

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION

Section: 07 46 00—Siding

REPORT HOLDER:

METAL SALES MANUFACTURING CORPORATION

EVALUATION SUBJECT:

METAL SALES MANUFACTURING CORPORATION'S EXTERIOR WALL PANELS

1.0 EVALUATION SCOPE

1.1 Compliance with the following codes:

- 2021 and 2018 *International Building Code*® (IBC)

For evaluation in compliance with codes adopted by the Los Angeles Department of Building and Safety (LADBS), see [ESR-4633 LABC Supplement](#).

For evaluation for compliance with codes adopted by the California Division of State Architects (DSA) and Office of Statewide Health Planning and Development (OSHPD), see [ESR-4633 CBC Supplement](#).

Properties evaluated:

- Structural
- Transverse wind load
- Air Leakage
- Water Resistance

2.0 USES

The exterior wall panels are used as an exterior veneer on exterior walls of Types I through V construction.

3.0 DESCRIPTION

3.1 Material:

3.1.1 Panel Steel: The exterior wall panels are cold-formed from sheet steel conforming to ASTM A635 SS Grade 33 with a G90 zinc coating designation, or ASTM A792 Grade 50 Class 1 with a AZ55 coating designation. Base-metal thicknesses for the exterior panels are as follows:

| NOMINAL THICKNESS (gauge) | MINIMUM BASE-METAL THICKNESS (inch) |
|---------------------------|-------------------------------------|
| No. 18 | 0.0451 |
| No. 20 | 0.0341 |
| No. 22 | 0.0278 |
| No. 24 | 0.0212 |

The exterior wall panels are available in widths from 28 inches (711 mm) to 36 inches (914 mm), and length up to 32 feet (9754 mm). Figures 1 through 9 show the exterior wall panel profiles.

3.1.2 Cold-Form Steel Framing: The cold-form steel framing members are C-shaped, Z-shaped, or Hat-shaped, fabricated from a minimum 16 gage [0.0555 inch (0.141 mm minimum base-metal thickness)] sheet steel, conforming to ASTM A653 SS Grade 55 with a G90 zinc coating designation.

3.2 Wood Structural Panel Substrate:

The wood structural panel substrate must be plywood sheathing having a nominal panel thickness of ¹⁵/₃₂ inch (11.9 mm) and a minimum span rating of 24/16, conforming to DOC PS-1 in accordance with IBC Table 2303.1.5.

3.3 Fasteners:

The fasteners used to attach the exterior wall panels to the steel framings must be corrosion resistant No. 12-14 self-drilling sheet metal screws. The fasteners used to attach the exterior wall panels to wood structural panel substrate must be corrosion resistant No. 10-14 wood screws. See Figures 1 through 9 for fastening patterns and schedules.

4.0 DESIGN AND INSTALLATION

4.1 Installation:

Installation of the exterior wall panels must comply with the prescriptive requirements of Section 1404.11 of the IBC; this report; and the manufacturer's published instructions. The manufacturer's published installation instructions must be available at the jobsite at all times during installation.

The exterior wall panels may be installed horizontally onto cold-formed steel framing (Section 3.1.2) directly, or over the wood structural panel substrate (Section 3.2), using fasteners specified in Section 3.3.

4.2 Design:

4.2.1 Wind Resistance: The allowable wind pressures reported in Tables 1A through 9A are for the exterior wall panels installed directly onto the cold-formed steel framing members (Section 3.1.2) using fasteners described in Section 3.3 of this evaluation report. The allowable wind pressures reported in Tables 1B through 9B are for the exterior wall panels installed over to the wood structural panel substrate (Section 3.2) using fasteners described in Section 3.4 of this evaluation report.

4.2.2 Water-resistive barrier: Where required by the code, a code-complying water-resistive barrier must be installed behind the exterior wall panels.

4.2.3 Air leakage: When tested in accordance with ASTM E283, the wall assembly constructed using the exterior wall panels has a air leakage of not more than 0.014 cfm/ft² (0.071 l/s/m²) at an applied air differential of 12 psf (575 Pa). The sidelap of the panels must be sealed with butyl tape sealant in accordance with manufacturer's installation instructions.

4.2.4 Water Resistance: When tested in accordance with ASTM E331, the wall assembly constructed using the exterior wall panels has no water penetration at an applied uniform static air pressure difference of 20 psf (958 Pa) when subjected for 15 minutes. The sidelap of the panels must be sealed with butyl tape sealant in accordance with manufacturer's installation instructions.

5.0 CONDITIONS OF USE

The Metal Sales Manufacturing Corporation Exterior Wall Panels described in this evaluation report comply with, or are a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 Installation must comply with this report, the manufacturer's published installation instructions and the applicable code. In the event of a conflict between the manufacturer's published installation instruction and this report, the most stringent governs.
- 5.2 A water-resistive barrier must be provided as required by the applicable code.
- 5.3 For the exterior wall panels, where installed on directly onto cold-form steel studs of the exterior walls greater than 40 feet in Types I, II, III or IV construction and the only combustible material is the water-resistive barrier, the water-resistive barrier must comply with Exception 1 or 2 of IBC Section 1402.5.
- 5.4 Design wind pressures must not exceed the allowable wind pressures at the center-to-center spacing given in Tables 1 through 9.
- 5.5 The allowable wind pressures given in Tables 1 through 9 are for exterior wall panels. The exterior walls and the cold-formed steel framing members to which the exterior wall panels are attached must be

designed to resist the wind pressures at the center-to-center spacing given in Tables 1 through 9 by a registered design professional to the satisfaction of the code official.

- 5.6 Calculations demonstrating that the design wind pressures are less than the allowable wind pressures must be submitted to the code official.
- 5.7 The exterior wall panels are manufactured under an approved quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

- 6.1 Manufacturer's descriptive literature and installation instructions.
- 6.2 Engineering calculations by a registered design professional.
- 6.3 Data in accordance with ASTM E283.
- 6.4 Data in accordance with ASTM E331.
- 6.5 Quality documentation in accordance with ICC-ES Acceptance Criteria for Quality Documentation (AC10).

7.0 IDENTIFICATION

- 7.1 The panels are marked with the report holder's name, the panel name and the evaluation report number (ESR-4633).
- 7.2 The report holder's contact information is the following:

METAL SALES MANUFACTURING CORPORATION
545 SOUTH THIRD STREET, SUITE 200
LOUISVILLE, KENTUCKY 40202
(502) 855-4300
www.metalsales.us.com

TABLE 1A— ALLOWABLE WIND PRESSURES FOR T6-A WALL PANELS INSTALLED DIRECTLY ON COLD-FORM STEEL FRAMING AT SPECIFIED SPANS

| SECTION PROPERTIES ¹ | | | | | | | | WIND PRESSURE ^{2,3,4,5} (psf) | | | | | | | |
|---------------------------------|----------------|----------------|-----------------|--|--|--|--|---|------|------|------|------|------|------|------|
| Ga | Width (in.) | Yield (ksi) | Weight (psf) | Top in Compression | | Bottom in Compression | | Span (ft.) | | | | | | | |
| | | | | I _{xx} (in ⁴ /ft) | S _{xx} (in ³ /ft) | I _{xx} (in ⁴ /ft) | S _{xx} (in ³ /ft) | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 24 | 36 | 50 | 1.18 | 0.0830 | 0.0983 | 0.1057 | 0.1094 | 62.6 | 46.9 | 37.6 | 31.3 | 26.8 | 23.5 | 20.9 | 18.8 |
| 22 | 36 | 50 | 1.55 | 0.1167 | 0.1454 | 0.1467 | 0.1572 | 62.6 | 46.9 | 37.6 | 31.3 | 26.8 | 23.5 | 20.9 | 18.8 |
| 20 | 36 | 33 | 1.89 | 0.1633 | 0.2161 | 0.2000 | 0.2196 | 62.6 | 46.9 | 37.6 | 31.3 | 26.8 | 23.5 | 20.9 | 18.8 |
| 18 | 36 | 33 | 2.49 | 0.2367 | 0.2927 | 0.2633 | 0.2930 | 62.6 | 46.9 | 37.6 | 31.3 | 26.8 | 23.5 | 20.9 | 18.8 |

For SI: 1 in. = 25.4 mm, 1 ft. = 304.8 mm, 1 ksi = 6894.8 kPa, 1 psf = 47.88 Pa.

¹Theoretical 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.

²The tabulated allowable wind pressures are based on the lowest positive and negative wind pressure calculated in accordance with AISI S100- 2016 North American Specification for the Design of Cold-Formed Steel Structural Members, considering bending, shear, combined bending and shear, deflection (L/180), web crippling and fastener head pull-over. Panel weight is not considered.

³The tabulated allowable wind pressures are for panels installed with 3 or more equal span condition at the spans noted.

⁴The tabulated allowable wind pressures must be greater than the design wind pressures resulting from the load combination (D + 0.6W).

⁵Pressure values at spans between those presented may be calculated by linear interpolation.

⁶Fasteners must comply with Section 3.3 of this report and must be spaced as shown in Figure 1 below.

TABLE 1B—ALLOWABLE WIND PRESSURES FOR T6-A WALL PANELS INSTALLED OVER WOOD STRUCTURAL PANEL SUBSTRATE AT SPECIFIED SPANS

| SECTION PROPERTIES | | | | | | | | WIND PRESSURE (psf) | | | | | | | |
|--------------------|----------------|----------------|-----------------|--|--|--|--|------------------------|------|------|------|------|------|------|------|
| Ga | Width (in.) | Yield (ksi) | Weight (psf) | Top in Compression | | Bottom in Compression | | Span (ft.) | | | | | | | |
| | | | | I _{xx} (in ⁴ /ft) | S _{xx} (in ³ /ft) | I _{xx} (in ⁴ /ft) | S _{xx} (in ³ /ft) | 1 | 1.33 | 2 | 2.5 | 3 | 3.5 | 4 | 5 |
| 24 | 36 | 50 | 1.18 | 0.0830 | 0.0983 | 0.1057 | 0.1094 | 55.1 | 41.3 | 27.5 | 22.0 | 18.4 | 15.7 | 13.8 | 11.0 |
| 22 | 36 | 50 | 1.55 | 0.1167 | 0.1454 | 0.1467 | 0.1572 | 55.1 | 41.3 | 27.5 | 22.0 | 18.4 | 15.7 | 13.8 | 11.0 |
| 20 | 36 | 33 | 1.89 | 0.1633 | 0.2161 | 0.2000 | 0.2196 | 55.1 | 41.3 | 27.5 | 22.0 | 18.4 | 15.7 | 13.8 | 11.0 |
| 18 | 36 | 33 | 2.49 | 0.2367 | 0.2927 | 0.2633 | 0.2930 | 55.1 | 41.3 | 27.5 | 22.0 | 18.4 | 15.7 | 13.8 | 11.0 |

For SI: 1 in. = 25.4 mm, 1 ft. = 1 ksi = 6894.8 kPa, 1 psf = 47.88 Pa.

¹Theoretical 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.

²The tabulated allowable wind pressures are based on the lowest positive and negative wind pressure calculated in accordance with AISI S100- 2016 North American Specification for the Design of Cold-Formed Steel Structural Members, considering bending, shear, combined bending and shear, deflection (L/180), web crippling and fastener head pull-over, and in accordance with AWC, NDS 2018 considering fastener pull-out. Panel weight is not considered.

³The tabulated allowable wind pressures are for panels installed with 3 or more equal span condition at the spans noted.

⁴The tabulated allowable wind pressures must be greater than the design wind pressures resulting from the load combination (D + 0.6W).

⁵Pressure values at spans between those presented may be calculated by linear interpolation.

⁶Use the metal panel fastener spacing not greater than the wood structural substrate support spacing unless the wood structural panel and its supports are specifically designed for the greater metal wall panel fastener spacing.

⁷Fasteners must comply with Section 3.3 of this report and must be spaced as shown in Figure 1 below.

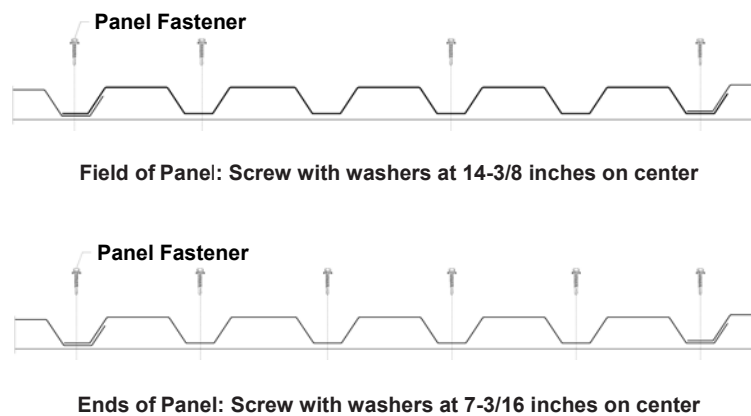


FIGURE 1—T6-A PANEL PROFILE AND FASTENING SCHEDULE FOR T6-A WALL PANELS

TABLE 2A— ALLOWABLE WIND PRESSURES FOR T10-A WALL PANELS INSTALLED DIRECTLY ON COLD-FORM STEEL FRAMING AT SPECIFIED SPANS

| SECTION PROPERTIES | | | | | | | | WIND PRESSURE (psf) | | | | | | | |
|--------------------|-------------|-------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------|------|------|------|------|------|------|------|
| Ga | Width (in.) | Yield (ksi) | Weight (psf) | Top in Compression | | Bottom in Compression | | Span (ft.) | | | | | | | |
| | | | | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 24 | 28 | 50 | 1.58 | 0.1230 | 0.1574 | 0.1547 | 0.1665 | 112.5 | 84.3 | 67.5 | 56.2 | 48.2 | 42.2 | 37.5 | 28.1 |
| 22 | 28 | 50 | 2.07 | 0.1727 | 0.2275 | 0.2121 | 0.2344 | 112.5 | 84.3 | 67.5 | 56.2 | 48.2 | 42.2 | 37.5 | 33.7 |
| 20 | 28 | 33 | 2.52 | 0.2400 | 0.2887 | 0.2614 | 0.2932 | 112.5 | 84.3 | 67.5 | 56.2 | 48.2 | 42.2 | 37.5 | 33.7 |
| 18 | 28 | 33 | 3.30 | 0.3386 | 0.3827 | 0.3386 | 0.3814 | 112.5 | 84.3 | 67.5 | 56.2 | 48.2 | 42.2 | 37.5 | 33.7 |

For SI: 1 in. = 25.4 mm, 1 ft. = 1 ksi = 6894.8 kPa, 1 psf = 47.88 Pa.

¹Theoretical 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.

²The tabulated allowable wind pressures are based on the lowest positive and negative wind pressure calculated in accordance with AISI S100- 2016 North American Specification for the Design of Cold-Formed Steel Structural Members, considering bending, shear, combined bending and shear, deflection (L/180), web crippling and fastener head pull-over. Panel weight is not considered.

³The tabulated allowable wind pressures are for panels installed with 3 or more equal span condition at the spans noted.

⁴The tabulated allowable wind pressures must be greater than the design wind pressures resulting from the load combination (D + 0.6W).

⁵Pressure values at spans between those presented may be calculated by linear interpolation.

⁶Fasteners must comply with Section 3.3 of this report and must be spaced as shown in Figure 2 below.

TABLE 2B—ALLOWABLE WIND PRESSURES FOR T10-A WALL PANELS INSTALLED OVER WOOD STRUCTURAL PANEL SUBSTRATE AT SPECIFIED SPANS

| SECTION PROPERTIES | | | | | | | | WIND PRESSURE (psf) | | | | | | | |
|--------------------|-------------|-------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------|------|------|------|------|------|------|------|
| Ga | Width (in.) | Yield (ksi) | Weight (psf) | Top in Compression | | Bottom in Compression | | Span (ft.) | | | | | | | |
| | | | | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | 1.33 | 2 | 2.5 | 3 | 3.5 | 4 | 4.5 | 5 |
| 24 | 28 | 50 | 1.58 | 0.1230 | 0.1574 | 0.1547 | 0.1665 | 74.2 | 49.5 | 39.6 | 33.0 | 28.3 | 24.7 | 22.0 | 19.8 |
| 22 | 28 | 50 | 2.07 | 0.1727 | 0.2275 | 0.2121 | 0.2344 | 74.2 | 49.5 | 39.6 | 33.0 | 28.3 | 24.7 | 22.0 | 19.8 |
| 20 | 28 | 33 | 2.52 | 0.2400 | 0.2887 | 0.2614 | 0.2932 | 74.2 | 49.5 | 39.6 | 33.0 | 28.3 | 24.7 | 22.0 | 19.8 |
| 18 | 28 | 33 | 3.30 | 0.3386 | 0.3827 | 0.3386 | 0.3814 | 74.2 | 49.5 | 39.6 | 33.0 | 28.3 | 24.7 | 22.0 | 19.8 |

For SI: 1 in. = 25.4 mm, 1 ft. = 1 ksi = 6894.8 kPa, 1 psf = 47.88 Pa.

¹Theoretical 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.

²The tabulated allowable wind pressures are based on the lowest positive and negative wind pressure calculated in accordance with AISI S100- 2016 North American Specification for the Design of Cold-Formed Steel Structural Members, considering bending, shear, combined bending and shear, deflection (L/180), web crippling and fastener head pull-over, and in accordance with AWC, NDS 2018 considering fastener pull-out. Panel weight is not considered.

³The tabulated allowable wind pressures are for panels installed with 3 or more equal span condition at the spans noted.

⁴The tabulated allowable wind pressures must be greater than the design wind pressures resulting from the load combination (D + 0.6W).

⁵Pressure values at spans between those presented may be calculated by linear interpolation.

⁶Use the metal panel fastener spacing not greater than the wood structural substrate support spacing unless the wood structural panel and its supports are specifically designed for the greater metal wall panel fastener spacing.

⁷Fasteners must comply with Section 3.3 of this report and must be spaced as shown in Figure 2 below.

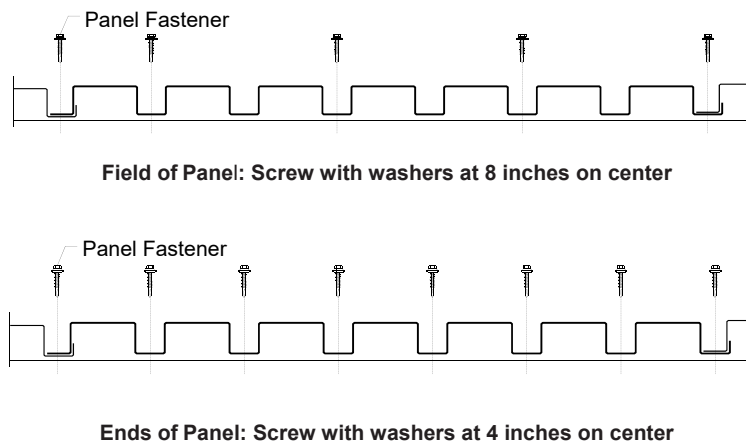


FIGURE 2—T10-A PANEL PROFILE AND FASTENING SCHEDULE FOR T10-A WALL PANELS

TABLE 3A— ALLOWABLE WIND PRESSURES FOR T10-B WALL PANELS INSTALLED DIRECTLY ON COLD-FORM STEEL FRAMING AT SPECIFIED SPANS

| SECTION PROPERTIES | | | | | | | | WIND PRESSURE (psf) | | | | | | | |
|--------------------|-------------|-------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------|------|------|------|------|------|------|------|
| Ga | Width (in.) | Yield (ksi) | Weight (psf) | Top in Compression | | Bottom in Compression | | Span (ft.) | | | | | | | |
| | | | | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 24 | 30 | 50 | 1.40 | 0.1140 | 0.1182 | 0.1164 | 0.1253 | 75.0 | 56.2 | 45.0 | 37.5 | 32.1 | 28.1 | 25.0 | 22.5 |
| 22 | 30 | 50 | 1.84 | 0.1616 | 0.1741 | 0.1648 | 0.1845 | 75.0 | 56.2 | 45.0 | 37.5 | 32.1 | 28.1 | 25.0 | 22.5 |
| 20 | 30 | 33 | 2.24 | 0.2240 | 0.2582 | 0.2280 | 0.2716 | 75.0 | 56.2 | 45.0 | 37.5 | 32.1 | 28.1 | 25.0 | 22.5 |
| 18 | 30 | 33 | 2.95 | 0.3200 | 0.3864 | 0.3200 | 0.4004 | 75.0 | 56.2 | 45.0 | 37.5 | 32.1 | 28.1 | 25.0 | 22.5 |

For SI: 1 in. = 25.4 mm, 1 ft. = 1 ksi = 6894.8 kPa, 1 psf = 47.88 Pa.

¹Theoretical 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.

²The tabulated allowable wind pressures are based on the lowest positive and negative wind pressure calculated in accordance with AISI S100- 2016 North American Specification for the Design of Cold-Formed Steel Structural Members, considering bending, shear, combined bending and shear, deflection (L/180), web crippling and fastener head pull-over. Panel weight is not considered.

³The tabulated allowable wind pressures are for panels installed with 3 or more equal span condition at the spans noted.

⁴The tabulated allowable wind pressures must be greater than the design wind pressures resulting from the load combination (D + 0.6W).

⁵Pressure values at spans between those presented may be calculated by linear interpolation.

⁶Fasteners must comply with Section 3.3 of this report and must be spaced as shown in Figure 3 below.

TABLE 3B—ALLOWABLE WIND PRESSURES FOR T10-B WALL PANELS INSTALLED OVER WOOD STRUCTURAL PANEL SUBSTRATE AT SPECIFIED SPANS

| SECTION PROPERTIES | | | | | | | | WIND PRESSURE (psf) | | | | | | | |
|--------------------|-------------|-------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------|------|------|------|------|------|------|------|
| Ga | Width (in.) | Yield (ksi) | Weight (psf) | Top in Compression | | Bottom in Compression | | Span (ft.) | | | | | | | |
| | | | | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | 1 | 1.33 | 2 | 2.5 | 3 | 3.5 | 4 | 5 |
| 24 | 30 | 50 | 1.40 | 0.1140 | 0.1182 | 0.1164 | 0.1253 | 66.0 | 49.5 | 33.0 | 26.4 | 22.0 | 18.9 | 16.5 | 13.2 |
| 22 | 30 | 50 | 1.84 | 0.1616 | 0.1741 | 0.1648 | 0.1845 | 66.0 | 49.5 | 33.0 | 26.4 | 22.0 | 18.9 | 16.5 | 13.2 |
| 20 | 30 | 33 | 2.24 | 0.2240 | 0.2582 | 0.2280 | 0.2716 | 66.0 | 49.5 | 33.0 | 26.4 | 22.0 | 18.9 | 16.5 | 13.2 |
| 18 | 30 | 33 | 2.95 | 0.3200 | 0.3864 | 0.3200 | 0.4004 | 66.0 | 49.5 | 33.0 | 26.4 | 22.0 | 18.9 | 16.5 | 13.2 |

For SI: 1 in. = 25.4 mm, 1 ft. = 1 ksi = 6894.8 kPa, 1 psf = 47.88 Pa.

¹Theoretical 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.

²The tabulated allowable wind pressures are based on the lowest positive and negative wind pressure calculated in accordance with AISI S100- 2016 North American Specification for the Design of Cold-Formed Steel Structural Members, considering bending, shear, combined bending and shear, deflection (L/180), web crippling and fastener head pull-over, and in accordance with AWC, NDS 2018 considering fastener pull-out. Panel weight is not considered.

³The tabulated allowable wind pressures are for panels installed with 3 or more equal span condition at the spans noted.

⁴The tabulated allowable wind pressures must be greater than the design wind pressures resulting from the load combination (D + 0.6W).

⁵Pressure values at spans between those presented may be calculated by linear interpolation.

⁶Use the metal panel fastener spacing not greater than the wood structural substrate support spacing unless the wood structural panel and its supports are specifically designed for the greater metal wall panel fastener spacing.

⁷Fasteners must comply with Section 3.3 of this report and must be spaced as shown in Figure 3 below.

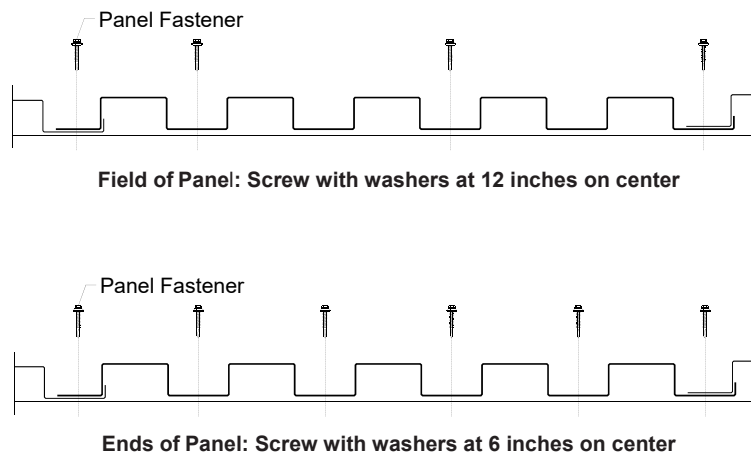


FIGURE 3—T10-B PANEL PROFILE AND FASTENING SCHEDULE FOR T10-B WALL PANELS

TABLE 4A— ALLOWABLE WIND PRESSURES FOR T10-C WALL PANELS INSTALLED DIRECTLY ON COLD-FORM STEEL FRAMING AT SPECIFIED SPANS

| SECTION PROPERTIES | | | | | | | | WIND PRESSURE (psf) | | | | | | | |
|--------------------|-------------|-------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------|------|------|------|------|------|------|------|
| Ga | Width (in.) | Yield (ksi) | Weight (psf) | Top in Compression | | Bottom in Compression | | Span (ft.) | | | | | | | |
| | | | | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 24 | 30 | 50 | 1.37 | 0.0844 | 0.1078 | 0.1260 | 0.1195 | 75.0 | 56.2 | 45.0 | 37.5 | 32.1 | 28.1 | 25.0 | 22.5 |
| 22 | 30 | 50 | 1.79 | 0.1196 | 0.1577 | 0.1740 | 0.1685 | 75.0 | 56.2 | 45.0 | 37.5 | 32.1 | 28.1 | 25.0 | 22.5 |
| 20 | 30 | 33 | 2.19 | 0.1720 | 0.2018 | 0.2160 | 0.2128 | 75.0 | 56.2 | 45.0 | 37.5 | 32.1 | 28.1 | 25.0 | 22.5 |
| 18 | 30 | 33 | 2.88 | 0.2480 | 0.2700 | 0.2840 | 0.2780 | 75.0 | 56.2 | 45.0 | 37.5 | 32.1 | 28.1 | 25.0 | 22.5 |

For SI: 1 in. = 25.4 mm, 1 ft. = 1 ksi = 6894.8 kPa, 1 psf = 47.88 Pa.

¹Theoretical 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.

²The tabulated allowable wind pressures are based on the lowest positive and negative wind pressure calculated in accordance with AISI S100- 2016 North American Specification for the Design of Cold-Formed Steel Structural Members, considering bending, shear, combined bending and shear, deflection (L/180), web crippling and fastener head pull-over. Panel weight is not considered.

³The tabulated allowable wind pressures are for panels installed with 3 or more equal span condition at the spans noted.

⁴The tabulated allowable wind pressures must be greater than the design wind pressures resulting from the load combination (D + 0.6W).

⁵Pressure values at spans between those presented may be calculated by linear interpolation.

⁶Fasteners must comply with Section 3.3 of this report and must be spaced as shown in Figure 4 below.

TABLE 4B—ALLOWABLE WIND PRESSURES FOR T10-C WALL PANELS INSTALLED OVER WOOD STRUCTURAL PANEL SUBSTRATE AT SPECIFIED SPANS

| SECTION PROPERTIES | | | | | | | | WIND LOAD PRESSURE (psf) | | | | | | | |
|--------------------|-------------|-------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|------|------|------|------|------|------|------|
| Ga | Width (in.) | Yield (ksi) | Weight (psf) | Top in Compression | | Bottom in Compression | | Span (ft.) | | | | | | | |
| | | | | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | 1 | 1.33 | 2 | 2.5 | 3 | 3.5 | 4 | 5 |
| 24 | 30 | 50 | 1.37 | 0.0844 | 0.1078 | 0.1260 | 0.1195 | 66.0 | 49.5 | 33.0 | 26.4 | 22.0 | 18.9 | 16.5 | 13.2 |
| 22 | 30 | 50 | 1.79 | 0.1196 | 0.1577 | 0.1740 | 0.1685 | 66.0 | 49.5 | 33.0 | 26.4 | 22.0 | 18.9 | 16.5 | 13.2 |
| 20 | 30 | 33 | 2.19 | 0.1720 | 0.2018 | 0.2160 | 0.2128 | 66.0 | 49.5 | 33.0 | 26.4 | 22.0 | 18.9 | 16.5 | 13.2 |
| 18 | 30 | 33 | 2.88 | 0.2480 | 0.2700 | 0.2840 | 0.2780 | 66.0 | 49.5 | 33.0 | 26.4 | 22.0 | 18.9 | 16.5 | 13.2 |

For SI: 1 in. = 25.4 mm, 1 ft. = 1 ksi = 6894.8 kPa, 1 psf = 47.88 Pa.

¹Theoretical 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.

²The tabulated allowable wind pressures are based on the lowest positive and negative wind pressure calculated in accordance with AISI S100- 2016 North American Specification for the Design of Cold-Formed Steel Structural Members, considering bending, shear, combined bending and shear, deflection (L/180), web crippling and fastener head pull-over, and in accordance with AWC, NDS 2018 considering fastener pull-out. Panel weight is not considered.

³The tabulated allowable wind pressures are for panels installed with 3 or more equal span condition at the spans noted.

⁴The tabulated allowable wind pressures must be greater than the design wind pressures resulting from the load combination (D + 0.6W).

⁵Pressure values at spans between those presented may be calculated by linear interpolation.

⁶Use the metal panel fastener spacing not greater than the wood structural substrate support spacing unless the wood structural panel and its supports are specifically designed for the greater metal wall panel fastener spacing.

⁷Fasteners must comply with Section 3.3 of this report and must be spaced as shown in Figure 4 below.

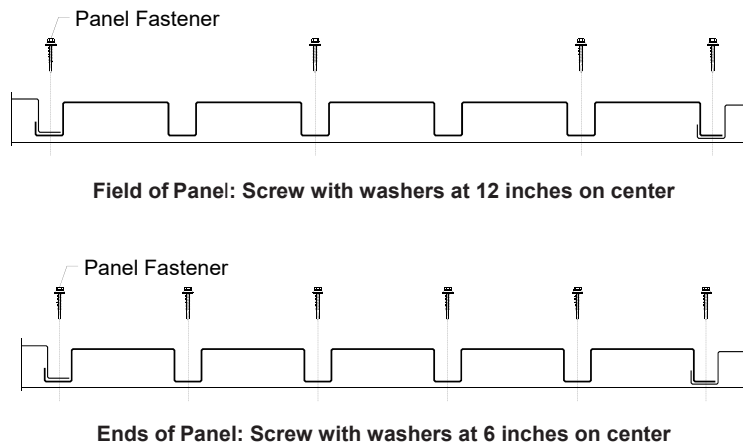


FIGURE 4—T10-C PANEL PROFILE AND FASTENING SCHEDULE FOR T10-C WALL PANELS

TABLE 5A— ALLOWABLE WIND PRESSURES FOR T10-D WALL PANELS INSTALLED DIRECTLY ON COLD-FORM STEEL FRAMING AT SPECIFIED SPANS

| SECTION PROPERTIES | | | | | | | | WIND LOAD PRESSURE (psf) | | | | | | | |
|--------------------|-------------|-------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|------|------|------|------|------|------|------|
| Ga | Width (in.) | Yield (ksi) | Weight (psf) | Top in Compression | | Bottom in Compression | | Span (ft.) | | | | | | | |
| | | | | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 24 | 36 | 50 | 1.22 | 0.0577 | 0.0730 | 0.0977 | 0.0838 | 100.0 | 75.0 | 60.0 | 46.4 | 34.2 | 26.3 | 20.8 | 16.9 |
| 22 | 36 | 50 | 1.60 | 0.0800 | 0.1082 | 0.1367 | 0.1184 | 100.0 | 75.0 | 60.0 | 50.0 | 42.8 | 37.5 | 30.9 | 23.9 |
| 20 | 36 | 33 | 1.96 | 0.1167 | 0.1390 | 0.1700 | 0.1507 | 100.0 | 75.0 | 60.0 | 50.0 | 42.7 | 32.9 | 26.1 | 21.3 |
| 18 | 36 | 33 | 2.58 | 0.1733 | 0.1867 | 0.2233 | 0.1973 | 100.0 | 75.0 | 60.0 | 50.0 | 42.8 | 37.5 | 33.3 | 28.6 |

For SI: 1 in. = 25.4 mm, 1 ft. = 1 ksi = 6894.8 kPa, 1 psf = 47.88 Pa.

¹Theoretical 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.

²The tabulated allowable wind pressures are based on the lowest positive and negative wind pressure calculated in accordance with AISI S100- 2016 North American Specification for the Design of Cold-Formed Steel Structural Members, considering bending, shear, combined bending and shear, deflection (L/180), web crippling and fastener head pull-over. Panel weight is not considered.

³The tabulated allowable wind pressures are for panels installed with 3 or more equal span condition at the spans noted.

⁴The tabulated allowable wind pressures must be greater than the design wind pressures resulting from the load combination (D + 0.6W).

⁵Pressure values at spans between those presented may be calculated by linear interpolation.

⁶Fasteners must comply with Section 3.3 of this report and must be spaced as shown in Figure 5 below.

TABLE 5B—ALLOWABLE WIND PRESSURES FOR T10-D WALL PANELS INSTALLED OVER WOOD STRUCTURAL PANEL SUBSTRATE AT SPECIFIED SPANS

| SECTION PROPERTIES | | | | | | | | WIND LOAD PRESSURE (psf) | | | | | | | |
|--------------------|-------------|-------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|------|------|------|------|------|------|------|
| Ga | Width (in.) | Yield (ksi) | Weight (psf) | Top in Compression | | Bottom in Compression | | Span (ft.) | | | | | | | |
| | | | | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | 1.33 | 2 | 2.5 | 3 | 3.5 | 4 | 4.5 | 5 |
| 24 | 36 | 50 | 1.22 | 0.0577 | 0.0730 | 0.0977 | 0.0838 | 66.0 | 44.0 | 35.2 | 29.3 | 25.1 | 22.0 | 19.6 | 17.6 |
| 22 | 36 | 50 | 1.60 | 0.0800 | 0.1082 | 0.1367 | 0.1184 | 66.0 | 44.0 | 35.2 | 29.3 | 25.1 | 22.0 | 19.6 | 17.6 |
| 20 | 36 | 33 | 1.96 | 0.1167 | 0.1390 | 0.1700 | 0.1507 | 66.0 | 44.0 | 35.2 | 29.3 | 25.1 | 22.0 | 19.6 | 17.6 |
| 18 | 36 | 33 | 2.58 | 0.1733 | 0.1867 | 0.2233 | 0.1973 | 66.0 | 44.0 | 35.2 | 29.3 | 25.1 | 22.0 | 19.6 | 17.6 |

For SI: 1 in. = 25.4 mm, 1 ft. = 1 ksi = 6894.8 kPa, 1 psf = 47.88 Pa.

¹Theoretical 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.

²The tabulated allowable wind pressures are based on the lowest positive and negative wind pressure calculated in accordance with AISI S100- 2016 North American Specification for the Design of Cold-Formed Steel Structural Members, considering bending, shear, combined bending and shear, deflection (L/180), web crippling and fastener head pull-over, and in accordance with AWC, NDS 2018 considering fastener pull-out. Panel weight is not considered.

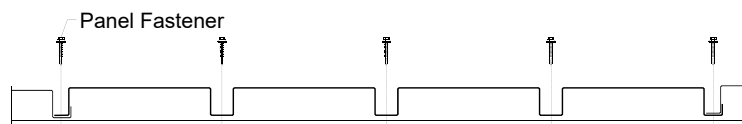
³The tabulated allowable wind pressures are for panels installed with 3 or more equal span condition at the spans noted.

⁴The tabulated allowable wind pressures must be greater than the design wind pressures resulting from the load combination (D + 0.6W).

⁵Pressure values at spans between those presented may be calculated by linear interpolation.

⁶Use the metal panel fastener spacing not greater than the wood structural substrate support spacing unless the wood structural panel and its supports are specifically designed for the greater metal wall panel fastener spacing.

⁷Fasteners must comply with Section 3.3 of this report and must be spaced as shown in Figure 5 below.



Field and Ends of Panel: Screw with washers at 9 inches on center

FIGURE 5—T10-D PANEL PROFILE AND FASTENING SCHEDULE FOR T10-D WALL PANELS

TABLE 6A— ALLOWABLE WIND PRESSURES FOR T16-E WALL PANELS INSTALLED DIRECTLY ON COLD-FORM STEEL FRAMING AT SPECIFIED SPANS

| SECTION PROPERTIES | | | | | | | | WIND LOAD PRESSURE (psf) | | | | | | | |
|--------------------|-------------|-------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|-------|------|------|------|------|------|------|
| Ga | Width (in.) | Yield (ksi) | Weight (psf) | Top in Compression | | Bottom in Compression | | Span (ft.) | | | | | | | |
| | | | | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | 2.5 | 3 | 3.5 | 4 | 4.5 | 5 | 6 | 7 |
| 24 | 36 | 50 | 1.20 | 0.0243 | 0.0585 | 0.0300 | 0.0605 | 120.0 | 100.0 | 85.7 | 75.0 | 65.4 | 47.8 | 27.7 | 16.3 |
| 22 | 36 | 50 | 1.57 | 0.0343 | 0.0882 | 0.0420 | 0.0880 | 120.1 | 100.0 | 85.7 | 75.0 | 66.6 | 60.0 | 35.4 | 21.1 |

For SI: 1 in. = 25.4 mm, 1 ft. = 1 ksi = 6894.8 kPa, 1 psf = 47.88 Pa.

¹Theoretical 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.

²The tabulated allowable wind pressures are based on the lowest positive and negative wind pressure calculated in accordance with AISI S100- 2016 North American Specification for the Design of Cold-Formed Steel Structural Members, considering bending, shear, combined bending and shear, deflection (L/180), web crippling and fastener head pull-over. Panel weight is not considered.

³The tabulated allowable wind pressures are for panels installed with 3 or more equal span condition at the spans noted.

⁴The tabulated allowable wind pressures must be greater than the design wind pressures resulting from the load combination (D + 0.6W).

⁵Pressure values at spans between those presented may be calculated by linear interpolation.

⁶Fasteners must comply with Section 3.3 of this report and must be spaced as shown in Figure 6 below.

TABLE 6B—ALLOWABLE WIND PRESSURES FOR T16-E WALL PANELS INSTALLED OVER WOOD STRUCTURAL PANEL SUBSTRATE AT SPECIFIED SPANS

| SECTION PROPERTIES | | | | | | | | WIND LOAD PRESSURE (psf) | | | | | | | |
|--------------------|-------------|-------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|------|------|------|------|------|------|------|
| Ga | Width (in.) | Yield (ksi) | Weight (psf) | Top in Compression | | Bottom in Compression | | Span (ft.) | | | | | | | |
| | | | | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | 1.33 | 2 | 2.5 | 3 | 3.5 | 4 | 4.5 | 5 |
| 24 | 36 | 50 | 1.20 | 0.0243 | 0.0585 | 0.0300 | 0.0605 | 66.0 | 44.0 | 35.2 | 29.3 | 25.1 | 22.0 | 19.6 | 17.6 |
| 22 | 36 | 50 | 1.57 | 0.0343 | 0.0882 | 0.0420 | 0.0880 | 66.0 | 44.0 | 35.2 | 29.3 | 25.1 | 22.0 | 19.6 | 17.6 |

For SI: 1 in. = 25.4 mm, 1 ft. = 1 ksi = 6894.8 kPa, 1 psf = 47.88 Pa.

¹Theoretical 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.

²The tabulated allowable wind pressures are based on the lowest positive and negative wind pressure calculated in accordance with AISI S100- 2016 North American Specification for the Design of Cold-Formed Steel Structural Members, considering bending, shear, combined bending and shear, deflection (L/180), web crippling and fastener head pull-over, and in accordance with AWC, NDS 2018 considering fastener pull-out. Panel weight is not considered.

³The tabulated allowable wind pressures are for panels installed with 3 or more equal span condition at the spans noted.

⁴The tabulated allowable wind pressures must be greater than the design wind pressures resulting from the load combination (D + 0.6W).

⁵Pressure values at spans between those presented may be calculated by linear interpolation.

⁶Use the metal panel fastener spacing not greater than the wood structural substrate support spacing unless the wood structural panel and its supports are specifically designed for the greater metal wall panel fastener spacing.

⁷Fasteners must comply with Section 3.3 of this report and must be spaced as shown in Figure 6 below.

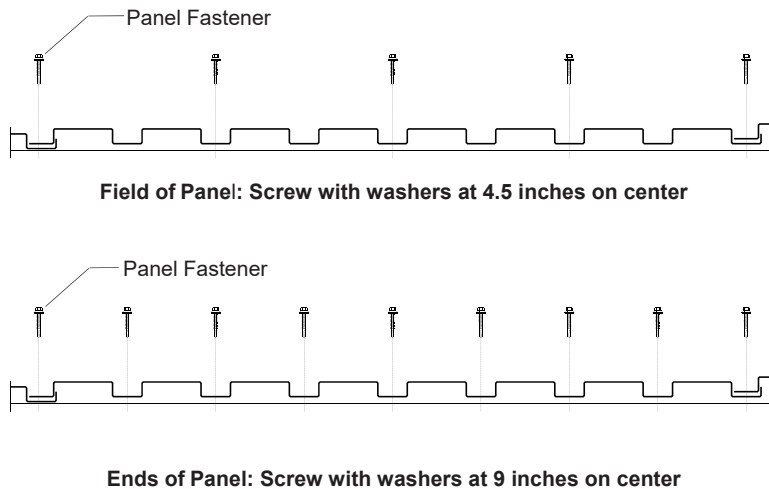


FIGURE 6—T16-E PANEL PROFILE AND FASTENING SCHEDULE FOR T16-E WALL PANELS

TABLE 7A— ALLOWABLE WIND PRESSURES FOR T16-L WALL PANELS INSTALLED DIRECTLY ON COLD-FORM STEEL FRAMING AT SPECIFIED SPANS

| SECTION PROPERTIES | | | | | | | | WIND LOAD PRESSURE (psf) | | | | | | | |
|--------------------|-------------|-------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|-------|------|------|------|------|------|------|
| Ga | Width (in.) | Yield (ksi) | Weight (psf) | Top in Compression | | Bottom in Compression | | Span (ft.) | | | | | | | |
| | | | | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | 2.5 | 3 | 3.5 | 4 | 4.5 | 5 | 6 | 7 |
| 24 | 32 | 50 | 1.25 | 0.0293 | 0.0657 | 0.0304 | 0.0679 | 134.9 | 112.5 | 96.4 | 77.8 | 61.0 | 49.0 | 30.1 | 18.9 |
| 22 | 32 | 50 | 1.63 | 0.0416 | 0.0977 | 0.0424 | 0.1004 | 134.9 | 112.5 | 96.4 | 84.3 | 75.0 | 66.6 | 38.5 | 24.3 |

For SI: 1 in. = 25.4 mm, 1 ft. = 1 ksi = 6894.8 kPa, 1 psf = 47.88 Pa.

¹Theoretical 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.

²The tabulated allowable wind pressures are based on the lowest positive and negative wind pressure calculated in accordance with AISI S100- 2016 North American Specification for the Design of Cold-Formed Steel Structural Members, considering bending, shear, combined bending and shear, deflection (L/180), web crippling and fastener head pull-over. Panel weight is not considered.

³The tabulated allowable wind pressures are for panels installed with 3 or more equal span condition at the spans noted.

⁴The tabulated allowable wind pressures must be greater than the design wind pressures resulting from the load combination (D + 0.6W).

⁵Pressure values at spans between those presented may be calculated by linear interpolation.

⁶Fasteners must comply with Section 3.3 of this report and must be spaced as shown in Figure 7 below.

TABLE 7B—ALLOWABLE WIND PRESSURES FOR T16-L WALL PANELS INSTALLED OVER WOOD STRUCTURAL PANEL SUBSTRATE AT SPECIFIED SPANS

| SECTION PROPERTIES | | | | | | | | WIND LOAD PRESSURE (psf) | | | | | | | |
|--------------------|-------------|-------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|------|------|------|------|------|------|------|
| Ga | Width (in.) | Yield (ksi) | Weight (psf) | Top in Compression | | Bottom in Compression | | Span (ft.) | | | | | | | |
| | | | | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | 1.33 | 2 | 2.5 | 3 | 3.5 | 4.5 | 5 | |
| 24 | 32 | 50 | 1.25 | 0.0293 | 0.0657 | 0.0304 | 0.0679 | 74.2 | 49.5 | 39.6 | 33.0 | 28.3 | 24.7 | 22.0 | 19.8 |
| 22 | 32 | 50 | 1.63 | 0.0416 | 0.0977 | 0.0424 | 0.1004 | 74.2 | 49.5 | 39.6 | 33.0 | 28.3 | 24.7 | 22.0 | 19.8 |

For SI: 1 in. = 25.4 mm, 1 ft. = 1 ksi = 6894.8 kPa, 1 psf = 47.88 Pa.

¹Theoretical 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.

²The tabulated allowable wind pressures are based on the lowest positive and negative wind pressure calculated in accordance with AISI S100- 2016 North American Specification for the Design of Cold-Formed Steel Structural Members, considering bending, shear, combined bending and shear, deflection (L/180), web crippling and fastener head pull-over, and in accordance with AWC, NDS 2018 considering fastener pull-out. Panel weight is not considered.

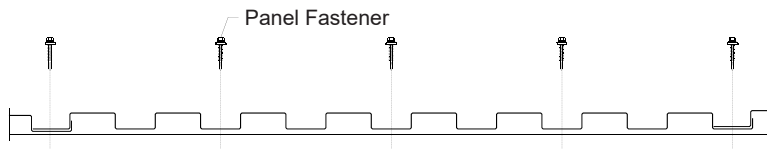
³The tabulated allowable wind pressures are for panels installed with 3 or more equal span condition at the spans noted.

⁴The tabulated allowable wind pressures must be greater than the design wind pressures resulting from the load combination (D + 0.6W).

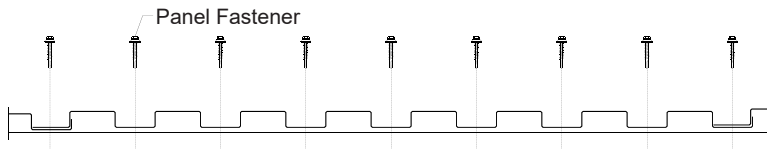
⁵Pressure values at spans between those presented may be calculated by linear interpolation.

⁶Use the metal panel fastener spacing not greater than the wood structural substrate support spacing unless the wood structural panel and its supports are specifically designed for the greater metal wall panel fastener spacing.

⁷Fasteners must comply with Section 3.3 of this report and must be spaced as shown in Figure 7 below.



Field of Panel: Screw with washers at 8 inches on center



Ends of Panel: Screw with washers at 4 inches on center

FIGURE 7—T16-L PANEL PROFILE AND FASTENING SCHEDULE FOR T16-L WALL PANELS

TABLE 8A— ALLOWABLE WIND PRESSURES FOR T24 WALL PANELS INSTALLED DIRECTLY ON COLD-FORM STEEL FRAMING AT SPECIFIED SPANS

| SECTION PROPERTIES | | | | | | | | WIND LOAD PRESSURE (psf) | | | | | | | |
|--------------------|-------------|-------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|------|------|------|------|------|------|------|
| Ga | Width (in.) | Yield (ksi) | Weight (psf) | Top in Compression | | Bottom in Compression | | Span (ft.) | | | | | | | |
| | | | | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 12 |
| 24 | 36 | 50 | 1.22 | 0.4153 | 0.2665 | 0.3107 | 0.1430 | 75.0 | 56.2 | 45.0 | 37.5 | 32.1 | 28.1 | 22.5 | 18.7 |
| 22 | 36 | 50 | 1.60 | 0.5900 | 0.3590 | 0.4800 | 0.2368 | 75.0 | 56.2 | 45.0 | 37.5 | 32.1 | 28.1 | 22.5 | 18.7 |
| 20 | 36 | 33 | 1.96 | 0.7567 | 0.4449 | 0.7067 | 0.3802 | 75.0 | 56.2 | 45.0 | 37.5 | 32.1 | 28.1 | 22.5 | 18.7 |
| 18 | 36 | 33 | 2.59 | 1.0267 | 0.5897 | 0.9800 | 0.5380 | 75.0 | 56.2 | 45.0 | 37.5 | 32.1 | 28.1 | 22.5 | 18.7 |

For SI: 1 in. = 25.4 mm, 1 ft. = 1 ksi = 6894.8 kPa, 1 psf = 47.88 Pa.

¹Theoretical 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.

²The tabulated allowable wind pressures are based on the lowest positive and negative wind pressure calculated in accordance with AISI S100- 2016 North American Specification for the Design of Cold-Formed Steel Structural Members, considering bending, shear, combined bending and shear, deflection (L/180), web crippling and fastener head pull-over. Panel weight is not considered.

³The tabulated allowable wind pressures are for panels installed with 3 or more equal span condition at the spans noted.

⁴The tabulated allowable wind pressures must be greater than the design wind pressures resulting from the load combination (D + 0.6W).

⁵Pressure values at spans between those presented may be calculated by linear interpolation.

⁶Fasteners must comply with Section 3.3 of this report and must be spaced as shown in Figure 8 below.

TABLE 8B—ALLOWABLE WIND PRESSURES FOR T24 WALL PANELS INSTALLED OVER WOOD STRUCTURAL PANEL SUBSTRATE AT SPECIFIED SPANS

| SECTION PROPERTIES | | | | | | | | WIND LOAD PRESSURE (psf) | | | | | | | |
|--------------------|-------------|-------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|------|------|------|------|------|------|------|
| Ga | Width (in.) | Yield (ksi) | Weight (psf) | Top in Compression | | Bottom in Compression | | Span (ft.) | | | | | | | |
| | | | | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | 1 | 1.33 | 2 | 2.5 | 3 | 3.5 | 4 | 5 |
| 24 | 36 | 50 | 1.22 | 0.4153 | 0.2665 | 0.3107 | 0.1430 | 66.0 | 49.5 | 33.0 | 26.4 | 22.0 | 18.9 | 16.5 | 13.2 |
| 22 | 36 | 50 | 1.60 | 0.5900 | 0.3590 | 0.4800 | 0.2368 | 66.0 | 49.5 | 33.0 | 26.4 | 22.0 | 18.9 | 16.5 | 13.2 |
| 20 | 36 | 33 | 1.96 | 0.7567 | 0.4449 | 0.7067 | 0.3802 | 66.0 | 49.5 | 33.0 | 26.4 | 22.0 | 18.9 | 16.5 | 13.2 |
| 18 | 36 | 33 | 2.59 | 1.0267 | 0.5897 | 0.9800 | 0.5380 | 66.0 | 49.5 | 33.0 | 26.4 | 22.0 | 18.9 | 16.5 | 13.2 |

For SI: 1 in. = 25.4 mm, 1 ft. = 1 ksi = 6894.8 kPa, 1 psf = 47.88 Pa.

¹Theoretical 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.

²The tabulated allowable wind pressures are based on the lowest positive and negative wind pressure calculated in accordance with AISI S100- 2016 North American Specification for the Design of Cold-Formed Steel Structural Members, considering bending, shear, combined bending and shear, deflection (L/180), web crippling and fastener head pull-over, and in accordance with AWC, NDS 2018 considering fastener pull-out. Panel weight is not considered.

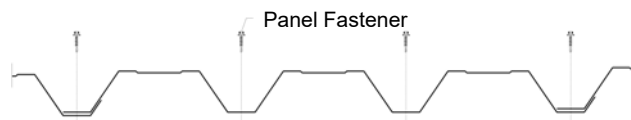
³The tabulated allowable wind pressures are for panels installed with 3 or more equal span condition at the spans noted.

⁴The tabulated allowable wind pressures must be greater than the design wind pressures resulting from the load combination (D + 0.6W).

⁵Pressure values at spans between those presented may be calculated by linear interpolation.

⁶Use the metal panel fastener spacing not greater than the wood structural panel substrate support spacing unless the wood structural panel and its supports are specifically designed for the greater metal wall panel fastener spacing.

⁷Fasteners must comply with Section 3.3 of this report and must be spaced as shown in Figure 8 below.



Field and End of Panel: Screw with washers at 12 inches on center

FIGURE 8—T24 PANEL PROFILE AND FASTENING SCHEDULE FOR T24 WALL PANELS

TABLE 9A— ALLOWABLE WIND PRESSURES FOR T2630 WALL PANELS INSTALLED DIRECTLY ON COLD-FORM STEEL FRAMING AT SPECIFIED SPANS

| SECTION PROPERTIES | | | | | | WIND LOAD PRESSURE (psf) | | | | | | | | | |
|--------------------|-------------|-------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|------------|------|------|------|------|------|------|------|
| Ga | Width (in.) | Yield (ksi) | Weight (psf) | Top in Compression | | Bottom in Compression | | Span (ft.) | | | | | | | |
| | | | | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 12 |
| 24 | 30 | 50 | 1.49 | 0.1988 | 0.1709 | 0.2328 | 0.1854 | 75.0 | 56.2 | 45.0 | 37.5 | 32.1 | 28.1 | 22.5 | 18.7 |
| 22 | 30 | 50 | 1.95 | 0.2796 | 0.2494 | 0.3256 | 0.2672 | 75.0 | 56.2 | 45.0 | 37.5 | 32.1 | 28.1 | 22.5 | 18.7 |
| 20 | 30 | 33 | 2.38 | 0.3840 | 0.3658 | 0.4400 | 0.3783 | 75.0 | 56.2 | 45.0 | 37.5 | 32.1 | 28.1 | 22.5 | 18.7 |
| 18 | 30 | 33 | 3.14 | 0.5440 | 0.5392 | 0.6040 | 0.5348 | 75.0 | 56.2 | 45.0 | 37.5 | 32.1 | 28.1 | 22.5 | 18.7 |

For SI: 1 in. = 25.4 mm, 1 ft. = 1 ksi = 6894.8 kPa, 1 psf = 47.88 Pa.

¹Theoretical 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.

²The tabulated allowable wind pressures are based on the lowest positive and negative wind pressure calculated in accordance with AISI S100- 2016 North American Specification for the Design of Cold-Formed Steel Structural Members, considering bending, shear, combined bending and shear, deflection (L/180), web crippling and fastener head pull-over. Panel weight is not considered.

³The tabulated allowable wind pressures are for panels installed with 3 or more equal span condition at the spans noted.

⁴The tabulated allowable wind pressures must be greater than the design wind pressures resulting from the load combination (D + 0.6W).

⁵Pressure values at spans between those presented may be calculated by linear interpolation.

⁶Fasteners must comply with Section 3.3 of this report and must be spaced as shown in Figure 9 below.

TABLE 9B—ALLOWABLE WIND PRESSURES FOR T2630 WALL PANELS INSTALLED OVER WOOD STRUCTURAL PANEL SUBSTRATE AT SPECIFIED SPANS

| SECTION PROPERTIES | | | | | | WIND LOAD PRESSURE (psf) | | | | | | | | | |
|--------------------|-------------|-------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|------------|------|------|------|------|------|------|------|
| Ga | Width (in.) | Yield (ksi) | Weight (psf) | Top in Compression | | Bottom in Compression | | Span (ft.) | | | | | | | |
| | | | | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | Ixx (in ⁴ /ft) | Sxx (in ³ /ft) | 1 | 1.33 | 2 | 2.5 | 3 | 3.5 | 4 | 5 |
| 24 | 30 | 50 | 1.49 | 0.1988 | 0.1709 | 0.2328 | 0.1854 | 66.0 | 49.5 | 33.0 | 26.4 | 22.0 | 18.9 | 16.5 | 13.2 |
| 22 | 30 | 50 | 1.95 | 0.2796 | 0.2494 | 0.3256 | 0.2672 | 66.0 | 49.5 | 33.0 | 26.4 | 22.0 | 18.9 | 16.5 | 13.2 |
| 20 | 30 | 33 | 2.38 | 0.3840 | 0.3658 | 0.4400 | 0.3783 | 66.0 | 49.5 | 33.0 | 26.4 | 22.0 | 18.9 | 16.5 | 13.2 |
| 18 | 30 | 33 | 3.14 | 0.5440 | 0.5392 | 0.6040 | 0.5348 | 66.0 | 49.5 | 33.0 | 26.4 | 22.0 | 18.9 | 16.5 | 13.2 |

For SI: 1 in. = 25.4 mm, 1 ft. = 1 ksi = 6894.8 kPa, 1 psf = 47.88 Pa.

¹Theoretical 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.

²The tabulated allowable wind pressures are based on the lowest positive and negative wind pressure calculated in accordance with AISI S100- 2016 North American Specification for the Design of Cold-Formed Steel Structural Members, considering bending, shear, combined bending and shear, deflection (L/180), web crippling and fastener head pull-over, and in accordance with AWC, NDS 2018 considering fastener pull-out. Panel weight is not considered.

³The tabulated allowable wind pressures are for panels installed with 3 or more equal span condition at the spans noted.

⁴The tabulated allowable wind pressures must be greater than the design wind pressures resulting from the load combination (D + 0.6W).

⁵Pressure values at spans between those presented may be calculated by linear interpolation.

⁶Use the metal panel fastener spacing not greater than the wood structural substrate support spacing unless the wood structural panel and its supports are specifically designed for the greater metal wall panel fastener spacing.

⁷Fasteners must comply with Section 3.3 of this report and must be spaced as shown in Figure 9 below.

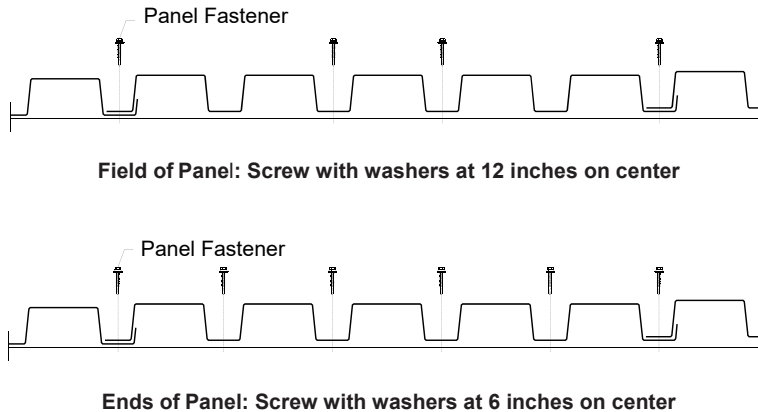


FIGURE 9—T2630 PANEL PROFILE AND FASTENING SCHEDULE FOR T2630 WALL PANELS

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION

Section: 07 46 00—Siding

REPORT HOLDER:

METAL SALES MANUFACTURING CORPORATION

EVALUATION SUBJECT:

METAL SALES MANUFACTURING CORPORATION'S EXTERIOR WALL PANELS

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that the Metal Sales manufacturing corporation's exterior wall panels, described in ICC-ES evaluation report [ESR-4633](#), have also been evaluated for compliance with the code noted below as adopted by the Los Angeles Department of Building and Safety (LADBS).

Applicable code editions:

- 2020 *City of Los Angeles Building Code* (LABC)

2.0 CONCLUSIONS

The Metal Sales manufacturing corporation's exterior wall panels, described in Sections 2.0 through 7.0 of the evaluation report [ESR-4633](#), comply with the LABC Chapter 14 and are subjected to the conditions of use described in this evaluation report supplement.

3.0 CONDITIONS OF USE

The Metal Sales manufacturing corporation's exterior wall panels, described in this evaluation report supplement must comply with all of the following conditions:

- All applicable sections in the evaluation report [ESR-4633](#).
- The design, installation, conditions of use and identification of the Metal Sales manufacturing corporation's exterior wall panels are in accordance with the 2018 *International Building Code*® (IBC) provisions noted in the evaluation report [ESR-4633](#).
- The design, installation and inspection are in accordance with additional requirements of the LABC Chapters 16 and 17, as applicable.

This evaluation report supplement expires concurrently with the evaluation report ESR-4633, issued June 2021.

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION

Section: 07 46 00—Siding

REPORT HOLDER:

METAL SALES MANUFACTURING CORPORATION

EVALUATION SUBJECT:

METAL SALES MANUFACTURING CORPORATION'S EXTERIOR WALL PANELS

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that the Metal Sales manufacturing corporation's exterior wall panels, described in ICC-ES evaluation report ESR-4633, have also been evaluated for compliance with the code noted below.

Applicable code edition:

- 2019 California Building Code (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) and Division of State Architect (DSA), see section 2.1.1 and 2.1.2 below.

2.0 CONCLUSIONS

2.1 CBC:

The Metal Sales manufacturing corporation's exterior wall panels, described in Sections 2.0 through 7.0 of the evaluation report ESR-4633, comply with CBC Chapter 14, provided the design and installation are in accordance with the 2018 *International Building Code*® (IBC) provisions noted in the evaluation report and the additional requirements of the CBC Chapters 14 and 16, as applicable.

- 2.1.1 OSHPD:** The Metal Sales manufacturing corporation's exterior wall panels, described in Section 2.0 through 7.0 of the evaluation report ESR-4633, comply with CBC Chapter 14, provided the design and installation are in accordance with CBC Chapters 14 with amendments, 16 with amendments [OSHPD 1R, 2, 3 & 5] and 16A [OSHPD 1 & 4], as applicable.

- 2.1.2 DSA:** The Metal Sales manufacturing corporation's exterior wall panels described in Section 2.0 through 7.0 of the evaluation report ESR-4633, comply with CBC Chapter 14, provided the design and installation are in accordance with CBC Chapters 14 with amendments, 16 with amendments [DSA SS/CC] and 16A [DSA SS], as applicable.

This evaluation report supplement expires concurrently with the evaluation report ESR-4633, issued June 2021.