



Installation Guide
TLC Series

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The application and detail drawings in this manual are strictly for illustration purposes and may not be applicable to all building designs or product installations. All projects should conform to applicable building codes for that particular area. It is recommended to follow all building regulations and standard industry practices.

Metal Sales Manufacturing Corporation is not responsible for the performance of the wall system if it is not installed in accordance with the suggested instructions referenced in this manual. If there is a conflict between this manual and the actual erection drawings, the erection drawings are to take precedence.

Prior to ordering and installing materials, all dimensions should be verified by field measurements.

Metal Sales reserves the right to modify, without notice, any details, recommendations or suggestions. Any questions you may have regarding proper installation of these Concealed Fastened Wall Panel systems should be directed to your local Metal Sales representative (see pages 2 and 3).

Oil canning is not a cause for rejection. Oil canning can be described as the amount of waviness found in the flat areas of metal panels. Oil canning is an inherent characteristic of light gauge cold formed metal products, particularly those with broad flat areas. There are many factors which may contribute to oil canning that Metal Sales is not able to control. These factors include: misalignment of the support system, over driving of fasteners used on the panels, stress (whether inherent in the panel or induced), thermal expansion and contraction of the panel, improper material handling, width, gauge, length, color of panels and improper installation (reference Metal Construction Association "Oil Canning Position Paper"- Appendix A).

Consult your local Metal Sales Branch for any additional information not outlined in this manual.

This manual is designed to be utilized as a guide when installing a Concealed Fastened Wall Panel system. It is the responsibility of the erector to ensure the safe installation of this product system.

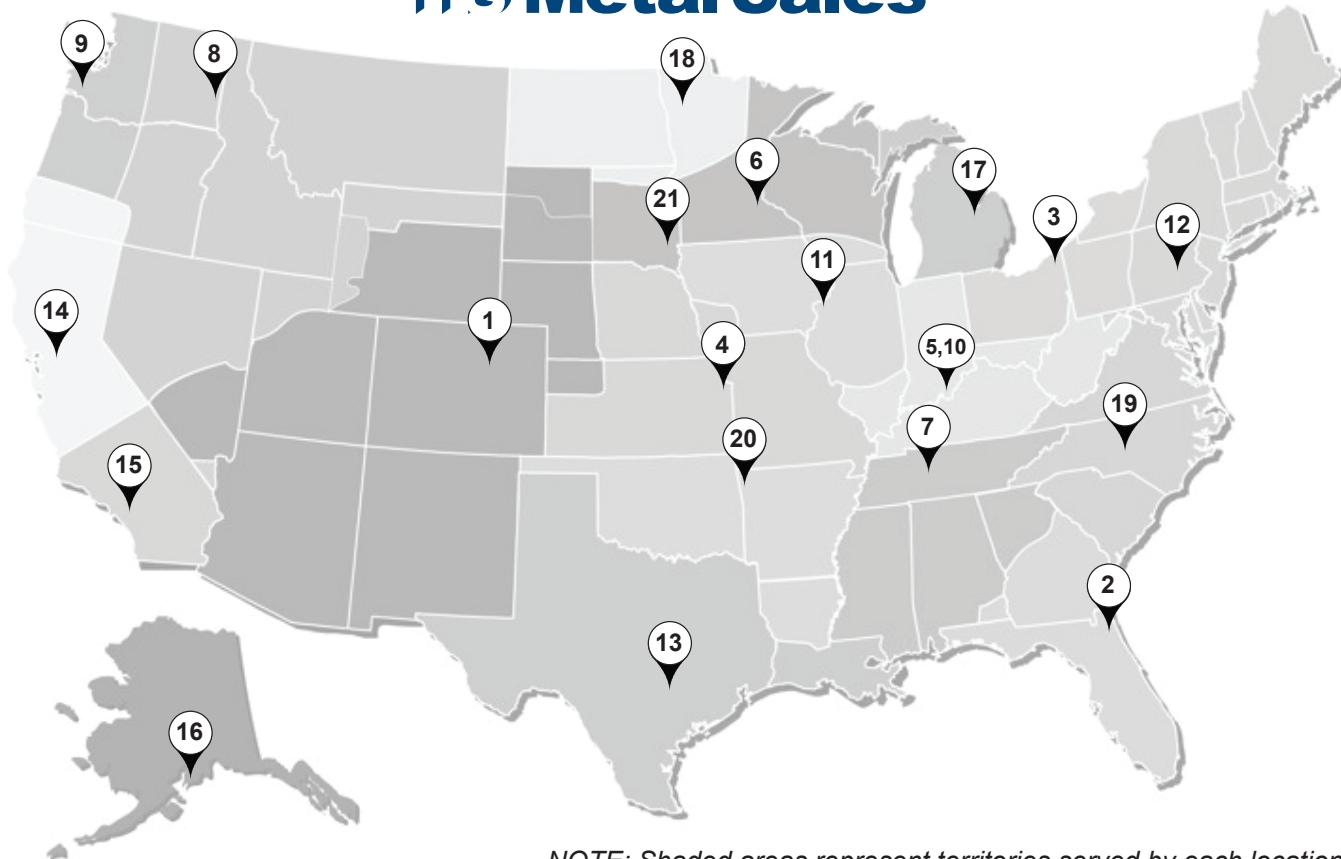
SAFETY

STUDY APPLICABLE OSHA AND OTHER SAFETY REQUIREMENTS BEFORE FOLLOWING THESE INSTRUCTIONS.

The installation of metal wall systems is a dangerous procedure and should be supervised by trained knowledgeable erectors. **USE EXTREME CARE WHILE INSTALLING WALL PANELS.** It is not possible for Metal Sales to be aware of all the possible job site situations that could cause an unsafe condition to exist. The erector of the wall system is responsible for reading these instructions and determining the safest way to install the wall system.

These instructions are provided only as a guide to show a knowledgeable, trained erector the correct relationship of parts to one another. If following any of the installation steps would endanger a worker, the erector should stop work and decide upon a corrective action.

Fall protection for workers installing wall panels must be provided.



NOTE: Shaded areas represent territories served by each location.

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1. DENVER

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 Longmont, CO 80504
 303.702.5440
 800.289.7663
 800.289.1617 Fax

2. JACKSONVILLE

7110 Stuart Avenue
 Jacksonville, FL 32254
 904.783.3660
 800.394.4419
 904.783.9175 Fax
 800.413.3292 Fax

3. JEFFERSON

352 East Erie Street
 Jefferson, OH 44047
 440.576.9070
 800.321.5833
 440.576.9242 Fax
 800.233.5719 Fax

4. INDEPENDENCE

1306 South Powell Road
 Independence, MO 64057
 816.796.0900
 800.747.0012
 816.796.0906 Fax

5. SELLERSBURG

7800 Highway 60
 Sellersburg, IN 47172
 812.246.1866
 800.999.7777
 812.246.0893 Fax
 800.477.9318 Fax

6. ROGERS

22651 Industrial Boulevard
 Rogers, MN 55374
 763.428.8080
 800.328.9316
 763.428.8525 Fax
 800.938.9119 Fax

7. NASHVILLE

4314 Hurricane Creek Boulevard
 Antioch, TN 37013
 615.641.7100
 800.251.8508
 615.641.7118 Fax
 800.419.4372 Fax

8. SPOKANE

2727 East Trent Avenue
 Spokane, WA 99202
 509.536.6000
 800.572.6565
 509.534.4427 Fax

9. KELSO

2680 Coweeman Park Drive
 Kelso, WA 98626
 253.872.5750
 800.431.3470
 253.872.2008 Fax

10. NEW ALBANY

999 Park Place
 New Albany, IN 47150
 812.944.2733
 812.944.1418 Fax

11. ROCK ISLAND

8111 West 29th Street
 Rock Island, IL 61201
 309.787.1200
 800.747.1206
 309.787.1833 Fax

12. DEER LAKE

29 Pinedale Industrial Road
 Orwigsburg, PA 17961
 570.366.2020
 800.544.2577
 570.366.1648 Fax
 800.544.2574 Fax

13. TEMPLE

3838 North General Bruce Drive
 Temple, TX 76501
 254.791.6650
 800.543.4415
 254.791.6655 Fax
 800.543.4473 Fax

14. WOODLAND

1326 Paddock Place
 Woodland, CA 95776
 530.668.5690
 800.759.6019
 530.668.0901 Fax

15. FONTANA

14213 Whittram Avenue
 Fontana, CA 92335
 909.829.8618
 800.782.7953
 909.829.9083 Fax

16. ANCHORAGE

4637 Old Seward Highway
 Anchorage, AK 99503
 907.646.7663
 866.640.7663
 907.646.7664 Fax

17. BAY CITY

5209 Mackinaw Road
 Bay City, MI 48706
 989.686.5879
 888.777.7640
 989.686.5870 Fax
 888.777.0112 Fax

18. DETROIT LAKES

1435 Egret Avenue
 Detroit Lakes, MN 56501
 218.847.2988
 888.594.1394
 218.847.4835 Fax
 888.594.1454 Fax

19. MOCKSVILLE

188 Quality Drive
 Mocksville, NC 27028
 336.751.6381
 800.228.6119
 336.751.6301 Fax
 800.228.7916 Fax

20. FORT SMITH

7510 Ball Road
 Fort Smith, AR 72908
 479.646.1176
 877.452.3915
 479.646.5204 Fax

21. SIOUX FALLS

2700 West 3rd Street, Suite 4
 Sioux Falls, SD 57104
 605.335.2745
 888.299.0024

CORPORATE OFFICE

7800 Highway 60
 Sellersburg, IN 47172
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TECHNICAL SUPPORT

TECH SERVICES DEPT.
 7800 Highway 60
 Sellersburg, IN 47172
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 800.406.7387
 800.944.6884 Fax

Safety

Use proper safety gear, safe equipment and safe processes. Safety gear includes gloves, arm guards, safety goggles and fall protection. Safe equipment includes maintained screw gun, saw, snips and folder. Safe processes include being aware of dangers and taking appropriate measures to avoid them.

Material Storage

Material not used right away, should be stored inside, out of the elements. If inside storage is not available, tarp the material such that air can circulate. Elevate the crates off the ground and slope so that water will run off.

Wall Condition

Before installing panels, ensure the wall support material is plumb, square and true. Variance from in-plane should not exceed 1/4" in 10'.

Wall Assembly

Cover building envelope with a moisture barrier, such as peel-and-stick underlayment or synthetic building wrap to meet building code requirements for water resistance barrier to resist air and water penetration through the wall assembly. Install the moisture barrier horizontally from the bottom upward, overlapping each run over the previous, lower run.

Plan the Work

Before installing panels on a wall section, plan for alignment with adjacent wall sections. Decide if the first and last panels in the run should be a full or partial panel. Consider the locations of wall penetrations and openings.

Fasteners

Do not overtighten the panel fasteners. The fasteners should be brought just to firm contact between the support material and panel. Overtightening the fasteners can cause panel deformation.

The fastener spacing must be determined based on a load analysis to ensure adequate attachment. Stitch Screw in the sidleap or field-applied sealant / adhesive is required to develop load-carrying capacity.

Installation Practice

For horizontal panels, start at the top of the wall and work down the wall toward the bottom. Always 'shingle' panels and trims so that water will run down off of one member on to the next. Ensure every surface has adequate slope to permit water to run off and not collect on any surface. Vertical panel may be installed left-to-right or right-to-left.

When installing panels, give effort to stay on module by checking the coverage of each panel and the overall modularity relative to the end of the run after every tenth panel.

Strippable Film

Panels and trim are typically provided with strippable film as protection against minor fabrication, transit and handling damage. The strippable film must be removed just before installation. Waiting until after panel installation to remove the strippable film or after significant exposure to sunlight or heat can make removal very difficult.

RECEIVING MATERIAL

It is the responsibility of the installer to unload material from the delivery truck. The installer shall be responsible for providing suitable equipment for unloading of material from the delivery.

Metal Sales is not responsible for any damages or shortages unless they are documented in writing and presented to Metal Sales within 48 hours. A claim should be made against the carrier as soon as possible.

After receiving material:

- Check the condition of the material
- Review the shipment against the shipping list to ensure all materials are all accounted for
- If damages or shortages are discovered, it should be noted on the Bill of Lading at the time of delivery

GENERAL HANDLING

Each bundle should be handled carefully to avoid being damaged. Care should be taken to prevent bending of the panel or scratching of the finish. Whenever possible, the bundle should remain crated until it is located in its place of storage or use. If bundles must be opened, we recommend you re-crate them before lifting. To avoid damage lift the bundle at its center of gravity.

CAUTION

Improper loading and unloading of bundles and crates may result in bodily harm and/or material damage. Metal Sales is not responsible for bodily injuries and/or material damages resulting from improper loading and unloading.

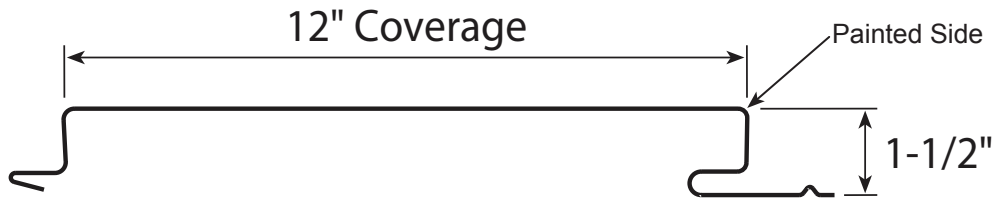
MECHANICAL HANDLING

Forklift - A forklift may be used for panels up to 20'-0" long. Make sure the forks are at their maximum separation. Do not transport open bundles. When transporting bundles across rough terrain, or over a longer distance, some means of supporting the panel load must be used.

Crane - A crane should be used when lifting panels with lengths greater than 20'-0". Be sure to utilize a spreader bar to ensure the even distribution of the weight to the pick up points. As a rule when lifting panels, no more than 1/3 of the length of the panel should be left unsupported. Never use wire rope because this will damage the panels.



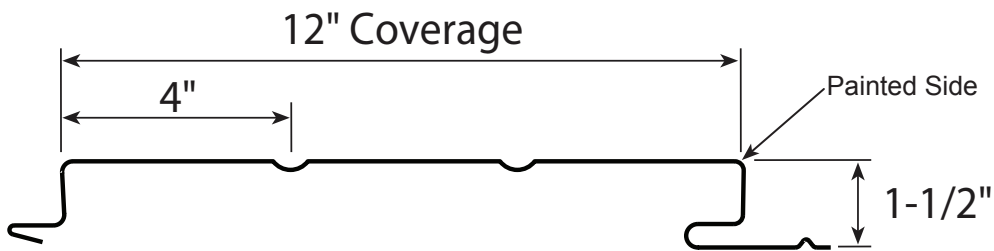
TLC-1



Panel can be produced in lengths from 5' to 40'.

Profile	Product No.	Coverage	Description	Gauge	Finish
	22F6741	12"	Flat Face	24	Galvalume® (ACG)
	22F67XX	12"	Flat Face	24	PVDF Painted
	23F6741	12"	Flat Face	22	Galvalume® (ACG)
	23F67XX	12"	Flat Face	22	PVDF Painted
	24F67XX	12"	Flat Face	20	PVDF Painted
	22A67XX	12"	Flat Face	0.032"	Aluminum PVDF Painted
	23A67XX	12"	Flat Face	0.040"	Aluminum PVDF Painted

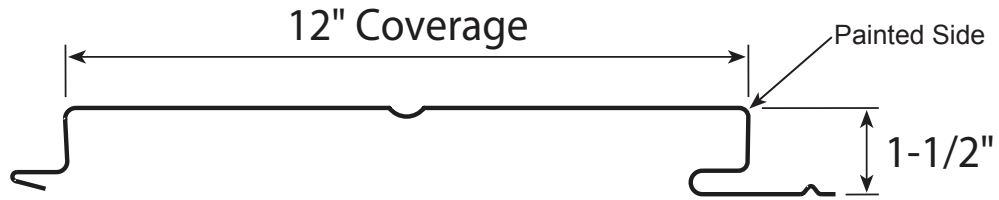
TLC-2



Panel can be produced in lengths from 5' to 40'.

Profile	Product No.	Coverage	Description	Gauge	Finish
	22F6941	12"	2 beads	24	Galvalume® (ACG)
	22F69XX	12"	2 beads	24	PVDF Painted
	23F6941	12"	2 beads	22	Galvalume® (ACG)
	23F69XX	12"	2 beads	22	PVDF Painted
	24F69XX	12"	2 beads	20	PVDF Painted
	22A69XX	12"	2 beads	0.032"	Aluminum PVDF Painted
	23A69XX	12"	2 beads	0.040"	Aluminum PVDF Painted

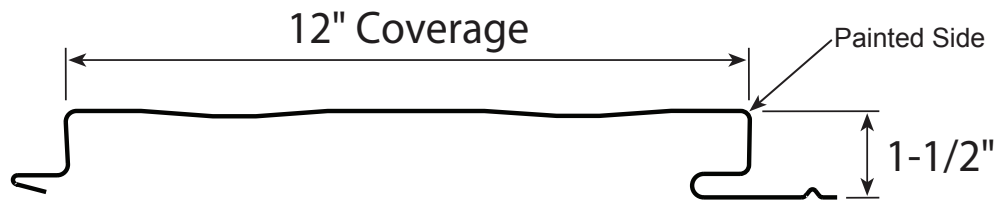
TLC-3



Panel can be produced in lengths from 5' to 40'.

Profile	Product No.	Coverage	Description	Gauge	Finish
	22F7241	12"	1 bead	24	Galvalume® (ACG)
	22F72XX	12"	1 bead	24	PVDF Painted
	23F7241	12"	1 bead	22	Galvalume® (ACG)
	23F72XX	12"	1 bead	22	PVDF Painted
	24F72XX	12"	1 bead	20	PVDF Painted
	22A72XX	12"	1 bead	0.032"	Aluminum PVDF Painted
	23A72XX	12"	1 bead	0.040"	Aluminum PVDF Painted

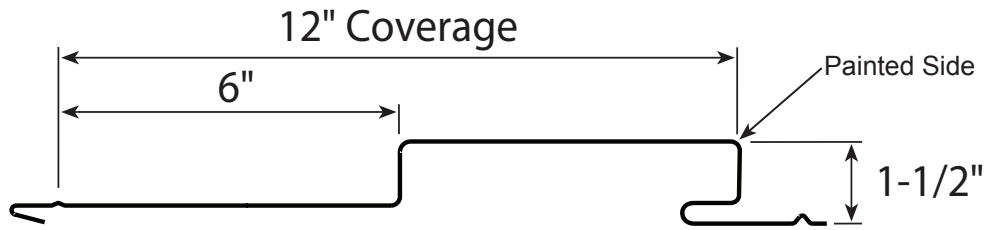
TLC-4



Panel can be produced in lengths from 5' to 40'.

Profile	Product No.	Coverage	Description	Gauge	Finish
	22F7341	12"	striated	24	Galvalume® (ACG)
	22F73XX	12"	striated	24	PVDF Painted
	23F7341	12"	striated	22	Galvalume® (ACG)
	23F73XX	12"	striated	22	PVDF Painted
	24F73XX	12"	striated	20	PVDF Painted
	22A73XX	12"	striated	0.032"	Aluminum PVDF Painted
	23A73XX	12"	striated	0.040"	Aluminum PVDF Painted

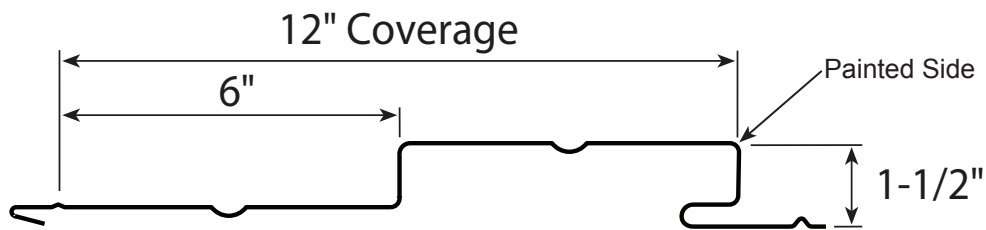
TLC-9



Panel can be produced in lengths from 5' to 40'.

Profile	Product No.	Coverage	Description	Gauge	Finish
	22F0941	12"	1 rib	24	Galvalume® (ACG)
	22F09XX	12"	1 rib	24	PVDF Painted
	23F9241	12"	1 rib	22	Galvalume® (ACG)
	23F92XX	12"	1 rib	22	PVDF Painted
	24F92XX	12"	1 rib	20	PVDF Painted
	22A09XX	12"	1 rib	0.032"	Aluminum PVDF Painted
	23A92XX	12"	1 rib	0.040"	Aluminum PVDF Painted

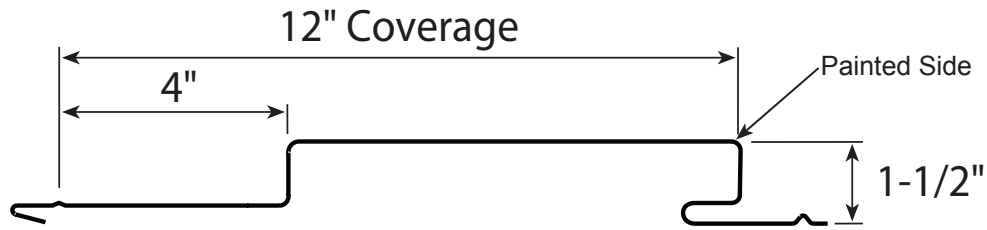
TLC-10



Panel can be produced in lengths from 5' to 40'.

Profile	Product No.	Coverage	Description	Gauge	Finish
	22F9341	12"	1 rib, beads	24	Galvalume® (ACG)
	22F93XX	12"	1 rib, beads	24	PVDF Painted
	23F9341	12"	1 rib, beads	22	Galvalume® (ACG)
	23F93XX	12"	1 rib, beads	22	PVDF Painted
	24F93XX	12"	1 rib, beads	20	PVDF Painted
	22A93XX	12"	1 rib, beads	0.032"	Aluminum PVDF Painted
	23A93XX	12"	1 rib, beads	0.040"	Aluminum PVDF Painted

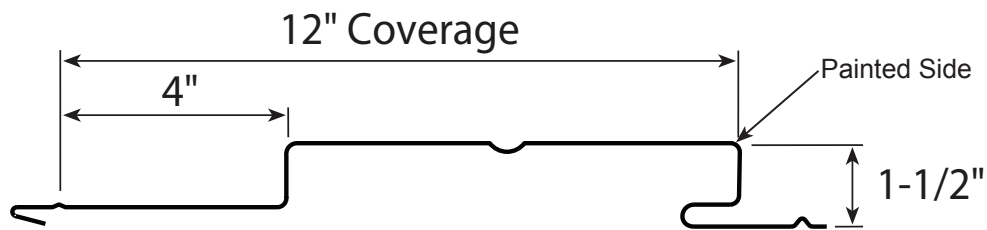
TLC-11



Panel can be produced in lengths from 5' to 40'.

Profile	Product No.	Coverage	Description	Gauge	Finish
	22F9441	12"	1 rib	24	Galvalume® (ACG)
	22F94XX	12"	1 rib	24	PVDF Painted
	23F9441	12"	1 rib	22	Galvalume® (ACG)
	23F94XX	12"	1 rib	22	PVDF Painted
	24F94XX	12"	1 rib	20	PVDF Painted
	22A94XX	12"	1 rib	0.032"	Aluminum PVDF Painted
	23A94XX	12"	1 rib	0.040"	Aluminum PVDF Painted

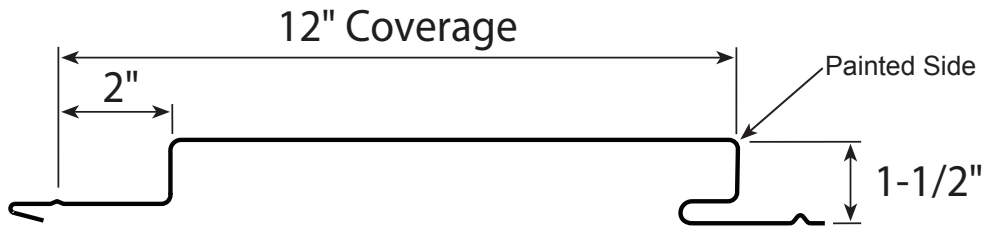
TLC-12



Panel can be produced in lengths from 5' to 40'.

Profile	Product No.	Coverage	Description	Gauge	Finish
	22W1241	12"	1 rib, bead	24	Galvalume® (ACG)
	22W12XX	12"	1 rib, bead	24	PVDF Painted
	23W1241	12"	1 rib, bead	22	Galvalume® (ACG)
	23W12XX	12"	1 rib, bead	22	PVDF Painted
	24W12XX	12"	1 rib, bead	20	PVDF Painted
	22A12XXA	12"	1 rib, bead	0.032"	Aluminum PVDF Painted
	23A12XXA	12"	1 rib, bead	0.040"	Aluminum PVDF Painted

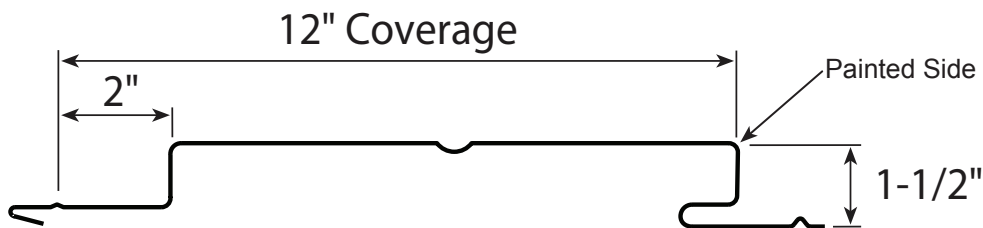
TLC-13



Panel can be produced in lengths from 5' to 40'.

Profile	Product No.	Coverage	Description	Gauge	Finish
	22W1341	12"	1 rib	24	Galvalume® (ACG)
	22W13XX	12"	1 rib	24	PVDF Painted
	23W1341	12"	1 rib	22	Galvalume® (ACG)
	23W13XX	12"	1 rib	22	PVDF Painted
	24W13XX	12"	1 rib	20	PVDF Painted
	22A13XXA	12"	1 rib	0.032"	Aluminum PVDF Painted
	23A13XXA	12"	1 rib	0.040"	Aluminum PVDF Painted

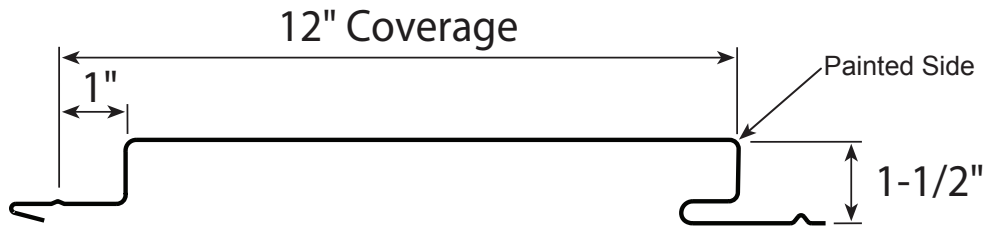
TLC-14



Panel can be produced in lengths from 5' to 40'.

Profile	Product No.	Coverage	Description	Gauge	Finish
	22W1441	12"	1 rib, bead	24	Galvalume® (ACG)
	22W14XX	12"	1 rib, bead	24	PVDF Painted
	23W1441	12"	1 rib, bead	22	Galvalume® (ACG)
	23W14XX	12"	1 rib, bead	22	PVDF Painted
	24W14XX	12"	1 rib, bead	20	PVDF Painted
	22A14XXA	12"	1 rib, bead	0.032"	Aluminum PVDF Painted
	23A14XXA	12"	1 rib, bead	0.040"	Aluminum PVDF Painted

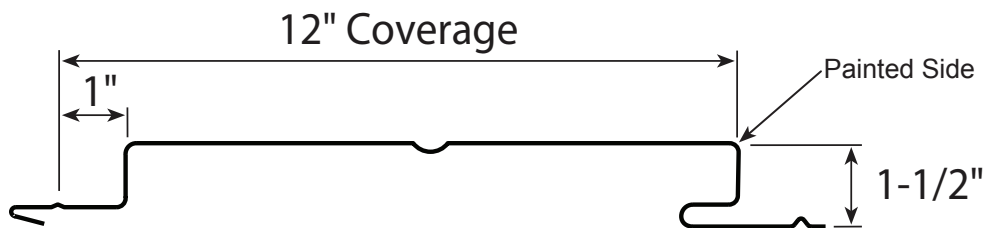
TLC-15



Panel can be produced in lengths from 5' to 40'.

Profile	Product No.	Coverage	Description	Gauge	Finish
	22F9441	12"	1 rib	24	Galvalume® (ACG)
	22F94XX	12"	1 rib	24	PVDF Painted
	23F9441	12"	1 rib	22	Galvalume® (ACG)
	23F94XX	12"	1 rib	22	PVDF Painted
	24F94XX	12"	1 rib	20	PVDF Painted
	22A94XX	12"	1 rib	0.032"	Aluminum PVDF Painted
	23A94XX	12"	1 rib	0.040"	Aluminum PVDF Painted

TLC-16



Panel can be produced in lengths from 5' to 40'.

Profile	Product No.	Coverage	Description	Gauge	Finish
	22W1641	12"	1 rib, bead	24	Galvalume® (ACG)
	22W16XX	12"	1 rib, bead	24	PVDF Painted
	23W1641	12"	1 rib, bead	22	Galvalume® (ACG)
	23W16XX	12"	1 rib, bead	22	PVDF Painted
	24W16XX	12"	1 rib, bead	20	PVDF Painted
	22A16XXA	12"	1 rib, bead	0.032"	Aluminum PVDF Painted
	23A16XXA	12"	1 rib, bead	0.040"	Aluminum PVDF Painted

BASE TRIM	Product No.	Length	Gauge	Finish
	5870841	10'-2"	24	Galvalume® (ACG)
	58708XX	10'-2"	24	PVDF Painted
	6070841	10'-2"	22	Galvalume® (ACG)
	60708XX	10'-2"	22	PVDF Painted
	58708XXA	10'-2"	0.032"	Aluminum PVDF Painted
Flashing Stretch Out = 6 ¹ / ₈ "				

Z-CLOSURE	Product No.	Length	Gauge	Finish
	5760541	10'-2"	24	Galvalume® (ACG)
	57605XX	10'-2"	24	PVDF Painted
	6060541	10'-2"	22	Galvalume® (ACG)
	60605XX	10'-2"	22	PVDF Painted
	57605XXA	10'-2"	0.032"	Aluminum PVDF Painted
Flashing Stretch Out = 3 ¹ / ₂ "				

JAMB TRIM	Product No.	Length	Gauge	Finish
	5867141	10'-2"	24	Galvalume® (ACG)
	58671XX	10'-2"	24	PVDF Painted
	6076141	10'-2"	22	Galvalume® (ACG)
	60761XX	10'-2"	22	PVDF Painted
	58671XXA	10'-2"	0.032"	Aluminum PVDF Painted
Flashing Stretch Out = 5 ¹ / ₄ "				

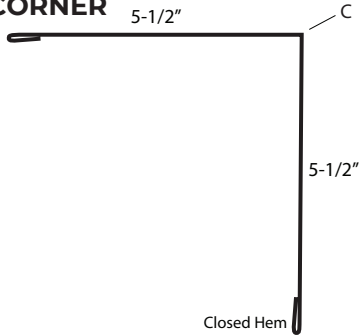
WINDOW CLOSURE	Product No.	Length	Gauge	Finish
	5874441	10'-2"	24	Galvalume® (ACG)
	58744XX	10'-2"	24	PVDF Painted
	6074441	10'-2"	22	Galvalume® (ACG)
	60744XX	10'-2"	22	PVDF Painted
	58744XXA	10'-2"	0.032"	Aluminum PVDF Painted
Flashing Stretch Out = 9 ⁷ / ₈ "				

HEAD TRIM	Product No.	Length	Gauge	Finish
	5862141	10'-2"	24	Galvalume® (ACG)
	58621XX	10'-2"	24	PVDF Painted
	6062141	10'-2"	22	Galvalume® (ACG)
	60621XX	10'-2"	22	PVDF Painted
	58621XXA	10'-2"	0.032"	Aluminum PVDF Painted
Flashing Stretch Out = 6 ³ / ₈ "				

TLC SERIES INSTALL GUIDE

Flashing Profiles

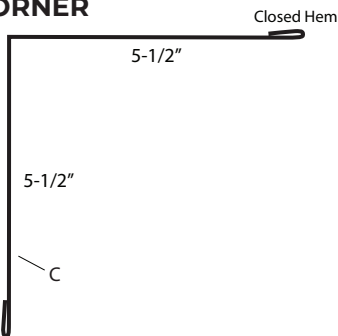
OUTSIDE CORNER



Product No.	Length	Gauge	Finish
5813241	10'-2"	24	Galvalume® (ACG)
58132XX	10'-2"	24	PVDF Painted
5913241	10'-2"	22	Galvalume® (ACG)
59132XX	10'-2"	22	PVDF Painted
58132XXA	10'-2"	0.032"	Aluminum PVDF Painted

Flashing Stretch Out = 12"

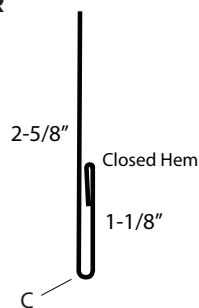
INSIDE CORNER



Product No.	Length	Gauge	Finish
5812641	10'-2"	24	Galvalume® (ACG)
58126XX	10'-2"	24	PVDF Painted
5912641	10'-2"	22	Galvalume® (ACG)
59126XX	10'-2"	22	PVDF Painted
58126XXA	10'-2"	0.032"	Aluminum PVDF Painted

Flashing Stretch Out = 12"

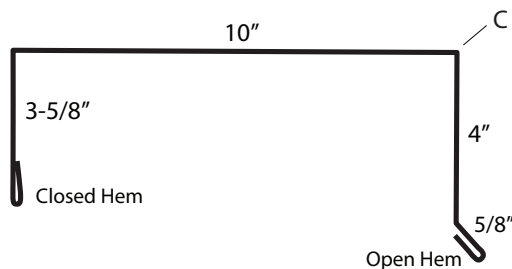
PANEL STARTER



Product No.	Length	Gauge	Finish
5872841	10'-2"	24	Galvalume® (ACG)
58728XX	10'-2"	24	PVDF Painted
6072841	10'-2"	22	Galvalume® (ACG)
60728XX	10'-2"	22	PVDF Painted
58728XXA	10'-2"	0.032"	Aluminum PVDF Painted

Flashing Stretch Out = 4 1/4"

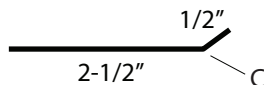
COPING



Product No.	Length	Gauge	Finish
5802641	10'-2"	24	Galvalume® (ACG)
58026XX	10'-2"	24	PVDF Painted
6002641	10'-2"	22	Galvalume® (ACG)
60026XX	10'-2"	22	PVDF Painted
58026XXA	10'-2"	0.032"	Aluminum PVDF Painted

Flashing Stretch Out = 19 1/4"

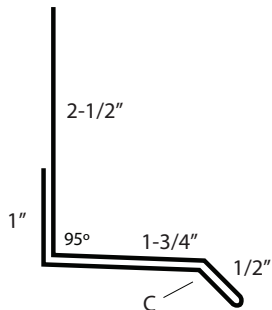
CLEAT



Product No.	Length	Gauge	Finish
5806099	10'-2"	24	Various Colors
58060XX	10'-2"	24	PVDF Painted
5906041	10'-2"	22	Galvalume® (ACG)
59060XX	10'-2"	22	PVDF Painted
58060XXA	10'-2"	0.032"	Aluminum PVDF Painted

Flashing Stretch Out = 3"

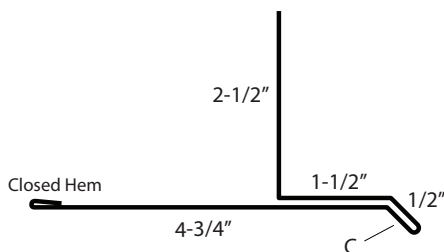
SILL/HEAD



Product No.	Length	Gauge	Finish
5860741	10'-2"	24	Galvalume® (ACG)
58607XX	10'-2"	24	PVDF Painted
6060741	10'-2"	22	Galvalume® (ACG)
60607XX	10'-2"	22	PVDF Painted
58607XXA	10'-2"	0.032"	Aluminum PVDF Painted

Flashing Stretch Out = 8"

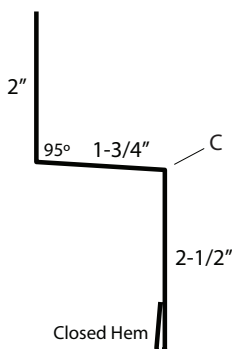
SILL-TO-SOFFIT TRIM



Product No.	Length	Gauge	Finish
5811841	10'-2"	24	Galvalume® (ACG)
58118XX	10'-2"	24	PVDF Painted
6011841	10'-2"	22	Galvalume® (ACG)
60118XX	10'-2"	22	PVDF Painted
58118XXA	10'-2"	0.032"	Aluminum PVDF Painted

Flashing Stretch Out = 10 1/4"

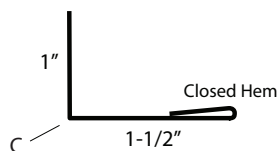
TRANSITION TRIM



Product No.	Length	Gauge	Finish
5873841	10'-2"	24	Galvalume® (ACG)
58738XX	10'-2"	24	PVDF Painted
6073841	10'-2"	22	Galvalume® (ACG)
60738XX	10'-2"	22	PVDF Painted
58738XXA	10'-2"	0.032"	Aluminum PVDF Painted

Flashing Stretch Out = 5 1/8"

MITER TRIM



Product No.	Length	Gauge	Finish
5865441	10'-2"	24	Galvalume® (ACG)
58654XX	10'-2"	24	PVDF Painted
6065441	10'-2"	22	Galvalume® (ACG)
60654XX	10'-2"	22	PVDF Painted
58654XXA	10'-2"	0.032"	Aluminum PVDF Painted

Flashing Stretch Out = 3"

TLC SERIES INSTALL GUIDE

Accessories

UNIVERSAL CLOSURE



Product No.	Description	WT/Ea	Type
6411100	1" x 1 1/2" x 50'	4.00 lbs	Foam
6411199	1" x 1 1/2" x 10'	0.80 lbs	Foam

DOUBLE BEAD-TAPE SEALANT



Product No.	Description	WT/Ctn.	Type
6403899	7/8" x 3/16" x 25' 20 Rolls per Carton	40.00 lbs	Butyl

TUBE ADHESIVE



Product No.	Description	WT/Ea	Color
6402800	Acrylic Tube Adhesive	3.31 lbs	Clear
64028XX	Tube Adhesive	3.31 lbs	Color Match*

*Contact branch for color options

POP RIVET



Product No.	Description	WT/250	Finish
8240201	1/8" x 3/8" Pop Rivet	0.75 lbs	Bare
82402XX	1/8" x 3/8" Pop Rivet	0.75 lbs	Painted

PANCAKE HEAD WOOD SCREW



Product No.	Description	WT/250	Finish
8243100	#10-12 x 1" PH Wood Screw	1.90 lbs	Plated

PANCAKE HEAD DRILLER



Product No.	Description	WT/250	Finish
8242100	#10-16 x 1" PH Driller	1.90 lbs	Plated

SELF DRILLER - NO WASHER



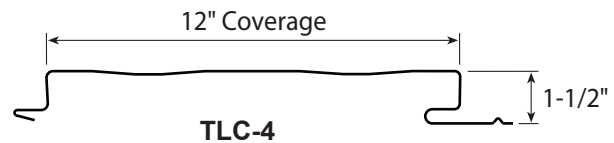
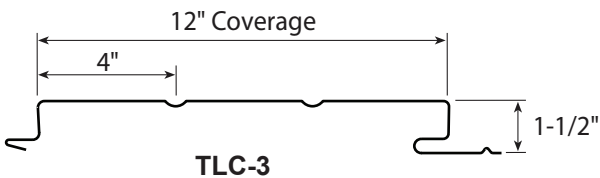
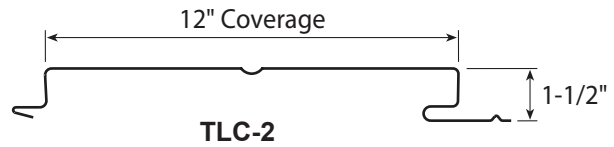
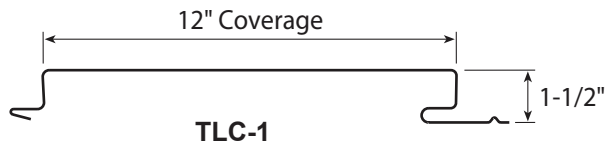
Product No.	Description	WT/250	Finish
824200	#12-14 x 1" SD No Washer	1.90 lbs	Plated

STITCH SCREW



Product No.	Description	WT/250	Finish
8234800	1/4-14 x 7/8" Stitch Screw	1.90 lbs	Plated
82348XX	1/4-14 x 7/8" Stitch Screw	1.90 lbs	Plated

TLC-1 • TLC-2 • TLC-3 • TLC-4



PANEL OVERVIEW

- Finish: Standard: PVDF
Optional: multi-pass PVDF, Vintage and Weathering Steel
- Corrosion Protection: AZ50 per ASTM A 792 for painted Galvalume®, G90 per ASTM A 653 for Galvanized
- Gauges: 24 ga, 22 ga and 20 ga
- Installation: Vertical (Left to Right or Right to Left), Horizontal (Top to Bottom)
- 12" panel coverage, 1-1/2" panel height
- Flush face, concealed fastened, non-end lapping panel system
- Roll-Formed Panels
- Panel Length: 5' minimum, 40' maximum
- Optional material availability: Copper and Aluminum
- Panels can be installed horizontally or vertically and are interchangeable for accent effects
- Use on single-skin or field-assembled wall systems

TESTING AND APPROVALS

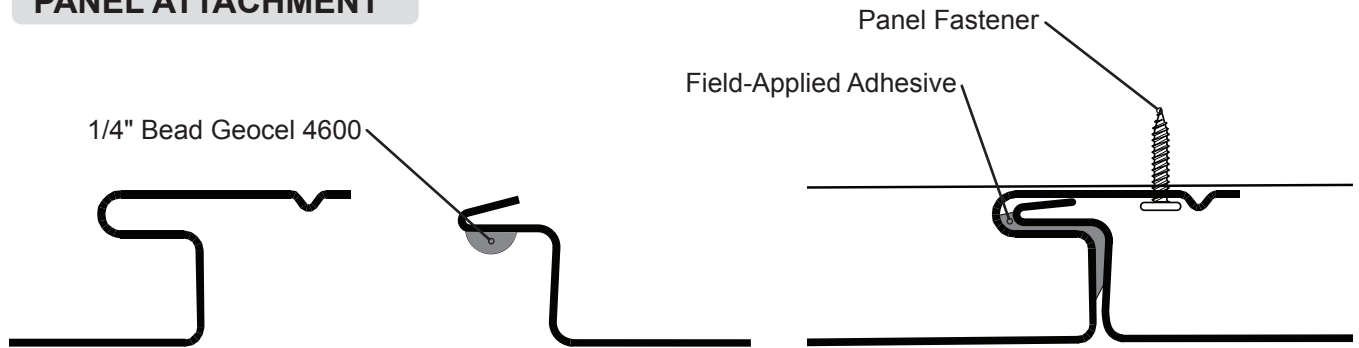
- ASTM E 283 Air Leakage
- ASTM E 331 Water Penetration
- ASTM E 330 Uniform Static Air Pressure Difference
- ASTM E 1592 Load Test

FASTENING INFORMATION

- Overdriven fasteners will cause panel distortions.
- Fasteners should extend 1/2" or more past the inside face of the support material.
- Thick Panels (ex. 20 ga) or supports (ex. 1/2" steel) may require predrilling of holes for screws.
- Panel Fasteners:
 - Attaching to Wood:
 - #10-12 Pancake Head Wood Screw
 - Attaching to Steel:
 - Less than 20 ga: 1/4"-13 Deck Screw
 - Greater than or equal to 20 ga, <=12 ga: #10-16 Pancake Head Driller
- Trim Fasteners:
 - 1/4"-14 x 7/8" XL Stitch Screw
 - 1/8" x 3/16" Pop Rivet
- Field-Applied Adhesive:
 - 1/4" diameter bead of Geocel 4600

TLC-1 • TLC-2 • TLC-3 • TLC-4

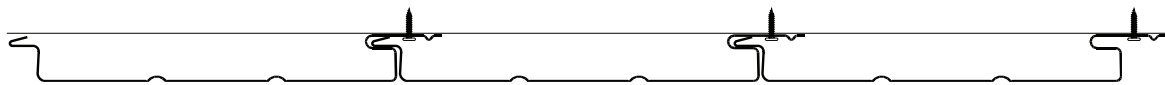
PANEL ATTACHMENT



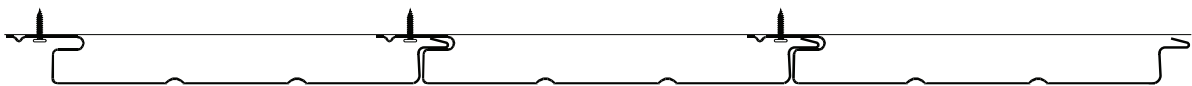
DIRECTIONAL DETAILS

Horizontal Installation – Top to Bottom

Vertical Installation – Left to Right



Vertical Installation – Right to Left



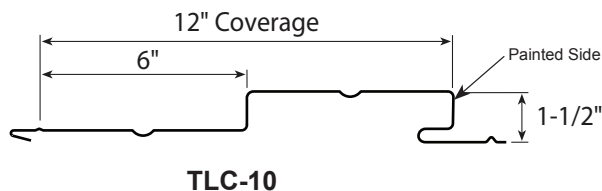
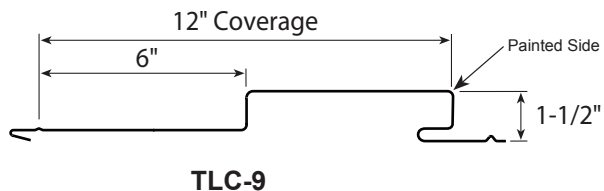
SECTION PROPERTIES

ALLOWABLE UNIFORM LOADS, psf
For various fastener spacings

Ga	Width in	Yield ksi	Weight psf	Top In Compression		Bottom In Compression		Inward Load						Outward Load					
				I _{xx} in ⁴ /ft	S _{xx} in ³ /ft	I _{xx} in ⁴ /ft	S _{xx} in ³ /ft	2'	3'	4'	5'	6'	8'	2'	3'	4'	5'	6'	8'
24	12	50	1.48	0.0609	0.0616	0.1317	0.1123	50	33	25	20	19	18	80	53	40	32	27	25
22	12	50	1.93	0.0880	0.0923	0.1840	0.1593	63	42	31	29	27	25	88	58	44	35	32	30
20	12	33	2.35	0.1260	0.1421	0.2460	0.2177	63	42	31	29	27	25	88	58	44	35	32	30

- Theoretical section properties have been calculated per AISI S100-2016 'North American Specification for the Design of Cold-Formed Steel Structural Members'. I_{xx} and S_{xx} are effective section properties for deflection and bending.
- Allowable load is calculated in accordance with AISI 2016 specifications considering bending, shear, combined bending & shear, deflection and ASTM E 330 testing on 16 ga girts. Allowable load considers the 3 or more equal spans condition. Allowable load does not address web crippling, fasteners, support material or load testing with other supports. Panel weight is not considered.
- Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
- Allowable loads do not include a 1/3 stress increase for wind.

TLC-9 • TLC-10



PANEL OVERVIEW

- Finish: Standard: PVDF
Optional: multi-pass PVDF, Vintage and Weathering Steel
- Corrosion Protection: AZ50 per ASTM A 792 for painted Galvalume®, G90 per ASTM A 653 for Galvanized
- Gauges: 24 ga, 22 ga and 20 ga
- Installation: Vertical (Left to Right or Right to Left), Horizontal (Top to Bottom)
- 12" panel coverage, 1-1/2" panel height
- Flush face, concealed fastened, non-end lapping panel system
- Roll-Formed Panels
- Panel Length: 5' minimum, 40' maximum
- Optional material availability: Copper and Aluminum
- Panels can be installed horizontally or vertically and are interchangeable for accent effects
- Use on single-skin or field-assembled wall systems

TESTING AND APPROVALS

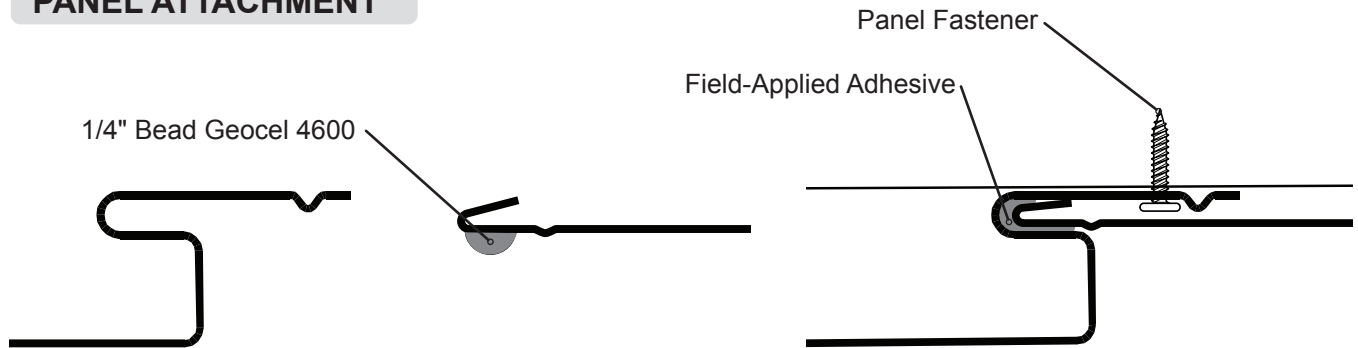
- ASTM E 283 Air Leakage
- ASTM E 331 Water Penetration
- ASTM E 330 Uniform Static Air Pressure Difference
- ASTM E 1592 Load Test

FASTENING INFORMATION

- Overdriven fasteners will cause panel distortions.
- Fasteners should extend 1/2" or more past the inside face of the support material.
- Thick Panels (ex. 20 ga) or supports (ex. 1/2" steel) may require predrilling of holes for screws.
- Panel Fasteners:
 - Attaching to Wood:
 - #10-12 Pancake Head Wood Screw
 - Attaching to Steel:
 - Less than 20 ga: 1/4"-13 Deck Screw
 - Greater than or equal to 20 ga, ≤12 ga: #10-16 Pancake Head Driller
- Trim Fasteners:
 - 1/4"-14 x 7/8" XL Stitch Screw
 - 1/8" x 3/16" Pop Rivet
- Field-Applied Adhesive:
 - 1/4" diameter bead of Geocel 4600

TLC-9 • TLC-10

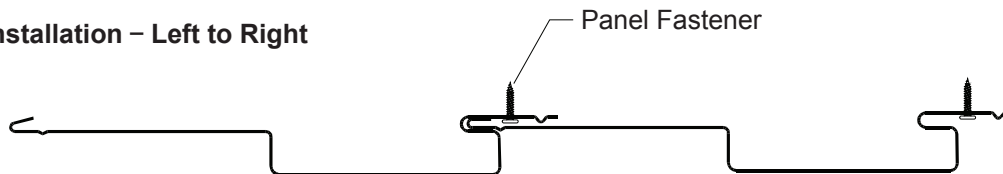
PANEL ATTACHMENT



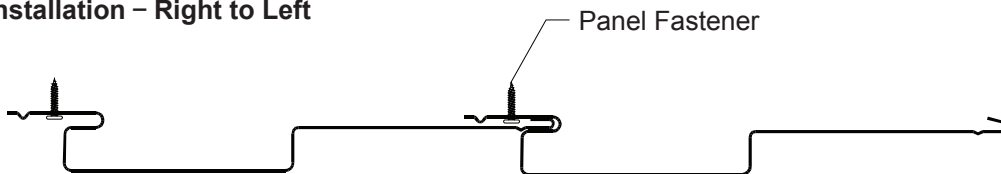
DIRECTIONAL DETAILS

Horizontal Installation – Top to Bottom

Vertical Installation – Left to Right



Vertical Installation – Right to Left



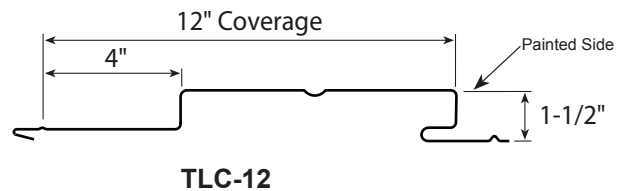
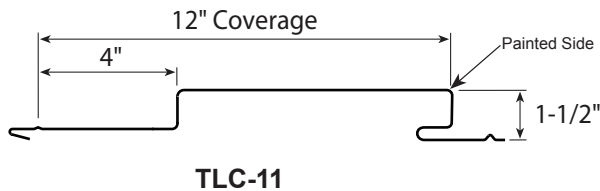
SECTION PROPERTIES

ALLOWABLE UNIFORM LOADS, psf
For various fastener spacings

Ga	Width in	Yield ksi	Weight psf	Top In Compression		Bottom In Compression		Inward Load						Outward Load					
				Ixx in ² /ft	Sxx in ² /ft	Ixx in ² /ft	Sxx in ² /ft	2'	3'	4'	5'	6'	8'	2'	3'	4'	5'	6'	8'
24	12	50	1.51	0.0623	0.0592	0.1041	0.1060	90	53	40	32	27	20	90	60	45	36	30	23
22	12	50	1.97	0.0906	0.0879	0.1437	0.1492	90	53	40	32	27	20	90	60	45	36	30	23
20	12	33	2.39	0.1310	0.1329	0.1920	0.2079	90	53	40	32	27	20	90	60	45	36	30	23

1. Theoretical section properties have been calculated per AISI S100-2016 'North American 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 2016 specifications considering bending, shear, combined bending & shear, deflection and ASTM E 330 testing on 16 ga girts. Allowable load considers the 3 or more equal spans condition. Allowable load does not address web crippling, fasteners, support material or load testing with other supports. 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 for wind.

TLC-11 • TLC-12



PANEL OVERVIEW

- Finish: Standard: PVDF
Optional: multi-pass PVDF, Vintage and Weathering Steel
- Corrosion Protection: AZ50 per ASTM A 792 for painted Galvalume®, G90 per ASTM A 653 for Galvanized
- Gauges: 24 ga, 22 ga and 20 ga
- Installation: Vertical (Left to Right or Right to Left), Horizontal (Top to Bottom)
- 12" panel coverage, 1-1/2" panel height
- Flush face, concealed fastened, non-end lapping panel system
- Roll-Formed Panels
- Panel Length: 5' minimum, 40' maximum
- Optional material availability: Copper and Aluminum
- Panels can be installed horizontally or vertically and are interchangeable for accent effects
- Use on single-skin or field-assembled wall systems

TESTING AND APPROVALS

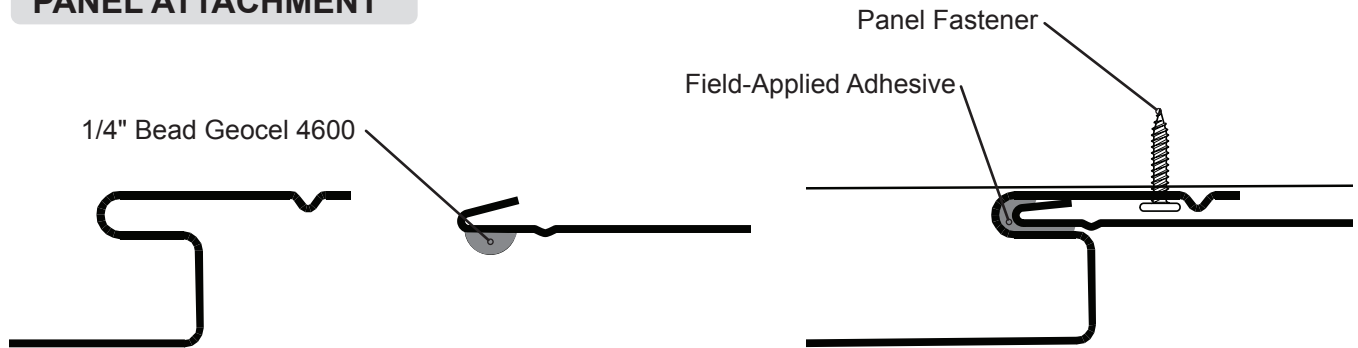
- ASTM E 283 Air Leakage
- ASTM E 331 Water Penetration
- ASTM E 330 Uniform Static Air Pressure Difference
- ASTM E 1592 Load Test

FASTENING INFORMATION

- Overdriven fasteners will cause panel distortions.
- Fasteners should extend 1/2" or more past the inside face of the support material.
- Thick Panels (ex. 20 ga) or supports (ex. 1/2" steel) may require predrilling of holes for screws.
- Panel Fasteners:
 - Attaching to Wood:
 - #10-12 Pancake Head Wood Screw
 - Attaching to Steel:
 - Less than 20 ga: 1/4"-13 Deck Screw
 - Greater than or equal to 20 ga, <=12 ga: #10-16 Pancake Head Driller
- Trim Fasteners:
 - 1/4"-14 x 7/8" XL Stitch Screw
 - 1/8" x 3/16" Pop Rivet
- Field-Applied Adhesive:
 - 1/4" diameter bead of Geocel 4600

TLC-11 • TLC-12

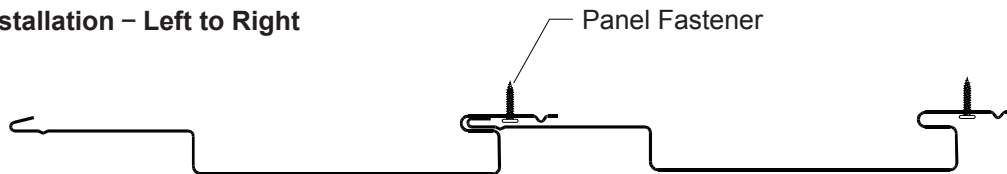
PANEL ATTACHMENT



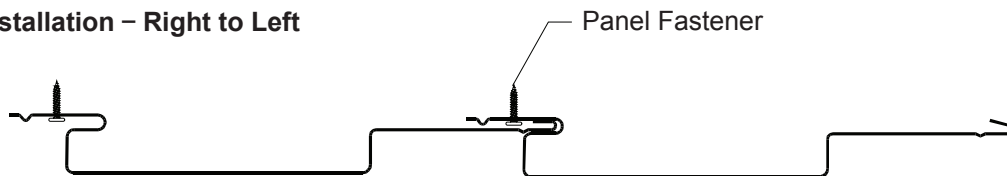
DIRECTIONAL DETAILS

Horizontal Installation – Top to Bottom

Vertical Installation – Left to Right



Vertical Installation – Right to Left



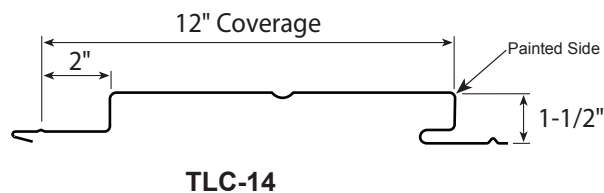
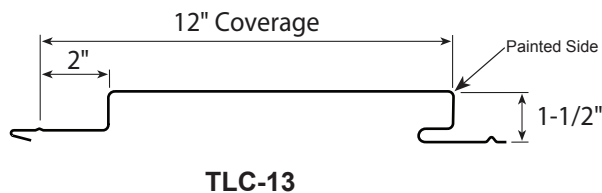
SECTION PROPERTIES

ALLOWABLE UNIFORM LOADS, psf
For various fastener spacings

Ga	Width in	Yield ksi	Weight psf	Top In Compression		Bottom In Compression		Inward Load						Outward Load					
				I _{xx} in ⁴ /ft	S _{xx} in ³ /ft	I _{xx} in ⁴ /ft	S _{xx} in ³ /ft	2'	3'	4'	5'	6'	8'	2'	3'	4'	5'	6'	8'
24	12	50	1.51	0.0621	0.0599	0.1164	0.1099	50	33	25	20	19	18	80	53	40	32	27	25
22	12	50	1.97	0.0900	0.0892	0.1610	0.1546	63	42	31	29	27	25	88	58	44	35	32	30
20	12	33	2.39	0.1310	0.1358	0.2160	0.2155	63	42	31	29	27	25	88	58	44	35	32	30

- Theoretical section properties have been calculated per AISI S100-2016 'North American Specification for the Design of Cold-Formed Steel Structural Members'. I_{xx} and S_{xx} are effective section properties for deflection and bending.
- Allowable load is calculated in accordance with AISI 2016 specifications considering bending, shear, combined bending & shear, deflection and ASTM E 330 testing on 16 ga girts. Allowable load considers the 3 or more equal spans condition. Allowable load does not address web crippling, fasteners, support material or load testing with other supports. Panel weight is not considered.
- Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
- Allowable loads do not include a 1/3 stress increase for wind.

TLC-13 • TLC-14



PANEL OVERVIEW

- Finish: Standard: PVDF
Optional: multi-pass PVDF, Vintage and Weathering Steel
- Corrosion Protection: AZ50 per ASTM A 792 for painted Galvalume®, G90 per ASTM A 653 for Galvanized
- Gauges: 24 ga, 22 ga and 20 ga
- Installation: Vertical (Left to Right or Right to Left), Horizontal (Top to Bottom)
- 12" panel coverage, 1-1/2" panel height
- Flush face, concealed fastened, non-end lapping panel system
- Roll-Formed Panels
- Panel Length: 5' minimum, 40' maximum
- Optional material availability: Copper and Aluminum
- Panels can be installed horizontally or vertically and are interchangeable for accent effects
- Use on single-skin or field-assembled wall systems

TESTING AND APPROVALS

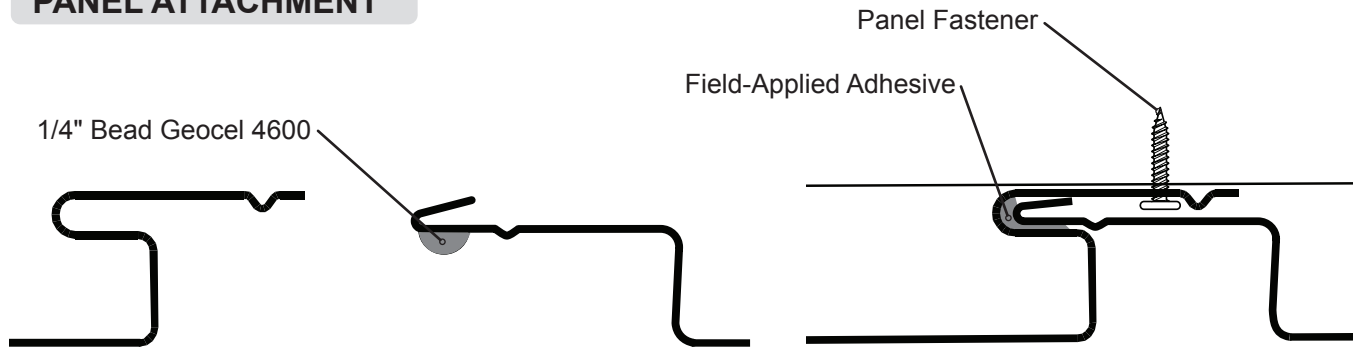
- ASTM E 283 Air Leakage
- ASTM E 331 Water Penetration
- ASTM E 330 Uniform Static Air Pressure Difference
- ASTM E 1592 Load Test

FASTENING INFORMATION

- Overdriven fasteners will cause panel distortions.
- Fasteners should extend 1/2" or more past the inside face of the support material.
- Thick Panels (ex. 20 ga) or supports (ex. 1/2" steel) may require predrilling of holes for screws.
- Panel Fasteners:
 - Attaching to Wood:
 - #10-12 Pancake Head Wood Screw
 - Attaching to Steel:
 - Less than 20 ga: 1/4"-13 Deck Screw
 - Greater than or equal to 20 ga, <=12 ga: #10-16 Pancake Head Driller
- Trim Fasteners:
 - 1/4"-14 x 7/8" XL Stitch Screw
 - 1/8" x 3/16" Pop Rivet
- Field-Applied Adhesive:
 - 1/4" diameter bead of Geocel 4600

TLC-13 • TLC-14

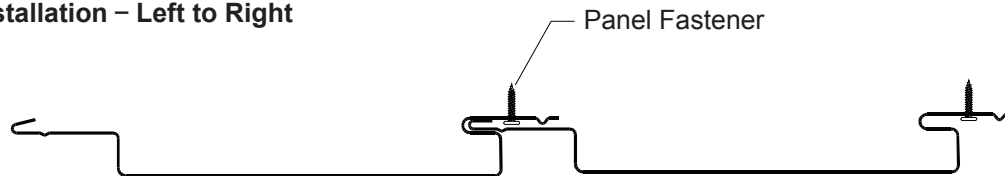
PANEL ATTACHMENT



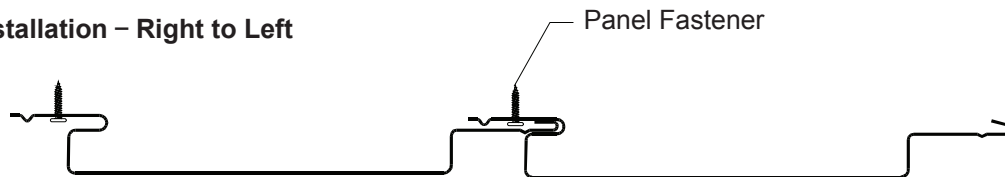
DIRECTIONAL DETAILS

Horizontal Installation – Top to Bottom

Vertical Installation – Left to Right



Vertical Installation – Right to Left



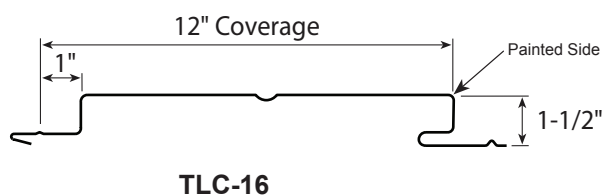
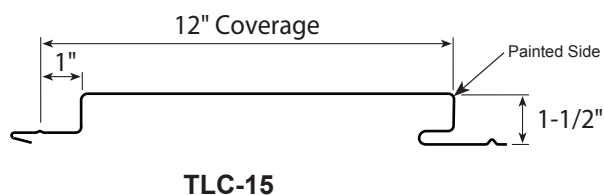
SECTION PROPERTIES

ALLOWABLE UNIFORM LOADS, psf
For various fastener spacings

Ga	Width in	Yield ksi	Weight psf	Top In Compression		Bottom In Compression		Inward Load						Outward Load					
				I _{xx} in ⁴ /ft	S _{xx} in ³ /ft	I _{xx} in ⁴ /ft	S _{xx} in ³ /ft	2'	3'	4'	5'	6'	8'	2'	3'	4'	5'	6'	8'
24	12	50	1.51	0.0617	0.0606	0.1253	0.1119	50	33	25	20	19	18	80	53	40	32	27	25
22	12	50	1.97	0.0890	0.0904	0.1730	0.1569	63	42	31	29	27	25	88	58	44	35	32	30
20	12	33	2.39	0.1290	0.1385	0.2330	0.2178	63	42	31	29	27	25	88	58	44	35	32	30

- Theoretical section properties have been calculated per AISI S100-2016 'North American Specification for the Design of Cold-Formed Steel Structural Members'. I_{xx} and S_{xx} are effective section properties for deflection and bending.
- Allowable load is calculated in accordance with AISI 2016 specifications considering bending, shear, combined bending & shear, deflection and ASTM E 330 testing on 16 ga girts. Allowable load considers the 3 or more equal spans condition. Allowable load does not address web crippling, fasteners, support material or load testing with other supports. Panel weight is not considered.
- Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
- Allowable loads do not include a 1/3 stress increase for wind.

TLC-15 • TLC-16



PANEL OVERVIEW

- Finish: Standard: PVDF
Optional: multi-pass PVDF, Vintage and Weathering Steel
- Corrosion Protection: AZ50 per ASTM A 792 for painted Galvalume®, G90 per ASTM A 653 for Galvanized
- Gauges: 24 ga, 22 ga and 20 ga
- Installation: Vertical (Left to Right or Right to Left), Horizontal (Top to Bottom)
- 12" panel coverage, 1-1/2" panel height
- Flush face, concealed fastened, non-end lapping panel system
- Roll-Formed Panels
- Panel Length: 5' minimum, 40' maximum
- Optional material availability: Copper and Aluminum
- Panels can be installed horizontally or vertically and are interchangeable for accent effects
- Use on single-skin or field-assembled wall systems

TESTING AND APPROVALS

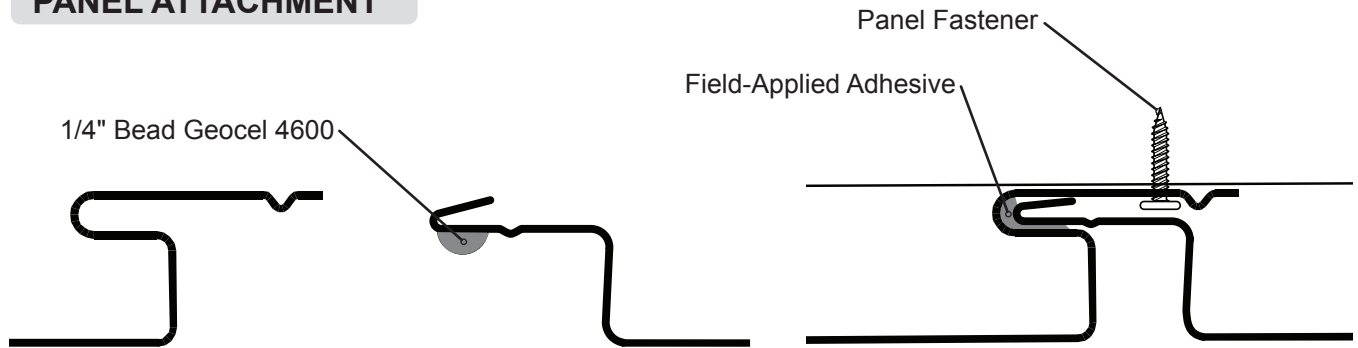
- ASTM E 283 Air Leakage
- ASTM E 331 Water Penetration
- ASTM E 330 Uniform Static Air Pressure Difference
- ASTM E 1592 Load Test

FASTENING INFORMATION

- Overdriven fasteners will cause panel distortions.
- Fasteners should extend 1/2" or more past the inside face of the support material.
- Thick Panels (ex. 20 ga) or supports (ex. 1/2" steel) may require predrilling of holes for screws.
- Panel Fasteners:
 - Attaching to Wood:
 - #10-12 Pancake Head Wood Screw
 - Attaching to Steel:
 - Less than 20 ga: 1/4"-13 Deck Screw
 - Greater than or equal to 20 ga, <=12 ga: #10-16 Pancake Head Driller
- Trim Fasteners:
 - 1/4"-14 x 7/8" XL Stitch Screw
 - 1/8" x 3/16" Pop Rivet
- Field-Applied Adhesive:
 - 1/4" diameter bead of Geocel 4600

TLC-15 • TLC-16

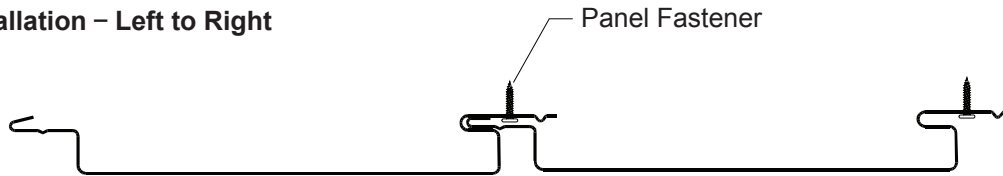
PANEL ATTACHMENT



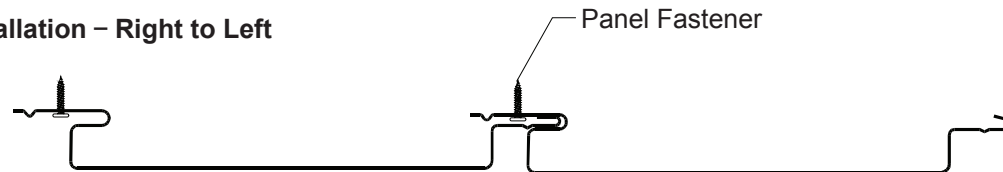
DIRECTIONAL DETAILS

Horizontal Installation – Top to Bottom

Vertical Installation – Left to Right



Vertical Installation – Right to Left



SECTION PROPERTIES

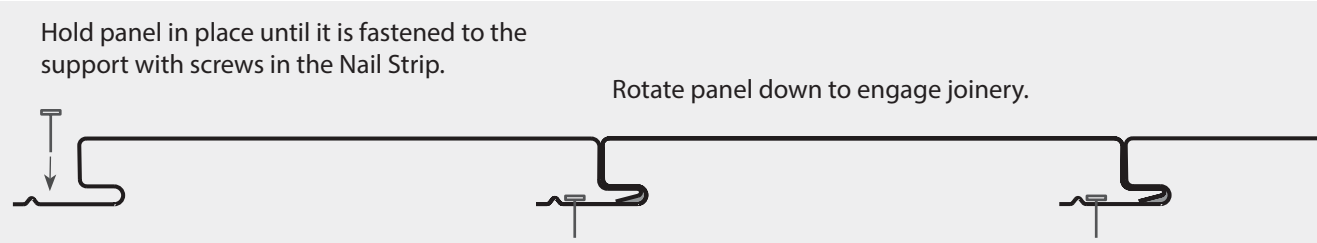
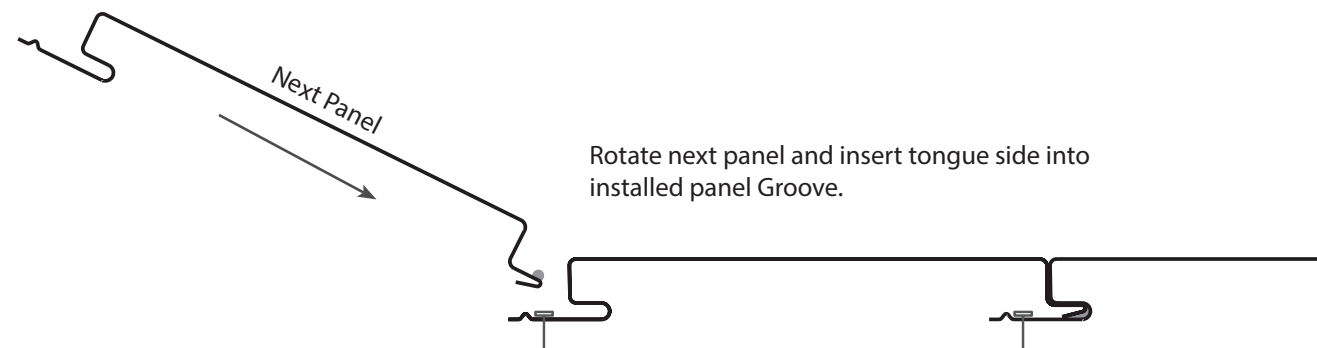
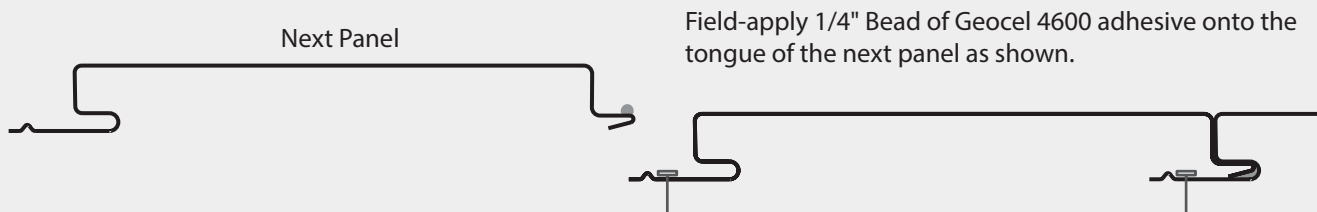
ALLOWABLE UNIFORM LOADS, psf
For various fastener spacings

Ga	Width in	Yield ksi	Weight psf	Top In Compression		Bottom In Compression		Inward Load						Outward Load					
				I _{xx} in ⁴ /ft	S _{xx} in ³ /ft	I _{xx} in ⁴ /ft	S _{xx} in ³ /ft	2'	3'	4'	5'	6'	8'	2'	3'	4'	5'	6'	8'
24	12	50	1.51	0.0613	0.0610	0.1282	0.1116	50	33	25	20	19	18	80	53	40	32	27	25
22	12	50	1.97	0.0890	0.0912	0.1770	0.1558	63	42	31	29	27	25	88	58	44	35	32	30
20	12	33	2.39	0.1280	0.1399	0.2380	0.2150	63	42	31	29	27	25	88	58	44	35	32	30

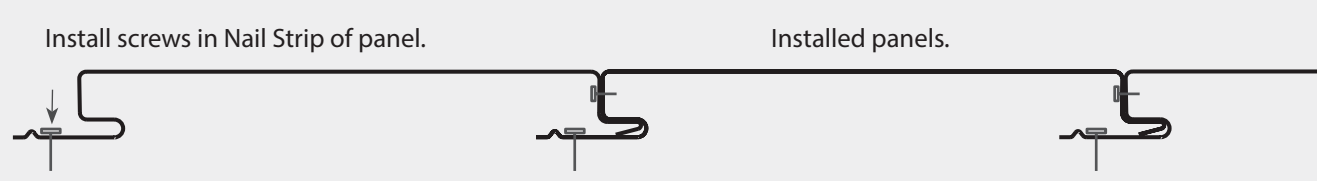
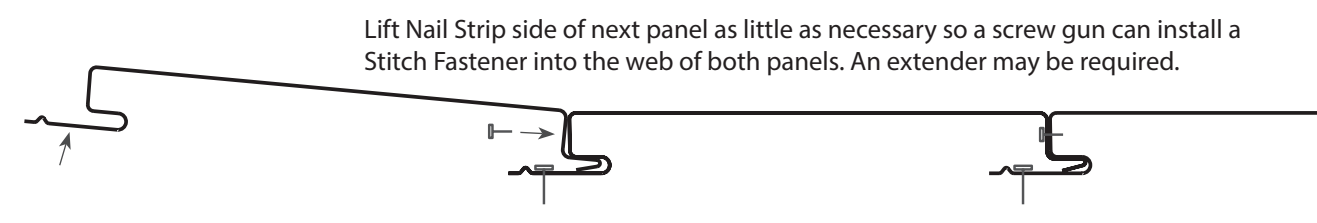
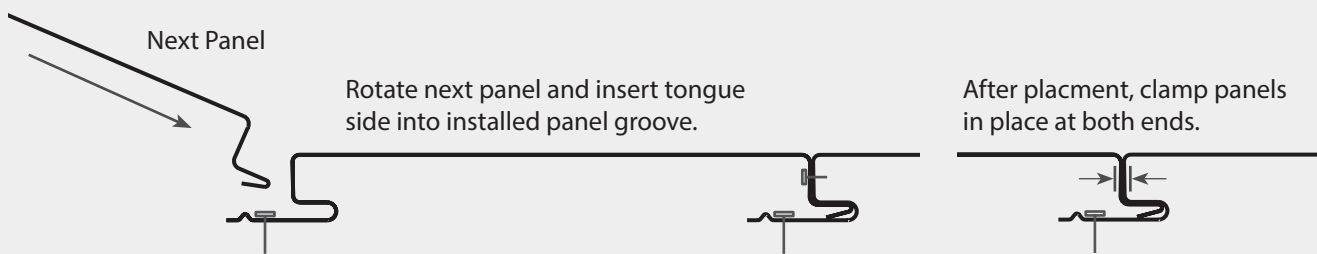
- Theoretical section properties have been calculated per AISI S100-2016 'North American Specification for the Design of Cold-Formed Steel Structural Members'. I_{xx} and S_{xx} are effective section properties for deflection and bending.
- Allowable load is calculated in accordance with AISI 2016 specifications considering bending, shear, combined bending & shear, deflection and ASTM E 330 testing on 16 ga girts. Allowable load considers the 3 or more equal spans condition. Allowable load does not address web crippling, fasteners, support material or load testing with other supports. Panel weight is not considered.
- Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
- Allowable loads do not include a 1/3 stress increase for wind.

TLC-1 • TLC-2 • TLC-3 • TLC-4

STANDARD FLUSH FACE PANEL INSTALLATION • ADHESIVE

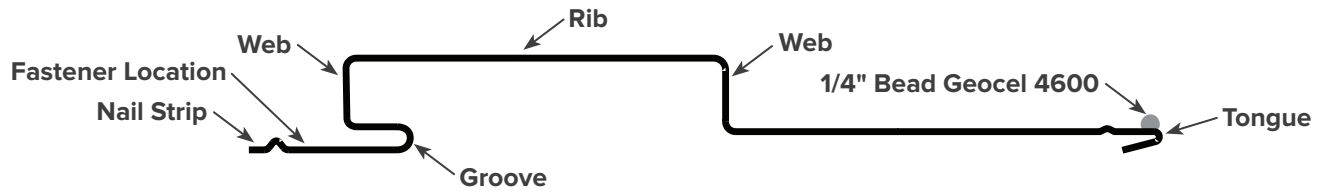


OPTIONAL INSTALLATION • FASTENER-NO ADHESIVE

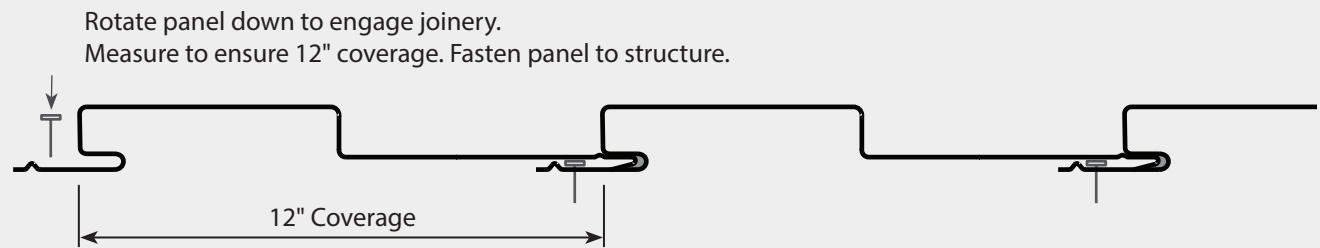
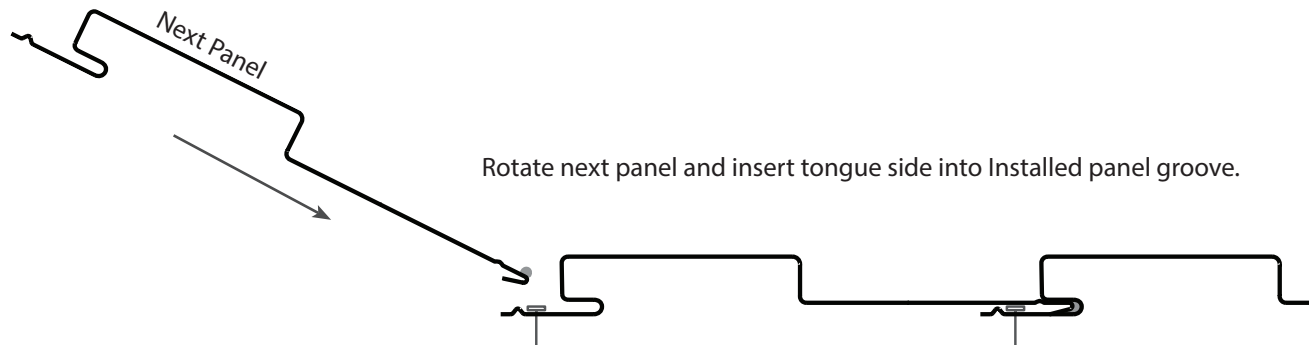
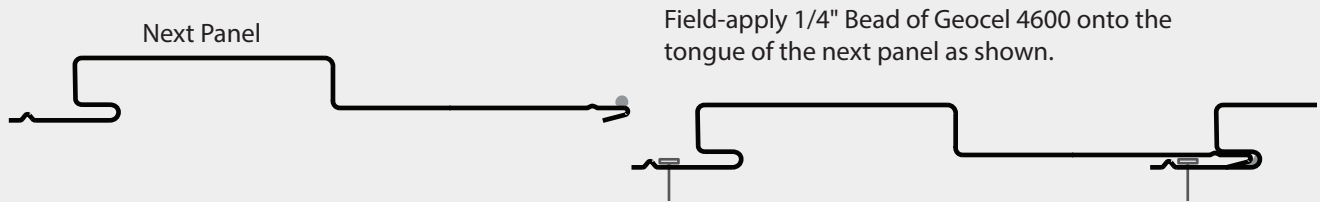


TLC-9 • TLC-10 • TLC-11 • TLC-12 • TLC-13 • TLC-14 • TLC-15 • TLC-16

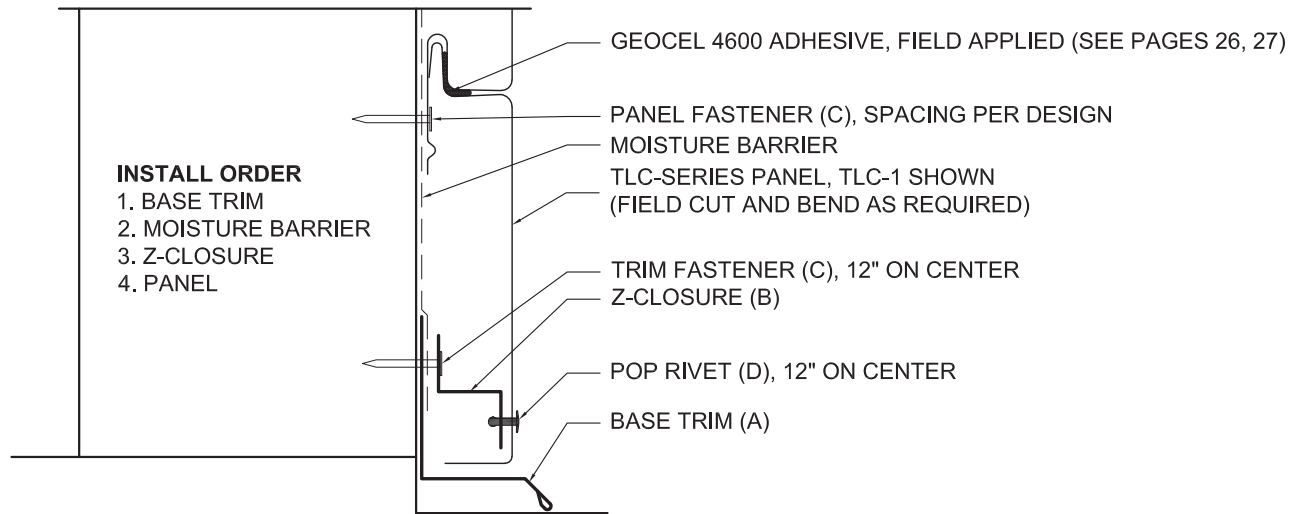
PANEL DIAGRAM



STANDARD RIB PANEL INSTALLATION • ADHESIVE



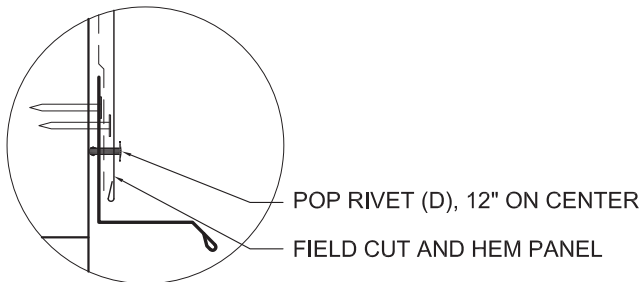
ELEVATION VIEW



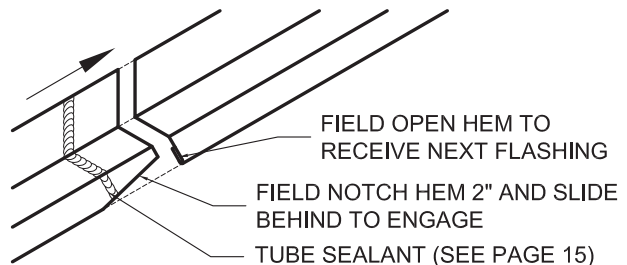
INSTALL ORDER

1. BASE TRIM
2. MOISTURE BARRIER
3. Z-CLOSURE
4. PANEL

AT LOW RIB

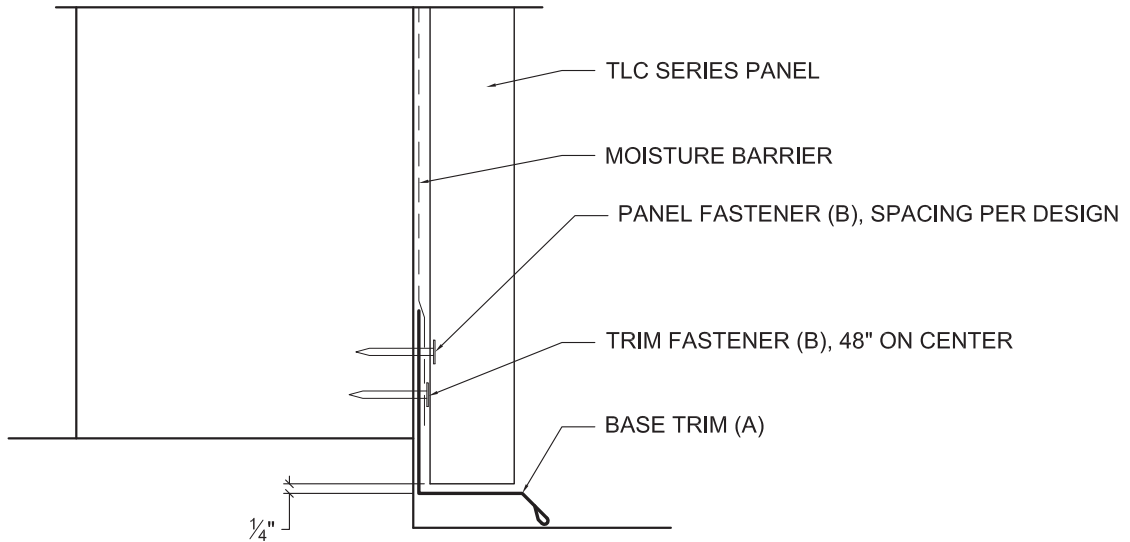


TRIM LAP



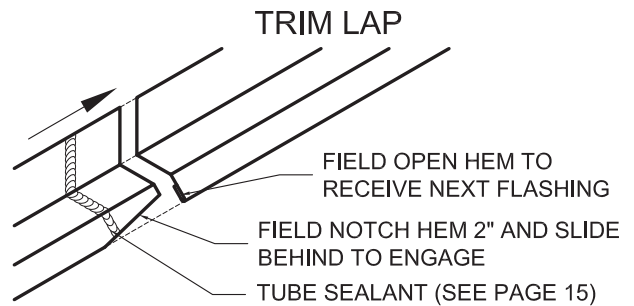
Part	Description	Product #	Length	Installation Information
(A)	Base Trim, 24 Ga Base Trim, 22 Ga Base Trim, 0.032"	58708XX 59708XX 58708XXA	10'-2"	Install Moisture Barrier over top of Base Trim
(B)	Z-Closure, 24 Ga Z-Closure, 22 Ga Z-Closure, 0.032"	57605XX 60605XX 57605XXA	10'-2"	Install over Base Trim with Tape Sealant on both legs. Pop Rivet Panel to Z-Closure.
(C)	#10-16 x 1" Pancake Head Driller	8242100	1"	For panel/trim attachment to metal framing
(C)	#10-12 x 1" Pancake Head Wood Screw	8243100	1"	For panel/trim attachment to wood sheathing or framing
(D)	1/8" x 3/8" Pop Rivet	82402XX		For panel attachment to Z-Closure

ELEVATION VIEW



INSTALL ORDER

1. BASE TRIM
2. MOISTURE BARRIER
3. PANEL

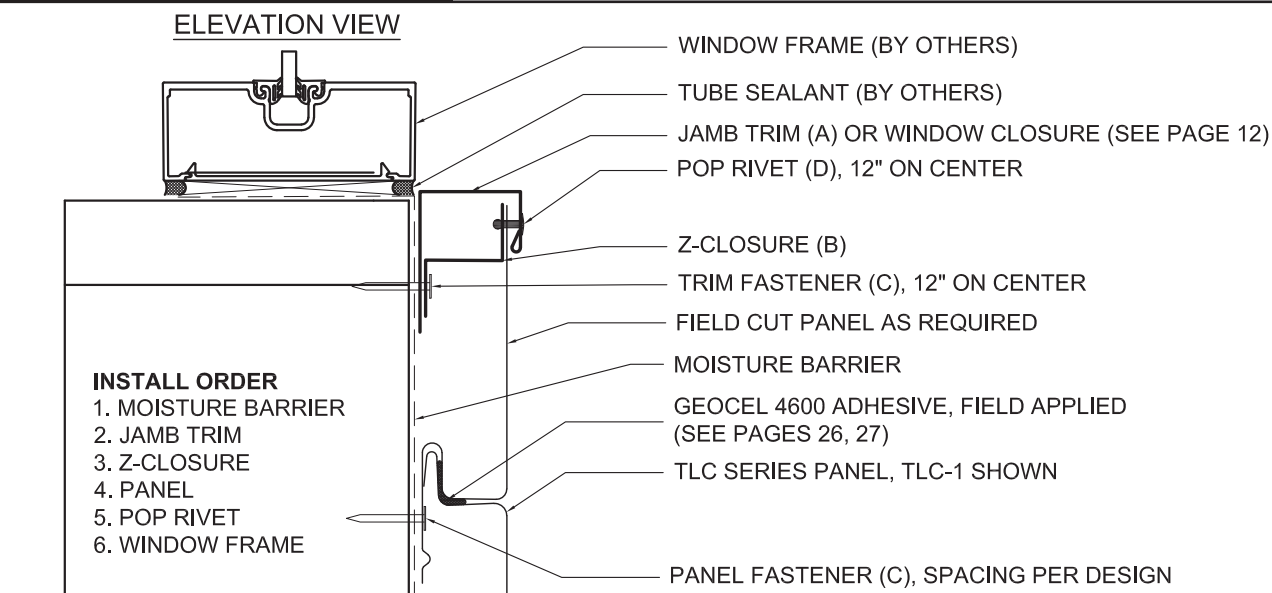


NO FASTENERS THROUGH TRIM LAP

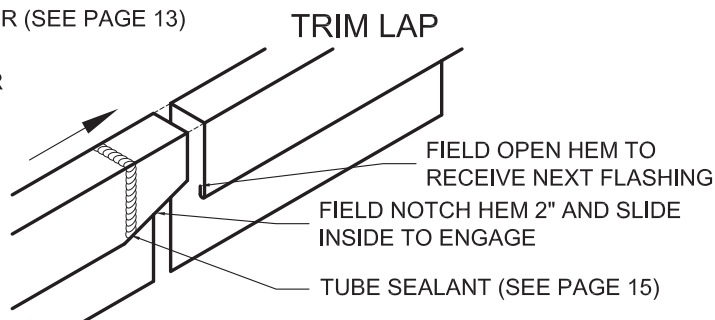
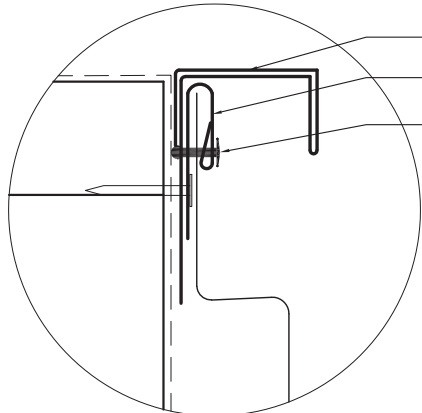
Part	Description	Product #	Length	Installation Information
<p>(A)</p>	Base Trim, 24 Ga Base Trim, 22 Ga Base Trim, 0.032"	58708XX 59708XX 58708XXA	10'-2"	Install Moisture Barrier over top of Base Trim
<p>(B)</p>	#10-16 x 1" Pancake Head Driller	8242100	1"	For panel/trim attachment to metal framing
<p>(B)</p>	#10-12 x 1" Pancake Head Wood Screw	8243100	1"	For panel/trim attachment to wood sheathing or framing

TLC SERIES INSTALL GUIDE

Horizontal - Panel Sill

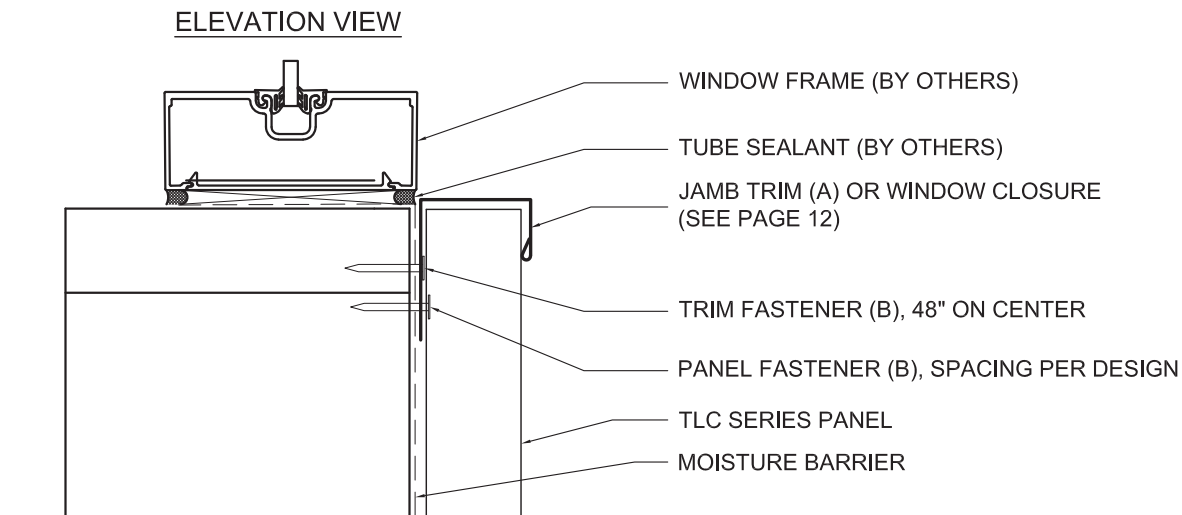


AT LOW RIB



NO FASTENERS THROUGH TRIM LAP

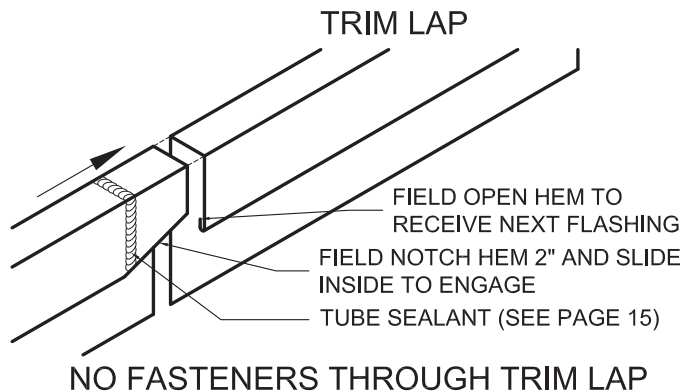
Part	Description	Product #	Length	Installation Information
(A)	Jamb Trim, 24 Ga Jamb Trim, 22 Ga Jamb Trim, 0.032"	58671XX 60761XX 58671XXA	10'-2"	Install Jamb Trim over Moisture Barrier.
(B)	Z-Closure, 24 Ga Z-Closure, 22 Ga Z-Closure, 0.032"	57605XX 60605XX 57605XXA	10'-2"	Locate at Jamb Trim. Field cut panel and slide panel between Z-Closure and Jamb Trim.
(C)	#10-16 x 1" Pancake Head Driller	8242100	1"	For panel/trim attachment to metal framing
(C)	#10-12 x 1" Pancake Head Wood Screw	8243100	1"	For panel/trim attachment to wood sheathing or framing
(D)	1/8" x 3/8" Pop Rivet	82402XX		Attach panel to Jamb Trim and Z-Closure



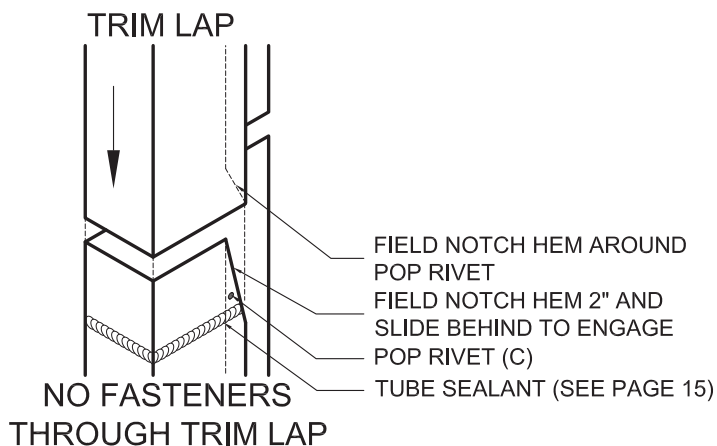
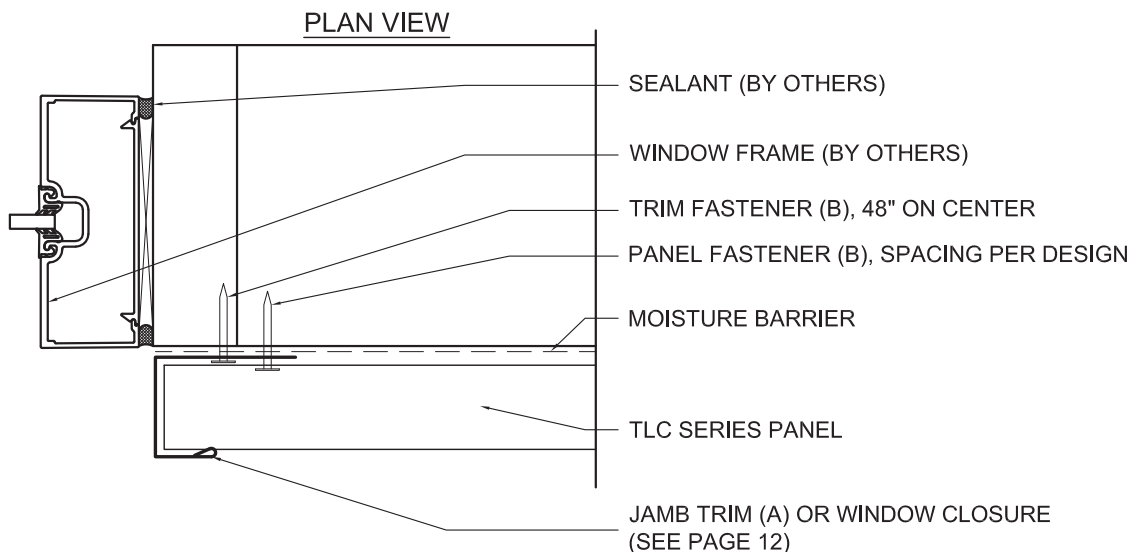
NOTE: USE JAMB TRIM WITH PANEL PROFILES TLC-1 THRU TLC-4. FOR OTHER PANEL PROFILES, USE WINDOW CLOSURE (SEE PAGE 12) TO KEEP THE BACKSIDE OF THE JAMB TRIM FROM BEING VISIBLE.

INSTALL ORDER

1. MOISTURE BARRIER
2. JAMB TRIM
3. PANEL
4. WINDOW FRAME



	Part	Description	Product #	Length	Installation Information
(A)		Jamb Trim, 24 Ga Jamb Trim, 22 Ga Jamb Trim, 0.032"	58671XX 60761XX 58671XXA	10'-2"	Install Jamb Trim over Moisture Barrier.
(B)		#10-16 x 1" Pancake Head Driller	8242100	1"	For panel/trim attachment to metal framing
(B)		#10-12 x 1" Pancake Head Wood Screw	8243100	1"	For panel/trim attachment to wood sheathing and framing



INSTALL ORDER

1. MOISTURE BARRIER
2. JAMB TRIM
3. PANEL
4. WINDOW FRAME

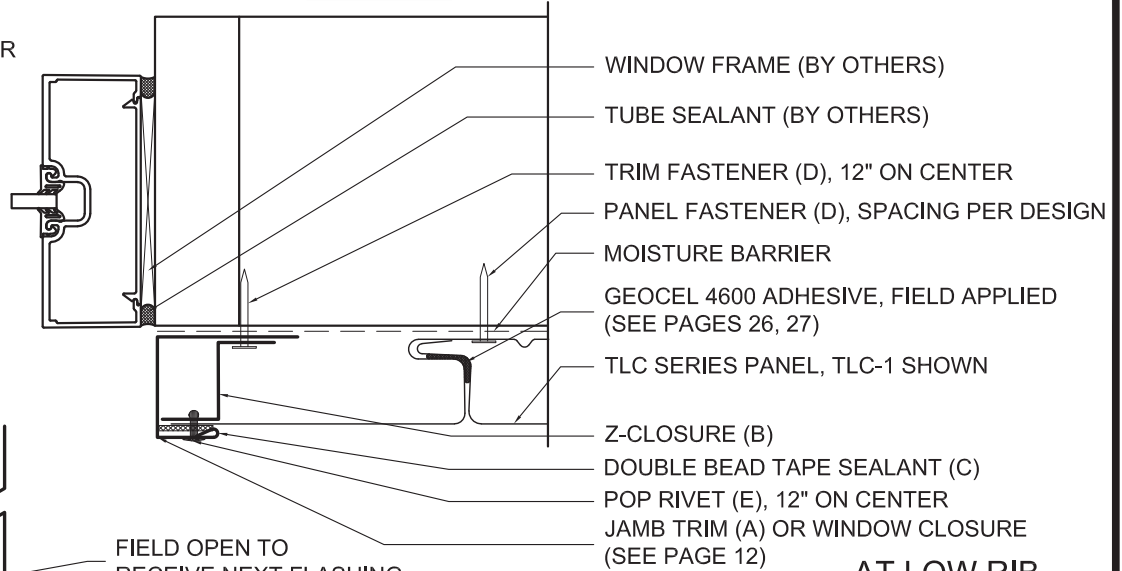
NOTE: USE JAMB TRIM WITH PANEL PROFILES TLC-1 THRU TLC-4. FOR OTHER PANEL PROFILES, USE WINDOW CLOSURE (SEE PAGE 12) TO KEEP THE BACKSIDE OF THE JAMB TRIM FROM BEING VISIBLE.

	Part	Description	Product #	Length	Installation Information
(A)		Jamb Trim, 24 Ga Jamb Trim, 22 Ga Jamb Trim, 0.032"	58671XX 60761XX 58671XXA	10'-2"	Install Jamb Trim over Moisture Barrier.
(B)		#10-16 x 1" Pancake Head Driller	8242100	1"	For panel/trim attachment to metal framing
(B)		#10-12 x 1" Pancake Head Wood Screw	8243100	1"	For panel/trim attachment to wood sheathing or framing

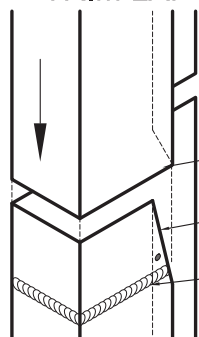
INSTALL ORDER

1. MOISTURE BARRIER
2. JAMB TRIM
3. Z-CLOSURE
4. PANEL
5. WINDOW FRAME

PLAN VIEW



TRIM LAP

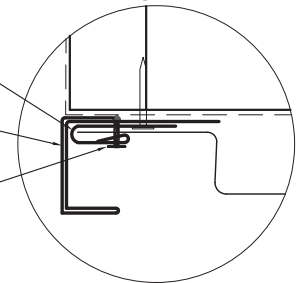


NO FASTENERS THROUGH TRIM LAP

FIELD OPEN TO RECEIVE NEXT FLASHING
 FIELD NOTCH HEM 2" AND SLIDE BEHIND TO ENGAGE
 TUBE SEALANT (SEE PAGE 15)

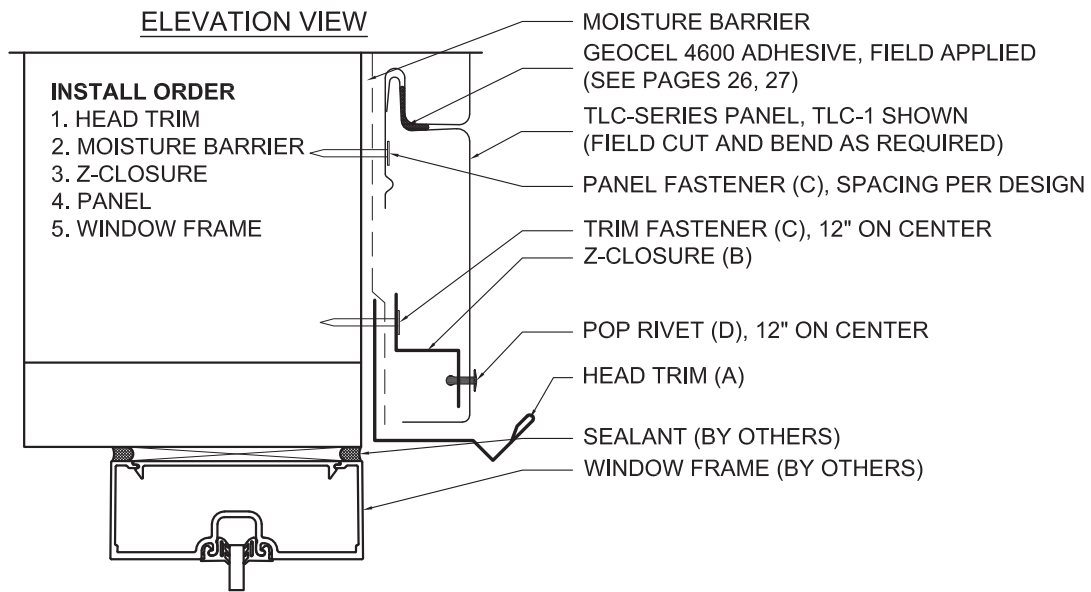
AT LOW RIB

PANEL STARTER (SEE PAGE 13)
 WINDOW CLOSURE (SEE PAGE 12)



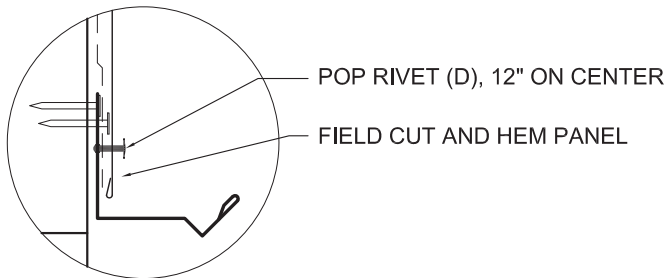
POP RIVET (E), 12" ON CENTER

Part	Description	Product #	Length	Installation Information
<p>(A)</p>	Jamb Trim, 24 Ga Jamb Trim, 22 Ga Jamb Trim, 0.032:	58671XX 60761XX 58671XXA	10'-2"	Install Jamb Trim over Moisture Barrier, add sealant between Jamb Trim and panel.
<p>(B)</p>	Z-Closure, 24 Ga Z-Closure, 22 Ga Z-Closure, 0.032"	57605XX 60605XX 57605XXA	10'-2"	Install at Jamb Trim. Field cut and slide panel between Z-Closure and Jamb Trim.
<p>(C)</p>	Double Bead Tape Sealant (7/8"x3/16"x25')	6403899		Install between panel and flashings
<p>(D)</p>	#10-16 x 1" Pancake Head Drillers	8242100	1"	For panel/trim attachment to metal framing
<p>(D)</p>	#10-12 x 1" Pancake Head Wood Screws	8243100	1"	For panel/trim attachment to wood sheathing or framing
<p>(E)</p>	1/8" x 3/8" Pop Rivet	82402XX		For panel/trim attachment

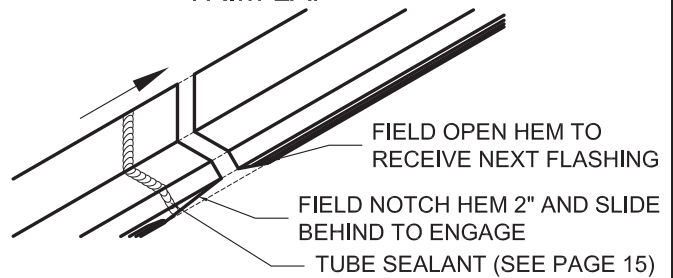


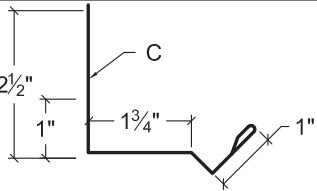
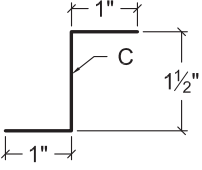
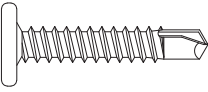
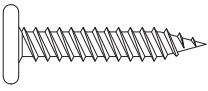
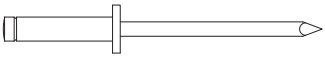
- INSTALL ORDER**
1. HEAD TRIM
 2. MOISTURE BARRIER
 3. Z-CLOSURE
 4. PANEL
 5. WINDOW FRAME

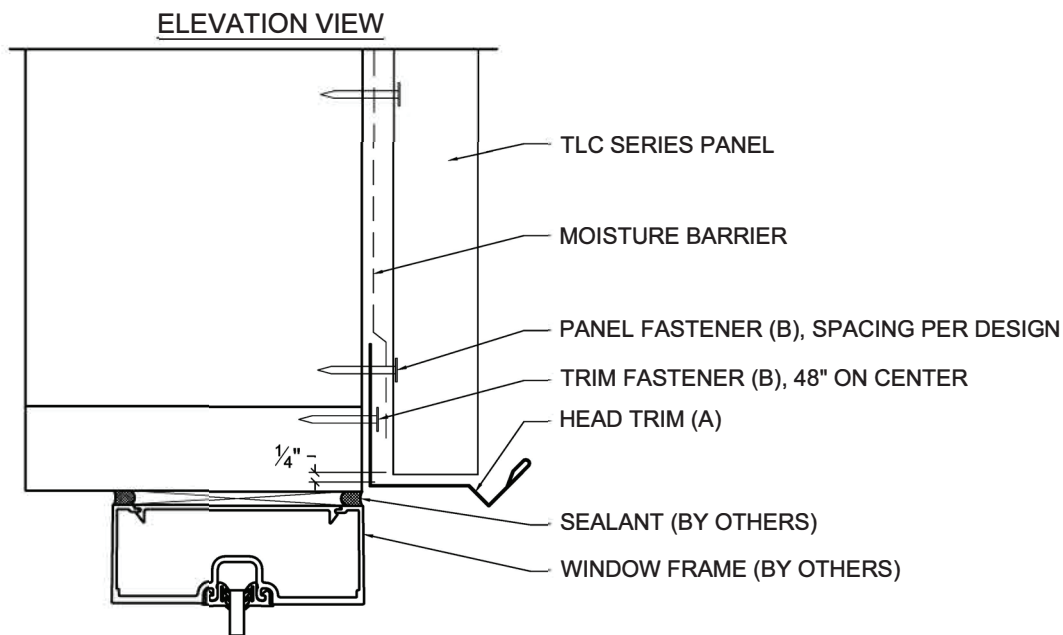
AT LOW RIB



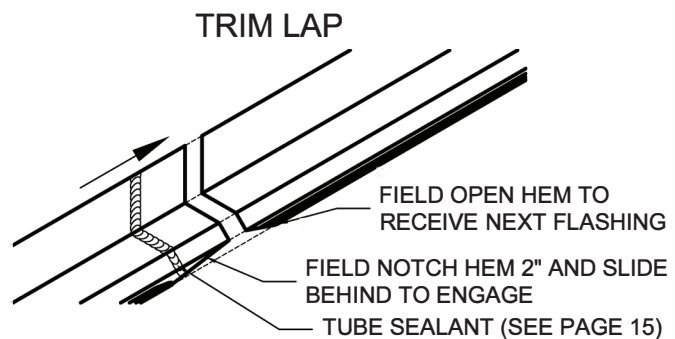
TRIM LAP



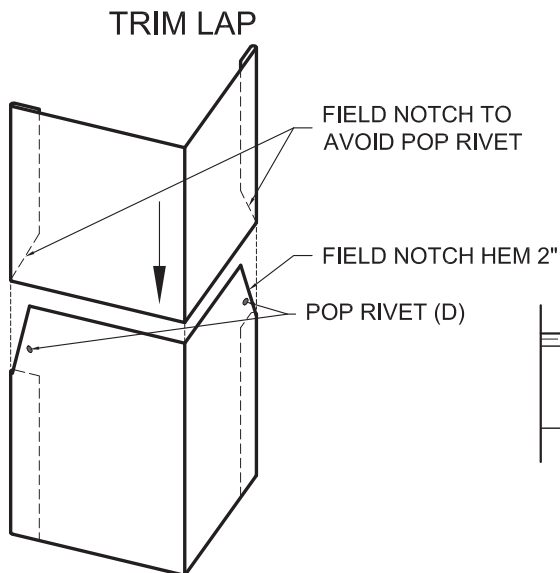
Part	Description	Product #	Length	Installation Information
(A) 	Head Trim, 24 Ga Head Trim, 22 Ga Head Trim, 0.032"	58621XX 60621XX 58621XXA	10'-2"	Install Moisture Barrier over top of Head Trim
(B) 	Z-Closure, 24 Ga Z-Closure, 22 Ga Z-Closure, 0.032"	57605XX 60605XX 57605XXA	10'-2"	Locate Z-Closure to support edge of panel.
(C) 	#10-16 x 1" PH Driller	8242100	1"	For panel/trim attachment to metal framing
(C) 	#10-12 x 1" PH Wood Screw	8243100	1"	For panel/trim attachment to wood sheathing or framing
(D) 	1/8" x 3/8" Pop Rivet	82402XX		For panel attachment to Z-Closure



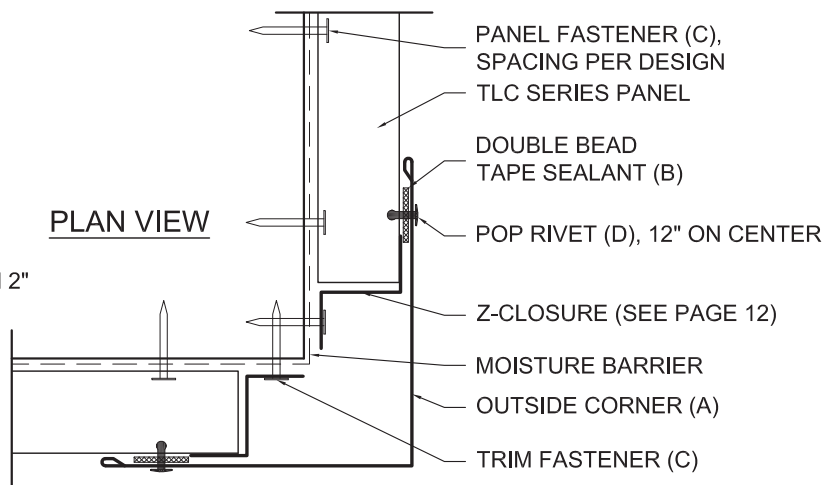
- INSTALL ORDER**
1. HEAD TRIM
 2. MOISTURE BARRIER
 3. PANEL
 4. WINDOW FRAME



Part	Description	Product #	Length	Installation Information
<p>(A)</p>	Head Trim, 24 Ga Head Trim, 22 Ga Head Trim, 0.032"	58621XX 60621XX 58621XXA	10'-2"	Install Moisture Barrier over top of Head Trim
<p>(B)</p>	#10-16 x 1" Pancake Head Driller	8242100	1"	For panel/trim attachment to metal framing
<p>(B)</p>	#10-12 x 1" Pancake Head Wood Screw	8243100	1"	For panel/trim attachment to wood sheathing or framing



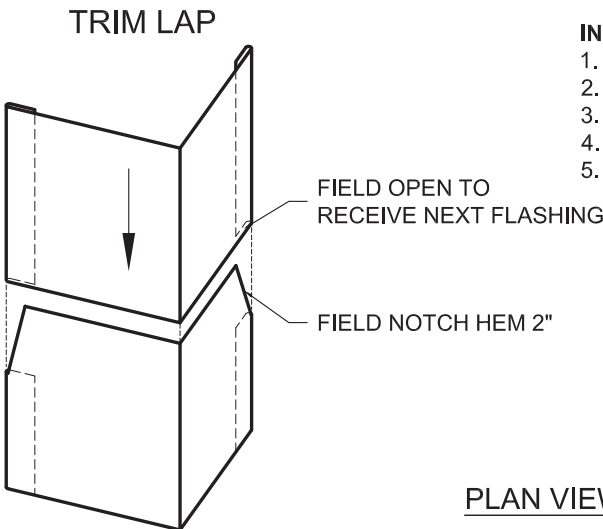
NO FASTENERS THROUGH TRIM LAP



- INSTALL ORDER**
1. MOISTURE BARRIER
 2. PANELS
 3. TAPE SEALANT
 4. OUTSIDE CORNER
 5. POP RIVETS

NOTE: Z-CLOSURE (SEE PAGE 12) AT PANEL ENDS SHOWN ABOVE ARE NOT NEEDED FOR PANEL PROFILES TLC-1 THRU TLC-4. FOR OTHER PANEL PROFILES, Z-CLOSURES CLOSE OFF THE PANEL LOWS.

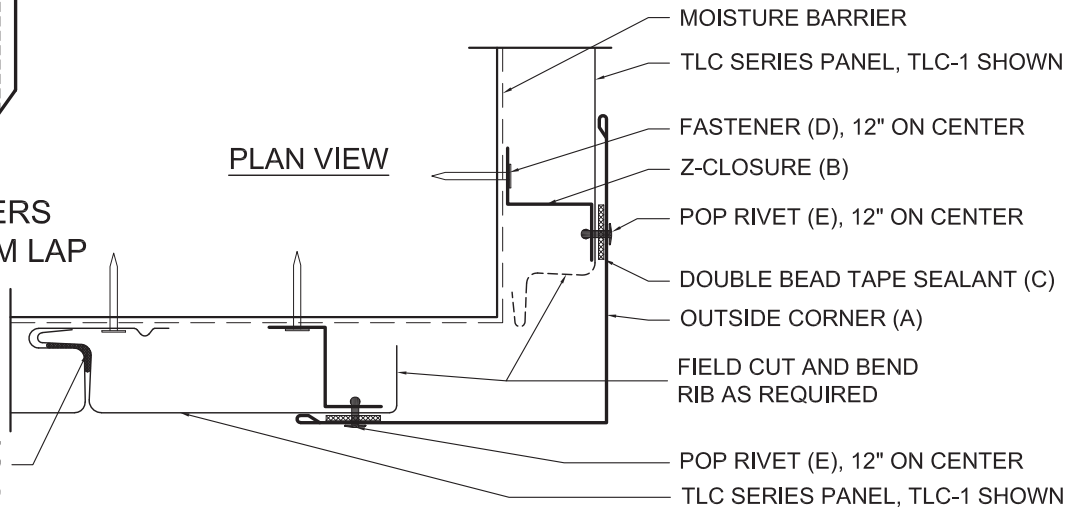
Part	Description	Product #	Length	Installation Information
	Outside Corner, 24 Ga Outside Corner, 22 Ga Outside Corner, 0.032"	58132XX 59132XX 58132XXA	10'-2"	Locate Outside Corner into place. Pop Rivet to panels.
	Double Bead Tape Sealant (7/8"x3/16"x25')	6403899		Install between panel and Outside Corner
	#10-16 x 1" Pancake Head Driller	8242100	1"	For panel/trim attachment to metal framing
	#10-12 x 1" Pancake Head Wood Screw	8243100	1"	For panel/trim attachment to wood sheathing or framing
	1/8" x 3/8" Pop Rivet	82402XX		Attach Outside Corner to panels.



- INSTALL ORDER**
 1. MOISTURE BARRIER
 2. Z-CLOSURES
 3. PANELS
 4. TAPE SEALANT
 5. OUTSIDE CORNER

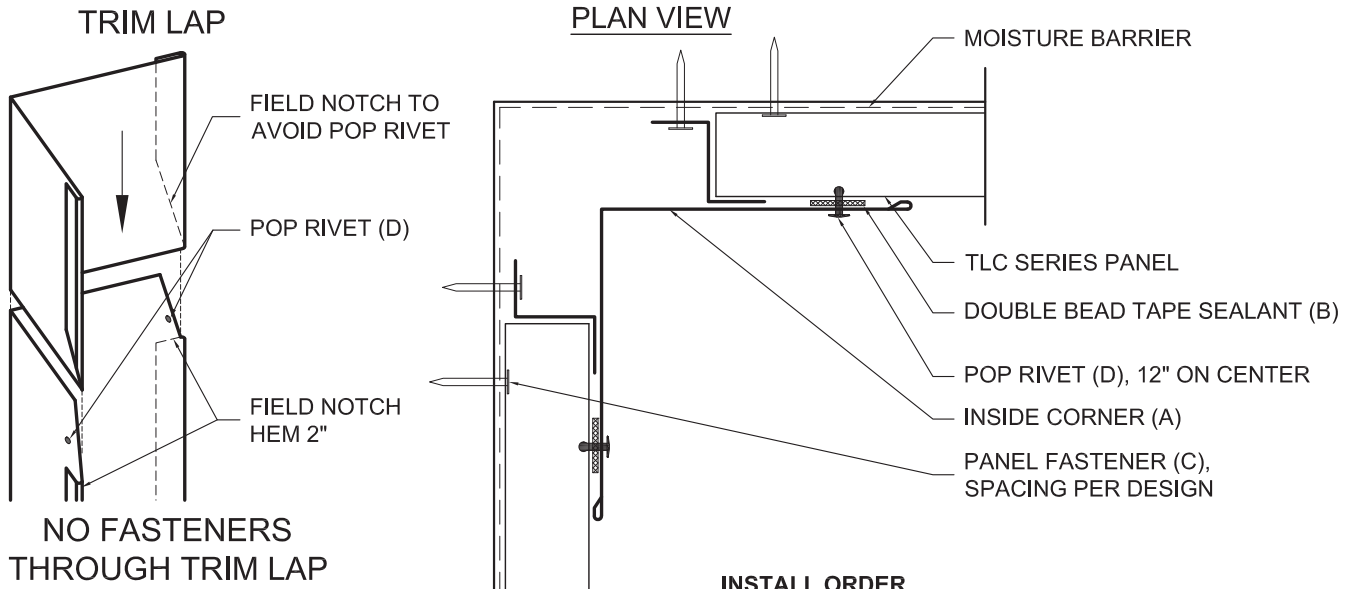
NO FASTENERS THROUGH TRIM LAP

PLAN VIEW



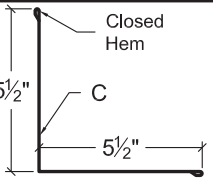

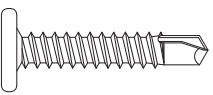
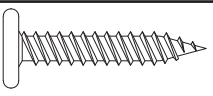
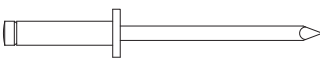
GEOCEL 4600 ADHESIVE, FIELD APPLIED (SEE PAGES 26, 27)

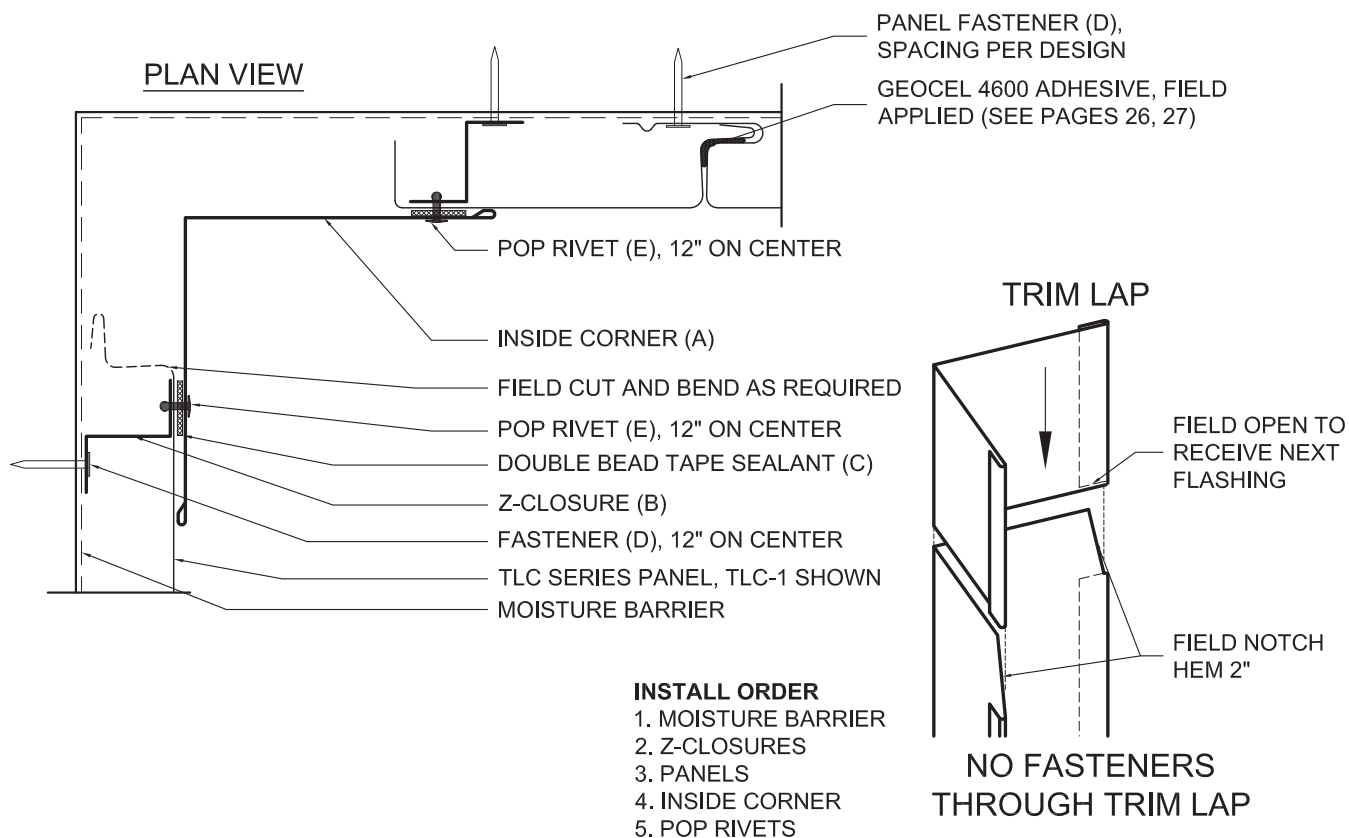
Part	Description	Product #	Length	Installation Information
	Inside Corner, 24 Ga Inside Corner, 22 Ga Inside Corner, 0.032"	58132XX 59132XX 58132XXA	10'-2"	Locate Outside Corner into place. Pop Rivet to Z-Closures and panels.
	Z-Closure, 24 Ga Z-Closure, 22 Ga Z-Closure, 0.032"	57605XX 60605XX 57605XXA	10'-2"	Locate Z-Closures to support edge of panels.
	Double Bead Tape Sealant (7/8" x 3/16" x 25')	6403899		Install between panel and Outside Corner
	#10-16 x 1" Pancake Head Driller	8242100	1"	For panel/trim attachment to metal framing
	#10-12 x 1" Pancake Head Wood Screw	8243100	1"	For panel/trim attachment to wood sheathing or framing
	1/8" x 3/8" Pop Rivet	82402XX		Attach Outside Corner to Z-Closures and panels.



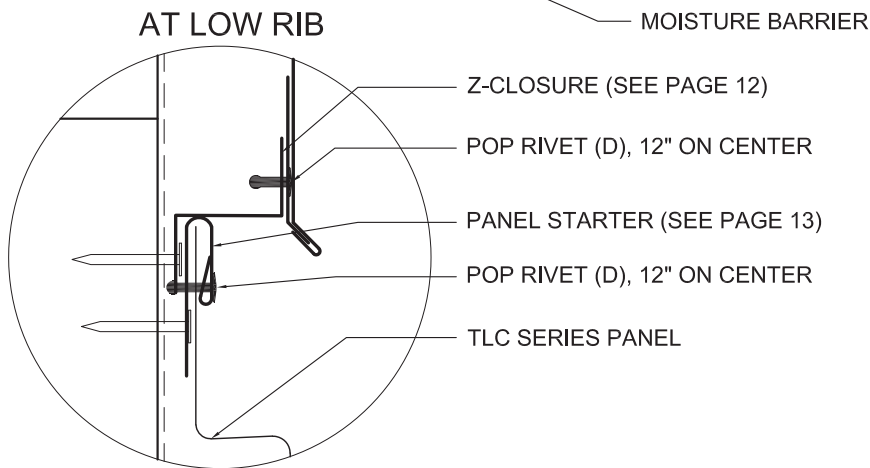
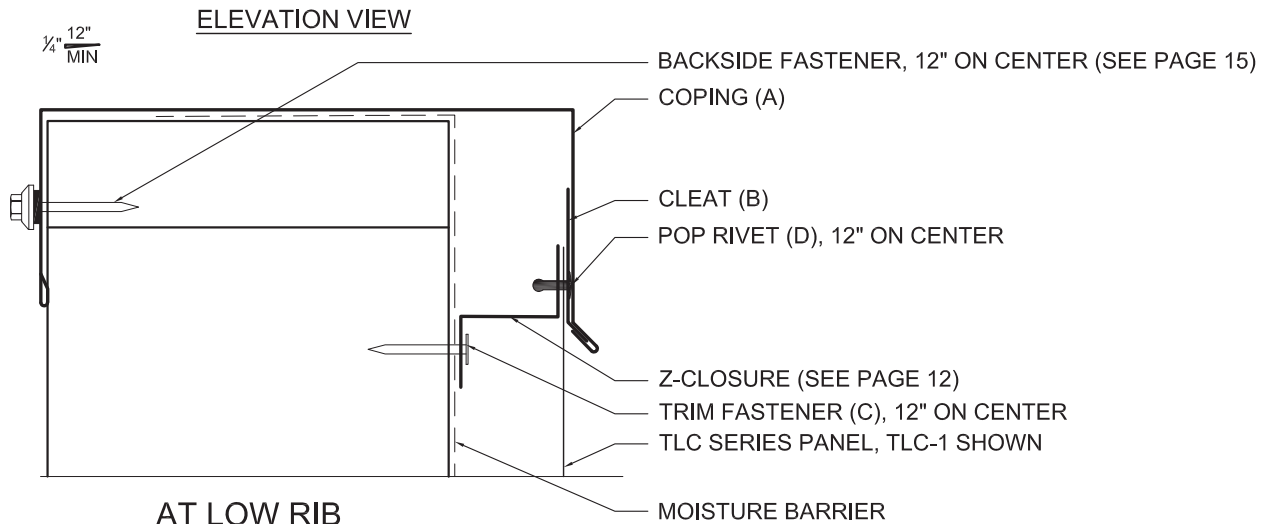
- INSTALL ORDER**
1. MOISTURE BARRIER
 2. PANELS
 3. Z-CLOSURES
 4. TAPE SEALANT
 5. INSIDE CORNER
 6. POP RIVETS

NOTE: Z-CLOSURE (SEE PAGE 12) AT PANEL ENDS SHOWN ABOVE ARE NOT NEEDED FOR PANEL PROFILES TLC-1 THRU TLC-4. FOR OTHER PANEL PROFILES, Z-CLOSURES CLOSE OFF THE PANEL LOWS.

Part	Description	Product #	Length	Installation Information
(A) 	Inside Corner, 24 Ga Inside Corner, 22 Ga Inside Corner, 0.032"	58126XX 59126XX 58126XXA	10'-2"	Locate Inside Corner into place. Pop Rivet to panels.
(B) 	Double Bead Tape Sealant (7/8"x3/16"x25')	6403899		Install between panel and Inside Corner
(C) 	#10-16 x 1" Pancake Head Driller	8242100	1"	For panel/trim attachment to metal framing
(C) 	#10-12 x 1" Pancake Head Wood Screw	8243100	1"	For panel/trim attachment to wood sheathing or framing
(D) 	1/8" x 3/8" Pop Rivet	82402XX		Attach Inside Corner to panels.

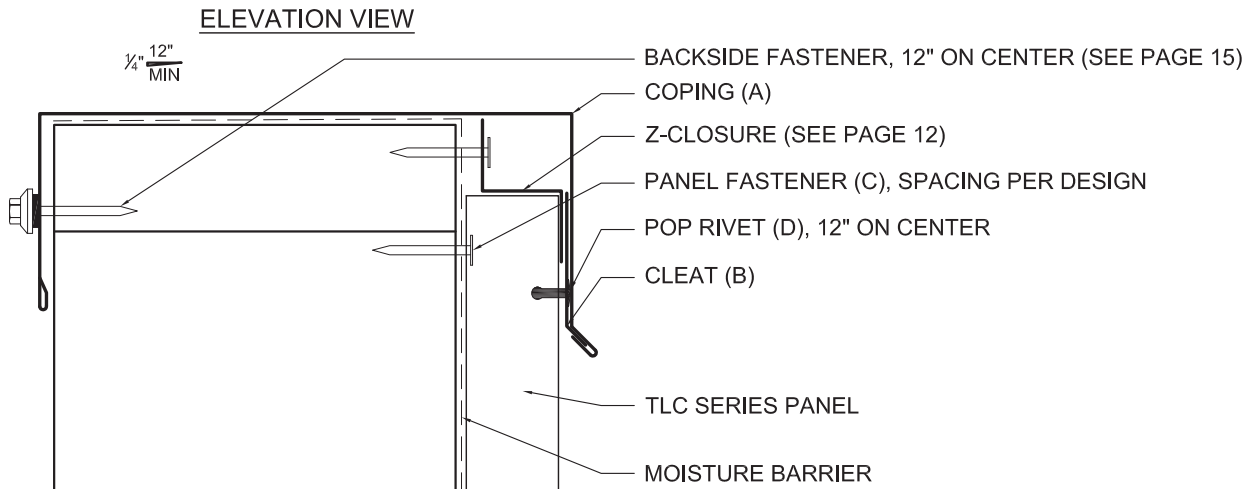


Part	Description	Product #	Length	Installation Information
(A)	Inside Corner, 24 Ga Inside Corner, 22 Ga Inside Corner, 0.032"	58126XX 59126XX 58126XXA	10'-2"	Locate Inside Corner into place. Pop Rivet to Z-Closures and panels.
(B)	Z-Closure, 24 Ga Z-Closure, 22 Ga Z-Closure, 0.032"	57605XX 60605XX 57605XXA	10'-2"	Locate Z-Closures to support edge of panels.
(C)	Double Bead Tape Sealant (7/8"x3/16"x25')	6403899		Install between panel and Inside Corner
(D)	#10-16 x 1" Pancake Head Driller	8242100	1"	For panel/trim attachment to metal framing
(D)	#10-12 x 1" Pancake Head Wood Screw	8243100	1"	For panel/trim attachment to wood sheathing or framing
(E)	1/8" x 3/8" Pop Rivet	82402XX		Attach Inside Corner to Z-Closures and panels.



- INSTALL ORDER**
1. MOISTURE BARRIER
 2. Z-CLOSURE
 3. CLEAT
 4. COPING
 5. BACKSIDE FASTENER

Part	Description	Product #	Length	Installation Information
<p>(A)</p>	<p>Coping, 24 Ga Coping, 22 Ga Coping, 0.032"</p>	<p>58026XX 60026XX 58026XXA</p>	<p>10'-2"</p>	<p>Hook Coping onto Cleat and attach on the back side with fastener.</p>
<p>(B)</p>	<p>Cleat, 24 Ga Cleat, 0.032"</p>	<p>5806099 58060XXA</p>	<p>10'-2"</p>	<p>Locate and attach Cleat to panel and Z-Closure with Pop Rivet.</p>
<p>(C)</p>	<p>#10-16 x 1" Pancake Head Driller</p>	<p>8242100</p>	<p>1"</p>	<p>For panel/trim attachment to metal framing</p>
<p>(C)</p>	<p>#10-12 x 1" Pancake Head Wood Screw</p>	<p>8243100</p>	<p>1"</p>	<p>For panel/trim attachment to wood sheathing or framing</p>
<p>(D)</p>	<p>1/8" x 3/8" Pop Rivet</p>	<p>82409XX</p>	<p>7/8"</p>	<p>For Cleat attachment to panel and Z-Closure</p>



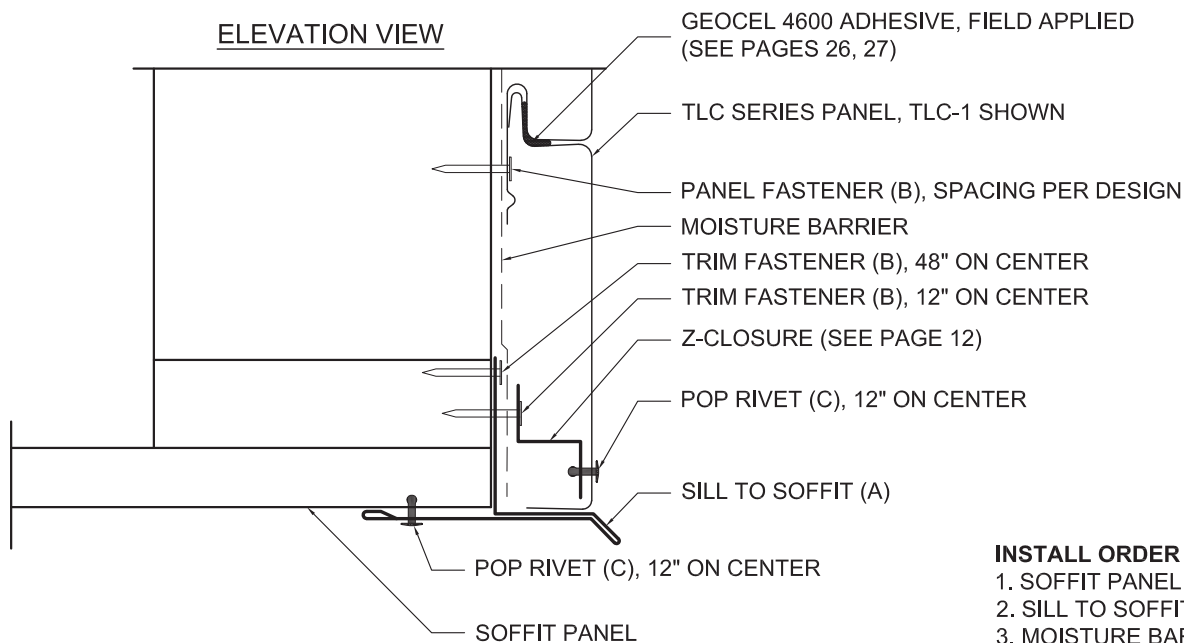
CLEAT DETAIL

NOTE: Z-CLOSURE (SEE PAGE 12) AT THE TOP PANEL END IS NOT NEEDED FOR PANEL PROFILES TLC-1 THRU TLC-4. FOR OTHER PANEL PROFILES, Z-CLOSURE CLOSSES OFF THE PANEL LOWS.

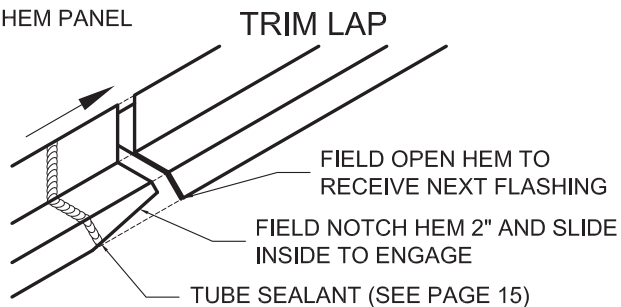
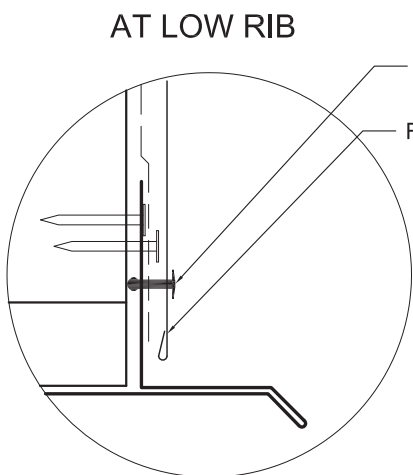
INSTALL ORDER

1. PANEL
2. CLEAT
3. COPING
4. BACKSIDE FASTENER

Part	Description	Product #	Length	Installation Information
<p>(A)</p>	<p>Coping, 24 Ga Coping, 22 Ga Coping, 0.032"</p>	<p>58026XX 60026XX 58026XXA</p>	<p>10'-2"</p>	<p>Hook Coping onto Cleat and attach on the back side with fastener.</p>
<p>(B)</p>	<p>Cleat, 24 Ga Cleat, 0.032"</p>	<p>5806099 58060XXA</p>	<p>10'-2"</p>	<p>Locate and attach Cleat to panel with Pop Rivet.</p>
<p>(C)</p>	<p>#10-16 x 1" Pancake Head Drillers</p>	<p>8242100</p>	<p>1"</p>	<p>For panel/trim attachment to metal framing</p>
<p>(C)</p>	<p>#10-12 x 1" Pancake Head Wood Screw</p>	<p>8243100</p>	<p>1"</p>	<p>For panel/trim attachment to wood sheathing or framing</p>
<p>(D)</p>	<p>1/8" x 3/8" Pop Rivet</p>	<p>82409XX</p>		<p>For Cleat attachment to panel</p>

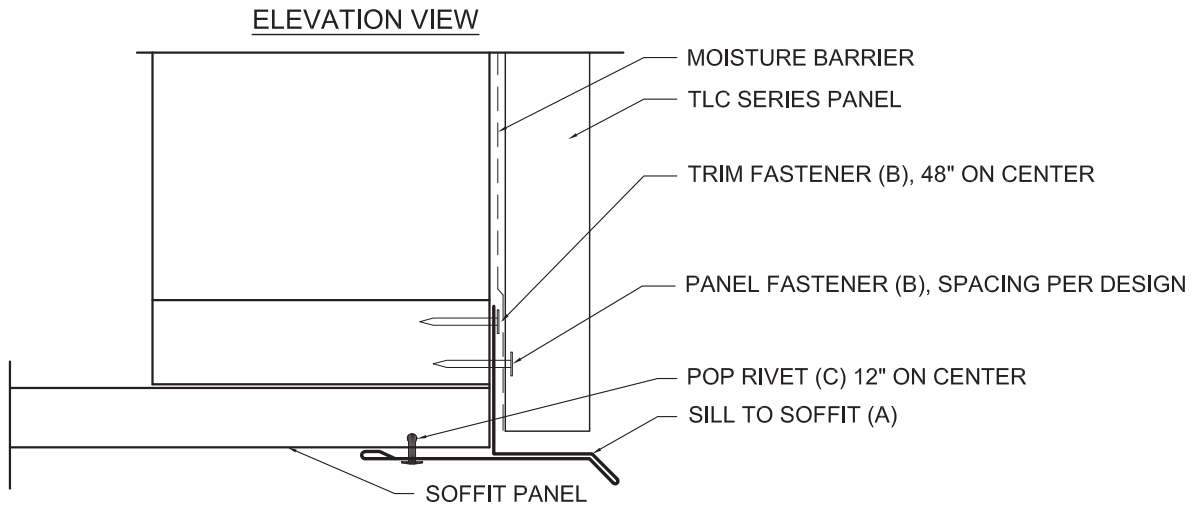


- INSTALL ORDER**
1. SOFFIT PANEL
 2. SILL TO SOFFIT
 3. MOISTURE BARRIER
 4. Z-CLOSURE
 5. PANEL

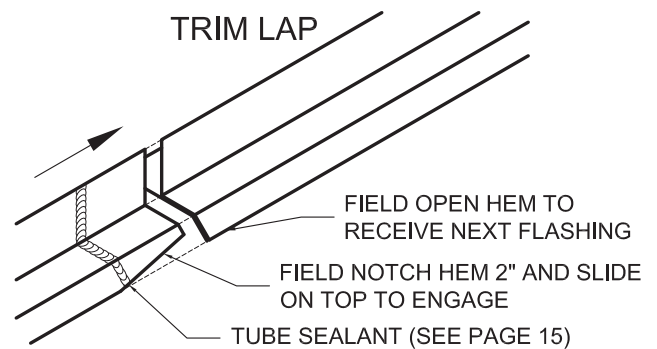


NO FASTENERS THROUGH TRIM LAP

Part	Description	Product #	Length	Installation Information
(A)	Sill To Soffit, 24 Ga Sill To Soffit, 22 Ga Sill To Soffit, 0.032"	58118XX 60118XX 58118XXA	10'-0"	Attach Sill To Soffit to the wall support with Trim Fastener and attach to soffit panel with Pop Rivet then install panel.
(B)	#10-16 x 1" Pancake Head Driller	8242100	1"	For panel/trim attachment to metal framing
(B)	#10-12 x 1" Pancake Head Wood Screw	8243100	1"	For panel/trim attachment to wood sheathing or framing
(C)	1/8" x 3/8" Pop Rivet	82402XX		For attachment of trim and panel

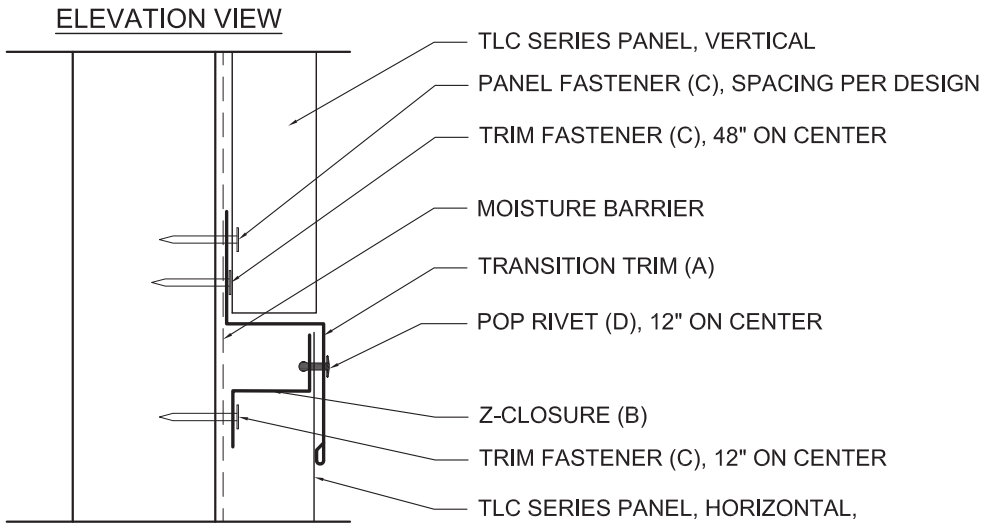


- INSTALL ORDER**
1. SOFFIT PANEL
 2. SILL TO SOFFIT
 3. PANEL



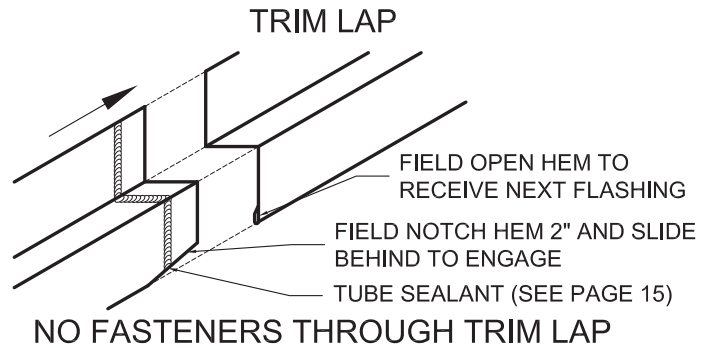
NO FASTENERS THROUGH TRIM LAP

Part	Description	Product #	Length	Installation Information
<p>(A)</p>	<p>Sill To Soffit, 24 Ga Sill To Soffit, 22 Ga Sill To Soffit, 0.032"</p>	<p>58118XX 60118XX 58118XXA</p>	<p>10'-0"</p>	<p>Attach Sill To Soffit to the wall support with Trim Fastener and attach to soffit panel with Pop Rivet then install panel.</p>
<p>(B)</p>	<p>#10-16 x 1" Pancake Head Drill</p>	<p>8242100</p>	<p>1"</p>	<p>For panel/ trim attachment to metal framing</p>
<p>(B)</p>	<p>#10-12 x 1" Pancake Head Wood Screw</p>	<p>8243100</p>	<p>1"</p>	<p>For panel/trim attachment to wood sheathing or framing</p>
<p>(C)</p>	<p>1/8" x 3/8" Pop Rivet</p>	<p>82402XX</p>		<p>For trim attachment to panel</p>



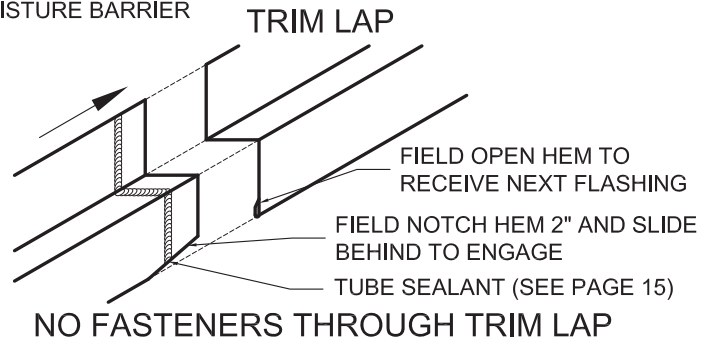
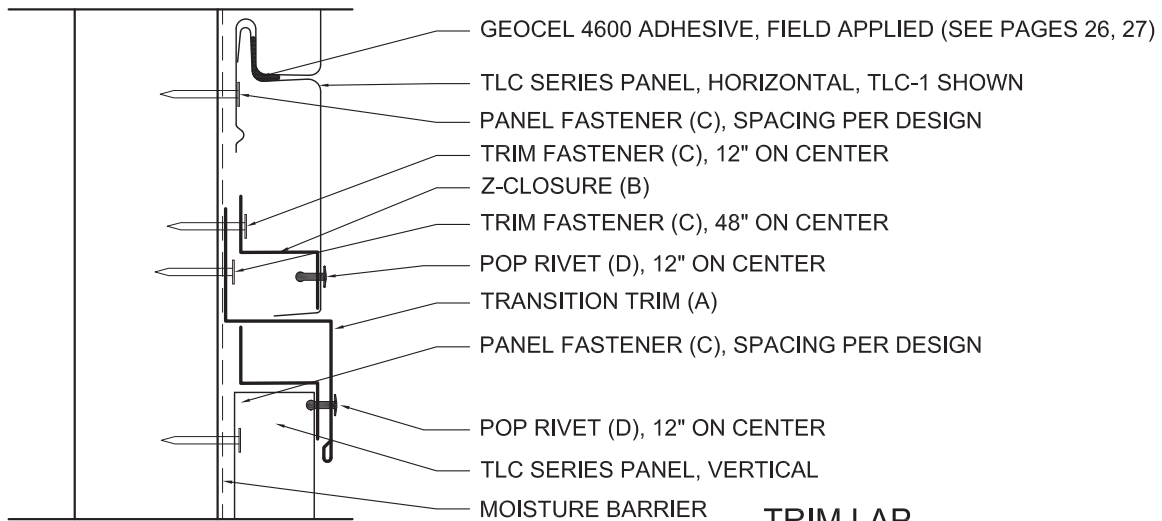
INSTALL ORDER

1. Z-CLOSURE
2. HORIZONTAL PANEL
3. TRANSITION TRIM
4. POP RIVET
5. VERTICAL PANEL



Part	Description	Product #	Length	Installation Information
(A)	Transition Trim, 24 Ga Transition Trim, 22 Ga Transition Trim, 0.032"	58738XX 60738XX 58738XXA	10'-2"	Install Transition Trim over horizontal panel and attach with Pop Rivet.
(B)	Z-Closure, 24 Ga Z-Closure, 22 Ga Z-Closure, 0.032"	57605XX 60605XX 57605XXA	10'-2"	Locate for support of panel edge.
(C)	#10-16 x 1" Pancake Head Driller	8242100	1"	For panel/trim attachment to metal framing
(C)	#10-12 x 1" Pancake Head Wood Screw	8243100	1"	For panel/trim attachment to wood sheathing or framing
(D)	1/8" x 3/8" Pop Rivet	82402XX		For panel/trim attachment to Z-Closure.

ELEVATION VIEW

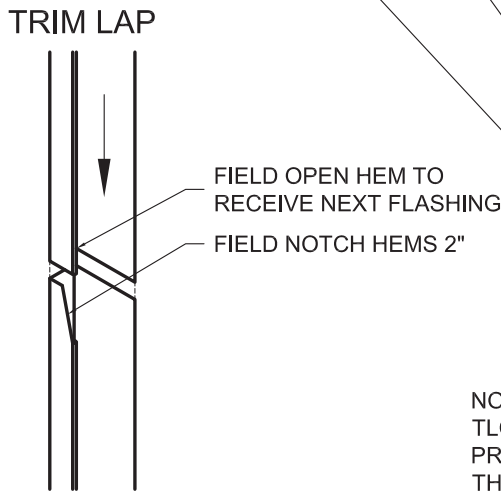
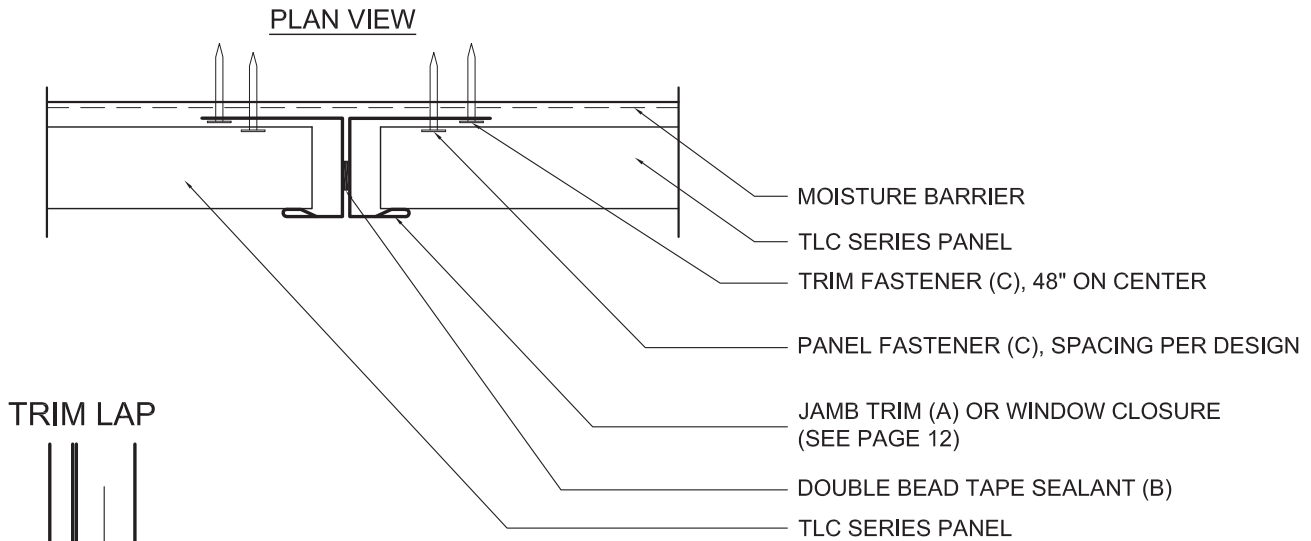


INSTALL ORDER

1. VERTICAL PANEL
2. TRANSITION TRIM
3. Z-CLOSURE
4. HORIZONTAL PANEL

NOTE: Z-CLOSURE BELOW TRANSITION TRIM IS NOT NEEDED FOR PANEL PROFILES TLC-1 THRU TLC-4. FOR OTHER PANEL PROFILES, THE Z-CLOSURE CAN KEEP THE BACKSIDE OF THE TRANSITION TRIM FROM BEING VISIBLE.

Part	Description	Product #	Length	Installation Information
<p>(A)</p>	Transition Trim, 24 Ga Transition Trim, 22 Ga Transition Trim, 0.032"	58738XX 60738XX 58738XXA	10'-2"	Install Transition Trim over vertical panel and attach to panel with Pop Rivet.
<p>(B)</p>	Z-Closure, 24 Ga Z-Closure, 22 Ga Z-Closure, 0.032"	57605XX 60605XX 57605XXA	10'-2"	Install on Transition Trim for support of panel edge.
<p>(C)</p>	#10-16 x 1" Pancake Head Driller	8242100	1"	For panel/trim attachment to metal framing
<p>(C)</p>	#10-12 x 1" Pancake Head Wood Screw	8243100	1"	For panel/trim attachment to wood sheathing or framing
<p>(D)</p>	1/8" x 3/8" Pop Rivet	82402XX		For attachment of panel and trim

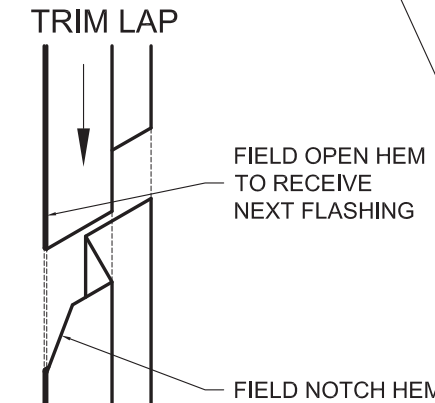
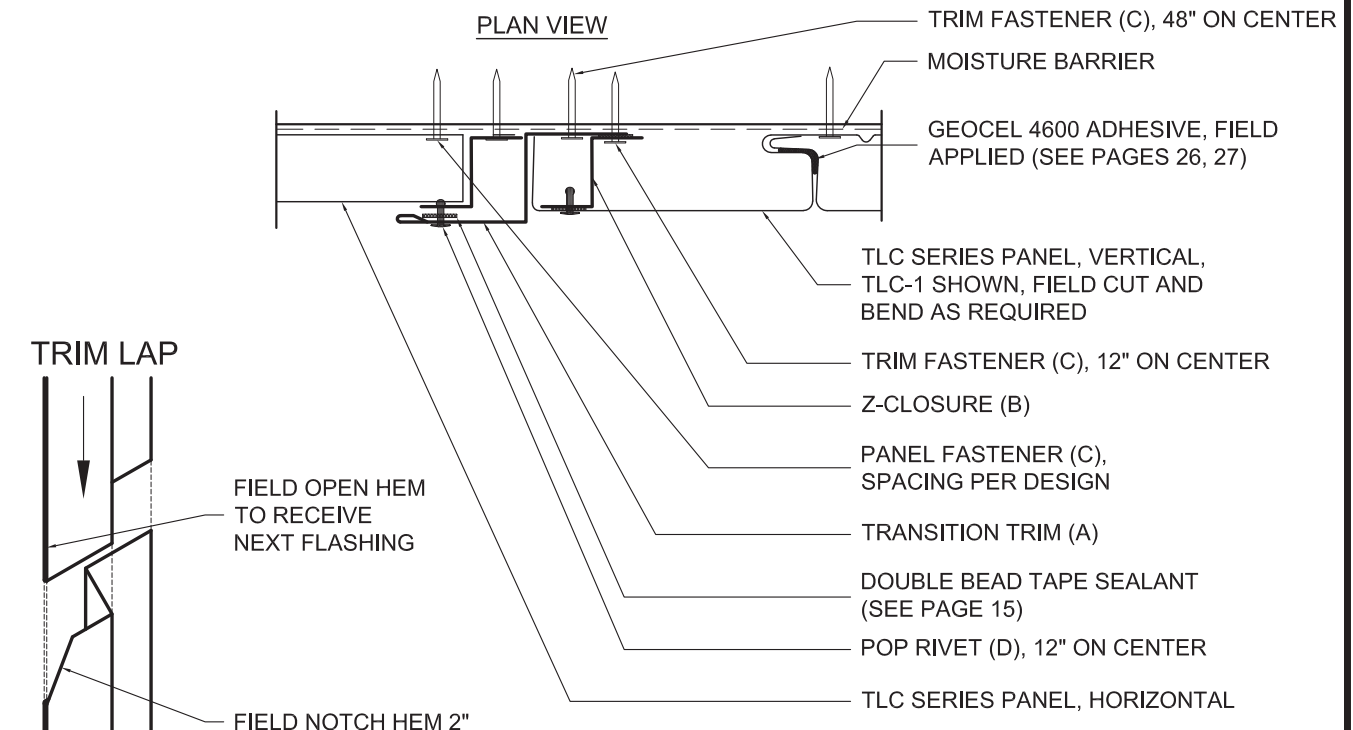


NO FASTENERS THROUGH TRIM LAP

- INSTALL ORDER**
 1. JAMB TRIMS
 2. PANELS

NOTE: USE JAMB TRIM WITH PANEL PROFILES TLC-1 THRU TLC-4. FOR OTHER PANEL PROFILES, USE WINDOW CLOSURES TO KEEP THE BACKSIDE OF THE JAMB TRIM FROM BEING VISIBLE.

Part	Description	Product #	Length	Installation Information
(A)	Jamb Trim, 24 Ga Jamb Trim, 22 Ga Jamb Trim, 0.032"	58671XX 60761XX 58671XXA	10'-0"	Place and attach Jamb Trims with Tape Sealant between.
(B)	Double Bead Tape Sealant (7/8"x3/16"x25')	6403899		Install between panel and flashings
(C)	#10-16 x 1" Pancake Head Drill	8242100	1"	For panel/trim attachment to metal framing
(C)	#10-12 x 1" Pancake Head Wood Screw	8243100	1"	For panel/trim attachment to wood sheathing or framing

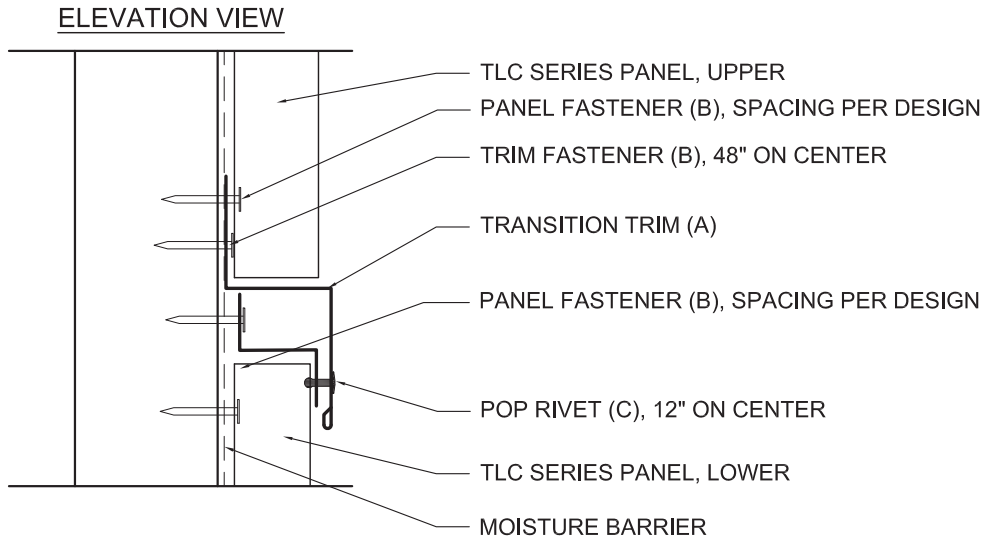


NO FASTENERS THROUGH TRIM LAP

NOTE: Z-CLOSURE AT HORIZONTAL PANEL IS NOT NECESSARY FOR PANEL PROFILES TLC-1 THRU TLC-4. FOR OTHER PANEL PROFILES, Z-CLOSURE CAN KEEP THE BACKSIDE OF THE TRANSITION TRIM FROM BEING VISIBLE.

- INSTALL ORDER**
1. HORIZONTAL PANEL
 2. Z-CLOSURE
 3. TRANSITION TRIM
 4. POP RIVET
 5. VERTICAL PANEL

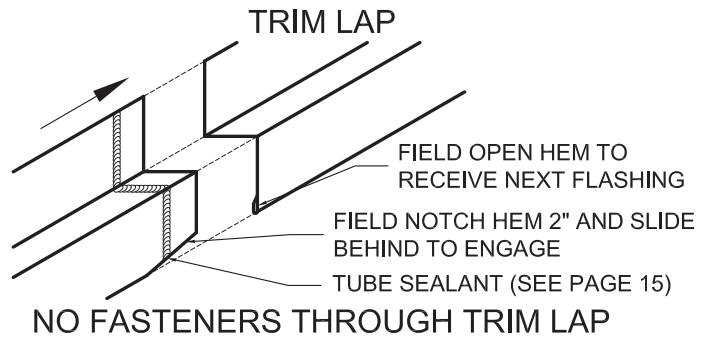
Part	Description	Product #	Length	Installation Information	
(A)		Transition Trim, 24 Ga Transition Trim, 22 Ga Transition Trim, 0.032"	58738XX 60738XX 58738XXA	10'-2"	Install Transition Trim over horizontal panel and attach with Pop Rivet.
(B)		Z-Closure, 24 Ga Z-Closure, 22 Ga Z-Closure, 0.032"	57605XX 60605XX 57605XXA	10'-2"	Locate for support of panel edge.
(C)		#10-16 x 1" Pancake Head Driller	8242100	1"	For panel/trim attachment to metal framing
(C)		#10-12 x 1" Pancake Head Wood Screw	8243100	1"	For panel/trim attachment to wood sheathing or framing
(D)		1/8" x 3/8" Pop Rivet	82402XX		Attach Transition Trim to panel.



INSTALL ORDER

1. LOWER PANEL
2. Z-CLOSURE
3. TRANSITION TRIM
4. POP RIVET
5. UPPER PANEL

NOTE: Z-CLOSURE BELOW TRANSITION TRIM IS NOT NEEDED FOR PANEL PROFILES TLC-1 THRU TLC-4. FOR OTHER PANEL PROFILES, THE Z-CLOSURE CAN KEEP THE BACKSIDE OF THE TRANSITION TRIM FROM BEING VISIBLE.



	Part	Description	Product #	Length	Installation Information
(A)		Transition Trim, 24 Ga Transition Trim, 22 Ga Transition Trim, 0.032"	58738XX 60738XX 58738XXA	10'-2"	Install Transition Trim over lower panel and attach with Pop Rivets.
(B)		#10-16 x 1" Pancake Head Drill	8242100	1"	For panel/trim attachment to metal framing
(B)		#10-12 x 1" Pancake Head Wood Screw	8243100	1"	For panel/trim attachment to wood sheathing or framing
(C)		1/8" x 3/8" Pop Rivet	82402XX		Attach Transition Trim to panels.

Though factory-applied pre-painted finishes are very durable and will last many years, eventually it may be desirable to thoroughly clean or repaint them.

Dirt pickup may cause apparent discoloration of the paint when it has been exposed in some dirt-laden atmospheres for long periods of time. In areas of strong sunlight, slight chalking may cause some change in appearance. A good cleaning will often restore the appearance of these buildings and render repainting unnecessary. An occasional light cleaning will help maintain a good appearance.

In many cases, simply washing the building with plain water using a hose or pressure sprayer will be adequate. In areas where heavy dirt deposits dull the surface, a cloth or soft bristle brush and solution of water and detergent ($\frac{1}{3}$ cup of laundry detergent per gallon of water for example) may be used. This should be followed by an adequate rinse of water. Do not use wire brushes, abrasives, or cleaning tools which will scratch the coating surface.

Mildew may occur in areas subject to high humidity but is not normally a problem due to the high inherent mildew resistance of the baked finish that is used. However, mildew can grow on dirt and spore deposits in some cases. To remove mildew along with the dirt, the following solution is recommended.

- $\frac{1}{3}$ cup detergent (Tide® or equivalent)
- $\frac{2}{3}$ cup trisodium phosphate (Solex® or equivalent)
- 1 quart of 5% sodium hypochlorite solution (Clorox® or equivalent)
- 3 quarts of water

Strong solvents and abrasive type cleaners should be avoided. Most organic solvents are flammable and toxic, and must be handled accordingly. When using a solvent, consult maintenance professionals and label instructions for proper handling and disposal of washings. If required, a mild solvent such as mineral spirits can be used to remove caulking compounds, oil, grease, tars, wax and similar substances. Use a cloth dampened with mineral spirits and apply only to areas which are contaminated. Follow up the use of this mild solvent with detergent cleaning and rinsing.



**HOSE OR PRESSURE SPRAY
FOR ADEQUATE CLEANING**

**DO NOT USE A
WIRE BRUSH**

**USE MILD DETERGENT AND WATER
FOR HEAVY DIRT DEPOSITS**

