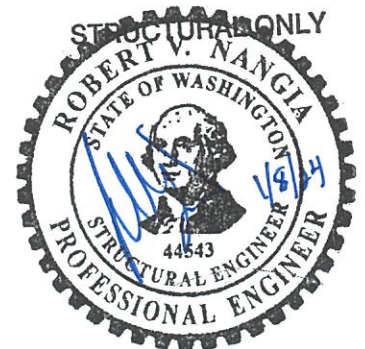


|            |       |           |            | SECTION PROPERTIES               |  |                                  |                                  |  |                                  | ALLOWABLE UNIFORM LOADS, psf<br>For various support spacings (i.e. span values) |      |      |      |      |      |      |
|------------|-------|-----------|------------|----------------------------------|--|----------------------------------|----------------------------------|--|----------------------------------|---|------|------|------|------|------|------|
| Width, in. | Gauge | Yield ksi | Weight psf | Top in Compression               |  |                                  | Bottom in Compression            |  |                                  | Negative Load   |      |      |      |      |      |      |
|            |       |           |            | $I_{xx}$<br>in <sup>4</sup> /ft. | $I_{xx}$ (eff)<br>in <sup>4</sup> /ft. | $S_{xx}$<br>in <sup>3</sup> /ft. | $I_{xx}$<br>in <sup>4</sup> /ft. | $I_{xx}$ (eff)<br>in <sup>4</sup> /ft. | $S_{xx}$<br>in <sup>3</sup> /ft. | 2'  | 2.5' | 3'   | 3.5' | 4'   | 4.5' | 5'   |
| 36         | 24    | 50        | 1.23       | 0.0203                           | 0.0224                                 | 0.0488                           | 0.0277                           | 0.0255                                 | 0.0506                           | 50.0  | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 |
| 36         | 22    | 50        | 1.45       | 0.0267                           | 0.0286                                 | 0.0635                           | 0.0333                           | 0.0314                                 | 0.0642                           | 62.5  | 60.4 | 58.3 | 56.3 | 54.2 | 52.1 | 50.0 |
| 36         | 20    | 33        | 1.77       | 0.0367                           | 0.0396                                 | 0.0908                           | 0.0467                           | 0.0438                                 | 0.0903                           | 62.5  | 60.4 | 58.3 | 56.3 | 54.2 | 52.1 | 50.0 |
| 36         | 18    | 33        | 2.29       | 0.0533                           | 0.0552                                 | 0.1177                           | 0.0600                           | 0.0581                                 | 0.1157                           | 62.5  | 60.4 | 58.3 | 56.3 | 54.2 | 52.1 | 50.0 |

- Theoretical section properties for steel panels have been calculated per AISI S100 Specification for the Design of Cold-Formed Steel Structural Members.
- $I_{xx}$  (eff) values are "effective" stiffness properties for positive (downward) load induced deflection determination.
- $S_{xx}$  values are to be used for flexural (bending) stress determination.
- Charted Load/Span values are based on ASTM E1592-05 (2017) testing protocol.
- Charted Load/Span values above are based on Allowable Stress Design (ASD)...Load Resistance Factor Design (LRFD) technique not recommended for charted values.
- Charted Allowable Uniform Loads are based on the Ultimate Uniform Load (per ASTM E1592-05 testing) divided by a 2.00 Factor-of-Safety.
- Charted Allowable Uniform Loads do not consider panel weight (Dead Load) or clip-to-substrate (structure) fastener connection strength.
- Panel-to-substrate (structure) fastener evaluation and analysis should be performed by a licensed structural engineer.
- Minimum recommended substrate (structure) recommendations:
  - Open-framing (i.e. purlins) - 16 ga. (design thickness = 0.0566")
  - Plywood/OSB - 15/32" or thicker is recommended to assure an effective degree of fastener thread engagement
  - Metal deck - 22 ga. (design thickness = 0.0283")
- Charted Allowable Uniform Loads cannot be increased by 1/3.
- Tested assembly used three (3) screws per panel.

|            |       |           |            | SECTION PROPERTIES               |  |                                  |                                  |  |                                  | ALLOWABLE UNIFORM LOADS, psf<br>For various support spacings (i.e. span values) |       |       |       |      |      |      |      |      |      |
|------------|-------|-----------|------------|----------------------------------|--|----------------------------------|----------------------------------|--|----------------------------------|---|-------|-------|-------|------|------|------|------|------|------|
| Width, in. | Gauge | Yield ksi | Weight psf | Top in Compression               |  |                                  | Bottom in Compression            |  |                                  | Positive Load   |       |       |       |      |      |      |      |      |      |
|            |       |           |            | $I_{xx}$<br>in <sup>4</sup> /ft. | $I_{xx}$ (eff)<br>in <sup>4</sup> /ft. | $S_{xx}$<br>in <sup>3</sup> /ft. | $I_{xx}$<br>in <sup>4</sup> /ft. | $I_{xx}$ (eff)<br>in <sup>4</sup> /ft. | $S_{xx}$<br>in <sup>3</sup> /ft. | 1'  | 2'    | 3'    | 4'    | 5'   | 6'   | 7'   | 8'   | 9'   | 10'  |
| 36         | 24    | 50        | 1.23       | 0.0203                           | 0.0224                                 | 0.0488                           | 0.0277                           | 0.0255                                 | 0.0506                           | 817.3   | 305.0 | 135.6 | 76.3  | 48.8 | 33.9 | 24.9 | 19.1 | 15.1 | 11.8 |
| 36         | 22    | 50        | 1.45       | 0.0267                           | 0.0286                                 | 0.0635                           | 0.0333                           | 0.0314                                 | 0.0642                           | 1160.9  | 396.9 | 176.4 | 99.2  | 63.5 | 44.1 | 32.4 | 24.8 | 19.6 | 15.1 |
| 36         | 20    | 33        | 1.77       | 0.0367                           | 0.0396                                 | 0.0908                           | 0.0467                           | 0.0438                                 | 0.0903                           | 1166.4  | 372.5 | 165.6 | 93.1  | 59.6 | 41.4 | 30.4 | 23.3 | 18.4 | 14.9 |
| 36         | 18    | 33        | 2.29       | 0.0533                           | 0.0552                                 | 0.1177                           | 0.0600                           | 0.0581                                 | 0.1157                           | 1909.1  | 477.3 | 212.1 | 119.3 | 76.4 | 53.0 | 39.0 | 29.8 | 23.6 | 19.1 |

- Theoretical section properties for Steel panels have been calculated per 2020 AISI S100 North American Specification for the Design of Cold-Formed Steel Structural Member.  $I_{xx}$  and  $S_{xx}$  are effective section properties for deflection and bending.
- $I_{xx}$  (eff) values are "effective" stiffness properties for positive (downward) load induced deflection determination.
- Allowable loads for Steel panels are calculated in accordance with 2020 AISI S100 specifications considering bending, shear, combined bending and shear and deflection. Allowable load considers a 3 or more equal span condition.
- $S_{xx}$  values are to be used for flexural (bending) stress determination.
- Allowable load does not address panel weight, fasteners, connection strength or support material.
- Allowable load includes web crippling.
- Load/Span values are based on theoretical computations and not load testing.
- Deflection is not considered.
- Allowable loads do not include a 1/3 stress increase for wind.
- The TMP .75-6-36 Lite Wall Panel when installed as a three-span condition with spans of 5 ft. on-center for Steel and 3 ft. on-center for Aluminum are is capable of withstanding the minimum uniform distributed load of 20 psf (0.958 kPa) noted in Table 1607.1 of the IBC and a minimum concentrated load of 300 lbf (1.33 kN).
- When panels are installed over solid or closely fitted deck sheathing, the capacity is limited to the capacity of the underlying sheathing.
- Assembly uses three (3) screws per panel.



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