TAYLOR METAL PRODUCTS

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# CONTOUR SERIES™
# CE-A/C-1 WALL & SOFFIT PANEL (SCREW FLANGE)

| | | | | SECTION PROPERTIES | | | | | | ALLOWABLE UNIFORM LOADS, psf For various fastener spacings (i.e. span values) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Top in Compression | | | Bottom in Compression | | | Negative Load | | | | | | |
| Width, in. | Gauge | Yield ksi | Weight psf | $I_{xx}$ $in^4/ft.$ | $I_{xx\ (eff)}$ $in^4/ft.$ | $S_{xx}$ $in^3/ft$ | $I_{xx}$ $in^4/ft.$ | $I_{xx\ (eff)}$ $in^4/ft.$ | $S_{xx}$ $in^3/ft$ | 1' | 1.5' | 2' | 2.5' | 3' | 3.5' | 4' |
| **16** | 24 | 50 | 1.47 | 0.0383 | 0.0392 | 0.0775 | 0.0414 | 0.0405 | 0.0895 | 100.0 | 92.5 | 85.0 | 77.5 | 70.0 | 62.5 | 55.0 |
| **16** | 22 | 50 | 1.73 | 0.0451 | 0.0460 | 0.0999 | 0.0481 | 0.0472 | 0.1120 | 200.0 | 179.1 | 158.3 | 137.5 | 116.6 | 95.8 | 75.0 |
| **16** | 0.032" | 19 | 0.52 | 0.0647 | 0.0647 | 0.1466 | 0.0647 | 0.0647 | 0.1508 | 65.0 | 59.1 | 53.3 | 47.5 | 41.6 | 35.8 | 30.0 |

1a. Theoretical section properties for **steel** panels have been calculated per AISI S100 Specification for the Design of Cold-Formed Steel Structural Members.

1b. Theoretical section properties for **aluminum** panels have been calculated per the latest edition of the Aluminum Association Design Manual.

2. $I_{xx\ (eff)}$ values are "effective" stiffness properties for positive (downward) load induced deflection determination.

3. $S_{xx}$ values are to be used for flexural (bending) stress determination.

4. Charted Load/Span values are based on ASTM E1592-05 (2017) testing protocol.

5. Charted Load/Span values above are based on Allowable Stress Design (ASD).....Load Resistance Factor Design (LRFD) technique not recommended for charted values.

6. Charted Allowable Uniform Loads are based on the Ultimate Uniform Load (per ASTM E1592-05 testing) divided by a 2.00 Factor-of-Safety.

7. Charted Allowable Uniform Loads do not consider panel weight (Dead Load) or clip-to-substrate (structure) fastener connection strength.

8. Panel-to-substrate (structure) fastener evaluation and analysis should be performed by a licensed structural engineer.

9. Minimum recommended substrate (structure) recommendations:
   a. Open-framing (i.e. purlins) - 16 ga. (design thickness = 0.0566")
   b. Plywood/OSB - 5/8" (nominal).....this recommended thickness assures an effective degree of fastener thread engagement
   c. Metal deck - 22 ga. (design thickness = 0.0283")

10. Deflection limit consideration for positive (downward) loading is limited to a deflection ratio of L/180 of the span....where "L" is the span in inches.

11. Charted Allowable Uniform Loads cannot be increased by 1/3.

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16493
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EXPIRES 09-16-2022

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