Metal Sales

Installation Guide **TLC Series**

metalsales.us.com

TLC SERIES INSTALL GUIDE Important Information

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.

TLC SERIES INSTALL GUIDE Branch Territory Map



NOTE: Shaded areas represent territories served by each location.

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TLC SERIES INSTALL GUIDE Branch Locations

1. DENVER

7990 East I-25 Frontage Road 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 800.406.7387 800.944.6884 Fax

TECHNICAL SUPPORT

TECH SERVICES DEPT. 7800 Highway 60 Sellersburg, IN 47172 502.855.4300 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.





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TLC SERIES INSTALL GUIDE Fla

Flashing Profiles

BASE TRIM	Product No.	Length	Gauge	Finish
C	5870841	10'-2"	24	Galvalume [®] (ACG)
	58708XX	10'-2"	24	PVDF Painted
3-1/4″	6070841	10'-2"	22	Galvalume [®] (ACG)
	60708XX	10'-2"	22	PVDF Painted
	58708XXA	10'-2"	0.032"	Aluminum PVDF Paintee
95° 1-7/8″	Flashing Stretch	Out = $6^{1/2}$ "		
Closed Hem 5/8"				
Z-CLOSURE	Product No.	Length	Gauge	Finish
1"	5760541	10'-2"	24	Galvalume® (ACG)
	57605XX	10'-2"	24	PVDF Painted
c 🔪	6060541	10'-2"	22	Galvalume® (ACG)
1-1/2″	60605XX	10'-2"	22	PVDF Painted
	57605XXA	10'-2"	0.032"	Aluminum PVDF Painte
1″	Flashing Stretch	Out = 3 ¹ / ₂ "		
AMB TRIM	Product No.	Length	Gauge	Finish
	5867141	10'-2"	24	Galvalume® (ACG)
	58671XX	10'-2"	24	PVDF Painted
Closed Hem	6076141	10'-2"	22	Galvalume® (ACG)
1-3/4″	60761XX	10'-2"	22	PVDF Painted
	58671XXA	10'-2"	0.032"	Aluminum PVDF Painte
2-1/2"	Flashing Stretch	Out = 5 ¹ /4"		
	Product No.	Length	Gauge	Finish
VINDOW CLOSORE	5874441	10'-2"	24	Galvalume [®] (ACG)
C	58744XX	10'-2"	24	PVDF Painted
	6074441	10'-2"	24	Galvalume [®] (ACG)
	60744X	10-2" 10'-2"	22	PVDF Painted
1-7/8″	58744XXA	10-2" 10'-2"	0.032"	Aluminum PVDF Painte
3"	Flashing Stretch		0.032	
1″				
	Product No.	Length	Gauge	Finish
	5862141	10'-2"	24	Galvalume® (ACG)
2.1/2	58621XX	10'-2"	24	PVDF Painted
2-1/2"	6062141	10'-2"	22	Galvalume® (ACG)
	60621XX	10'-2"	22	PVDF Painted
95° Closed	I Hem 58621XXA	10'-2"	0.032"	Aluminum PVDF Painte
C 1-3/4" 5/8" 1"	Flashing Stretch	Out = 6 ³ /8"		
\mathbf{v}	r idoning offoton			

TLC SERIES INSTALL GUIDE Flashing Profiles

		911011100		
OUTSIDE CORNER 5-1/2"	Product No.	Length	Gauge	Finish
	5813241	10'-2"	24	Galvalume [®] (ACG)
	58132XX	10'-2"	24	PVDF Painted
	5913241	10'-2"	22	Galvalume® (ACG)
5-1/2"	59132XX	10'-2"	22	PVDF Painted
	58132XXA	10'-2"	0.032"	Aluminum PVDF Painted
	Flashing Stretch	n Out = 12"		
Closed Hem				
	Product No.	Length	Gauge	Finish
Closed Hem	5812641	10'-2"	24	Galvalume [®] (ACG)
1/2	58126XX	10'-2"	24	PVDF Painted
	5912641	10'-2"	22	Galvalume [®] (ACG)
5-1/2"	59126XX	10'-2"	22	PVDF Painted
5-1/2	58126XXA	10'-2"	0.032"	Aluminum PVDF Painted
	Flashing Stretch		0.002	
⊂ ⊂	Flashing Stretch	i Out – 12		
0	_		i	i
PANEL STARTER	Product No.	Length	Gauge	Finish
	5872841	10'-2"	24	Galvalume® (ACG)
	58728XX	10'-2"	24	PVDF Painted
2-5/8″	6072841	10'-2"	22	Galvalume® (ACG)
Closed Hem	60728XX	10'-2"	22	PVDF Painted
1-1/8″	58728XXA	10'-2"	0.032"	Aluminum PVDF Painted
U	Flashing Stretch	n Out = 4 ¹ / ₄ "		
с — с				
COPING	Product No.	Length	Gauge	Finish
10″ ^C	5802641	10'-2"	24	Galvalume® (ACG)
	58026XX	10'-2"	24	PVDF Painted
3-5/8″	6002641	10'-2"	22	Galvalume® (ACG)
4"	60026XX	10'-2"	22	PVDF Painted
Closed Hem	58026XXA	10'-2"	0.032"	Aluminum PVDF Painted
5/8"	Flashing Stretch	n Out = 19¹/₄"		
Open Hem V				
	Due due 4 Ma	1		Platek
CLEAT	Product No.	Length	Gauge	Finish
	5806099 58060XX	10'-2" 10'-2"	24 24	Various Colors PVDF Painted
1/2″.	5906041	10 <i>-2</i> 10'-2"	24 22	Galvalume [®] (ACG)
	5906041 59060XX	10-2 10'-2"	22	PVDF Painted
2-1/2″ C	59060XX 58060XXA	10-2 10'-2"	0.032"	Aluminum PVDF Painted
			0.032	
	Flashing Stretch	1 Out = 3"		
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TLC SERIES INSTALL GUIDE Flashing Profiles

Gauge Finis	h									
24 Galvalume®										
24 PVDF Pa										
22 Galvalume [®]										
22 PVDF Pa										
0.032" Aluminum PVE										
58607XXA10'-2"0.032"Aluminum PVDF PainteFlashing Stretch Out = 8"										
Gauge Finis	h									
24 Galvalume®	^୬ (ACG)									
24 PVDF Pa	inted									
22 Galvalume®	◎ (ACG)									
22 PVDF Pa	inted									
0.032" Aluminum PVE	DF Painte									
Gauge Finis	h									
24 Galvalume [®]										
24 PVDF Pa	. ,									
22 Galvalume®										
22 PVDF Pa										
0.032" Aluminum PVE	DF Painte									
58738XXA10'-2"0.032"Aluminum PVDF PainFlashing Stretch Out = 51/8"										
Gauge Finis	h									
24 Galvalume®) (ACG)									
24 PVDF Pa	linted									
22 Galvalume®) (ACG)									
22 PVDF Pa	linted									
0.032" Aluminum PVE	DF Painte									

TLC SERIES INSTALL GUIDE Accessories

UNIVERSAL CLOSURE	Product No.	Description	WT/Ea	Туре
	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.	Туре
	6403899	⁷ /8" x ³ / ₁₆ " x 25' 20 Rolls per Carton	40.00 lbs	Butyl
TUBE ADHESIVE	Product No.	Description	WT/Ea	Color
and the second sec	6402800	Acrylic Tube Adhesive	3.31 lbs	Clear
ADD SINUTURAL	64028XX	Tube Adhesive	3.31 lbs	Color Match*
	*Contact branch	n 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
Centro	8234800 82348XX	1/4-14 x 7/8" Stitch Screw 1/4-14 x 7/8" Stitch Screw	1.90 lbs 1.90 lbs	Plated Plated
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Design Information

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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:
 - $\circ\,$ 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



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.



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
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 - 1/8" x 3/16" Pop Rivet
- Field-Applied Adhesive:
 - 1/4" diameter bead of Geocel 4600

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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.

0.1492

0.2079

 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.

0.0906

0.1310

0.0879

0.1329

0.1437

0.1920

4. Allowable loads do not include a 1/3 stress increase for wind.

1.97

2.39



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
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 - Attaching to Steel:
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 - 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



								For various fasterier spacings											
					mpression	Bottom In C	ottom In Compression Inward Load Outward Load					n Inward Load							
Ga	Width in	Yield ksi	Dsf	Ixx	Sxx	Ixx	Sxx	1	Inward Load										
		K5I	psi	in⁴/ft	in³/ft	in⁴/ft	in³/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

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.



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:
 - $\circ\,$ Less than 20 ga: 1/4"-13 Deck Screw
 - Greater than or equal to 20 ga, <=12 ga: #10-16 Pancake Head Driller</p>
- 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



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.



- 12" panel coverage, 1-1/2" panel height
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TESTING AND APPROVALS

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 - 1/8" x 3/16" Pop Rivet
- Field-Applied Adhesive:
 - 1/4" diameter bead of Geocel 4600

TLC-15 • TLC-16



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.

0.1558

0.2150

0.1770

0.2380

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.

0.0890

0.1280

0.0912

0.1399

4. Allowable loads do not include a 1/3 stress increase for wind.

1.97

2.39

TLC SERIES INSTALL GUIDE Panel Installation



TLC SERIES INSTALL GUIDE Panel Installation



TLC SERIES INSTALL GUIDE Horizontal - Panel Base



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TLC SERIES INSTALL GUIDE Vertical - Panel Base







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TLC SERIES INSTALL GUIDE Vertical - Panel Sill



TLC SERIES INSTALL GUIDE Horizontal - Panel Jamb



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TLC SERIES INSTALL GUIDE Horizontal - Panel Header



 $^{\odot}$ Metal Sales Manufacturing Corporation / Subject to change without notice 3/24

TLC SERIES INSTALL GUIDE Vertical - Panel Header


TLC SERIES INSTALL GUIDE Horizontal - Outside Corner



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TLC SERIES INSTALL GUIDE Horizontal - Inside Corner



TLC SERIES INSTALL GUIDE Vertical - Inside Corner



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TLC SERIES INSTALL GUIDE Horizontal - Coping



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Vertical - Coping TLC SERIES INSTALL GUIDE



TLC SERIES INSTALL GUIDE Horizontal - Sill to Soffit



TLC SERIES INSTALL GUIDE Vertical - Sill to Soffit



#10-12 x 1" Pancake

Head Wood Screw

1/8" x 3/8"

Pop Rivet

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8243100

82402XX

1"

(B)

(C)

For panel/trim attachment

to wood sheathing or framing

For trim attachment to panel

TLC SERIES INSTALL GUIDE

Horizontal Transition - Vert. over Horiz.



TLC SERIES INSTALL GUIDE

Horizontal Transition - Horiz. over Vert.



TLC SERIES INSTALL GUIDE Vertical Transition - Horiz. to Horiz.



 Pancake Head Driller
 0242100
 1
 to metal framing

 Image: Comparison of the system
 #10-12 x 1" Pancake Head Wood Screw
 8243100
 1"
 For panel/trim attachment to wood sheathing or framing

 Image: Comparison of Subject to change without notice 3/24
 Image: Comparison of Subject to change without notice 3/24

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(C)

TLC SERIES INSTALL GUIDE Vert

Vertical Transition - Horiz. to Vertical



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TLC SERIES INSTALL GUIDE Horizontal Transition - Vertical Panels



(A)	$2" - 1\frac{3}{4} - C$ $2\frac{1}{2}$ Closed Hem	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 Driller	8242100	1"	For panel/trim attachment to metal framing						
(B)	JANNUNNUN 🖚	#10-12 x 1" Pancake Head Wood Screw	8243100	1"	For panel/trim attachment to wood sheathing or framing						
(C)		⅓" x ⅔" Pop Rivet	82402XX		Attach Transition Trim to panels.						
48	48 © Metal Sales Manufacturing Corporation / Subject to change without notice 3/24										

TLC SERIES INSTALL GUIDE Care and Maintenance

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 (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.

¹/₃ cup detergent (Tide[®] or equivalent)

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.



TLC SERIES INSTALL GUIDE Notes
