

| Connection         | Section        | Length | Axial | Int. | Fastener    | Pa    | Req. |
|--------------------|----------------|--------|-------|------|-------------|-------|------|
| BC #1              | 250S162-68(50) | 9.79   | 6.05C | 0.67 | #10 Drivall | 0.000 | 0    |
| TC #1              | 250S162-68(50) | 9.79   | 2.85C | 0.84 | #10 Drivall | 0.000 | 0    |
| Web # 1 6          | 250S162-54(50) | 1.42   | 3.82T | 0.96 | #10 Drivall | 0.364 | 11   |
| Web # 2 5          | 250S162-54(50) | 1.64   | 3.17T | 0.82 | #10 Drivall | 0.373 | 9    |
| Web # 3 4          | 250S162-54(50) | 1.64   | 3.47C | 0.60 | #10 Drivall | 0.368 | 10   |
| Web Stiffener (ws) | 250T125-33(33) | 0.19   | 1.69C | 0.46 | #10 Drivall | 0.186 | 9    |
| BC Lateral Brace   | 250S162-43(33) | 6.00   | 0.64C | 0.43 | #10 Drivall | 0.345 | 2    |
| BC Diagonal Brace  | 250S162-43(33) | 7.81   | 0.83C | 0.86 | #10 Drivall | 0.345 | 3    |

| Connection             | Simpson      | each | Load | Uplift/Shear | Fastener    | Pa    | Req. |
|------------------------|--------------|------|------|--------------|-------------|-------|------|
| Truss Chord Steel Beam | L-2x3x3x0.12 | 1    | 0.51 |              | #10 Drivall | 0.444 | 4    |
| Truss Chord Steel Beam | L-2x3x3x0.12 | 1    | 0.51 | 0.51         | EDNI 19P8   | 0.455 | 2    |
| Truss Chord Steel Beam | L-2x3x3x0.12 | 1    | 0.51 |              | #10 Drivall | 0.444 | 4    |
| Truss Chord Steel Beam | L-2x3x3x0.12 | 1    | 0.51 | 0.51         | EDNI 19P8   | 0.455 | 2    |

**GENERAL NOTES**

1. Trusses require lateral bracing. See Truss Layout and Detail sheets.
2. Top Chord continuously sheathed.
3. Number of fasteners noted in chart installed on each end of Web
4. Allowable fastener values based on LGSEA Research Note No. 1-00 and Grabber Chart.
5. (ws) denotes web stiffener required at support.
6. Member design based on sections in SSMA-RCD Library.

**Maximum Deflections**

|            |                                      |
|------------|--------------------------------------|
| Vertical   | 0.256 in (L / 469)                   |
| Horizontal | 0.036 in                             |
| Vertical   | 0.083 in (L / 1447) [Dead Load Only] |
| Vertical   | 0.171 in (L / 702) [Live Load Only]  |

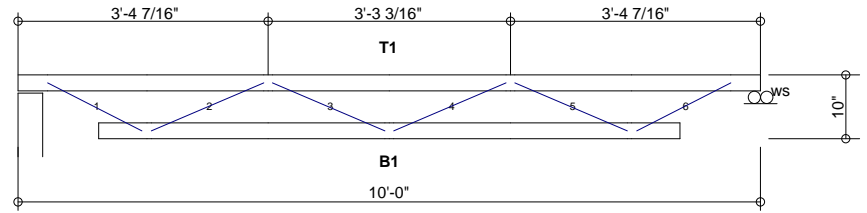
**Support Reactions**

| Support Reactions | Down        | Uplift*       | Horizontal | Bearing |
|-------------------|-------------|---------------|------------|---------|
| Left              | 1.69 {1.69} | -0.51 [-0.82] | 0.00       | 4.00    |
| Right             | 1.69 {1.69} | -0.51 [-0.82] | 0.00       | 4.00    |

\* Uplift Load Combination (Truss to Support Connection Only): 0.6Dead + 1.0Wind  
 {} Denotes 'Dead+Live Only'  
 [] Denotes 'Wind Only' Uplift Reaction

**DESIGN DATA**

Number of Trusses = 10 each  
 Plate Style : Out-Of-Plane  
 Eave Height : 10.00 ft (top of wall)  
 Bearing : 4 in  
 Spacing : 6.00 ft  
 Dead Load : 10.00 psf (top chord)  
 Dead Load : 10.00 psf (bottom chord)  
 Live Load : 40.00 psf (top chord)  
 Live Load : 0.00 psf (bottom chord)  
 Snow Load : 43.00 psf (ground)  
 Snow Load : 30.10 psf (design) [Is = 1.00, Ce = 1.00]  
 Wind Load : 14.96 psf (design) [Iw = 1.00]  
 Wind Speed : 90 mph (Exposure C)  
 Open Category: E  
 Topography (Kz): 1  
 Building Category: (2) General  
 Seismic Coefficient: 0.044



| Per AISI S100-2007 |                  | Actual |      |      | Allowable |      |       | Ratio |
|--------------------|------------------|--------|------|------|-----------|------|-------|-------|
| Member             | Section          | Po     | Vo   | Mo   | Pa        | Va   | Ma    |       |
| Bottom Chord       | 1-250S162-68(50) | 6.05T  | 0.00 | 2.58 | 14.17     | 2.90 | 10.69 | 0.67  |
| Top Chord          | 1-250S162-68(50) | 2.85C  | 0.01 | 6.58 | 12.76     | 2.90 | 10.69 | 0.84  |
| Web                | 1-250S162-54(50) | 1.02T  | 0.00 | 5.81 | 10.72     | 2.33 | 8.62  | 0.96  |

International Building Code 2009: PASSED  
 Design Method - (ASD)  
 Component Wind Pressure Design (End)



**Rusk Component and Design**  
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**Bar Joist Equivalent**

Lafayette, CO

Truss D&E, V23.05  
 Date: 10-06-2013  
 Time: 10:11  
 Designer: BJR  
 File: BJK10-72-10  
 Job Number: BarJoist

**BJK10-72-10**