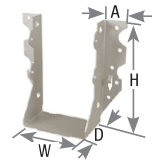


| Joist Size | MiTek Stock No. | Ref. No. | GA     | Dimensions (in) |         |       |        | Fastener Schedule <sup>2,3</sup> |        |         |             | D Fir-L Factored Resistance |          |                     |          | S-P-F Factored Resistance |          |                     |          | Corrosion Finish |                     |
|------------|-----------------|----------|--------|-----------------|---------|-------|--------|----------------------------------|--------|---------|-------------|-----------------------------|----------|---------------------|----------|---------------------------|----------|---------------------|----------|------------------|---------------------|
|            |                 |          |        | W               | H       | D     | A      | Min/Max                          | Header |         | Joist       |                             | Lbs      |                     | kN       |                           | Lbs      |                     | kN       |                  |                     |
|            |                 |          |        |                 |         |       |        |                                  | Qty    | Type    | Qty         | Type                        | Vertical | Uplift <sup>1</sup> | Vertical | Uplift <sup>1</sup>       | Vertical | Uplift <sup>1</sup> | Vertical |                  | Uplift <sup>1</sup> |
| 100%       | 115%            | 100%     | 115%   | 100%            | 115%    | 100%  | 115%   |                                  |        |         |             |                             |          |                     |          |                           |          |                     |          |                  |                     |
| 2 x 4      | JL24            | LU24     | 20     | 1-9/16          | 3       | 1-1/2 | 15/16  | --                               | 4      | 10d     | 2           | 10d x 1-1/2                 | 940      | 560                 | 4.18     | 2.49                      | 740      | 460                 | 3.29     | 2.05             |                     |
|            | JL24IF-TZ       | --       | 18     | 1-9/16          | 3-1/8   | 1-1/2 | --     | --                               | 4      | 10d HDG | 2           | 10d x 1-1/2 HDG             | 840      | 440                 | 3.74     | 1.96                      | 765      | 400                 | 3.40     | 1.78             | ■                   |
|            | JUS24           | LUS24    | 18     | 1-9/16          | 3-1/8   | 1-3/4 | 1      | --                               | 4      | 10d     | 2           | 10d                         | 1455     | 1180                | 6.47     | 5.25                      | 1340     | 1105                | 5.96     | 4.92             | ■                   |
|            | SUH24           | U24      | 16     | 1-9/16          | 3-1/4   | 2     | 1-3/16 | --                               | 4      | 10d     | 2           | 10d x 1-1/2                 | 1390     | 795                 | 6.18     | 3.54                      | 1090     | 625                 | 4.85     | 2.78             | ■                   |
|            | HD26            | HU26     | 14     | 1-9/16          | 3-1/2   | 2-1/2 | 1-1/8  | Min                              | 4      | 16d     | 2           | 10d x 1-1/2                 | 1485     | 620                 | 6.61     | 2.76                      | 1255     | 580                 | 5.58     | 2.58             |                     |
|            |                 |          |        |                 |         |       | Max    | 4                                |        | 4       |             | 1485                        | 1035     | 6.61                | 4.60     | 1255                      | 955      | 5.58                | 4.25     |                  |                     |
| 2 x 6      | JL26            | LU26     | 20     | 1-9/16          | 4-3/4   | 1-1/2 | 15/16  | --                               | 6      | 10d     | 4           | 10d x 1-1/2                 | 1385     | 1070                | 6.16     | 4.76                      | 1085     | 930                 | 4.83     | 4.14             |                     |
|            | JL26IF-TZ       | LUC26Z   | 18     | 1-9/16          | 4-1/2   | 1-1/2 | --     | --                               | 6      | 10d HDG | 4           | 10d x 1-1/2 HDG             | 1710     | 1385                | 7.61     | 6.16                      | 1610     | 1305                | 7.16     | 5.80             | ■                   |
|            | JUS26           | LUS26    | 18     | 1-9/16          | 4-13/16 | 1-3/4 | 1      | --                               | 4      | 10d     | 4           | 10d                         | 2600     | 1960                | 11.57    | 8.72                      | 2395     | 1810                | 10.65    | 8.05             | ■                   |
|            | MUS26           | MUS26    | 18     | 1-9/16          | 5-1/16  | 2     | 1      | --                               | 6      | 10d     | 6           | 10d                         | 2845     | 1425                | 12.66    | 6.34                      | 2825     | 1415                | 12.57    | 6.29             | ■                   |
|            | SUH26           | U26      | 16     | 1-9/16          | 5-1/8   | 2     | 1-3/16 | --                               | 6      | 10d     | 4           | 10d x 1-1/2                 | 2345     | 1505                | 10.43    | 6.69                      | 1840     | 1180                | 8.18     | 5.25             | ■                   |
|            | HUS26           | HUS26    | 16     | 1-5/8           | 5-7/16  | 3     | 2      | --                               | 14     | 16d     | 6           | 16d                         | 6090     | 3915                | 27.09    | 17.41                     | 5195     | 3625                | 23.11    | 16.12            | ■                   |
|            | HD26            | HU26     | 14     | 1-9/16          | 3-1/2   | 2-1/2 | 1-1/8  | Min                              | 4      | 16d     | 2           | 10d x 1-1/2                 | 1485     | 620                 | 6.61     | 2.76                      | 1255     | 580                 | 5.58     | 2.58             |                     |
|            |                 |          |        |                 |         |       | Max    | 4                                |        | 4       |             | 1485                        | 1035     | 6.61                | 4.60     | 1255                      | 955      | 5.58                | 4.25     |                  |                     |
|            |                 |          |        |                 |         |       | Min    | 8                                | 16d    | 4       | 10d x 1-1/2 | 3010                        | 1430     | 13.39               | 6.36     | 2290                      | 1320     | 10.19               | 5.87     |                  |                     |
|            |                 |          |        |                 |         |       | Max    | 6                                |        | 6       |             | 3010                        | 1430     | 13.39               | 6.36     | 2290                      | 1320     | 10.19               | 5.87     |                  |                     |
| 2 x 8      | JL26            | LU26     | 20     | 1-9/16          | 4-3/4   | 1-1/2 | 15/16  | --                               | 6      | 10d     | 4           | 10d x 1-1/2                 | 1385     | 1070                | 6.16     | 4.76                      | 1085     | 930                 | 4.83     | 4.14             |                     |
|            | JL28            | LU28     | 20     | 1-9/16          | 6-3/8   | 1-1/2 | 15/16  | --                               | 10     | 10d     | 6           | 10d x 1-1/2                 | 2050     | 1495                | 9.12     | 6.65                      | 1610     | 1225                | 7.16     | 5.45             |                     |
|            | JL26IF-TZ       | LUC26Z   | 18     | 1-9/16          | 4-1/2   | 1-1/2 | --     | --                               | 6      | 10d HDG | 4           | 10d x 1-1/2 HDG             | 1710     | 1385                | 7.61     | 6.16                      | 1610     | 1305                | 7.16     | 5.80             | ■                   |
|            | JL28IF-TZ       | --       | 18     | 1-9/16          | 6-1/8   | 1-1/2 | --     | --                               | 8      | 10d HDG | 4           | 10d x 1-1/2 HDG             | 1710     | 1385                | 7.61     | 6.16                      | 1610     | 1305                | 7.16     | 5.80             | ■                   |
|            | JUS26           | LUS26    | 18     | 1-9/16          | 4-13/16 | 1-3/4 | 1      | --                               | 4      | 10d     | 4           | 10d                         | 2600     | 1960                | 11.57    | 8.72                      | 2395     | 1810                | 10.65    | 8.05             | ■                   |
|            | JUS28           | LUS28    | 18     | 1-9/16          | 6-5/8   | 1-3/4 | 1      | --                               | 6      | 10d     | 4           | 10d                         | 2600     | 1960                | 11.57    | 8.72                      | 2395     | 1810                | 10.65    | 8.05             | ■                   |
|            | MUS26           | MUS26    | 18     | 1-9/16          | 5-1/16  | 2     | 1      | --                               | 6      | 10d     | 6           | 10d                         | 2845     | 1425                | 12.66    | 6.34                      | 2825     | 1415                | 12.57    | 6.29             | ■                   |
|            | MUS28           | MUS28    | 18     | 1-9/16          | 7-1/16  | 2     | 1      | --                               | 8      | 10d     | 8           | 10d                         | 3855     | 2030                | 17.15    | 9.03                      | 3830     | 2015                | 17.04    | 8.96             | ■                   |
|            | SUH26           | U26      | 16     | 1-9/16          | 5-1/8   | 2     | 1-3/16 | --                               | 6      | 10d     | 4           | 10d x 1-1/2                 | 2345     | 1505                | 10.43    | 6.69                      | 1840     | 1180                | 8.18     | 5.25             | ■                   |
|            | SUH28           | --       | 16     | 1-9/16          | 6-5/8   | 2     | 1-3/16 | --                               | 8      | 10d     | 6           | 10d x 1-1/2                 | 3135     | 1505                | 13.95    | 6.69                      | 2460     | 1180                | 10.94    | 5.25             | ■                   |
|            | HUS26           | HUS26    | 16     | 1-5/8           | 5-7/16  | 3     | 2      | --                               | 14     | 16d     | 6           | 16d                         | 6090     | 3915                | 27.09    | 17.41                     | 5195     | 3625                | 23.11    | 16.12            | ■                   |
|            | HUS28           | HUS28    | 16     | 1-5/8           | 7-3/16  | 3     | 2      | --                               | 22     | 16d     | 8           | 16d                         | 8050     | 5775                | 35.81    | 25.69                     | 6875     | 5345                | 30.58    | 23.78            | ■                   |
|            | HD28            | HU28     | 14     | 1-9/16          | 5-1/4   | 2-1/2 | 1-1/8  | Min                              | 8      | 16d     | 4           | 10d x 1-1/2                 | 3010     | 1430                | 13.39    | 6.36                      | 2290     | 1320                | 10.19    | 5.87             |                     |
|            |                 |          |        |                 |         |       |        | Max                              | 6      |         | 6           |                             | 3010     | 1430                | 13.39    | 6.36                      | 2290     | 1320                | 10.19    | 5.87             |                     |
| HD210      | HU210           | 14       | 1-9/16 | 7-3/16          | 2-1/2   | 1-1/8 | Min    | 10                               | 16d    | 4       | 10d x 1-1/2 | 3010                        | 1430     | 13.39               | 6.36     | 2290                      | 1320     | 10.19               | 5.87     |                  |                     |
|            |                 |          |        |                 |         |       | Max    | 14                               |        | 6       |             | 5030                        | 2185     | 22.37               | 9.72     | 4180                      | 2050     | 18.59               | 9.12     |                  |                     |
| 2 x 10     | JL28            | LU28     | 20     | 1-9/16          | 6-3/8   | 1-1/2 | 15/16  | --                               | 10     | 10d     | 6           | 10d x 1-1/2                 | 2050     | 1495                | 9.12     | 6.65                      | 1610     | 1225                | 7.16     | 5.45             |                     |
|            | JL210           | LU210    | 20     | 1-9/16          | 8-1/4   | 1-1/2 | 15/16  | --                               | 14     | 10d     | 8           | 10d x 1-1/2                 | 2975     | 1925                | 13.23    | 8.56                      | 2335     | 1575                | 10.39    | 7.01             |                     |
|            | JL28IF-TZ       | --       | 18     | 1-9/16          | 6-1/8   | 1-1/2 | --     | --                               | 8      | 10d HDG | 4           | 10d x 1-1/2 HDG             | 1710     | 1385                | 7.61     | 6.16                      | 1610     | 1305                | 7.16     | 5.80             | ■                   |
|            | JL210IF-TZ      | LUC210Z  | 18     | 1-9/16          | 8-7/32  | 1-1/2 | --     | --                               | 11     | 10d HDG | 6           | 10d x 1-1/2 HDG             | 3135     | 2175                | 13.95    | 9.67                      | 2810     | 2050                | 12.50    | 9.12             | ■                   |
|            | JUS28           | LUS28    | 18     | 1-9/16          | 6-5/8   | 1-3/4 | 1      | --                               | 6      | 10d     | 4           | 10d                         | 2600     | 1960                | 11.57    | 8.72                      | 2395     | 1810                | 10.65    | 8.05             | ■                   |
|            | JUS210          | LUS210   | 18     | 1-9/16          | 7-3/4   | 1-3/4 | 1      | --                               | 8      | 10d     | 4           | 10d                         | 2600     | 1960                | 11.57    | 8.72                      | 2395     | 1810                | 10.65    | 8.05             | ■                   |
|            | MUS28           | MUS28    | 18     | 1-9/16          | 7-1/16  | 2     | 1      | --                               | 8      | 10d     | 8           | 10d                         | 3855     | 2030                | 17.15    | 9.03                      | 3830     | 2015                | 17.04    | 8.96             | ■                   |
|            | SUH28           | --       | 16     | 1-9/16          | 6-5/8   | 2     | 1-3/16 | --                               | 8      | 10d     | 6           | 10d x 1-1/2                 | 3135     | 1505                | 13.95    | 6.69                      | 2460     | 1180                | 10.94    | 5.25             | ■                   |
|            | SUH210          | U210     | 16     | 1-9/16          | 8       | 2     | 1-3/16 | --                               | 10     | 10d     | 6           | 10d x 1-1/2                 | 4080     | 2505                | 18.15    | 11.14                     | 3205     | 1965                | 14.26    | 8.74             | ■                   |
|            | HUS28           | HUS28    | 16     | 1-5/8           | 7-3/16  | 3     | 2      | --                               | 22     | 16d     | 8           | 16d                         | 8050     | 5775                | 35.81    | 25.69                     | 6875     | 5345                | 30.58    | 23.78            | ■                   |
| HUS210     | HUS210          | 16       | 1-5/8  | 9-3/16          | 3       | 2     | --     | 30                               | 16d    | 10      | 16d         | 9625                        | 8045     | 42.81               | 35.79    | 8070                      | 7455     | 35.90               | 33.16    | ■                |                     |
| HD210      | HU210           | 14       | 1-9/16 | 7-3/16          | 2-1/2   | 1-1/8 | Min    | 10                               | 16d    | 4       | 10d x 1-1/2 | 3010                        | 1430     | 13.39               | 6.36     | 2290                      | 1320     | 10.19               | 5.87     |                  |                     |
|            |                 |          |        |                 |         |       | Max    | 14                               |        | 6       |             | 5030                        | 2185     | 22.37               | 9.72     | 4180                      | 2050     | 18.59               | 9.12     |                  |                     |

- 1) Factored uplift resistances have been increased 15% for short-term loads such as wind and earthquake; no further increase allowed.
- 2) 16d sinkers (0.148" dia. x 3-1/4" long) may be used at 0.85 of the table load where 16d commons are specified. This does not apply to JUS, HUS, MUS slant nail hangers.
- 3) **NAILS:** 8d x 1-1/2 nails are 0.131" dia. x 1-1/2" long, 10d x 1-1/2 nails are 0.148" dia. x 1-1/2" long, 10d nails are 0.148" dia. x 3" long, 16d nails are 0.162" dia. x 3-1/2" long.

Corrosion Finish Key ■ Stainless Steel ■ HDG ■ Triple Zinc



Continued on next page

# MUS / HUS Slant Nail Truss Hangers

## Plated Truss

The MUS / HUS hanger series offers double shear nailing. MiTek's raised dimple allows for 30° to 45° nailing through the joist into header, resulting in higher loads and less nailing.

**Materials:** MUS – 18 gauge; HUS – 16 gauge

**Finish:** G90 galvanizing

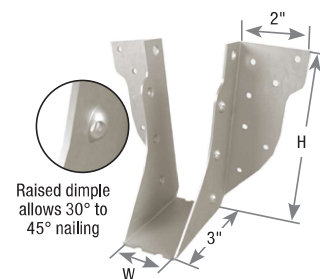
**Codes:** Load values are derived from data submitted to various North American building code evaluators

### Installation:

- Use all specified fasteners. See Product Notes, page 16.
- Joist nails must be driven in at a 30° to 45° angle through the joist or truss into the header to achieve listed loads. **Slant / double shear nails must be used to achieve listed load values.**
- HUS – See EWP applications page 187.

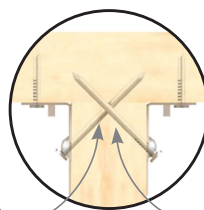


**Typical HUS installation**  
(MUS similar)



Raised dimple allows 30° to 45° nailing

**HUS**



Double shear nail design features fewer nails and faster installation

Uses standard length nails

**MUS**

| Joist / Truss Size | MiTek Stock No. | Ref. No.       | Steel Gauge | Dimensions (in) |        | Fastener Schedule <sup>3</sup> |      |                    |      | Unit | D Fir-L Factored Resistance |                          | S-P-F Factored Resistance |                          | Corrosion Finish |
|--------------------|-----------------|----------------|-------------|-----------------|--------|--------------------------------|------|--------------------|------|------|-----------------------------|--------------------------|---------------------------|--------------------------|------------------|
|                    |                 |                |             | W               | H      | Header                         |      | Truss <sup>2</sup> |      |      | Vertical 100%               | Uplift <sup>1</sup> 115% | Vertical 100%             | Uplift <sup>1</sup> 115% |                  |
|                    |                 |                |             |                 |        | Qty                            | Type | Qty                | Type |      |                             |                          |                           |                          |                  |
| 2 x 6 - 8          | MUS26           | MUS26          | 18          | 1-9/16          | 5-1/16 | 6                              | 10d  | 6                  | 10d  | Lbs  | 2845                        | 1425                     | 2825                      | 1415                     |                  |
|                    |                 |                |             |                 |        |                                |      |                    |      | kN   | 12.66                       | 6.34                     | 12.57                     | 6.29                     |                  |
|                    | HUS26           | HUS26, LJS26DS | 16          | 1-5/8           | 5-7/16 | 14                             | 16d  | 6                  | 16d  | Lbs  | 6090                        | 3915                     | 5195                      | 3625                     |                  |
|                    |                 |                |             |                 |        |                                |      |                    |      | kN   | 27.09                       | 17.41                    | 23.11                     | 16.12                    |                  |
| 2 x 8 - 10         | MUS28           | MUS28          | 18          | 1-9/16          | 7-1/16 | 8                              | 10d  | 8                  | 10d  | Lbs  | 3855                        | 2030                     | 3830                      | 2015                     |                  |
|                    |                 |                |             |                 |        |                                |      |                    |      | kN   | 17.15                       | 9.03                     | 17.04                     | 8.96                     |                  |
|                    | HUS28           | HUS28          | 16          | 1-5/8           | 7-3/16 | 22                             | 16d  | 8                  | 16d  | Lbs  | 8050                        | 5775                     | 6875                      | 5345                     |                  |
|                    |                 |                |             |                 |        |                                |      |                    |      | kN   | 35.81                       | 25.69                    | 30.58                     | 23.78                    |                  |
| 2 x 10 - 12        | HUS210          | HUS210         | 16          | 1-5/8           | 9-3/16 | 30                             | 16d  | 10                 | 16d  | Lbs  | 9625                        | 8045                     | 8070                      | 7455                     |                  |
|                    |                 |                |             |                 |        |                                |      |                    |      | kN   | 42.81                       | 35.79                    | 35.90                     | 33.16                    |                  |

1) Factored uplift resistances have been increased 15% for short-term loads such as wind and earthquake; reduce for other load durations in accordance with the code.

2) Nails must be driven at a 30° to 45° angle through the joist or truss into the header to achieve the table loads.

3) **NAILS:** 10d nails are 0.148" dia. x 3" long, 16d nails are 0.162" dia. x 3-1/2" long.

New products or updated product information are designated in blue font.

**Corrosion Finish Key** ■ Stainless Steel ■ HDG ■ Triple Zinc



MiTek offers a wide variety of light-gauge face mount joist hangers to accommodate application and installation preferences.

**DT series** – 20 gauge, (2) 2x dimensional joist hangers

**JL series** – 20 gauge, 2x dimensional joist hangers

**JLIF series** – 18 gauge, 2x dimensional joist hangers. For installation at end of post or beam or where inverted flange is needed

**SUH series** – 16 gauge steel construction for more demanding applications and light truss support

**Materials:** See chart

**Finish:** G90 galvanizing; JLIF – G-185 galvanizing

**Options:** See chart for Corrosion Finish Options. See SUH Specialty Options Chart.

**Codes:** Load values are derived from data submitted to various North American building code evaluators



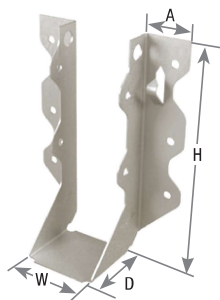
Typical JL26 installation



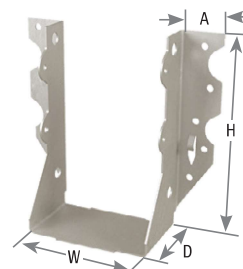
Typical SUH26-2 installation



Typical JL210IF-TZ inverted flange installation



JL26



SUH26-2



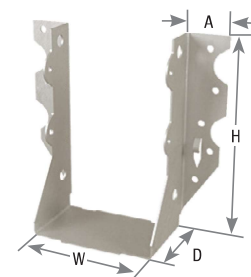
JLIF

**Installation:**

- Use all specified fasteners. See Product Notes, page 16.



Typical DT installation



DT

**SUH Specialty Options Chart**

Refer to Specialty Options pages 294-295 for additional details.

| Option <sup>4</sup>        | Skewed <sup>1,3</sup>   | Sloped Seat <sup>2,3</sup>  | Sloped / Skewed <sup>1,2,3</sup>                                 |
|----------------------------|---|---|--|
| <b>Range</b>               | 1° to 67-1/2° when width is 1-3/4" or less. 1° to 50° on all others.  | 1° to 45°   | See Sloped Seat and Skewed                                       |
| <b>Factored Resistance</b> | 100% of table load. 75% of uplift load on skews greater than 15°.   | 100% of table load  | 80% of table load. 75% of uplift load on skews greater than 15°. |
| <b>Ordering</b>            | Add <i>SK</i> angle required, right ( <i>R</i> ) or left ( <i>L</i> ), and square cut ( <i>SQ</i> ) or bevel cut ( <i>BV</i> ) to product number. Ex. SUH210_SK45R_SQ | Add <i>SL</i> , slope required, and up ( <i>U</i> ) or down ( <i>D</i> ), to product number. Ex. SUH210_SL30D | See Sloped Seat and Skewed. Ex. SUH210_SK45R_SQ_SL30D            |

- 1) Skewed hangers with skews greater than 15° may have all joist nailing on outside flange.
- 2) Sloped or sloped / skewed hangers with slopes greater than 15° may have additional joist nails.
- 3) For skewed hangers, the required cut type (square or bevel) of joist member may vary based on skew angle and width of hanger. Some square cut hangers will require custom pricing due to welded back plate.
- 4) SUH option hangers may be manufactured as welded products to achieve listed loads. Welded products will have primer finish.



# THD / THDH Face Mount Hangers

**THD** – Medium capacity hanger for LVL, LSL, and PSL beams

**THDH** – Heavy capacity hanger for LVL, LSL, and PSL beams

**Materials:** See EWP Face Mount Hangers charts, pages 187-189

**Finish:** G90 galvanizing

**Options:** Rough/ Full sizes available for THD series.  
See Specialty Options chart

**Codes:** Load values are derived from data submitted to various North American building code evaluators

**Installation:**

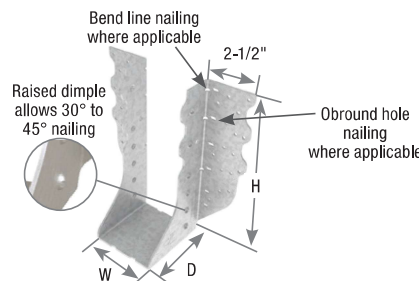
- Use all specified fasteners. See Product Notes, page 16.
- **THD** – Drive bend line nails into header at 45° to achieve listed loads.
- **THDH** – Drive joist nails into header at 30° to 45° to achieve listed loads.



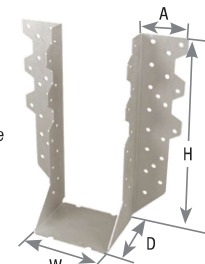
Typical THD installation



Typical THD installation

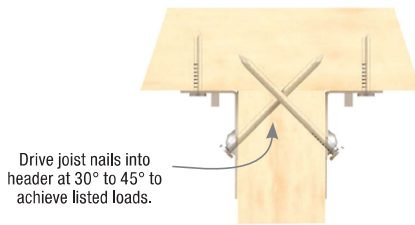


THDH

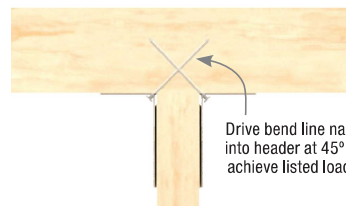


THD410

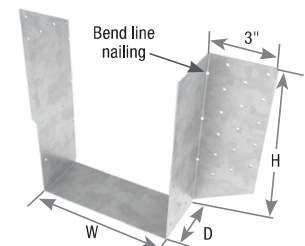
Some model designs may vary from illustration shown



Typical THDH double shear installation



Typical bend line nailing installation



THD7210

**Specialty Options Chart**

– refer to Specialty Options pages 294-295 for additional details

| Option              | MiTek Series | Skewed <sup>1,3,4</sup>  | Sloped Seat <sup>2</sup>   | Sloped / Skewed <sup>1,2,3,4</sup>                       | Inverted Flange  |
|---------------------|--------------|--|--|--|--|
| Range               | THD          | 1° to 45°  | 1° to 45°  | See Sloped Seat and Skewed                               | THD410 – THD414 One flange   |
|                     | THDH         |  |  |  | THD610 – THD7210 Two flange  |
| Factored Resistance | THD          | 85% of table load  | 65% of table load  | 65% of table load  | 100% of table load<br>65% of table load when nailing into the support members end grain                                  |
|                     | THDH         | 85% of table load<br>50% of table uplift load  | 85% of table load  | 52% of table load<br>50% of table uplift load            | N/A  |
| Ordering            | THD          | Add <i>SK</i> , angle required, right ( <i>R</i> ) or left ( <i>L</i> ), and square cut ( <i>SQ</i> ) or bevel cut ( <i>BV</i> ) to product number. Ex. THDH410_SK45R_BV | Add <i>SL</i> , slope required, and up ( <i>U</i> ) or down ( <i>D</i> ), to product number. Ex: THDH410_SL30D | See Sloped Seat and Skewed<br>Ex. THDH410_SK45R_BV_SL30D | <b>One flange option:</b> Add <i>IF</i> , and right ( <i>R</i> ) or left ( <i>L</i> ), to product number. Ex. THD410_IFR |
|                     | THDH         |  |  |  | <b>Two flange option:</b> Add <i>IF</i> , to product number. Ex. THD610_IF   |
|                     |              |  |  |  | N/A  |

- 1) Skewed hangers with skews greater than 15° may have all joist nailing on outside flange. All skewed THDH hangers have joist nails on one side only.
- 2) Sloped or sloped / skewed hangers with slopes greater than 15° may have additional joist nails.
- 3) THDH models - Skewed hangers typically require a bevel cut. A square cut option may be available as a custom.
- 4) THD models - For skewed hangers, the required cut type (square or bevel) of joist member may vary based on skew angle and width of hanger. Some square cut hangers will require custom pricing due to welded back plate.

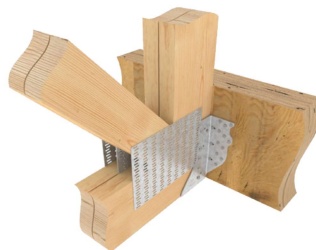
**Materials:** 12 gauge

**Finish:** G90 galvanizing

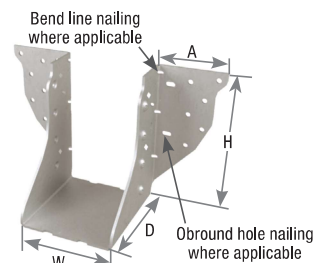
**Codes:** Load values are derived from data submitted to various North American building code evaluators

**Installation:**

- Use all specified fasteners. See Product Notes, page 16.
- Joist nails must be driven in at a 30° to 45° angle through the joist or truss into the header to achieve listed loads. **Slant / double shear nails must be used to achieve listed load values.**
- See EWP applications on pages 188-189.

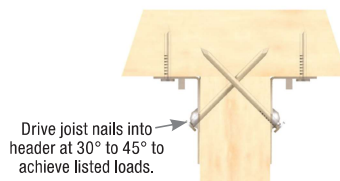


Typical THDH installation



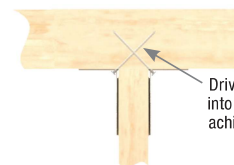
THDH

Some model designs may vary from illustration shown



Drive joist nails into header at 30° to 45° to achieve listed loads.

Typical double shear installation



Drive bend line nails into header at 45° to achieve listed loads.

Typical bend line nail installation

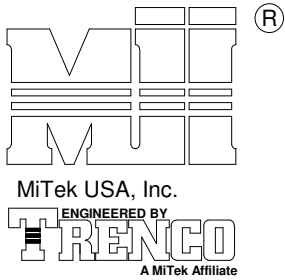
| Joist / Truss Size | MiTek Stock No. | Ref. No.  | Dimensions (in) |         |   |       | Fastener Schedule <sup>2,3</sup> |      |       |      | Unit | D Fir-L             |                          | S-P-F               |                          |
|--------------------|-----------------|-----------|-----------------|---------|---|-------|----------------------------------|------|-------|------|------|---------------------|--------------------------|---------------------|--------------------------|
|                    |                 |           | W               | H       | D | A     | Header                           |      | Truss |      |      | Factored Resistance |                          | Factored Resistance |                          |
|                    |                 |           |                 |         |   |       | Qty                              | Type | Qty   | Type |      | Vertical 100%       | Uplift <sup>1</sup> 115% | Vertical 100%       | Uplift <sup>1</sup> 115% |
| 2 x 6 - 8          | THDH26          | HGUS26    | 1-5/8           | 5-7/16  | 5 | 3-1/2 | 20                               | 16d  | 8     | 16d  | Lbs  | 7130                | 4880                     | 5470                | 4740                     |
|                    |                 |           |                 |         |   |       |                                  |      |       |      |      | kN                  | 31.72                    | 21.71               | 24.33                    |
| 2 x 8 - 10         | THDH28          | HGUS28    | 1-5/8           | 7-3/16  | 5 | 3-1/2 | 36                               | 16d  | 12    | 16d  | Lbs  | 12130               | 7575                     | 9475                | 7345                     |
|                    |                 |           |                 |         |   |       |                                  |      |       |      |      | kN                  | 53.96                    | 33.70               | 42.15                    |
| 2 x 10 - 12        | THDH210         | --        | 1-5/8           | 9-3/16  | 5 | 3-1/2 | 46                               | 16d  | 16    | 16d  | Lbs  | 14620               | 10030                    | 11905               | 8775                     |
|                    |                 |           |                 |         |   |       |                                  |      |       |      |      | kN                  | 65.03                    | 44.62               | 52.96                    |
| (2) 2 x 6 - 8      | THDH26-2        | HGUS26-2  | 3-1/4           | 5-1/2   | 4 | 2-1/2 | 22                               | 16d  | 8     | 16d  | Lbs  | 9480                | 4880                     | 7420                | 4740                     |
|                    |                 |           |                 |         |   |       |                                  |      |       |      |      | kN                  | 42.17                    | 21.71               | 33.01                    |
| (2) 2 x 8 - 10     | THDH28-2        | HGUS28-2  | 3-1/4           | 7-1/4   | 4 | 2-1/2 | 36                               | 16d  | 10    | 16d  | Lbs  | 12130               | 5110                     | 9475                | 5110                     |
|                    |                 |           |                 |         |   |       |                                  |      |       |      |      | kN                  | 53.96                    | 22.73               | 42.15                    |
| (2) 2 x 10 - 12    | THDH210-2       | HGUS210-2 | 3-1/4           | 9-1/4   | 4 | 2-1/2 | 46                               | 16d  | 12    | 16d  | Lbs  | 12430               | 7575                     | 9725                | 7345                     |
|                    |                 |           |                 |         |   |       |                                  |      |       |      |      | kN                  | 55.29                    | 33.70               | 43.26                    |
| (3) 2 x 6 - 8      | THDH26-3        | HGUS26-3  | 5-1/8           | 5-7/16  | 4 | 2-1/2 | 20                               | 16d  | 8     | 16d  | Lbs  | 7130                | 4880                     | 5470                | 4740                     |
|                    |                 |           |                 |         |   |       |                                  |      |       |      |      | kN                  | 31.72                    | 21.71               | 24.33                    |
| (3) 2 x 8 - 10     | THDH28-3        | HGUS28-3  | 5-1/8           | 7-3/16  | 4 | 2-1/2 | 36                               | 16d  | 12    | 16d  | Lbs  | 12130               | 7575                     | 9475                | 7345                     |
|                    |                 |           |                 |         |   |       |                                  |      |       |      |      | kN                  | 53.96                    | 33.70               | 42.15                    |
| (3) 2 x 10 - 12    | THDH210-3       | HGUS210-3 | 5-1/8           | 9-3/16  | 4 | 2-1/2 | 46                               | 16d  | 16    | 16d  | Lbs  | 12430               | 10030                    | 9725                | 8775                     |
|                    |                 |           |                 |         |   |       |                                  |      |       |      |      | kN                  | 55.29                    | 44.62               | 43.26                    |
| (3) 2 x 12 - 14    | THDH212-3       | HGUS212-3 | 5-1/8           | 11-3/16 | 4 | 2-1/2 | 56                               | 16d  | 20    | 16d  | Lbs  | 13975               | 10030                    | 11750               | 8775                     |
|                    |                 |           |                 |         |   |       |                                  |      |       |      |      | kN                  | 62.16                    | 44.62               | 52.27                    |
| (3) 2 x 14 - 16    | THDH214-3       | HGUS214-3 | 5-1/8           | 13-3/16 | 4 | 2-1/2 | 66                               | 16d  | 22    | 16d  | Lbs  | 17720               | 10185                    | 15320               | 8905                     |
|                    |                 |           |                 |         |   |       |                                  |      |       |      |      | kN                  | 78.82                    | 45.31               | 68.15                    |
| (4) 2 x 6 - 8      | THDH26-4        | HGUS26-4  | 6-9/16          | 5-7/16  | 4 | 2     | 20                               | 16d  | 8     | 16d  | Lbs  | 7130                | 4880                     | 5470                | 4740                     |
|                    |                 |           |                 |         |   |       |                                  |      |       |      |      | kN                  | 31.72                    | 21.71               | 24.33                    |
| (4) 2 x 8 - 10     | THDH28-4        | HGUS28-4  | 6-7/16          | 7-9/16  | 4 | 2-1/2 | 36                               | 16d  | 12    | 16d  | Lbs  | 11015               | 7575                     | 8680                | 7345                     |
|                    |                 |           |                 |         |   |       |                                  |      |       |      |      | kN                  | 49.00                    | 33.70               | 38.61                    |

1) Factored resistances have been increased 15% for short-term loads such as wind and earthquake; reduce for other load durations in accordance with the code.

2) Joist nails need to be toe nailed at a 30° to 45° angle to achieve factored resistances shown.

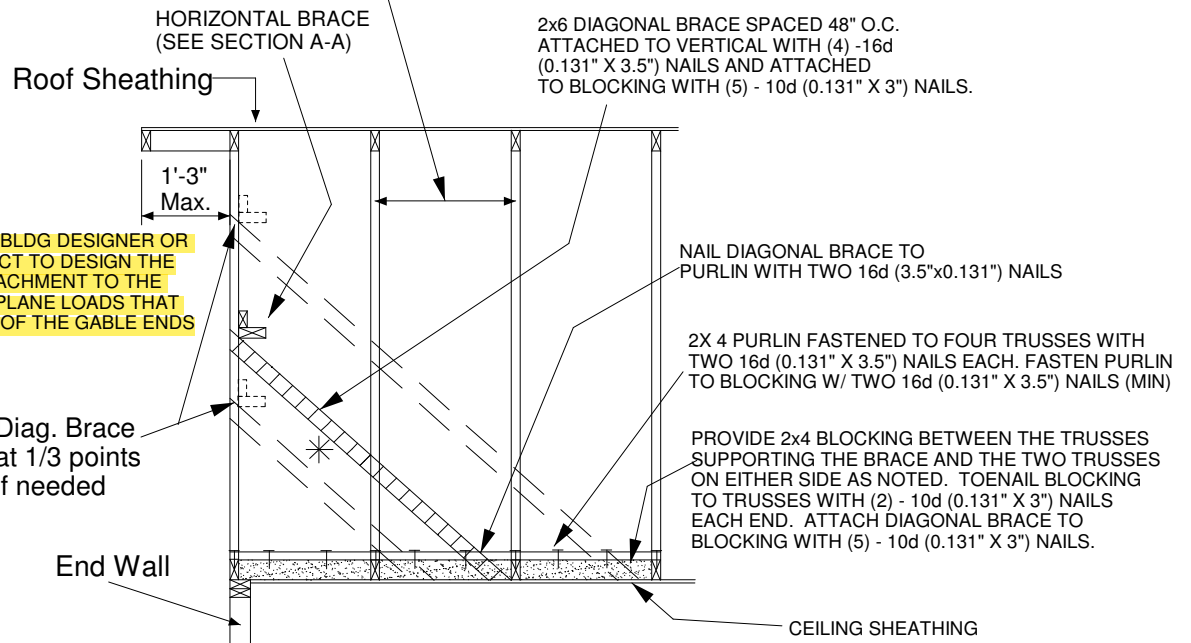
3) **NAILS:** 16d nails are 0.162" dia. x 3-1/2" long.

New products or updated product information are designated in blue font.



ALTERNATE DIAGONAL BRACING TO THE BOTTOM CHORD

Trusses @ 24" o.c.



IT IS THE RESPONSIBILITY OF THE BLDG DESIGNER OR THE PROJECT ENGINEER/ARCHITECT TO DESIGN THE CEILING DIAPHRAGM AND ITS ATTACHMENT TO THE TRUSSES TO RESIST ALL OUT OF PLANE LOADS THAT MAY RESULT FROM THE BRACING OF THE GABLE ENDS

Diag. Brace at 1/3 points if needed

BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES

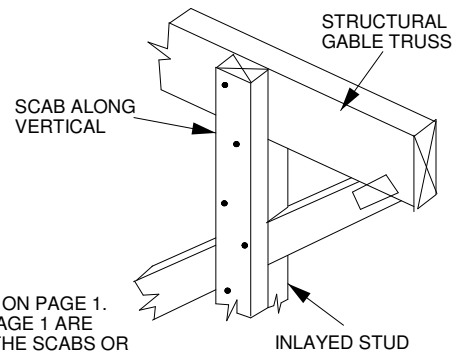
STRUCTURAL GABLE TRUSSES MAY BE BRACED AS NOTED:

METHOD 1 : ATTACH A MATCHING GABLE TRUSS TO THE INSIDE FACE OF THE STRUCTURAL GABLE AND FASTEN PER THE FOLLOWING NAILING SCHEDULE.

METHOD 2 : ATTACH 2X SCABS TO THE FACE OF EACH VERTICAL MEMBER ON THE STRUCTURAL GABLE PER THE FOLLOWING NAILING SCHEDULE. SCABS ARE TO BE OF THE SAME SIZE, GRADE AND SPECIES AS THE TRUSS VERTICALS

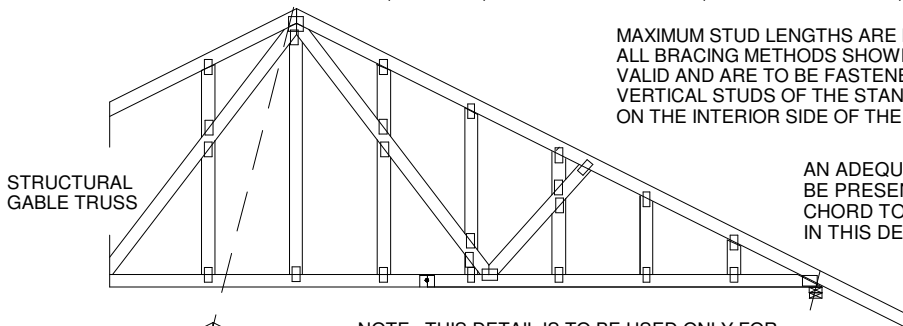
NAILING SCHEDULE:

- FOR WIND SPEEDS 120 MPH (ASCE 7-98, 02, 05), 150 MPH (ASCE 7-10, 16) OR LESS, NAIL ALL MEMBERS WITH ONE ROW OF 10d (0.131" X 3") NAILS SPACED 6" O.C.
- FOR WIND SPEEDS 120-150 MPH (ASCE 7-98, 02, 05), 150-190 MPH (ASCE 7-10, 16) NAIL ALL MEMBERS WITH TWO ROWS OF 10d (0.131" X 3") NAILS SPACED 6" O.C. (2X 4 STUDS MINIMUM)

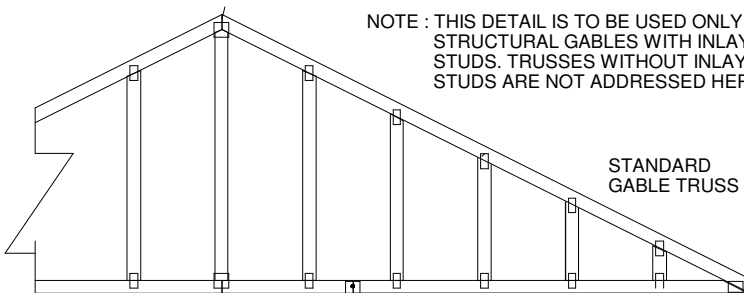


MAXIMUM STUD LENGTHS ARE LISTED ON PAGE 1. ALL BRACING METHODS SHOWN ON PAGE 1 ARE VALID AND ARE TO BE FASTENED TO THE SCABS OR VERTICAL STUDS OF THE STANDARD GABLE TRUSS ON THE INTERIOR SIDE OF THE STRUCTURE.

AN ADEQUATE DIAPHRAGM OR OTHER METHOD OF BRACING MUST BE PRESENT TO PROVIDE FULL LATERAL SUPPORT OF THE BOTTOM CHORD TO RESIST ALL OUT OF PLANE LOADS. THE BRACING SHOWN IN THIS DETAIL IS FOR THE VERTICAL/STUDS ONLY.

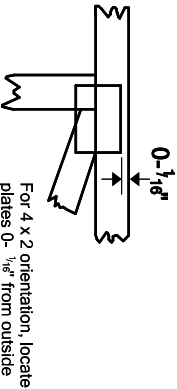
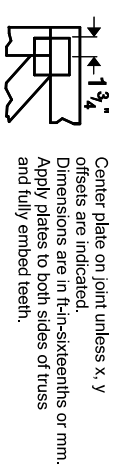


NOTE : THIS DETAIL IS TO BE USED ONLY FOR STRUCTURAL GABLES WITH INLAYED STUDS. TRUSSES WITHOUT INLAYED STUDS ARE NOT ADDRESSED HERE.



## Symbols

### PLATE LOCATION AND ORIENTATION



This symbol indicates the required direction of slots in connector plates.

\* Plate location details available in MITek software or upon request.

### PLATE SIZE

4 X 4

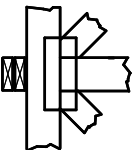
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

### LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T, I or Eliminator bracing if indicated.

### BEARING



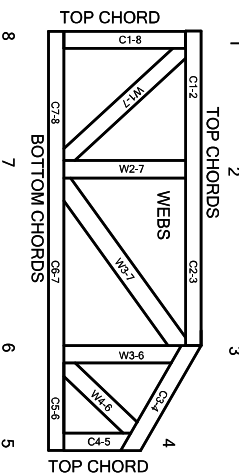
Indicates location where bearings (supports) occur. Loons vary but reaction section indicates joint number where bearings occur. Min. size shown is for crushing only.

### Industry Standards:

TPIC: Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses  
 DSB-89: Design Standard for Bracing.  
 BCSI1: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

## Numbering System

6-4-8 dimensions shown in 1/16-inches or mm (Drawings not to scale)



**JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.**

**CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.**

### PRODUCT CODE APPROVALS

CMC Reports:

11996-L, 10319-L, 13270-L, 12691-R

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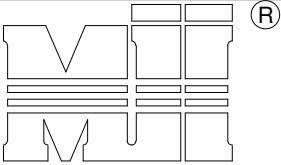
MITek Engineering Reference Sheet: MIT-7473C rev. 06/30/2020



## General Safety Notes

### Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI1.
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T, I, or Eliminator bracing should be considered.
- Never exceed the design bracing shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by TPIC.
- Design assumes trusses will be suitably protected from the environment in accord with TPIC.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with TPIC Quality Criteria.
- The design does not take into account any dynamic or other loads other than those expressly stated.



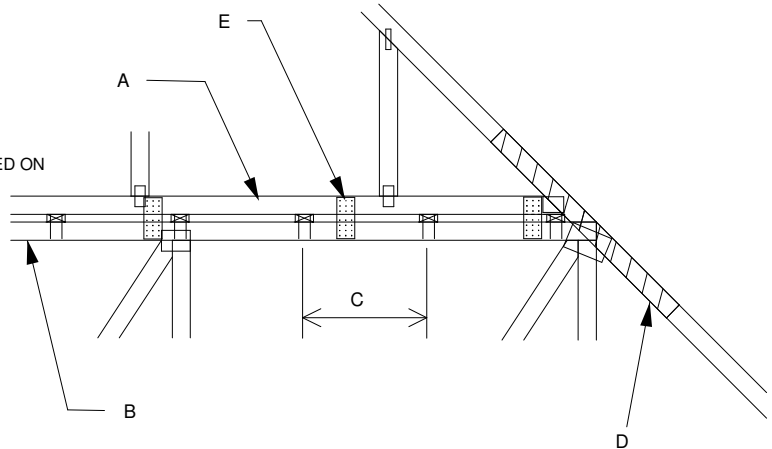
MiTek USA, Inc.



MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E  
 MAX MEAN ROOF HEIGHT = 30 FEET  
 MAX TRUSS SPACING = 24" O.C.  
 CATEGORY II BUILDING  
 EXPOSURE B or C  
 ASCE 7-02, ASCE 7-05  
 DURATION OF LOAD INCREASE : 1.60

DETAIL IS NOT APPLICABLE FOR TRUSSES TRANSFERRING DRAG LOADS (SHEAR TRUSSES). ADDITIONAL CONSIDERATIONS BY BUILDING ENGINEER/DESIGNER ARE REQUIRED.

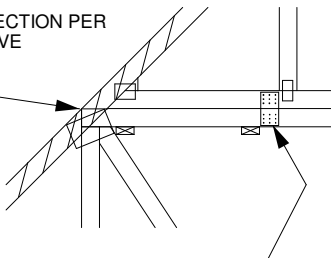
- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) (0.131" X 3.5") TOE-NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT TO BASE TRUSS WITH (2) (0.131" X 3.5") NAILS EACH.
- D - 2 X  $\frac{1}{2}$ " X 4'-0" SCAB, SIZE TO MATCH TOP CHORD OF PIGGYBACK TRUSS, MIN GRADE #2, ATTACHED TO ONE FACE, CENTERED ON INTERSECTION, WITH (2) ROWS OF (0.131" X 3") NAILS @ 4" O.C. SCAB MAY BE OMITTED PROVIDED THE TOP CHORD SHEATHING IS CONTINUOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH DIRECTIONS AND:
  - 1. WIND SPEED OF 90 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR
  - 2. WIND SPEED OF 91 MPH TO 140 MPH WITH A MAXIMUM PIGGYBACK SPAN OF 12 ft.
- E - FOR WIND SPEEDS BETWEEN 101 AND 140 MPH, ATTACH MITEK 3X8 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 72" O.C. W/ (4) (0.131" X 1.5") NAILS PER MEMBER. STAGGER NAILS FROM OPPOSING FACES. ENSURE 0.5" EDGE DISTANCE. (MIN. 2 PAIRS OF PLATES REQ. REGARDLESS OF SPAN)



WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

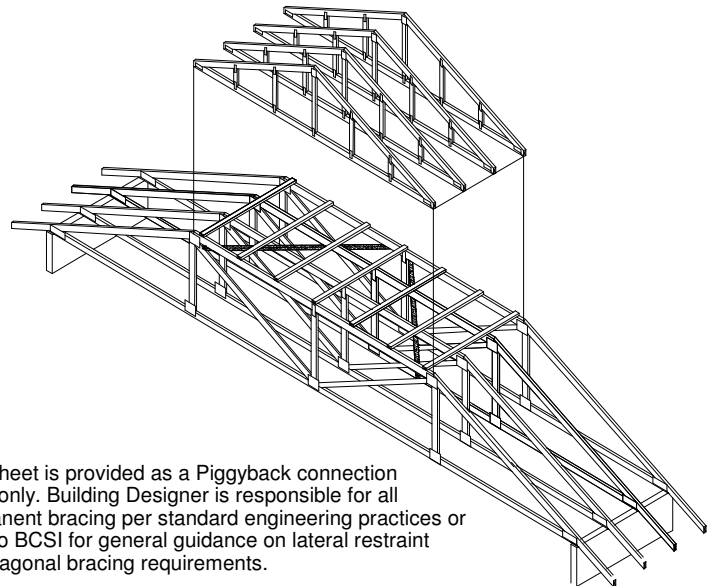
REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH Nail-On PLATES AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.

SCAB CONNECTION PER NOTE D ABOVE

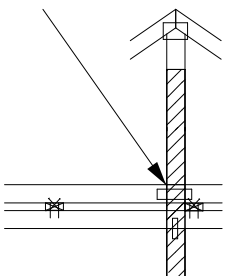


FOR ALL WIND SPEEDS, ATTACH MITEK 3X6 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) (0.131" X 1.5") PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" EDGE DISTANCE.

This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.



VERTICAL WEB TO EXTEND THROUGH BOTTOM CHORD OF PIGGYBACK



FOR LARGE CONCENTRATED LOADS APPLIED TO CAP TRUSS REQUIRING A VERTICAL WEB:

- 1) VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS MUST MATCH IN SIZE, GRADE, AND MUST LINE UP AS SHOWN IN DETAIL.
- 2) ATTACH 2 x  $\frac{1}{2}$ " x 4'-0" SCAB TO EACH FACE OF TRUSS ASSEMBLY WITH 2 ROWS OF 10d (0.131" X 3") NAILS SPACED 4" O.C. FROM EACH FACE. (SIZE AND GRADE TO MATCH VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS.) (MINIMUM 2X4)
- 3) THIS CONNECTION IS ONLY VALID FOR A MAXIMUM CONCENTRATED LOAD OF 4000 LBS (@1.15). REVIEW BY A QUALIFIED ENGINEER IS REQUIRED FOR LOADS GREATER THAN 4000 LBS.
- 4) FOR PIGGYBACK TRUSSES CARRYING GIRDER LOADS, NUMBER OF PLYS OF PIGGYBACK TRUSS TO MATCH BASE TRUSS.
- 5) CONCENTRATED LOAD MUST BE APPLIED TO BOTH THE PIGGYBACK AND THE BASE TRUSS DESIGN.