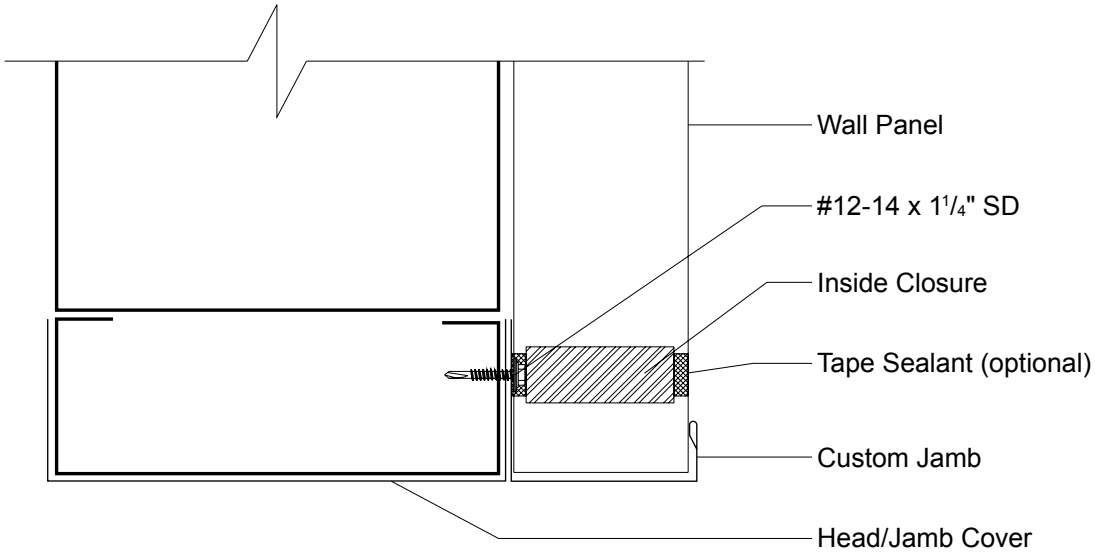
Industrial Rib / Deep Rib Series — Head Channel Detail (Vertical)



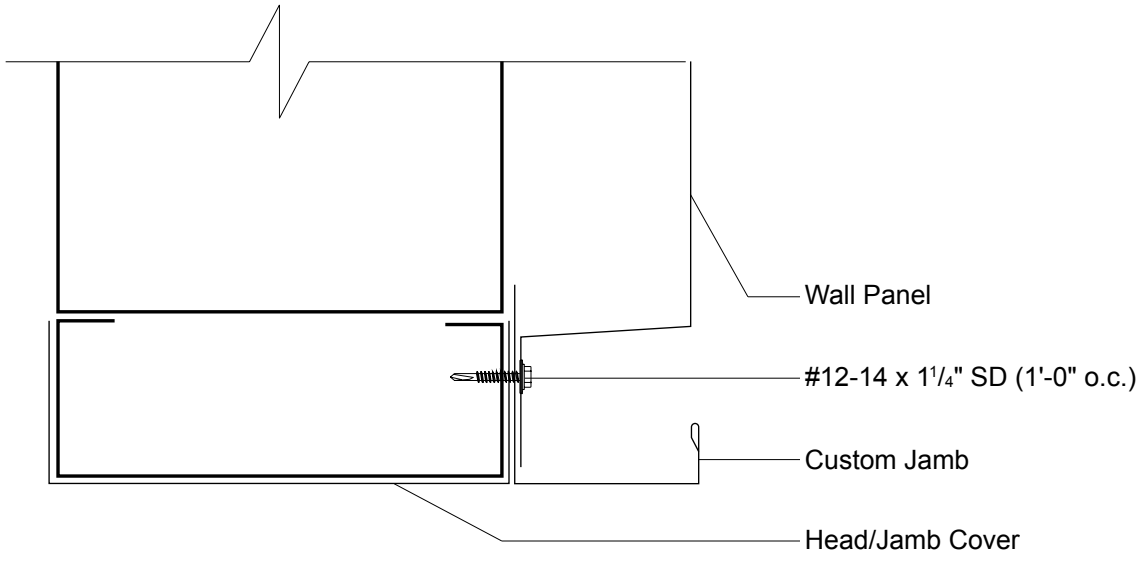
Industrial Rib / Deep Rib Series — Head Channel Detail (Horizontal)



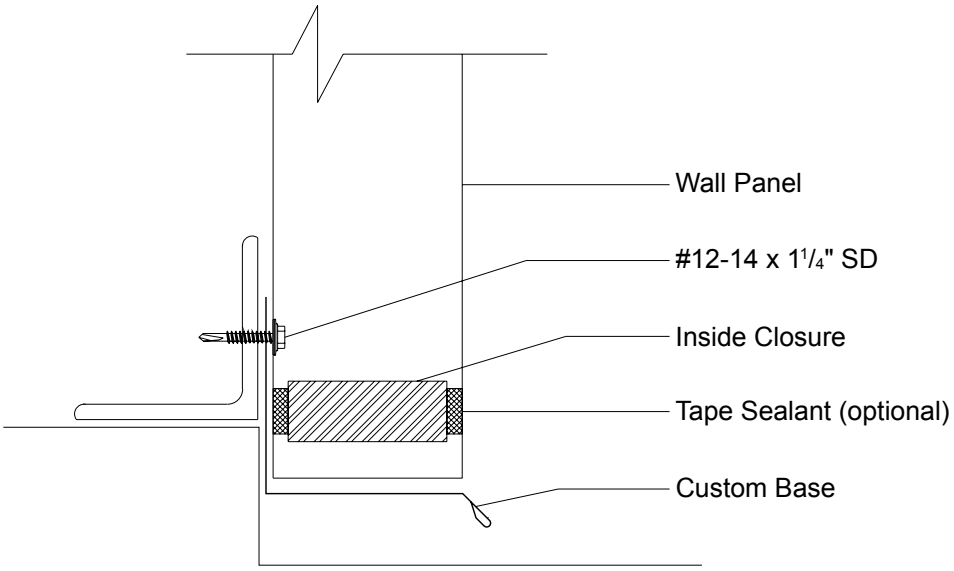
Industrial Rib / Deep Rib Series — Jamb Detail (Vertical)



Industrial Rib / Deep Rib Series — Jamb Detail (Horizontal)



Industrial Rib / Deep Rib Series — Base Detail (Vertical)



Industrial Rib / Deep Rib Series — Base Detail (Horizontal)