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| PRODUCT EVALUATION REPORT | |
|---|---|
| **Project No.:** ACE-2026-157 | **Report No.:** ACE-PER-1150, Rev. 1 |

**Product Description:** Exposed Fastener Metal Roof Panels, Series BR5-36, TR4-36 and Style-Rib

**Product Manufacturer:** Centria, 700 State Highway 121 Bypass, Suite 200, Lewisville, TX 75067

**Code:** Current Edition of the Florida Building Code including the 9th Edition (2026) Florida Building Code

**Compliance Method:** Product Approval Rule 61G20-3.005(1)(d) – Product Evaluation Report by a Licensed Professional Engineer

**Product Category/Sub-Category:** Structural Components/Roof Deck

**SCOPE:** Evaluate CENTRIA's Exposed Fastener Metal Roof Panels, Series BR5-36, TR4-36 and Style-Rib for conformance to the 9th Edition (2026) Florida Building Code excluding the High Velocity Hurricane Zone (HVHZ).

**DESCRIPTION OF PRODUCT – INSTALLATION REQUIREMENTS:**

See Reference 1 for a description of the product, its installation and other pertinent data related to its approved use.

**CODE CONFORMANCE:**

The 9th Edition (2026) Florida Building Code (FBC) requirements specific to this product have been met by testing (Reference 2) and engineering evaluation (Reference 3.a) and depicted on the manufacturer's installation drawings (Reference 1) are the following.

- 1504.3.2 Metal panel roof system
  - Tested to ASTM UL 580 for Uplift Wind Loads.
    - See Reference 2.
- 1507.4.3 Metal Roof Panels - Material Standards
  - Galvanized steel, ASTM A653, G-90 zinc-coated.
    - Minimum met – See Appendix 1.
- 1507.4.4 Attachment
  - Per Manufacturer's Installations Requirements.
    - See References 1 and 2.
- Table 1604.3 Deflection Limits
  - Roof/Not Supporting Ceiling, deflection for wind loading limited to L/180.
    - Met – See Appendix 2, 3 and 4.
- 1609 Wind Loads
- 2210.1 Cold-Formed Steel, General
  - Designed to AISI S100 for downwards wind/gravity loading.

Testing (Reference 2) is based on UL 580 per the requirements of the 9th Edition (2026) FBC. Testing determines the Negative (Uplift) Pressure Loading in PSF. The Roof Panels received a UL 580 Class 90 rating.

The engineering evaluation (Reference 3.a) is based on AISI S100-07/S2-10, North American Specification for the Design of Cold-formed Steel Structural Members. The engineering evaluation determines Positive (Downwards Acting) Pressure Loading in PSF. Safety factors are as prescribed in AISI S100-07/S2-10. Deflection limitation based on L/180 which meets the L/180 required by the building code.

Testing and engineering evaluation results are summarized in tables in Appendix 2, 3 and 4 of this report.

Appendix 1 summarizes the Exposed Fastener Metal Roof System material parameters and cross-references the testing/engineering-based Wind Pressure Loading results in Appendix 2, 3 and 4.

See Reference 3.b for Equivalency Evaluation in accordance with the 9th Edition (2026) FBC and FRC requirements for AISI S100-07/S2-10 as compared to AISI S100-16(2020) w/S2-20 required by the 9th Edition (2026) FBC.

**LIMITATIONS AND CONDITIONS OF USE:**

This product evaluation report contains or refers to specifications, technical details and installation details and/or methods that pertain to the proper use and/or installation of the product specified herein. Specific limitations and conditions of its use including but not limited to the following are contained in Reference 1 and/or shown below and are the subject of Product Approval in accordance with the State of Florida Product Approval Rule 61G20-3.

1. Design Pressure Rating (psf)
    a. Wind Uplift (negative) loading evaluated in accordance with UL 580 with a Class 90 rating.
    b. Wind Downwards (positive) loading evaluated in accordance with AISI S100. See Appendix 1 for summary matrix and Appendices 2 through 4 or Wind load/Span Tables.
2. Installation substrate requirements.
    a. See Appendix 1 through 4.
    b. See manufacturer's installation drawings (Ref. 1).
    c. See manufacturer's UL 580 Certifications (Ref. 2).
    d. The substrate shall be designed by others.
3. Installation anchor requirements.
    a. See Appendix 1 through 4.
    b. See manufacturer's installation drawings (Ref. 1).
    c. See manufacturer's UL 580 Certifications (Ref. 2).
4. Installation restrictions.
    a. See Appendix 1 through 4.
    b. See manufacturer's installation drawings (Ref. 1).

   c. See manufacturer's UL 580 Certifications (Ref. 2).
   d. The substrate shall be designed by others.

5. Product description.
   a. See Appendix 1.
   b. See manufacturer's installation drawings (Ref. 1).
   c. See manufacturer's UL 580 Certifications (Ref. 2).
6. Product components.
   a. See Appendix 1.
   b. See manufacturer's installation drawings (Ref. 1).
   c. See manufacturer's UL 580 Certifications (Ref. 2).
7. This evaluation is not for use in the HVHZ.
8. Fire classification is not within the scope of this evaluation.
9. Installation of the evaluated products shall comply with this report and the manufacturer's published application instructions.
10. Design loads shall be determined in accordance with 9th Edition (2026) FBC, Section 1609.

**TESTING STANDARDS:** Testing standards used in Reference 2 include the following.

- UL 580 – 2006

**REFERENCES & SUPPORTING DOCUMENTS:**

1) Manufacturer's Installation Instructions:
   a) Exposed Fasteners Metal Roof Panels Installation Instructions, signed and sealed by Robert J. Amoruso, P.E.
2) UL Certifications to UL 580 – See Appendix 5 (UL certs reviewed on 6/26/25 and current below).
   a) Style-Rib
      i) Roof Deck Constructions, Construction No. 137, TGKX.137, Roof Deck Constructions, Dated 9/13/2024 to UL 580
      ii) Wind Uplift – Steel Panels – Class 90 – Fire Not Investigated
   b) BR5-36
      i) Roof Deck Constructions, Construction No. 137A, TGKX.137A, Metal Deck Assemblies, Dated 12/10/97 to UL 580
      ii) Wind Uplift – Steel Panels – Class 90 – Fire Not Investigated
   c) TR4-36
      i) Roof Deck Constructions, Construction No. 203, TGKX.203, Roof Deck Constructions, Dated 4/21/06 to UL 580
      ii) Wind Uplift – Steel Panels – Class 90 – Fire Not Investigated
3) Reports and Calculations
   a) Panel Span Analysis for Centria Exposed Fastener Metal Roof Panels to AISI S100-07/S2-10, see Appendix 2, 3 and 4
      i) Equivalency of AISI S100-07/S2-10 as compared to AISI S100-16(2020) w/S2-20required by the 9th Edition (2026) FBC is addressed in Equivalency Evaluation Report No. ACE-EER-1150 (Ref. 3.b).

b) Report No. ACE-EER-1150, Rev.0, Equivalency Evaluation Report for Centria Exposed Fastener Metal Roof Panels, Series BR5-36, TR4-36 and Style-Rib to the 9th Edition (2026) FBC & 9th Edition (2026) FRC, Signed and Sealed by Robert J. Amoruso, P.E

4) 9th Edition (2026) Florida Building Code (FBC), Building Volume
   i) 1504.3.2 Metal panel roof system
   ii) 1507.4.3 Metal Roof Panels - Material Standards
   iii) 1507.4.4 Attachment
   iv) Table 1604.3 Deflection Limits
   v) 1609 Wind Loads
   vi) 2210.1 Cold-Formed Steel, General

5) Standards
   a) AISI S100-07/S2-10, North American Specification for the Design of Cold-formed Steel Structural Members
      i) Engineering evaluation for Positive (Downwards Acting Gravity and/or Wind) Loading in accordance with AISI S100.

**APPENDICES:**

- Appendix 1: Exposed Fastener Perforated Metal Roof Panel Summary Matrix – Table Key – 3 pages
- Appendix 2: BR5-36 Exposed Fastener Perforated Metal Roof Panel Load/Span Tables – 8 pages
- Appendix 3: Style-Rib Exposed Fastener Perforated Metal Roof Panel Load/Span Tables – 8 pages
- Appendix 4: TR4-36 Exposed Fastener Perforated Metal Roof Panel Load/Span Tables – 8 pages
- Appendix 5: UL Certifications to UL 580 – 11 pages

**Certificate of Independence per Product Approval Rule 61G20-3.009**

Robert J. Amoruso, P.E., does not have, nor will he acquire, any financial interest in the company manufacturing or distributing product(s) covered by this Product Evaluation Report.

Robert J. Amoruso, P.E., does not have, nor will he acquire any financial interest in any other entity involved in the approval process or testing of the product(s) covered by this Product Evaluation Report.

Digitally signed by Robert J Amoruso
Date: 2026.09.22 13:28:26 -04'00'

Evaluated by:
Robert J. Amoruso, P.E.
FL P.E. License No. 49752

# Exposed Fastener Metal Roof Panels - Panel Description and Load/Span Table Matrix

| POSITIVE (DOWNWARDS ACTING) LOAD/SPAN TABLE Appendix and Page No. | | NEGATIVE (UPLIFT) UL 580 CLASSIFICATION 90 Appendix and Page No. | | Panel Description | | | | | Fasteners | | | | Section Properties | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Appendix No. | Page No. | Appendix No. | Page No. | SERIES | Description | Configuration | Material | Gauge | Size (#14 used in evaluation) | Support Structure Thickness (GA or IN) | Qty | FS | Weight (psf) | I ($in^4$) | S ($in^3$) |
| 2 | 1 | 5 | 1, 2 and 3 | BR5-36 | Exposed Fastener Metal Roof Panel | 36" effective width and 5 ribs, each 1-1/2" high | Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process. Panel Material with Minimum Yield Strength = 50 ksi ASTM A 653/A 653M - Specification for Steel Sheet G90 Galvanized base material, optional Galvalume. | 24 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 16 | 5 | 3 | 2.48 | 0.237 | 0.266 |
| 2 | 2 | | | | | | | 24 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 3/16" | 5 | 3 | 2.48 | 0.237 | 0.266 |
| 2 | 3 | | | | | | | 22 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 16 | 5 | 3 | 2.48 | 0.237 | 0.266 |
| 2 | 4 | | | | | | | 22 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 3/16" | 5 | 3 | 2.48 | 0.237 | 0.266 |
| 2 | 5 | | | | | | | 20 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 16 | 5 | 3 | 2.48 | 0.237 | 0.266 |
| 2 | 6 | | | | | | | 20 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 3/16" | 5 | 3 | 2.48 | 0.237 | 0.266 |
| 2 | 7 | | | | | | | 18 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 16 | 5 | 3 | 2.48 | 0.237 | 0.266 |
| 2 | 8 | | | | | | | 18 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 3/16" | 5 | 3 | 2.48 | 0.237 | 0.266 |

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# Exposed Fastener Metal Roof Panels - Panel Description and Load/Span Table Matrix

| POSITIVE (DOWNWARDS ACTING) LOAD/SPAN TABLE Appendix and Page No. | | NEGATIVE (UPLIFT) UL 580 CLASSIFICATION 90 Appendix and Page No. | | Panel Description | | | | | Fasteners | | | | Section Properties | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Appendix No. | Page No. | Appendix No. | Page No. | SERIES | Description | Configuration | Material | Gauge | Size (#14 used in evaluation) | Support Structure Thickness (GA or IN) | Qty | FS | Weight (psf) | I ($in^4$) | S ($in^3$) |
| 3 | 1 | 5 | 4, 5 and 6 | Style-Rib | Exposed Fastener Metal Roof Panel | 36" effective width and 5 ribs, each 1-1/2" high | Panel Material with Minimum Yield Strength = 50 ksi ASTM A 653/A 653M - Specification for Steel Sheet Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process. G90 Galvanized base material, optional Galvalume. | 24 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 16 | 5 | 3 | 1.19 | 0.095 | 0.116 |
| 3 | 2 | | | | | | | 24 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 3/16" | 5 | 3 | 1.19 | 0.095 | 0.116 |
| 3 | 3 | | | | | | | 22 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 16 | 5 | 3 | 1.19 | 0.095 | 0.116 |
| 3 | 4 | | | | | | | 22 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 3/16" | 5 | 3 | 1.19 | 0.095 | 0.116 |
| 3 | 5 | | | | | | | 20 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 16 | 5 | 3 | 1.19 | 0.095 | 0.116 |
| 3 | 6 | | | | | | | 20 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 3/16" | 5 | 3 | 1.19 | 0.095 | 0.116 |
| 3 | 7 | | | | | | | 18 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 16 | 5 | 3 | 1.19 | 0.095 | 0.116 |
| 3 | 8 | | | | | | | 18 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 3/16" | 5 | 3 | 1.19 | 0.095 | 0.116 |

## Exposed Fastener Metal Roof Panels - Panel Description and Load/Span Table Matrix

| POSITIVE (DOWNWARDS ACTING) LOAD/SPAN TABLE Appendix and Page No. | | NEGATIVE (UPLIFT) UL 580 CLASSIFICATION 90 Appendix and Page No. | | Panel Description | | | | | Fasteners | | | | Section Properties | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Appendix No. | Page No. | Appendix No. | Page No. | SERIES | Description | Configuration | Material | Gauge | Size (#14 used in evaluation) | Support Structure Thickness (GA or IN) | Qty | FS | Weight (psf) | I ($in^4$) | S ($in^3$) |
| 4 | 1 | 5 | 7, 8 and 9 | TR4-36 | Exposed Fastener Metal Roof Panel | 36" effective width and 4 ribs, each 1-1/2" high | Panel Material with Minimum Yield Strength = 50 ksi ASTM A 653/A 653M - Specification for Steel Sheet Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process. G90 Galvanized base material, optional Galvalume. | 24 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 16 | 5 | 3 | 1.25 | 0.099 | 0.095 |
| 4 | 2 | | | | | | | 24 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 3/16" | 5 | 3 | 1.25 | 0.099 | 0.095 |
| 4 | 3 | | | | | | | 22 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 16 | 5 | 3 | 1.25 | 0.099 | 0.095 |
| 4 | 4 | | | | | | | 22 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 3/16" | 5 | 3 | 1.25 | 0.099 | 0.095 |
| 4 | 5 | | | | | | | 20 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 16 | 5 | 3 | 1.25 | 0.099 | 0.095 |
| 4 | 6 | | | | | | | 20 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 3/16" | 5 | 3 | 1.25 | 0.099 | 0.095 |
| 4 | 7 | | | | | | | 18 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 16 | 5 | 3 | 1.25 | 0.099 | 0.095 |
| 4 | 8 | | | | | | | 18 | 1/4" diameter, #14 screws with 5/8" diameter combination washers. | 3/16" | 5 | 3 | 1.25 | 0.099 | 0.095 |

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# WIND LOAD/SPAN TABLE FOR BR5-36 - 24 Ga.

CENTRIA

5 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.092 $in^4$/ft
$S_{min}$ = 0.123 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 9.54 g | 9.54 g | 10.67 g |
| | Defl. | 7.38 | 9.90 | 9.12 |
| 25 psf | Stress | 8.53 g | 8.53 g | 9.54 g |
| | Defl. | 6.85 | 9.19 | 8.47 |
| 30 psf | Stress | 7.79 g | 7.79 g | 8.71 g |
| | Defl. | 6.45 | 8.64 | 7.97 |
| 35 psf | Stress | 7.21 g | 7.21 g | 8.06 g |
| | Defl. | 6.13 | 8.21 | 7.57 |
| 40 psf | Stress | 6.75 g | 6.75 g | 7.54 g |
| | Defl. | 5.86 | 7.85 | 7.24 |
| 45 psf | Stress | 6.36 g | 6.36 g | 7.11 g |
| | Defl. | 5.63 | 7.55 | 6.96 |
| 50 psf | Stress | 6.03 g | 6.03 g | 6.75 g |
| | Defl. | 5.44 | 7.29 | 6.72 |
| 55 psf | Stress | 5.75 g | 5.75 g | 6.43 g |
| | Defl. | 5.27 | 7.06 | 6.51 |
| 60 psf | Stress | 5.51 g | 5.51 g | 6.16 g |
| | Defl. | 5.12 | 6.86 | 6.32 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 5.29 g | 5.29 g | 5.92 g |
| | Defl. | 4.98 | 6.68 | 6.16 |
| 70 psf | Stress | 5.10 g | 5.10 g | 5.70 g |
| | Defl. | 4.86 | 6.52 | 6.01 |
| 75 psf | Stress | 4.93 g | 4.93 g | 5.51 g |
| | Defl. | 4.75 | 6.37 | 5.87 |
| 80 psf | Stress | 4.77 g | 4.77 g | 5.33 g |
| | Defl. | 4.65 | 6.23 | 5.74 |
| 85 psf | Stress | 4.63 g | 4.50 a | 5.11 a |
| | Defl. | 4.56 | 6.11 | 5.63 |
| 90 psf | Stress | 4.50 g | 4.25 a | 4.83 a |
| | Defl. | 4.47 | 5.99 | 5.52 |
| 95 psf | Stress | 4.38 g | 4.02 a | 4.57 a |
| | Defl. | 4.39 | 5.89 | 5.42 |
| 100 psf | Stress | 4.27 g | 3.82 a | 4.34 a |
| | Defl. | 4.32 | 5.79 | 5.33 |
| 105 psf | Stress | 4.16 g | 3.64 a | 4.14 a |
| | Defl. | 4.25 | 5.69 | 5.25 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 1.24 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 16 Ga. minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

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# WIND LOAD/SPAN TABLE FOR BR5-36 - 24 Ga.

CENTRIA

5 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.092 $in^4$/ft
$S_{min}$ = 0.123 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 9.54 g | 9.54 g | 10.67 g |
| | Defl. | 7.38 | 9.90 | 9.12 |
| 25 psf | Stress | 8.53 g | 8.53 g | 9.54 g |
| | Defl. | 6.85 | 9.19 | 8.47 |
| 30 psf | Stress | 7.79 g | 7.79 g | 8.71 g |
| | Defl. | 6.45 | 8.64 | 7.97 |
| 35 psf | Stress | 7.21 g | 7.21 g | 8.06 g |
| | Defl. | 6.13 | 8.21 | 7.57 |
| 40 psf | Stress | 6.75 g | 6.75 g | 7.54 g |
| | Defl. | 5.86 | 7.85 | 7.24 |
| 45 psf | Stress | 6.36 g | 6.36 g | 7.11 g |
| | Defl. | 5.63 | 7.55 | 6.96 |
| 50 psf | Stress | 6.03 g | 6.03 g | 6.75 g |
| | Defl. | 5.44 | 7.29 | 6.72 |
| 55 psf | Stress | 5.75 g | 5.75 g | 6.43 g |
| | Defl. | 5.27 | 7.06 | 6.51 |
| 60 psf | Stress | 5.51 g | 5.51 g | 6.16 g |
| | Defl. | 5.12 | 6.86 | 6.32 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 5.29 g | 5.29 g | 5.92 g |
| | Defl. | 4.98 | 6.68 | 6.16 |
| 70 psf | Stress | 5.10 g | 5.10 g | 5.70 g |
| | Defl. | 4.86 | 6.52 | 6.01 |
| 75 psf | Stress | 4.93 g | 4.93 g | 5.51 g |
| | Defl. | 4.75 | 6.37 | 5.87 |
| 80 psf | Stress | 4.77 g | 4.77 g | 5.33 g |
| | Defl. | 4.65 | 6.23 | 5.74 |
| 85 psf | Stress | 4.63 g | 4.63 g | 5.17 g |
| | Defl. | 4.56 | 6.11 | 5.63 |
| 90 psf | Stress | 4.50 g | 4.50 g | 5.03 g |
| | Defl. | 4.47 | 5.99 | 5.52 |
| 95 psf | Stress | 4.38 g | 4.38 g | 4.89 g |
| | Defl. | 4.39 | 5.89 | 5.42 |
| 100 psf | Stress | 4.27 g | 4.27 g | 4.77 g |
| | Defl. | 4.32 | 5.79 | 5.33 |
| 105 psf | Stress | 4.16 g | 4.12 b | 4.66 g |
| | Defl. | 4.25 | 5.69 | 5.25 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 1.24 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 3/16" minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

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# WIND LOAD/SPAN TABLE FOR BR5-36 - 22 Ga.

CENTRIA

5 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.124 $in^4$/ft
$S_{min}$ = 0.157 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 10.78 g | 10.78 g | 12.05 g |
| | Defl. | 8.16 | 10.93 | 10.07 |
| 25 psf | Stress | 9.64 g | 9.64 g | 10.78 g |
| | Defl. | 7.57 | 10.15 | 9.35 |
| 30 psf | Stress | 8.80 g | 8.80 g | 9.84 g |
| | Defl. | 7.12 | 9.55 | 8.80 |
| 35 psf | Stress | 8.15 g | 8.15 g | 9.11 g |
| | Defl. | 6.77 | 9.07 | 8.36 |
| 40 psf | Stress | 7.62 g | 7.62 g | 8.52 g |
| | Defl. | 6.47 | 8.68 | 7.99 |
| 45 psf | Stress | 7.19 g | 7.19 g | 8.03 g |
| | Defl. | 6.22 | 8.34 | 7.69 |
| 50 psf | Stress | 6.82 g | 6.82 g | 7.62 g |
| | Defl. | 6.01 | 8.05 | 7.42 |
| 55 psf | Stress | 6.50 g | 6.50 g | 7.27 g |
| | Defl. | 5.82 | 7.80 | 7.19 |
| 60 psf | Stress | 6.22 g | 6.22 g | 6.96 g |
| | Defl. | 5.65 | 7.58 | 6.98 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 5.98 g | 5.88 a | 6.68 a |
| | Defl. | 5.51 | 7.38 | 6.80 |
| 70 psf | Stress | 5.76 g | 5.46 a | 6.20 a |
| | Defl. | 5.37 | 7.20 | 6.63 |
| 75 psf | Stress | 5.57 g | 5.10 a | 5.79 a |
| | Defl. | 5.25 | 7.04 | 6.48 |
| 80 psf | Stress | 5.39 g | 4.78 a | 5.43 a |
| | Defl. | 5.14 | 6.89 | 6.35 |
| 85 psf | Stress | 5.23 g | 4.50 a | 5.11 a |
| | Defl. | 5.04 | 6.75 | 6.22 |
| 90 psf | Stress | 5.08 g | 4.25 a | 4.83 a |
| | Defl. | 4.94 | 6.62 | 6.10 |
| 95 psf | Stress | 4.95 g | 4.02 a | 4.57 a |
| | Defl. | 4.85 | 6.50 | 5.99 |
| 100 psf | Stress | 4.82 g | 3.82 a | 4.34 a |
| | Defl. | 4.77 | 6.39 | 5.89 |
| 105 psf | Stress | 4.70 g | 3.64 a | 4.14 a |
| | Defl. | 4.69 | 6.29 | 5.80 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 1.55 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 16 Ga. minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

4/5/13



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# WIND LOAD/SPAN TABLE FOR BR5-36 - 22 Ga.

CENTRIA

5 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.124 $in^4$/ft
$S_{min}$ = 0.157 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 10.78 g | 10.78 g | 12.05 g |
| | Defl. | 8.16 | 10.93 | 10.07 |
| 25 psf | Stress | 9.64 g | 9.64 g | 10.78 g |
| | Defl. | 7.57 | 10.15 | 9.35 |
| 30 psf | Stress | 8.80 g | 8.80 g | 9.84 g |
| | Defl. | 7.12 | 9.55 | 8.80 |
| 35 psf | Stress | 8.15 g | 8.15 g | 9.11 g |
| | Defl. | 6.77 | 9.07 | 8.36 |
| 40 psf | Stress | 7.62 g | 7.62 g | 8.52 g |
| | Defl. | 6.47 | 8.68 | 7.99 |
| 45 psf | Stress | 7.19 g | 7.19 g | 8.03 g |
| | Defl. | 6.22 | 8.34 | 7.69 |
| 50 psf | Stress | 6.82 g | 6.82 g | 7.62 g |
| | Defl. | 6.01 | 8.05 | 7.42 |
| 55 psf | Stress | 6.50 g | 6.50 g | 7.27 g |
| | Defl. | 5.82 | 7.80 | 7.19 |
| 60 psf | Stress | 6.22 g | 6.22 g | 6.96 g |
| | Defl. | 5.65 | 7.58 | 6.98 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 5.98 g | 5.98 g | 6.68 g |
| | Defl. | 5.51 | 7.38 | 6.80 |
| 70 psf | Stress | 5.76 g | 5.76 g | 6.44 g |
| | Defl. | 5.37 | 7.20 | 6.63 |
| 75 psf | Stress | 5.57 g | 5.57 g | 6.22 g |
| | Defl. | 5.25 | 7.04 | 6.48 |
| 80 psf | Stress | 5.39 g | 5.39 g | 6.03 g |
| | Defl. | 5.14 | 6.89 | 6.35 |
| 85 psf | Stress | 5.23 g | 5.23 g | 5.85 g |
| | Defl. | 5.04 | 6.75 | 6.22 |
| 90 psf | Stress | 5.08 g | 5.08 g | 5.68 g |
| | Defl. | 4.94 | 6.62 | 6.10 |
| 95 psf | Stress | 4.95 g | 4.95 g | 5.53 g |
| | Defl. | 4.85 | 6.50 | 5.99 |
| 100 psf | Stress | 4.82 g | 4.82 g | 5.39 g |
| | Defl. | 4.77 | 6.39 | 5.89 |
| 105 psf | Stress | 4.70 g | 4.70 g | 5.26 g |
| | Defl. | 4.69 | 6.29 | 5.80 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 1.55 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 3/16" minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

4/5/13

# WIND LOAD/SPAN TABLE FOR BR5-36 - 20 Ga.

CENTRIA

5 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.159 $in^4$/ft
$S_{min}$ = 0.193 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 11.95 g | 11.95 g | 13.36 g |
| | Defl. | 8.86 | 11.87 | 10.94 |
| 25 psf | Stress | 10.69 g | 10.69 g | 11.95 g |
| | Defl. | 8.23 | 11.02 | 10.16 |
| 30 psf | Stress | 9.76 g | 9.76 g | 10.91 g |
| | Defl. | 7.74 | 10.37 | 9.56 |
| 35 psf | Stress | 9.03 g | 9.03 g | 10.10 g |
| | Defl. | 7.35 | 9.85 | 9.08 |
| 40 psf | Stress | 8.45 g | 8.45 g | 9.45 g |
| | Defl. | 7.03 | 9.42 | 8.69 |
| 45 psf | Stress | 7.97 g | 7.97 g | 8.91 g |
| | Defl. | 6.76 | 9.06 | 8.35 |
| 50 psf | Stress | 7.56 g | 7.56 g | 8.45 g |
| | Defl. | 6.53 | 8.75 | 8.06 |
| 55 psf | Stress | 7.21 g | 6.95 a | 7.90 a |
| | Defl. | 6.32 | 8.48 | 7.81 |
| 60 psf | Stress | 6.90 g | 6.37 a | 7.24 a |
| | Defl. | 6.14 | 8.23 | 7.59 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 6.63 g | 5.88 a | 6.68 a |
| | Defl. | 5.98 | 8.02 | 7.39 |
| 70 psf | Stress | 6.39 g | 5.46 a | 6.20 a |
| | Defl. | 5.84 | 7.82 | 7.21 |
| 75 psf | Stress | 6.17 g | 5.10 a | 5.79 a |
| | Defl. | 5.70 | 7.64 | 7.04 |
| 80 psf | Stress | 5.98 g | 4.78 a | 5.43 a |
| | Defl. | 5.58 | 7.48 | 6.89 |
| 85 psf | Stress | 5.80 g | 4.50 a | 5.11 a |
| | Defl. | 5.47 | 7.33 | 6.76 |
| 90 psf | Stress | 5.63 g | 4.25 a | 4.83 a |
| | Defl. | 5.37 | 7.19 | 6.63 |
| 95 psf | Stress | 5.48 g | 4.02 a | 4.57 a |
| | Defl. | 5.27 | 7.06 | 6.51 |
| 100 psf | Stress | 5.34 g | 3.82 a | 4.34 a |
| | Defl. | 5.18 | 6.94 | 6.40 |
| 105 psf | Stress | 5.22 g | 3.64 a | 4.14 a |
| | Defl. | 5.10 | 6.83 | 6.30 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 1.86 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 16 Ga. minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

4/5/13



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# WIND LOAD/SPAN TABLE FOR BR5-36 - 20 Ga.

CENTRIA

5 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.159 $in^4$/ft
$S_{min}$ = 0.193 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 11.95 g | 11.95 g | 13.36 g |
| | Defl. | 8.86 | 11.87 | 10.94 |
| 25 psf | Stress | 10.69 g | 10.69 g | 11.95 g |
| | Defl. | 8.23 | 11.02 | 10.16 |
| 30 psf | Stress | 9.76 g | 9.76 g | 10.91 g |
| | Defl. | 7.74 | 10.37 | 9.56 |
| 35 psf | Stress | 9.03 g | 9.03 g | 10.10 g |
| | Defl. | 7.35 | 9.85 | 9.08 |
| 40 psf | Stress | 8.45 g | 8.45 g | 9.45 g |
| | Defl. | 7.03 | 9.42 | 8.69 |
| 45 psf | Stress | 7.97 g | 7.97 g | 8.91 g |
| | Defl. | 6.76 | 9.06 | 8.35 |
| 50 psf | Stress | 7.56 g | 7.56 g | 8.45 g |
| | Defl. | 6.53 | 8.75 | 8.06 |
| 55 psf | Stress | 7.21 g | 7.21 g | 8.06 g |
| | Defl. | 6.32 | 8.48 | 7.81 |
| 60 psf | Stress | 6.90 g | 6.90 g | 7.71 g |
| | Defl. | 6.14 | 8.23 | 7.59 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 6.63 g | 6.63 g | 7.41 g |
| | Defl. | 5.98 | 8.02 | 7.39 |
| 70 psf | Stress | 6.39 g | 6.39 g | 7.14 g |
| | Defl. | 5.84 | 7.82 | 7.21 |
| 75 psf | Stress | 6.17 g | 6.17 g | 6.90 g |
| | Defl. | 5.70 | 7.64 | 7.04 |
| 80 psf | Stress | 5.98 g | 5.98 g | 6.68 g |
| | Defl. | 5.58 | 7.48 | 6.89 |
| 85 psf | Stress | 5.80 g | 5.80 g | 6.48 g |
| | Defl. | 5.47 | 7.33 | 6.76 |
| 90 psf | Stress | 5.63 g | 5.63 g | 6.30 g |
| | Defl. | 5.37 | 7.19 | 6.63 |
| 95 psf | Stress | 5.48 g | 5.48 g | 6.13 g |
| | Defl. | 5.27 | 7.06 | 6.51 |
| 100 psf | Stress | 5.34 g | 5.34 g | 5.98 g |
| | Defl. | 5.18 | 6.94 | 6.40 |
| 105 psf | Stress | 5.22 g | 5.22 g | 5.83 g |
| | Defl. | 5.10 | 6.83 | 6.30 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 1.86 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 3/16" minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

4/5/13

# WIND LOAD/SPAN TABLE FOR BR5-36 - 18 Ga.

CENTRIA

5 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.237 $in^4$/ft
$S_{min}$ = 0.266 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 14.03 g | 14.03 g | 15.69 g |
| | Defl. | 10.12 | 13.56 | 12.50 |
| 25 psf | Stress | 12.55 g | 12.55 g | 14.03 g |
| | Defl. | 9.40 | 12.59 | 11.60 |
| 30 psf | Stress | 11.46 g | 11.46 g | 12.81 g |
| | Defl. | 8.84 | 11.85 | 10.92 |
| 35 psf | Stress | 10.61 g | 10.61 g | 11.86 g |
| | Defl. | 8.40 | 11.26 | 10.37 |
| 40 psf | Stress | 9.92 g | 9.56 a | 10.86 a |
| | Defl. | 8.03 | 10.77 | 9.92 |
| 45 psf | Stress | 9.35 g | 8.49 a | 9.65 a |
| | Defl. | 7.72 | 10.35 | 9.54 |
| 50 psf | Stress | 8.87 g | 7.64 a | 8.69 a |
| | Defl. | 7.46 | 9.99 | 9.21 |
| 55 psf | Stress | 8.46 g | 6.95 a | 7.90 a |
| | Defl. | 7.22 | 9.68 | 8.92 |
| 60 psf | Stress | 8.10 g | 6.37 a | 7.24 a |
| | Defl. | 7.02 | 9.41 | 8.67 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 7.78 g | 5.88 a | 6.68 a |
| | Defl. | 6.83 | 9.16 | 8.44 |
| 70 psf | Stress | 7.50 g | 5.46 a | 6.20 a |
| | Defl. | 6.67 | 8.93 | 8.23 |
| 75 psf | Stress | 7.25 g | 5.10 a | 5.79 a |
| | Defl. | 6.51 | 8.73 | 8.05 |
| 80 psf | Stress | 7.01 g | 4.78 a | 5.43 a |
| | Defl. | 6.38 | 8.55 | 7.87 |
| 85 psf | Stress | 6.81 g | 4.50 a | 5.11 a |
| | Defl. | 6.25 | 8.37 | 7.72 |
| 90 psf | Stress | 6.61 g | 4.25 a | 4.83 a |
| | Defl. | 6.13 | 8.22 | 7.57 |
| 95 psf | Stress | 6.44 g | 4.02 a | 4.57 a |
| | Defl. | 6.02 | 8.07 | 7.44 |
| 100 psf | Stress | 6.27 g | 3.82 a | 4.34 a |
| | Defl. | 5.92 | 7.93 | 7.31 |
| 105 psf | Stress | 6.12 g | 3.64 a | 4.14 a |
| | Defl. | 5.82 | 7.80 | 7.19 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 2.48 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 16 Ga. minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

4/5/13



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CENTRIA

5 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.237 $in^4$/ft
$S_{min}$ = 0.266 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 14.03 g | 14.03 g | 15.69 g |
| | Defl. | 10.12 | 13.56 | 12.50 |
| 25 psf | Stress | 12.55 g | 12.55 g | 14.03 g |
| | Defl. | 9.40 | 12.59 | 11.60 |
| 30 psf | Stress | 11.46 g | 11.46 g | 12.81 g |
| | Defl. | 8.84 | 11.85 | 10.92 |
| 35 psf | Stress | 10.61 g | 10.61 g | 11.86 g |
| | Defl. | 8.40 | 11.26 | 10.37 |
| 40 psf | Stress | 9.92 g | 9.92 g | 11.09 g |
| | Defl. | 8.03 | 10.77 | 9.92 |
| 45 psf | Stress | 9.35 g | 9.35 g | 10.46 g |
| | Defl. | 7.72 | 10.35 | 9.54 |
| 50 psf | Stress | 8.87 g | 8.87 g | 9.92 g |
| | Defl. | 7.46 | 9.99 | 9.21 |
| 55 psf | Stress | 8.46 g | 8.46 g | 9.46 g |
| | Defl. | 7.22 | 9.68 | 8.92 |
| 60 psf | Stress | 8.10 g | 8.10 g | 9.06 g |
| | Defl. | 7.02 | 9.41 | 8.67 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 7.78 g | 7.78 g | 8.70 g |
| | Defl. | 6.83 | 9.16 | 8.44 |
| 70 psf | Stress | 7.50 g | 7.50 g | 8.38 g |
| | Defl. | 6.67 | 8.93 | 8.23 |
| 75 psf | Stress | 7.25 g | 7.25 g | 8.10 g |
| | Defl. | 6.51 | 8.73 | 8.05 |
| 80 psf | Stress | 7.01 g | 7.01 g | 7.84 g |
| | Defl. | 6.38 | 8.55 | 7.87 |
| 85 psf | Stress | 6.81 g | 6.81 g | 7.61 g |
| | Defl. | 6.25 | 8.37 | 7.72 |
| 90 psf | Stress | 6.61 g | 6.61 g | 7.39 g |
| | Defl. | 6.13 | 8.22 | 7.57 |
| 95 psf | Stress | 6.44 g | 6.44 g | 7.20 g |
| | Defl. | 6.02 | 8.07 | 7.44 |
| 100 psf | Stress | 6.27 g | 6.27 g | 7.01 g |
| | Defl. | 5.92 | 7.93 | 7.31 |
| 105 psf | Stress | 6.12 g | 6.12 g | 6.85 g |
| | Defl. | 5.82 | 7.80 | 7.19 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 2.48 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 3/16" minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

4/5/13

# WIND LOAD/SPAN TABLE FOR
# Style-Rib - 24 Ga.

CENTRIA

5 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.095 $in^4$/ft
$S_{min}$ = 0.116 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 9.26 g | 9.26 g | 10.36 g |
| | Defl. | 7.46 | 10.00 | 9.22 |
| 25 psf | Stress | 8.29 g | 8.29 g | 9.26 g |
| | Defl. | 6.93 | 9.28 | 8.56 |
| 30 psf | Stress | 7.56 g | 7.56 g | 8.46 g |
| | Defl. | 6.52 | 8.74 | 8.05 |
| 35 psf | Stress | 7.00 g | 7.00 g | 7.83 g |
| | Defl. | 6.19 | 8.30 | 7.65 |
| 40 psf | Stress | 6.55 g | 6.55 g | 7.32 g |
| | Defl. | 5.92 | 7.94 | 7.32 |
| 45 psf | Stress | 6.18 g | 6.18 g | 6.91 g |
| | Defl. | 5.70 | 7.63 | 7.03 |
| 50 psf | Stress | 5.86 g | 5.86 g | 6.55 g |
| | Defl. | 5.50 | 7.37 | 6.79 |
| 55 psf | Stress | 5.59 g | 5.59 g | 6.25 g |
| | Defl. | 5.33 | 7.14 | 6.58 |
| 60 psf | Stress | 5.35 g | 5.35 g | 5.98 g |
| | Defl. | 5.17 | 6.93 | 6.39 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 5.14 g | 5.14 g | 5.75 g |
| | Defl. | 5.04 | 6.75 | 6.22 |
| 70 psf | Stress | 4.95 g | 4.95 g | 5.54 g |
| | Defl. | 4.92 | 6.59 | 6.07 |
| 75 psf | Stress | 4.78 g | 4.78 g | 5.35 g |
| | Defl. | 4.80 | 6.44 | 5.93 |
| 80 psf | Stress | 4.63 g | 4.63 g | 5.18 g |
| | Defl. | 4.70 | 6.30 | 5.81 |
| 85 psf | Stress | 4.49 g | 4.49 g | 5.02 g |
| | Defl. | 4.61 | 6.17 | 5.69 |
| 90 psf | Stress | 4.37 g | 4.25 a | 4.83 a |
| | Defl. | 4.52 | 6.06 | 5.58 |
| 95 psf | Stress | 4.25 g | 4.02 a | 4.57 a |
| | Defl. | 4.44 | 5.95 | 5.48 |
| 100 psf | Stress | 4.14 g | 3.82 a | 4.34 a |
| | Defl. | 4.36 | 5.85 | 5.39 |
| 105 psf | Stress | 4.04 g | 3.64 a | 4.14 a |
| | Defl. | 4.29 | 5.75 | 5.30 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 1.19 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 16 Ga. minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

4/5/13

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# WIND LOAD/SPAN TABLE FOR
# Style-Rib - 24 Ga.

CENTRIA

5 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.095 $in^4$/ft
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Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 9.26 g | 9.26 g | 10.36 g |
| | Defl. | 7.46 | 10.00 | 9.22 |
| 25 psf | Stress | 8.29 g | 8.29 g | 9.26 g |
| | Defl. | 6.93 | 9.28 | 8.56 |
| 30 psf | Stress | 7.56 g | 7.56 g | 8.46 g |
| | Defl. | 6.52 | 8.74 | 8.05 |
| 35 psf | Stress | 7.00 g | 7.00 g | 7.83 g |
| | Defl. | 6.19 | 8.30 | 7.65 |
| 40 psf | Stress | 6.55 g | 6.55 g | 7.32 g |
| | Defl. | 5.92 | 7.94 | 7.32 |
| 45 psf | Stress | 6.18 g | 6.18 g | 6.91 g |
| | Defl. | 5.70 | 7.63 | 7.03 |
| 50 psf | Stress | 5.86 g | 5.86 g | 6.55 g |
| | Defl. | 5.50 | 7.37 | 6.79 |
| 55 psf | Stress | 5.59 g | 5.59 g | 6.25 g |
| | Defl. | 5.33 | 7.14 | 6.58 |
| 60 psf | Stress | 5.35 g | 5.35 g | 5.98 g |
| | Defl. | 5.17 | 6.93 | 6.39 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 5.14 g | 5.14 g | 5.75 g |
| | Defl. | 5.04 | 6.75 | 6.22 |
| 70 psf | Stress | 4.95 g | 4.95 g | 5.54 g |
| | Defl. | 4.92 | 6.59 | 6.07 |
| 75 psf | Stress | 4.78 g | 4.78 g | 5.35 g |
| | Defl. | 4.80 | 6.44 | 5.93 |
| 80 psf | Stress | 4.63 g | 4.63 g | 5.18 g |
| | Defl. | 4.70 | 6.30 | 5.81 |
| 85 psf | Stress | 4.49 g | 4.49 g | 5.02 g |
| | Defl. | 4.61 | 6.17 | 5.69 |
| 90 psf | Stress | 4.37 g | 4.37 g | 4.88 g |
| | Defl. | 4.52 | 6.06 | 5.58 |
| 95 psf | Stress | 4.25 g | 4.25 g | 4.75 g |
| | Defl. | 4.44 | 5.95 | 5.48 |
| 100 psf | Stress | 4.14 g | 4.14 g | 4.63 g |
| | Defl. | 4.36 | 5.85 | 5.39 |
| 105 psf | Stress | 4.04 g | 4.04 g | 4.52 g |
| | Defl. | 4.29 | 5.75 | 5.30 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
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3. Panel weight = 1.19 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 3/16" minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

4/5/13

# WIND LOAD/SPAN TABLE FOR
# Style-Rib - 22 Ga.

CENTRIA

5 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.125 $in^4$/ft
$S_{min}$ = 0.157 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 10.78 g | 10.78 g | 12.05 g |
| | Defl. | 8.18 | 10.96 | 10.10 |
| 25 psf | Stress | 9.64 g | 9.64 g | 10.78 g |
| | Defl. | 7.59 | 10.17 | 9.38 |
| 30 psf | Stress | 8.80 g | 8.80 g | 9.84 g |
| | Defl. | 7.14 | 9.57 | 8.82 |
| 35 psf | Stress | 8.15 g | 8.15 g | 9.11 g |
| | Defl. | 6.79 | 9.09 | 8.38 |
| 40 psf | Stress | 7.62 g | 7.62 g | 8.52 g |
| | Defl. | 6.49 | 8.70 | 8.02 |
| 45 psf | Stress | 7.19 g | 7.19 g | 8.03 g |
| | Defl. | 6.24 | 8.36 | 7.71 |
| 50 psf | Stress | 6.82 g | 6.82 g | 7.62 g |
| | Defl. | 6.03 | 8.08 | 7.44 |
| 55 psf | Stress | 6.50 g | 6.50 g | 7.27 g |
| | Defl. | 5.84 | 7.82 | 7.21 |
| 60 psf | Stress | 6.22 g | 6.22 g | 6.96 g |
| | Defl. | 5.67 | 7.60 | 7.00 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 5.98 g | 5.88 a | 6.68 a |
| | Defl. | 5.52 | 7.40 | 6.82 |
| 70 psf | Stress | 5.76 g | 5.46 a | 6.20 a |
| | Defl. | 5.39 | 7.22 | 6.65 |
| 75 psf | Stress | 5.57 g | 5.10 a | 5.79 a |
| | Defl. | 5.26 | 7.05 | 6.50 |
| 80 psf | Stress | 5.39 g | 4.78 a | 5.43 a |
| | Defl. | 5.15 | 6.90 | 6.36 |
| 85 psf | Stress | 5.23 g | 4.50 a | 5.11 a |
| | Defl. | 5.05 | 6.77 | 6.24 |
| 90 psf | Stress | 5.08 g | 4.25 a | 4.83 a |
| | Defl. | 4.95 | 6.64 | 6.12 |
| 95 psf | Stress | 4.95 g | 4.02 a | 4.57 a |
| | Defl. | 4.86 | 6.52 | 6.01 |
| 100 psf | Stress | 4.82 g | 3.82 a | 4.34 a |
| | Defl. | 4.78 | 6.41 | 5.91 |
| 105 psf | Stress | 4.70 g | 3.64 a | 4.14 a |
| | Defl. | 4.71 | 6.31 | 5.81 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 1.48 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 16 Ga. minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

4/5/13



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# WIND LOAD/SPAN TABLE FOR
## Style-Rib - 22 Ga.

CENTRIA

5 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.125 $in^4$/ft
$S_{min}$ = 0.157 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 10.78 g | 10.78 g | 12.05 g |
| | Defl. | 8.18 | 10.96 | 10.10 |
| 25 psf | Stress | 9.64 g | 9.64 g | 10.78 g |
| | Defl. | 7.59 | 10.17 | 9.38 |
| 30 psf | Stress | 8.80 g | 8.80 g | 9.84 g |
| | Defl. | 7.14 | 9.57 | 8.82 |
| 35 psf | Stress | 8.15 g | 8.15 g | 9.11 g |
| | Defl. | 6.79 | 9.09 | 8.38 |
| 40 psf | Stress | 7.62 g | 7.62 g | 8.52 g |
| | Defl. | 6.49 | 8.70 | 8.02 |
| 45 psf | Stress | 7.19 g | 7.19 g | 8.03 g |
| | Defl. | 6.24 | 8.36 | 7.71 |
| 50 psf | Stress | 6.82 g | 6.82 g | 7.62 g |
| | Defl. | 6.03 | 8.08 | 7.44 |
| 55 psf | Stress | 6.50 g | 6.50 g | 7.27 g |
| | Defl. | 5.84 | 7.82 | 7.21 |
| 60 psf | Stress | 6.22 g | 6.22 g | 6.96 g |
| | Defl. | 5.67 | 7.60 | 7.00 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 5.98 g | 5.98 g | 6.68 g |
| | Defl. | 5.52 | 7.40 | 6.82 |
| 70 psf | Stress | 5.76 g | 5.76 g | 6.44 g |
| | Defl. | 5.39 | 7.22 | 6.65 |
| 75 psf | Stress | 5.57 g | 5.57 g | 6.22 g |
| | Defl. | 5.26 | 7.05 | 6.50 |
| 80 psf | Stress | 5.39 g | 5.39 g | 6.03 g |
| | Defl. | 5.15 | 6.90 | 6.36 |
| 85 psf | Stress | 5.23 g | 5.23 g | 5.85 g |
| | Defl. | 5.05 | 6.77 | 6.24 |
| 90 psf | Stress | 5.08 g | 5.08 g | 5.68 g |
| | Defl. | 4.95 | 6.64 | 6.12 |
| 95 psf | Stress | 4.95 g | 4.95 g | 5.53 g |
| | Defl. | 4.86 | 6.52 | 6.01 |
| 100 psf | Stress | 4.82 g | 4.82 g | 5.39 g |
| | Defl. | 4.78 | 6.41 | 5.91 |
| 105 psf | Stress | 4.70 g | 4.70 g | 5.26 g |
| | Defl. | 4.71 | 6.31 | 5.81 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 1.48 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 3/16" minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

4/5/13



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# WIND LOAD/SPAN TABLE FOR
## Style-Rib - 20 Ga.

CENTRIA

5 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.157 $in^4$/ft
$S_{min}$ = 0.200 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | | Double Span | | Triple Span | |
|---|---|---|---|---|---|---|---|
| 20 | Stress | 12.17 | g | 12.17 | g | 13.60 | g |
| psf | Defl. | 8.82 | | 11.82 | | 10.90 | |
| 25 | Stress | 10.88 | g | 10.88 | g | 12.17 | g |
| psf | Defl. | 8.19 | | 10.98 | | 10.12 | |
| 30 | Stress | 9.93 | g | 9.93 | g | 11.11 | g |
| psf | Defl. | 7.71 | | 10.33 | | 9.52 | |
| 35 | Stress | 9.20 | g | 9.20 | g | 10.28 | g |
| psf | Defl. | 7.32 | | 9.81 | | 9.04 | |
| 40 | Stress | 8.60 | g | 8.60 | g | 9.62 | g |
| psf | Defl. | 7.00 | | 9.39 | | 8.65 | |
| 45 | Stress | 8.11 | g | 8.11 | g | 9.07 | g |
| psf | Defl. | 6.73 | | 9.02 | | 8.32 | |
| 50 | Stress | 7.69 | g | 7.64 | a | 8.60 | g |
| psf | Defl. | 6.50 | | 8.71 | | 8.03 | |
| 55 | Stress | 7.34 | g | 6.95 | a | 7.90 | a |
| psf | Defl. | 6.30 | | 8.44 | | 7.78 | |
| 60 | Stress | 7.02 | g | 6.37 | a | 7.24 | a |
| psf | Defl. | 6.12 | | 8.20 | | 7.56 | |

| Load | | Single Span | | Double Span | | Triple Span | |
|---|---|---|---|---|---|---|---|
| 65 | Stress | 6.75 | g | 5.88 | a | 6.68 | a |
| psf | Defl. | 5.96 | | 7.98 | | 7.36 | |
| 70 | Stress | 6.50 | g | 5.46 | a | 6.20 | a |
| psf | Defl. | 5.81 | | 7.79 | | 7.18 | |
| 75 | Stress | 6.28 | g | 5.10 | a | 5.79 | a |
| psf | Defl. | 5.68 | | 7.61 | | 7.01 | |
| 80 | Stress | 6.08 | g | 4.78 | a | 5.43 | a |
| psf | Defl. | 5.56 | | 7.45 | | 6.86 | |
| 85 | Stress | 5.90 | g | 4.50 | a | 5.11 | a |
| psf | Defl. | 5.45 | | 7.30 | | 6.73 | |
| 90 | Stress | 5.73 | g | 4.25 | a | 4.83 | a |
| psf | Defl. | 5.34 | | 7.16 | | 6.60 | |
| 95 | Stress | 5.58 | g | 4.02 | a | 4.57 | a |
| psf | Defl. | 5.25 | | 7.03 | | 6.48 | |
| 100 | Stress | 5.44 | g | 3.82 | a | 4.34 | a |
| psf | Defl. | 5.16 | | 6.92 | | 6.37 | |
| 105 | Stress | 5.31 | g | 3.64 | a | 4.14 | a |
| psf | Defl. | 5.08 | | 6.80 | | 6.27 | |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 1.78 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 16 Ga. minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

4/5/13



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# WIND LOAD/SPAN TABLE FOR
## Style-Rib - 20 Ga.

CENTRIA

5 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.157 $in^4$/ft
$S_{min}$ = 0.200 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 12.17 g | 12.17 g | 13.60 g |
| | Defl. | 8.82 | 11.82 | 10.90 |
| 25 psf | Stress | 10.88 g | 10.88 g | 12.17 g |
| | Defl. | 8.19 | 10.98 | 10.12 |
| 30 psf | Stress | 9.93 g | 9.93 g | 11.11 g |
| | Defl. | 7.71 | 10.33 | 9.52 |
| 35 psf | Stress | 9.20 g | 9.20 g | 10.28 g |
| | Defl. | 7.32 | 9.81 | 9.04 |
| 40 psf | Stress | 8.60 g | 8.60 g | 9.62 g |
| | Defl. | 7.00 | 9.39 | 8.65 |
| 45 psf | Stress | 8.11 g | 8.11 g | 9.07 g |
| | Defl. | 6.73 | 9.02 | 8.32 |
| 50 psf | Stress | 7.69 g | 7.69 g | 8.60 g |
| | Defl. | 6.50 | 8.71 | 8.03 |
| 55 psf | Stress | 7.34 g | 7.34 g | 8.20 g |
| | Defl. | 6.30 | 8.44 | 7.78 |
| 60 psf | Stress | 7.02 g | 7.02 g | 7.85 g |
| | Defl. | 6.12 | 8.20 | 7.56 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 6.75 g | 6.75 g | 7.54 g |
| | Defl. | 5.96 | 7.98 | 7.36 |
| 70 psf | Stress | 6.50 g | 6.50 g | 7.27 g |
| | Defl. | 5.81 | 7.79 | 7.18 |
| 75 psf | Stress | 6.28 g | 6.28 g | 7.02 g |
| | Defl. | 5.68 | 7.61 | 7.01 |
| 80 psf | Stress | 6.08 g | 6.08 g | 6.80 g |
| | Defl. | 5.56 | 7.45 | 6.86 |
| 85 psf | Stress | 5.90 g | 5.90 g | 6.60 g |
| | Defl. | 5.45 | 7.30 | 6.73 |
| 90 psf | Stress | 5.73 g | 5.73 g | 6.41 g |
| | Defl. | 5.34 | 7.16 | 6.60 |
| 95 psf | Stress | 5.58 g | 5.58 g | 6.24 g |
| | Defl. | 5.25 | 7.03 | 6.48 |
| 100 psf | Stress | 5.44 g | 5.44 g | 6.08 g |
| | Defl. | 5.16 | 6.92 | 6.37 |
| 105 psf | Stress | 5.31 g | 5.31 g | 5.94 g |
| | Defl. | 5.08 | 6.80 | 6.27 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 1.78 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 3/16" minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

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# WIND LOAD/SPAN TABLE FOR
## Style-Rib - 18 Ga.

CENTRIA

5 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.224 $in^4$/ft
$S_{min}$ = 0.293 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 14.72 g | 14.72 g | 16.46 g |
| | Defl. | 9.93 | 13.31 | 12.27 |
| 25 psf | Stress | 13.17 g | 13.17 g | 14.72 g |
| | Defl. | 9.22 | 12.36 | 11.39 |
| 30 psf | Stress | 12.02 g | 12.02 g | 13.44 g |
| | Defl. | 8.68 | 11.63 | 10.72 |
| 35 psf | Stress | 11.13 g | 10.92 a | 12.41 a |
| | Defl. | 8.24 | 11.05 | 10.18 |
| 40 psf | Stress | 10.41 g | 9.56 a | 10.86 a |
| | Defl. | 7.88 | 10.57 | 9.74 |
| 45 psf | Stress | 9.82 g | 8.49 a | 9.65 a |
| | Defl. | 7.58 | 10.16 | 9.36 |
| 50 psf | Stress | 9.31 g | 7.64 a | 8.69 a |
| | Defl. | 7.32 | 9.81 | 9.04 |
| 55 psf | Stress | 8.88 g | 6.95 a | 7.90 a |
| | Defl. | 7.09 | 9.50 | 8.76 |
| 60 psf | Stress | 8.50 g | 6.37 a | 7.24 a |
| | Defl. | 6.89 | 9.23 | 8.51 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 8.17 g | 5.88 a | 6.68 a |
| | Defl. | 6.71 | 8.99 | 8.28 |
| 70 psf | Stress | 7.87 g | 5.46 a | 6.20 a |
| | Defl. | 6.54 | 8.77 | 8.08 |
| 75 psf | Stress | 7.60 g | 5.10 a | 5.79 a |
| | Defl. | 6.39 | 8.57 | 7.90 |
| 80 psf | Stress | 7.36 g | 4.78 a | 5.43 a |
| | Defl. | 6.26 | 8.39 | 7.73 |
| 85 psf | Stress | 7.14 g | 4.50 a | 5.11 a |
| | Defl. | 6.13 | 8.22 | 7.57 |
| 90 psf | Stress | 6.94 g | 4.25 a | 4.83 a |
| | Defl. | 6.02 | 8.06 | 7.43 |
| 95 psf | Stress | 6.76 g | 4.02 a | 4.57 a |
| | Defl. | 5.91 | 7.92 | 7.30 |
| 100 psf | Stress | 6.59 g | 3.82 a | 4.34 a |
| | Defl. | 5.81 | 7.78 | 7.17 |
| 105 psf | Stress | 6.43 g | 3.64 a | 4.14 a |
| | Defl. | 5.72 | 7.66 | 7.06 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 2.37 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 16 Ga. minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

4/5/13



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# WIND LOAD/SPAN TABLE FOR
# Style-Rib - 18 Ga.

CENTRIA

5 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.224 $in^4$/ft
$S_{min}$ = 0.293 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 14.72 g | 14.72 g | 16.46 g |
| | Defl. | 9.93 | 13.31 | 12.27 |
| 25 psf | Stress | 13.17 g | 13.17 g | 14.72 g |
| | Defl. | 9.22 | 12.36 | 11.39 |
| 30 psf | Stress | 12.02 g | 12.02 g | 13.44 g |
| | Defl. | 8.68 | 11.63 | 10.72 |
| 35 psf | Stress | 11.13 g | 11.13 g | 12.44 g |
| | Defl. | 8.24 | 11.05 | 10.18 |
| 40 psf | Stress | 10.41 g | 10.41 g | 11.64 g |
| | Defl. | 7.88 | 10.57 | 9.74 |
| 45 psf | Stress | 9.82 g | 9.82 g | 10.98 g |
| | Defl. | 7.58 | 10.16 | 9.36 |
| 50 psf | Stress | 9.31 g | 9.31 g | 10.41 g |
| | Defl. | 7.32 | 9.81 | 9.04 |
| 55 psf | Stress | 8.88 g | 8.88 g | 9.93 g |
| | Defl. | 7.09 | 9.50 | 8.76 |
| 60 psf | Stress | 8.50 g | 8.50 g | 9.50 g |
| | Defl. | 6.89 | 9.23 | 8.51 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 8.17 g | 8.17 g | 9.13 g |
| | Defl. | 6.71 | 8.99 | 8.28 |
| 70 psf | Stress | 7.87 g | 7.87 g | 8.80 g |
| | Defl. | 6.54 | 8.77 | 8.08 |
| 75 psf | Stress | 7.60 g | 7.60 g | 8.50 g |
| | Defl. | 6.39 | 8.57 | 7.90 |
| 80 psf | Stress | 7.36 g | 7.36 g | 8.23 g |
| | Defl. | 6.26 | 8.39 | 7.73 |
| 85 psf | Stress | 7.14 g | 7.14 g | 7.99 g |
| | Defl. | 6.13 | 8.22 | 7.57 |
| 90 psf | Stress | 6.94 g | 6.94 g | 7.76 g |
| | Defl. | 6.02 | 8.06 | 7.43 |
| 95 psf | Stress | 6.76 g | 6.76 g | 7.55 g |
| | Defl. | 5.91 | 7.92 | 7.30 |
| 100 psf | Stress | 6.59 g | 6.59 g | 7.36 g |
| | Defl. | 5.81 | 7.78 | 7.17 |
| 105 psf | Stress | 6.43 g | 6.43 g | 7.18 g |
| | Defl. | 5.72 | 7.66 | 7.06 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 2.37 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 3/16" minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

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# WIND LOAD/SPAN TABLE FOR TR4-36 - 24 Ga.

CENTRIA

4 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.099 $in^4$/ft
$S_{min}$ = 0.095 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 8.38 g | 8.38 g | 9.37 g |
| | Defl. | 7.57 | 10.14 | 9.34 |
| 25 psf | Stress | 7.50 g | 7.50 g | 8.38 g |
| | Defl. | 7.02 | 9.41 | 8.67 |
| 30 psf | Stress | 6.85 g | 6.85 g | 7.65 g |
| | Defl. | 6.61 | 8.86 | 8.16 |
| 35 psf | Stress | 6.34 g | 6.34 g | 7.09 g |
| | Defl. | 6.28 | 8.41 | 7.75 |
| 40 psf | Stress | 5.93 g | 5.93 g | 6.63 g |
| | Defl. | 6.01 | 8.05 | 7.42 |
| 45 psf | Stress | 5.59 g | 5.59 g | 6.25 g |
| | Defl. | 5.77 | 7.74 | 7.13 |
| 50 psf | Stress | 5.30 g | 5.30 g | 5.93 g |
| | Defl. | 5.57 | 7.47 | 6.89 |
| 55 psf | Stress | 5.06 g | 5.06 g | 5.65 g |
| | Defl. | 5.40 | 7.24 | 6.67 |
| 60 psf | Stress | 4.84 g | 4.84 g | 5.41 g |
| | Defl. | 5.25 | 7.03 | 6.48 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 4.65 g | 4.65 g | 5.20 g |
| | Defl. | 5.11 | 6.85 | 6.31 |
| 70 psf | Stress | 4.48 g | 4.37 a | 4.96 a |
| | Defl. | 4.98 | 6.68 | 6.15 |
| 75 psf | Stress | 4.33 g | 4.08 a | 4.63 a |
| | Defl. | 4.87 | 6.53 | 6.01 |
| 80 psf | Stress | 4.19 g | 3.82 a | 4.34 a |
| | Defl. | 4.77 | 6.39 | 5.89 |
| 85 psf | Stress | 4.07 g | 3.60 a | 4.09 a |
| | Defl. | 4.67 | 6.26 | 5.77 |
| 90 psf | Stress | 3.95 g | 3.40 a | 3.86 a |
| | Defl. | 4.58 | 6.14 | 5.66 |
| 95 psf | Stress | 3.85 g | 3.22 a | 3.66 a |
| | Defl. | 4.50 | 6.03 | 5.56 |
| 100 psf | Stress | 3.75 g | 3.06 a | 3.47 a |
| | Defl. | 4.42 | 5.93 | 5.46 |
| 105 psf | Stress | 3.66 g | 2.91 a | 3.31 a |
| | Defl. | 4.35 | 5.83 | 5.38 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 1.25 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 16 Ga. minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

4/5/13



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# WIND LOAD/SPAN TABLE FOR TR4-36 - 24 Ga.

CENTRIA

4 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.099 $in^4$/ft
$S_{min}$ = 0.095 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 8.38 g | 8.38 g | 9.37 g |
| | Defl. | 7.57 | 10.14 | 9.34 |
| 25 psf | Stress | 7.50 g | 7.50 g | 8.38 g |
| | Defl. | 7.02 | 9.41 | 8.67 |
| 30 psf | Stress | 6.85 g | 6.85 g | 7.65 g |
| | Defl. | 6.61 | 8.86 | 8.16 |
| 35 psf | Stress | 6.34 g | 6.34 g | 7.09 g |
| | Defl. | 6.28 | 8.41 | 7.75 |
| 40 psf | Stress | 5.93 g | 5.93 g | 6.63 g |
| | Defl. | 6.01 | 8.05 | 7.42 |
| 45 psf | Stress | 5.59 g | 5.59 g | 6.25 g |
| | Defl. | 5.77 | 7.74 | 7.13 |
| 50 psf | Stress | 5.30 g | 5.30 g | 5.93 g |
| | Defl. | 5.57 | 7.47 | 6.89 |
| 55 psf | Stress | 5.06 g | 5.06 g | 5.65 g |
| | Defl. | 5.40 | 7.24 | 6.67 |
| 60 psf | Stress | 4.84 g | 4.84 g | 5.41 g |
| | Defl. | 5.25 | 7.03 | 6.48 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 4.65 g | 4.65 g | 5.20 g |
| | Defl. | 5.11 | 6.85 | 6.31 |
| 70 psf | Stress | 4.48 g | 4.48 g | 5.01 g |
| | Defl. | 4.98 | 6.68 | 6.15 |
| 75 psf | Stress | 4.33 g | 4.33 g | 4.84 g |
| | Defl. | 4.87 | 6.53 | 6.01 |
| 80 psf | Stress | 4.19 g | 4.19 g | 4.69 g |
| | Defl. | 4.77 | 6.39 | 5.89 |
| 85 psf | Stress | 4.07 g | 4.07 g | 4.55 g |
| | Defl. | 4.67 | 6.26 | 5.77 |
| 90 psf | Stress | 3.95 g | 3.84 b | 4.37 b |
| | Defl. | 4.58 | 6.14 | 5.66 |
| 95 psf | Stress | 3.85 g | 3.64 b | 4.14 b |
| | Defl. | 4.50 | 6.03 | 5.56 |
| 100 psf | Stress | 3.75 g | 3.46 b | 3.93 b |
| | Defl. | 4.42 | 5.93 | 5.46 |
| 105 psf | Stress | 3.66 g | 3.29 b | 3.74 b |
| | Defl. | 4.35 | 5.83 | 5.38 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 1.25 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 3/16" minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

4/5/13

# WIND LOAD/SPAN TABLE FOR TR4-36 - 22 Ga.

CENTRIA

4 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.124 $in^4$/ft
$S_{min}$ = 0.119 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 9.38 g | 9.38 g | 10.49 g |
| | Defl. | 8.16 | 10.93 | 10.07 |
| 25 psf | Stress | 8.39 g | 8.39 g | 9.38 g |
| | Defl. | 7.57 | 10.15 | 9.35 |
| 30 psf | Stress | 7.66 g | 7.66 g | 8.57 g |
| | Defl. | 7.12 | 9.55 | 8.80 |
| 35 psf | Stress | 7.09 g | 7.09 g | 7.93 g |
| | Defl. | 6.77 | 9.07 | 8.36 |
| 40 psf | Stress | 6.64 g | 6.64 g | 7.42 g |
| | Defl. | 6.47 | 8.68 | 7.99 |
| 45 psf | Stress | 6.26 g | 6.26 g | 6.99 g |
| | Defl. | 6.22 | 8.34 | 7.69 |
| 50 psf | Stress | 5.93 g | 5.93 g | 6.64 g |
| | Defl. | 6.01 | 8.05 | 7.42 |
| 55 psf | Stress | 5.66 g | 5.56 a | 6.32 a |
| | Defl. | 5.82 | 7.80 | 7.19 |
| 60 psf | Stress | 5.42 g | 5.10 a | 5.79 a |
| | Defl. | 5.65 | 7.58 | 6.98 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 5.21 g | 4.70 a | 5.35 a |
| | Defl. | 5.51 | 7.38 | 6.80 |
| 70 psf | Stress | 5.02 g | 4.37 a | 4.96 a |
| | Defl. | 5.37 | 7.20 | 6.63 |
| 75 psf | Stress | 4.85 g | 4.08 a | 4.63 a |
| | Defl. | 5.25 | 7.04 | 6.48 |
| 80 psf | Stress | 4.69 g | 3.82 a | 4.34 a |
| | Defl. | 5.14 | 6.89 | 6.35 |
| 85 psf | Stress | 4.55 g | 3.60 a | 4.09 a |
| | Defl. | 5.04 | 6.75 | 6.22 |
| 90 psf | Stress | 4.42 g | 3.40 a | 3.86 a |
| | Defl. | 4.94 | 6.62 | 6.10 |
| 95 psf | Stress | 4.31 g | 3.22 a | 3.66 a |
| | Defl. | 4.85 | 6.50 | 5.99 |
| 100 psf | Stress | 4.20 g | 3.06 a | 3.47 a |
| | Defl. | 4.77 | 6.39 | 5.89 |
| 105 psf | Stress | 4.10 g | 2.91 a | 3.31 a |
| | Defl. | 4.69 | 6.29 | 5.80 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 1.56 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 16 Ga. minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

4/5/13



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# WIND LOAD/SPAN TABLE FOR TR4-36 - 22 Ga.

CENTRIA

4 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.124 $in^4$/ft
$S_{min}$ = 0.119 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 9.38 g | 9.38 g | 10.49 g |
| | Defl. | 8.16 | 10.93 | 10.07 |
| 25 psf | Stress | 8.39 g | 8.39 g | 9.38 g |
| | Defl. | 7.57 | 10.15 | 9.35 |
| 30 psf | Stress | 7.66 g | 7.66 g | 8.57 g |
| | Defl. | 7.12 | 9.55 | 8.80 |
| 35 psf | Stress | 7.09 g | 7.09 g | 7.93 g |
| | Defl. | 6.77 | 9.07 | 8.36 |
| 40 psf | Stress | 6.64 g | 6.64 g | 7.42 g |
| | Defl. | 6.47 | 8.68 | 7.99 |
| 45 psf | Stress | 6.26 g | 6.26 g | 6.99 g |
| | Defl. | 6.22 | 8.34 | 7.69 |
| 50 psf | Stress | 5.93 g | 5.93 g | 6.64 g |
| | Defl. | 6.01 | 8.05 | 7.42 |
| 55 psf | Stress | 5.66 g | 5.66 g | 6.33 g |
| | Defl. | 5.82 | 7.80 | 7.19 |
| 60 psf | Stress | 5.42 g | 5.42 g | 6.06 g |
| | Defl. | 5.65 | 7.58 | 6.98 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 5.21 g | 5.21 g | 5.82 g |
| | Defl. | 5.51 | 7.38 | 6.80 |
| 70 psf | Stress | 5.02 g | 5.02 g | 5.61 g |
| | Defl. | 5.37 | 7.20 | 6.63 |
| 75 psf | Stress | 4.85 g | 4.85 g | 5.42 g |
| | Defl. | 5.25 | 7.04 | 6.48 |
| 80 psf | Stress | 4.69 g | 4.69 g | 5.25 g |
| | Defl. | 5.14 | 6.89 | 6.35 |
| 85 psf | Stress | 4.55 g | 4.55 g | 5.09 g |
| | Defl. | 5.04 | 6.75 | 6.22 |
| 90 psf | Stress | 4.42 g | 4.42 g | 4.95 g |
| | Defl. | 4.94 | 6.62 | 6.10 |
| 95 psf | Stress | 4.31 g | 4.31 g | 4.81 g |
| | Defl. | 4.85 | 6.50 | 5.99 |
| 100 psf | Stress | 4.20 g | 4.20 g | 4.69 g |
| | Defl. | 4.77 | 6.39 | 5.89 |
| 105 psf | Stress | 4.10 g | 4.10 g | 4.58 g |
| | Defl. | 4.69 | 6.29 | 5.80 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 1.56 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 3/16" minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

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# WIND LOAD/SPAN TABLE FOR TR4-36 - 20 Ga.

CENTRIA

4 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.150 $in^4$/ft
$S_{min}$ = 0.144 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 10.32 g | 10.32 g | 11.54 g |
| | Defl. | 8.69 | 11.65 | 10.73 |
| 25 psf | Stress | 9.23 g | 9.23 g | 10.32 g |
| | Defl. | 8.07 | 10.81 | 9.96 |
| 30 psf | Stress | 8.43 g | 8.43 g | 9.42 g |
| | Defl. | 7.59 | 10.17 | 9.38 |
| 35 psf | Stress | 7.80 g | 7.80 g | 8.72 g |
| | Defl. | 7.21 | 9.66 | 8.91 |
| 40 psf | Stress | 7.30 g | 7.30 g | 8.16 g |
| | Defl. | 6.90 | 9.24 | 8.52 |
| 45 psf | Stress | 6.88 g | 6.80 a | 7.69 g |
| | Defl. | 6.63 | 8.89 | 8.19 |
| 50 psf | Stress | 6.53 g | 6.12 a | 6.95 a |
| | Defl. | 6.40 | 8.58 | 7.91 |
| 55 psf | Stress | 6.22 g | 5.56 a | 6.32 a |
| | Defl. | 6.20 | 8.31 | 7.66 |
| 60 psf | Stress | 5.96 g | 5.10 a | 5.79 a |
| | Defl. | 6.03 | 8.08 | 7.44 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 5.73 g | 4.70 a | 5.35 a |
| | Defl. | 5.87 | 7.86 | 7.25 |
| 70 psf | Stress | 5.52 g | 4.37 a | 4.96 a |
| | Defl. | 5.72 | 7.67 | 7.07 |
| 75 psf | Stress | 5.33 g | 4.08 a | 4.63 a |
| | Defl. | 5.59 | 7.50 | 6.91 |
| 80 psf | Stress | 5.16 g | 3.82 a | 4.34 a |
| | Defl. | 5.47 | 7.34 | 6.76 |
| 85 psf | Stress | 5.01 g | 3.60 a | 4.09 a |
| | Defl. | 5.36 | 7.19 | 6.63 |
| 90 psf | Stress | 4.87 g | 3.40 a | 3.86 a |
| | Defl. | 5.26 | 7.05 | 6.50 |
| 95 psf | Stress | 4.74 g | 3.22 a | 3.66 a |
| | Defl. | 5.17 | 6.93 | 6.38 |
| 100 psf | Stress | 4.62 g | 3.06 a | 3.47 a |
| | Defl. | 5.08 | 6.81 | 6.28 |
| 105 psf | Stress | 4.51 g | 2.91 a | 3.31 a |
| | Defl. | 5.00 | 6.70 | 6.18 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 1.87 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 16 Ga. minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

4/5/13

# WIND LOAD/SPAN TABLE FOR TR4-36 - 20 Ga.

CENTRIA

4 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.150 $in^4$/ft
$S_{min}$ = 0.144 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 10.32 g | 10.32 g | 11.54 g |
| | Defl. | 8.69 | 11.65 | 10.73 |
| 25 psf | Stress | 9.23 g | 9.23 g | 10.32 g |
| | Defl. | 8.07 | 10.81 | 9.96 |
| 30 psf | Stress | 8.43 g | 8.43 g | 9.42 g |
| | Defl. | 7.59 | 10.17 | 9.38 |
| 35 psf | Stress | 7.80 g | 7.80 g | 8.72 g |
| | Defl. | 7.21 | 9.66 | 8.91 |
| 40 psf | Stress | 7.30 g | 7.30 g | 8.16 g |
| | Defl. | 6.90 | 9.24 | 8.52 |
| 45 psf | Stress | 6.88 g | 6.88 g | 7.69 g |
| | Defl. | 6.63 | 8.89 | 8.19 |
| 50 psf | Stress | 6.53 g | 6.53 g | 7.30 g |
| | Defl. | 6.40 | 8.58 | 7.91 |
| 55 psf | Stress | 6.22 g | 6.22 g | 6.96 g |
| | Defl. | 6.20 | 8.31 | 7.66 |
| 60 psf | Stress | 5.96 g | 5.96 g | 6.66 g |
| | Defl. | 6.03 | 8.08 | 7.44 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 5.73 g | 5.73 g | 6.40 g |
| | Defl. | 5.87 | 7.86 | 7.25 |
| 70 psf | Stress | 5.52 g | 5.52 g | 6.17 g |
| | Defl. | 5.72 | 7.67 | 7.07 |
| 75 psf | Stress | 5.33 g | 5.33 g | 5.96 g |
| | Defl. | 5.59 | 7.50 | 6.91 |
| 80 psf | Stress | 5.16 g | 5.16 g | 5.77 g |
| | Defl. | 5.47 | 7.34 | 6.76 |
| 85 psf | Stress | 5.01 g | 5.01 g | 5.60 g |
| | Defl. | 5.36 | 7.19 | 6.63 |
| 90 psf | Stress | 4.87 g | 4.87 g | 5.44 g |
| | Defl. | 5.26 | 7.05 | 6.50 |
| 95 psf | Stress | 4.74 g | 4.74 g | 5.30 g |
| | Defl. | 5.17 | 6.93 | 6.38 |
| 100 psf | Stress | 4.62 g | 4.62 g | 5.16 g |
| | Defl. | 5.08 | 6.81 | 6.28 |
| 105 psf | Stress | 4.51 g | 4.51 g | 5.04 g |
| | Defl. | 5.00 | 6.70 | 6.18 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 1.87 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 3/16" minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

4/5/13

# WIND LOAD/SPAN TABLE FOR TR4-36 - 18 Ga.

CENTRIA

4 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.202 $in^4$/ft
$S_{min}$ = 0.194 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 11.98 g | 11.98 g | 13.40 g |
| | Defl. | 9.60 | 12.86 | 11.85 |
| 25 psf | Stress | 10.72 g | 10.72 g | 11.98 g |
| | Defl. | 8.91 | 11.94 | 11.00 |
| 30 psf | Stress | 9.78 g | 9.78 g | 10.94 g |
| | Defl. | 8.38 | 11.23 | 10.35 |
| 35 psf | Stress | 9.06 g | 8.74 a | 9.93 a |
| | Defl. | 7.96 | 10.67 | 9.84 |
| 40 psf | Stress | 8.47 g | 7.64 a | 8.69 a |
| | Defl. | 7.62 | 10.21 | 9.41 |
| 45 psf | Stress | 7.99 g | 6.80 a | 7.72 a |
| | Defl. | 7.32 | 9.81 | 9.04 |
| 50 psf | Stress | 7.58 g | 6.12 a | 6.95 a |
| | Defl. | 7.07 | 9.48 | 8.73 |
| 55 psf | Stress | 7.23 g | 5.56 a | 6.32 a |
| | Defl. | 6.85 | 9.18 | 8.46 |
| 60 psf | Stress | 6.92 g | 5.10 a | 5.79 a |
| | Defl. | 6.65 | 8.92 | 8.22 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 6.65 g | 4.70 a | 5.35 a |
| | Defl. | 6.48 | 8.68 | 8.00 |
| 70 psf | Stress | 6.40 g | 4.37 a | 4.96 a |
| | Defl. | 6.32 | 8.47 | 7.81 |
| 75 psf | Stress | 6.19 g | 4.08 a | 4.63 a |
| | Defl. | 6.18 | 8.28 | 7.63 |
| 80 psf | Stress | 5.99 g | 3.82 a | 4.34 a |
| | Defl. | 6.05 | 8.10 | 7.47 |
| 85 psf | Stress | 5.81 g | 3.60 a | 4.09 a |
| | Defl. | 5.92 | 7.94 | 7.32 |
| 90 psf | Stress | 5.65 g | 3.40 a | 3.86 a |
| | Defl. | 5.81 | 7.79 | 7.18 |
| 95 psf | Stress | 5.50 g | 3.22 a | 3.66 a |
| | Defl. | 5.71 | 7.65 | 7.05 |
| 100 psf | Stress | 5.36 g | 3.06 a | 3.47 a |
| | Defl. | 5.61 | 7.52 | 6.93 |
| 105 psf | Stress | 5.23 g | 2.91 a | 3.31 a |
| | Defl. | 5.52 | 7.40 | 6.82 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 2.49 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 16 Ga. minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

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# WIND LOAD/SPAN TABLE FOR TR4-36 - 18 Ga.

CENTRIA

4 Fasteners per Panel
Safety Factor = 3.00 (Fasteners)

$I_{min}$ = 0.202 $in^4$/ft
$S_{min}$ = 0.194 $in^3$/ft

Deflection @ L/180
$F_y$ = 37 ksi

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 20 psf | Stress | 11.98 g | 11.98 g | 13.40 g |
| | Defl. | 9.60 | 12.86 | 11.85 |
| 25 psf | Stress | 10.72 g | 10.72 g | 11.98 g |
| | Defl. | 8.91 | 11.94 | 11.00 |
| 30 psf | Stress | 9.78 g | 9.78 g | 10.94 g |
| | Defl. | 8.38 | 11.23 | 10.35 |
| 35 psf | Stress | 9.06 g | 9.06 g | 10.13 g |
| | Defl. | 7.96 | 10.67 | 9.84 |
| 40 psf | Stress | 8.47 g | 8.47 g | 9.47 g |
| | Defl. | 7.62 | 10.21 | 9.41 |
| 45 psf | Stress | 7.99 g | 7.99 g | 8.93 g |
| | Defl. | 7.32 | 9.81 | 9.04 |
| 50 psf | Stress | 7.58 g | 7.58 g | 8.47 g |
| | Defl. | 7.07 | 9.48 | 8.73 |
| 55 psf | Stress | 7.23 g | 7.23 g | 8.08 g |
| | Defl. | 6.85 | 9.18 | 8.46 |
| 60 psf | Stress | 6.92 g | 6.92 g | 7.73 g |
| | Defl. | 6.65 | 8.92 | 8.22 |

| Load | | Single Span | Double Span | Triple Span |
|---|---|---|---|---|
| 65 psf | Stress | 6.65 g | 6.65 g | 7.43 g |
| | Defl. | 6.48 | 8.68 | 8.00 |
| 70 psf | Stress | 6.40 g | 6.40 g | 7.16 g |
| | Defl. | 6.32 | 8.47 | 7.81 |
| 75 psf | Stress | 6.19 g | 6.19 g | 6.92 g |
| | Defl. | 6.18 | 8.28 | 7.63 |
| 80 psf | Stress | 5.99 g | 5.99 g | 6.70 g |
| | Defl. | 6.05 | 8.10 | 7.47 |
| 85 psf | Stress | 5.81 g | 5.81 g | 6.50 g |
| | Defl. | 5.92 | 7.94 | 7.32 |
| 90 psf | Stress | 5.65 g | 5.65 g | 6.31 g |
| | Defl. | 5.81 | 7.79 | 7.18 |
| 95 psf | Stress | 5.50 g | 5.50 g | 6.15 g |
| | Defl. | 5.71 | 7.65 | 7.05 |
| 100 psf | Stress | 5.36 g | 5.36 g | 5.99 g |
| | Defl. | 5.61 | 7.52 | 6.93 |
| 105 psf | Stress | 5.23 g | 5.23 g | 5.85 g |
| | Defl. | 5.52 | 7.40 | 6.82 |

Explanatory Notes For Load/Span Tables:

1. Numbers in the tables indicate distance in feet between adjacent structural girts.
2. Span length limitation factors:
   Stress limitation uses .6 × Fy as design stress for wind load.
   Deflection limitation uses span / 180.
3. Panel weight = 2.49 psf.
4. Load/Span tables are based on #14 fasteners with 5/8 in. ø combination washers fastened to 3/16" minimum thickness steel structural girts.
5. Key to failure modes:
   a - Fastener pullout from structural girt.
   b - Fastener pullover.
   g - Bending of panel.

4/5/13

All Appendix 5 information verified current in UL database on 9/20/26

UL Product iQ®

UL Solutions

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

# Roof Deck Constructions

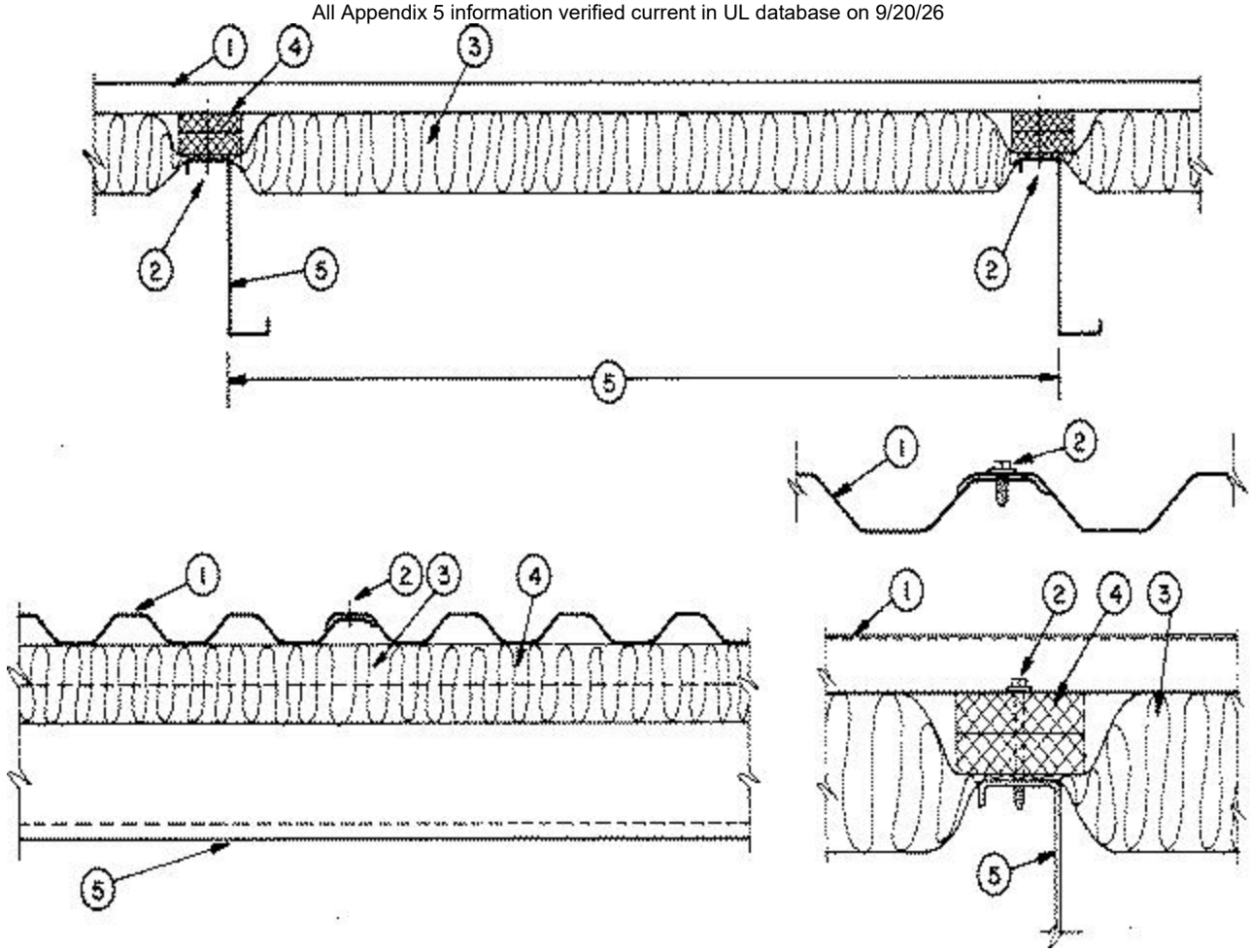
See General Information for Roof Deck Constructions

## Construction No. **137**

September 13, 2024

**Metal Deck Assemblies**
**Wind Uplift — Steel Panels — Class 90**
**Fire Not Investigated**

All Appendix 5 information verified current in UL database on 9/20/26




1. **Metal Roof Deck Panels —** * No. 24 MSG min gauge coated steel. Panels continuous over two or more spans. End laps to occur over purlins with panels overlapped 6 in. with lap beginning even with purlin web and extending across the purlin upper flange. A bead of sealant may be used at panel end and side laps.

**CENTRIA, A DIVISION OF NCI GROUP, INC** (View Classification) — "HR", "HR5" and "Style-rib".

**COATED METALS GROUP** (View Classification) — "Ultra Corrugated".

**FLATIRON STEEL** (View Classification) — "UB-3636"

**FLEXOSPAN STEEL BUILDINGS INC** (View Classification) — "FLEXBEAM"

**METAL PANELS INC** (View Classification) — "StrongSeam 7.2"

**METAL SALES MANUFACTURING CORPORATION** (View Classification) — "IC72-Panel"

**TAYLOR METAL INC, DBA TAYLOR METAL PRODUCTS** (View Classification) — "HR 34"

**THE BRYER CO** (View Classification) — "7.2 Rib"

2. **Panel Fasteners —** For panel to purlin connection to be No. 14, Type AB or BP, hex-head, self-tapping, stainless steel screws with a separate 5/8 in. stainless steel washer and a bonded neoprene sealing washer.

Length to be 3 in. when 2 in. thick thermal spacer blocks are used, 2 in. when 1 in. thick thermal spacer blocks are used and 1 in. when no thermal spacer block is used.

Spacing to be in every other valley (14 in. OC for HR panels and 14.4 in. OC for HR5 panels) with a fastener located in upper panel at side lap. Spacing at end lap to be in every valley.

Pilot holes to be as follows:

**Purlin Flange Thkns -3/16 In. to**

All Appendix 5 information verified current in UL database on 9/20/26

| Fastener Type | No. 14 MSG | No. 14 MSG | Over 3/16 In. |
|---|---|---|---|
| No. 14 AB | 5/32 | 7/32 | 0.228 |
| No. 14 BP | — | 7/32 | 0.228 |

For panel to panel connections fasteners to be the same type as panel to purlin fasteners, 3/4 in. long. Pilot holes to be 5/32 in. diam.

Spacing to be 18 in. O.C. max with fasteners located at end lap.

As an alternate fastener: for panel to panel connections. No. 14 by 7/8 in. long, self-drilling, self-tapping, hex-head, plated steel screws with a No. 5/8 in O.D. steel washer and a neoprene sealing washer may be used. Spacing to be 18 in. O.C. max with fastener located at end lap.

3. **Insulation —** (Optional) — Compressible blanket insulation, 4 in. max thickness before compression.

4. **Thermal Spacer Block —** (Optional) — 4 in. wide rigid perlite insulation. Max thickness 2 in.

5. **Purlins —** No. 16 MSG min gauge steel (33,000 psi min yield strength).
Spacing — when using HR panels to be 5.25 ft (5 ft-3 in.).

Spacing — when using HR5 panels to be 5.08 ft (5 ft-1 in.).

Refer to General Information, Roof Deck Construction, (Roofing Materials and Systems Directory) for items not evaluated.

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2024-09-13

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- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
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# Roof Deck Constructions

See General Information for Roof Deck Constructions

## Construction No. 137A

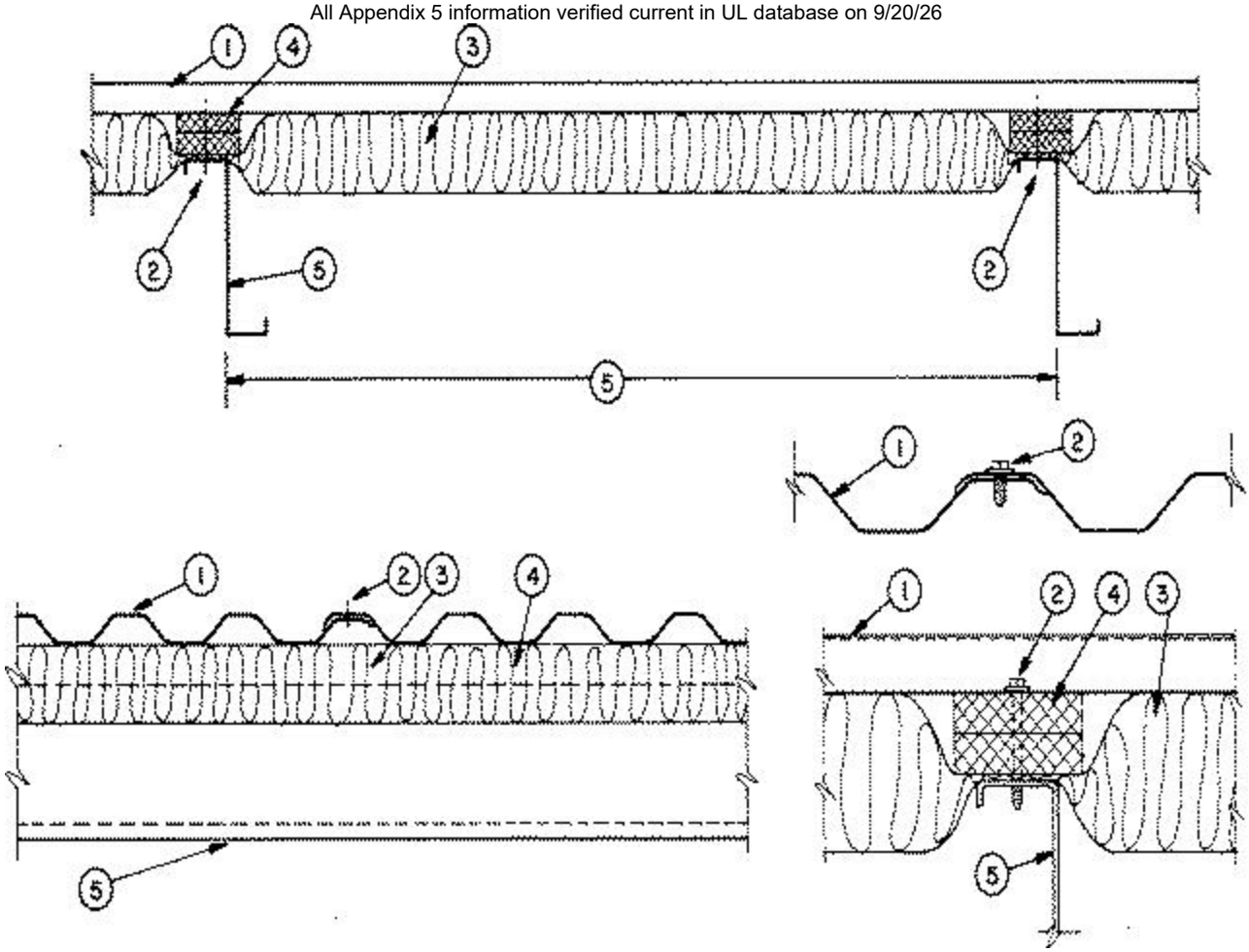
December 10, 1997

## Metal Deck Assemblies

## Wind Uplift — Steel Panels — Class 90

## Fire Not Investigated

All Appendix 5 information verified current in UL database on 9/20/26



1. **Metal Roof Deck Panels —** * — No. 22 MSG min gauge coated steel. Panels continuous over two or more spans. End laps to occur over purlins with panels overlapped 6 in. with lap beginning even with purlin web and extending across the purlin upper flange. A bead of sealant may be used at panel end and side laps.
**CENTRIA, A DIVISION OF NCI GROUP, INC** (View Classification) — "IBR" and "IBR5"

2. **Panel Fasteners —** For panel to purlin connection to be No. 14, Type AB or BP, hex-head, self-tapping, stainless steel screws with a separate 5/8 in. stainless steel washer and a bonded neoprene sealing washer.
Length to be 3 in. when 2 in. thick thermal spacer blocks are used, 2 in. when 1 in. thick thermal spacer blocks are used and 1 in. when no thermal spacer block is used.

Spacing to be in every valley (7 in. OC for IBR panels and 7.2 in. OC for IBR5 panels) with a fastener located in upper panel at side lap. Spacing at end lap to be the same.

Pilot holes to be as follows:

| | Purlin Flange Thkns -3/16 In. to | | |
|---|---|---|---|
| **Fastener Type** | **No. 14 MSG** | **No. 14 MSG** | **Over 3/16 In.** |
| No. 14 AB | 5/32 | 7/32 | 0.228 |
| No. 14 BP | — | 7/32 | 0.228 |

For panel to panel connections fasteners to be the same type as panel to purlin fasteners, 3/4 in. long. Pilot holes to be 5/32 in. diam.

Spacing to be 18 in. O.C. max with fasteners located at end lap.

As an alternate fastener: for panel to panel connections. No. 14 by 7/8 in. long, self-drilling, self-tapping, hex-head, plated steel screws with a No. 5/8 in O.D. steel washer and a neoprene sealing washer may be used. Spacing to be 18 in. O.C. max with fastener located at

end lap.

3. **Insulation —** (Optional) — Compressible blanket insulation, 4 in. max thickness before compression.

4. **Thermal Spacer Block —** (Optional) — 4 in. wide rigid perlite insulation. Max thickness 2 in.

5. **Purlins —** No. 16 MSG min gauge steel (33,000 psi min yield strength).
Spacing — when using IBR panels to be 5.25 ft (5 ft-3 in).

Spacing — when using IBR5 panels to be 5.08 ft (5 ft-1 in).

Refer to General Information, Roof Deck Construction, (Roofing Materials and Systems Directory) for items not evaluated.

## * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 1997-12-10

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- Authorities Having Jurisdiction should be consulted before construction.
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- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

# Roof Deck Constructions

See General Information for Roof Deck Constructions

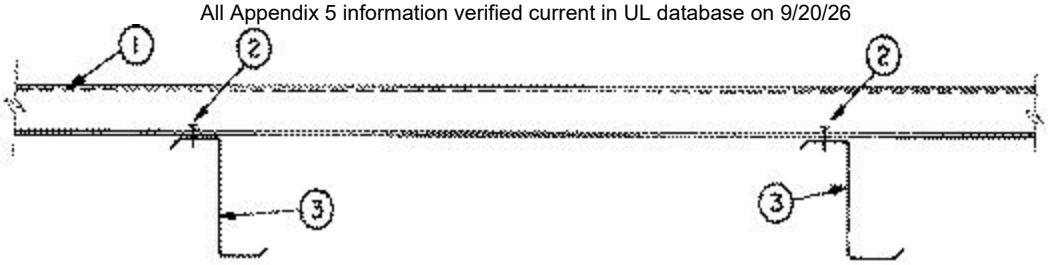
## Construction No. 203

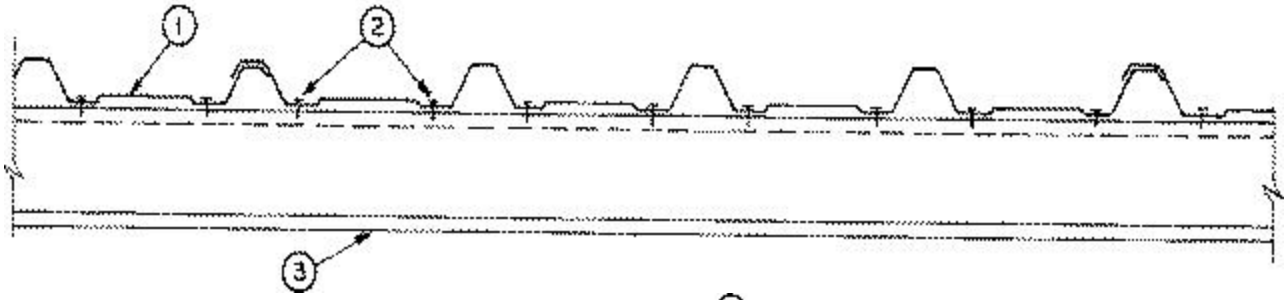
April 21, 2006

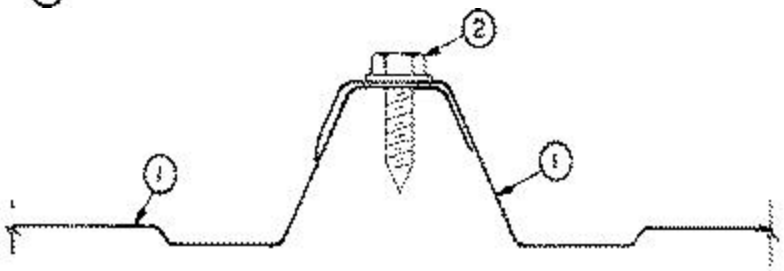
## Uplift — Class 90

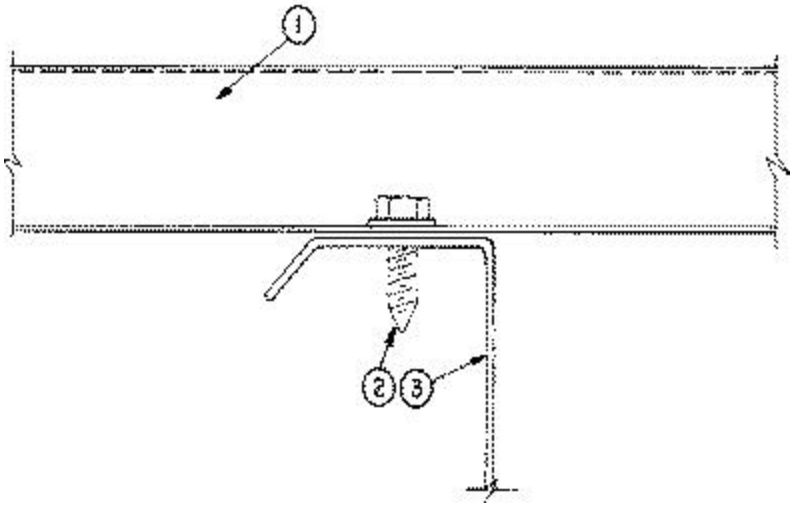
## Fire Not Investigated

All Appendix 5 information verified current in UL database on 9/20/26




1. **Metal Roof Deck Panels* —** No. 24 MSG min. Panels continuous over two or more spans. End laps to occur over purlins with panels overlapped 6 in. min.

**CENTRIA, A DIVISION OF NCI GROUP, INC** (View Classification) — "LR4-36" or "TR4-36"

2. **Fasteners —** Fasteners used for panel-to—purlin and panel-to-panel connections (for TR4-36 panels) to be No. 14 by 3/4 in. self-tapping, hex-head plated steel screws with a separate 5/8 in. diam steel washer and a bonded neoprene sealing washer. Spacing for panel-to-purlin connections to be in a 4-5-4-5 in. pattern beginning 2 in. from the centerline on both sides of each major rib. Spacing at end lap to be the same. Spacing of fasteners for panel-to-panel connections to be 18 in. OC.

3. **Purlins —** No. 16 MSG min coated steel (min yield strength to be 50,000 psi).

4. **Lateral Bracing —** Now shown, as required.

Refer to General Information, Roof Deck Construction, (Roofing Materials and Systems Directory) for items not evaluated.

## * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2006-04-21

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# Roof Deck Constructions

Guide Information for Roofing Materials and Systems

Roof deck constructions illustrated and described in this category are identified by a construction number and evaluated as to the spread of fire on the underside and/or resistance to uplift forces.

## FIRE CLASSIFIED

Fire Classified Constructions are evaluated by either the large-scale fire test, or other test procedures having fire exposure conditions related to the large-scale fire test, described in the Standard for Fire Test of Roof Deck Constructions, ANSI/UL 1256.

These Fire-Classifications are not related to Fire ratings under either the Surface Burning Characteristics or the Fire Resistance Classification. The Surface Burning Characteristics is a comparative evaluation of materials (occasionally with facings or backing) with respect to flame spread and smoke developed. The Fire Resistance Classification is the time rating of an assembly with respect to resistance to flame passage, heat transfer and maintenance of structural integrity.

Roof deck constructions which are Fire-Classified consist of assemblies of materials as illustrated and described in this category, classified on the basis of specific requirements for maximum flame spread on the underside of the assembly within definite time limits. These constructions differ from materials classified with respect to Surface Burning Characteristics in that in the latter, materials are assigned comparative numerical values. They also differ from assemblies classified with respect to Fire Resistance, since temperature transmission through roof deck constructions and structural performance under load are not measured nor are time ratings assigned.

A fire investigation of a roof deck construction primarily determines whether the contribution to an igniting fire by any or all of the materials in the assembly is at a sufficient rate to cause propagation of flame on the underside, in excess of the established limits.

As indicated in individual Classifications, specific materials have been supplementally fire tested in accordance with the requirements of the indicated National Codes and Standards.

Authorities having jurisdiction are to be consulted as to which type of roof deck construction is acceptable for specific locations before installation.

## UPLIFT RESISTANCE CLASSIFIED

Roof Deck Constructions Classified for Uplift Resistance have been investigated for damageability from both external and internal pressures on the deck associated with high velocity winds. Uplift Classifications are derived from tests conducted in accordance with the Standard for "Tests For Uplift Resistance of Roof Assemblies" , ANSI/UL 580. The ANSI/UL 580 test method subjects a 10 ft by 10 ft test sample to various static and oscillating air pressures to index performance under uplift loads imposed on roof decks.

The magnitude of the wind velocity across a roof deck and the resulting uplift pressures on a roof deck are dependent upon many factors such as wind gusts, the shape of the roof deck, edge configuration and the landscape surrounding the roof deck installation. A method to calculate the uplift pressures on roof decks is contained in the American Society of Civil Engineers (ASCE) Standard 7-95, Minimum Design Loads for Buildings and Other Structures.

The nominal static uplift pressure, the oscillating uplift pressures and the maximum static uplift pressure for each Class are:

| Class | Nom Static Uplift Pressure psf | Range of Oscillating Pressure psf | Max Static Uplift Pressure psf |
|---|---|---|---|
| 15 | 15 | 11 to 21 | 23 |
| 30 | 30 | 22 to 42 | 45 |
| 60 | 60 | 44 to 83 | 75 |
| 90 | 90 | 66 to 90 | 105 |

The static pressures are maintained for a 5 min period and the oscillating pressures are applied at a 10 plus or minus 2 s frequency and are maintained for a 60 min period for each Class. An assembly rated Class 60 has successfully withstood pressures imposed during Class 30 and Class 60 tests. An assembly rated Class 90 has successfully withstood pressures imposed during Class 30, Class 60 and Class 90 tests.

The test method provides a comparative measure of uplift resistance of roof deck constructions. The test evaluates the roof deck or roof deck assembly and its attachment to supports as well as the attachment of the roof covering, if used. **For uplift resistance related exclusively to the securement of the roof covering to a specified type of roof deck see Classifications under Roofing Systems, Uplift Resistance (TGIK).** Supporting structural members are evaluated only with respect to spacing and physical properties such as gauge, yield strength, grade and species of lumber and related factors, which could affect fastener attachment and necessary resistance to uplift forces. Secondary supports (beams, purlins, joists, bulb tees, lateral bracing, etc.), connections of the assembly to the main structural members (girders, columns, etc.) and construction details along the edges of the roof and around openings in the roof (skylights, chimneys, etc.) have not been evaluated unless specified in the construction. Constructions including skylights have been evaluated with single width skylight panels flanked on each side by a metal panel. Constructions including eaves/soffit have been evaluated for resistance to uplift pressures on the underside only.

Roof deck constructions consist of two groups. Construction illustrations and descriptions, beginning with Construction No. 1 include assemblies using metallic decks and constructions beginning with NM501 include assemblies using nonmetallic decks.

The specifications for the materials and their assembly are important details in limiting the flame spread on the underside of roof deck constructions or in resisting damage from high velocity winds. UL's Classification and Follow-Up Service is available for those materials so designated in the constructions described. The classifications of these materials are shown under Roof Deck Construction Materials (TGYV).

**Metal Deck Assemblies**

The metal deck assemblies illustrated are identified by a Construction Number.

Certain foam plastic insulation board products are acceptable for use in lieu of compressible fiberglass insulation in all roof deck constructions Classified for Wind uplift resistance in which the Metal Roof Deck Panels (TJPV) are directly fastened to structural members by means of self-drilling or self-tapping screws, or similar products. Refer to the Foamed Plastic (TJBX) category for information pertaining to the installation requirements.

**Nonmetallic Deck Assemblies**

The nonmetallic deck assemblies illustrated are identified by a construction number.

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