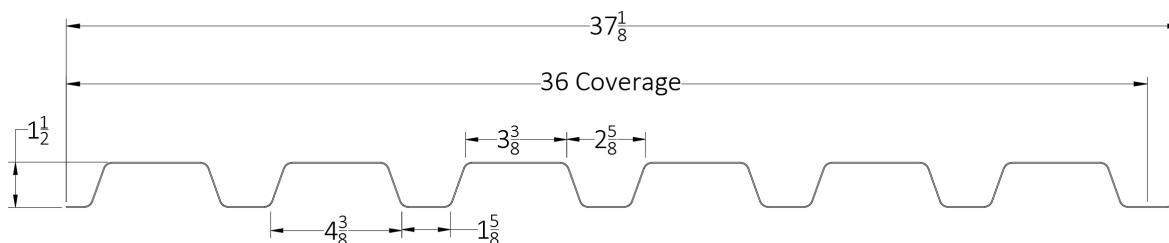


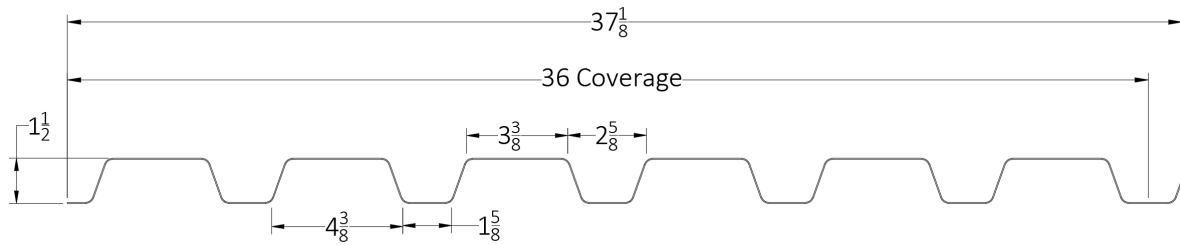
NOMINAL.  
ACTUAL  
DIMENSIONS  
MAY  
VARY.



### 1.5 B Deck (WR)

- Deck Options and Material Specs
  - Galvanized: 20 Gauge, G60, Minimum Thickness .036" Grade: A1011 CS Type B
  - Galvanized: 20 Gauge, G40, Minimum Thickness .036" Grade: A1011 CS Type B
  - Galvanized: 22 Gauge, G40, Minimum Thickness .030" Grade: A1011 CS Type B
  - Chem dry galvanized material is not in stock but is available upon request.
  - White Bottom Painted: 20 Gauge, Minimum Thickness .036" Cold Rolled
  - Standard Length Options: 2' – 40' (contact sales for longer length options)
- Section properties are calculated in accordance with ANSI/SDI RD-2017
- Loads and spans are based on the *SDI Roof Deck Design Manual Second Edition*
- Deck may be fastened using mechanical fasteners or puddle welds.
- All fastening methods must be approved by the engineer of record.
- Minimum overlap of 2", 6" overlap recommended.
- Minimum end bearing length shall be 1 1/2".
- Minimum interior bearing length shall be 3" (check web crippling).
- Side lap screws are required if support spacing is greater than 5'.
- "Minimum Standard Yield Strength is 30 KSI based on standard mill tensile range of 30-50 KSI. For specific projects requiring higher tensile yield strengths, please contact our sales dept to request your specific demand for any orders above 225 SQs or full truck load QTY.
- Table does not account for web crippling, see *SDI Roof Deck Design Manual Second Edition (Table 5)*
- Cantilever table assumes adjacent span is 1.5 greater than the cantilever distance.
- Deck is Factory Mutual compliant, download roof deck securement details at [fmglobal.com](http://fmglobal.com).
- Design Process Step 1: Confirm construction loading condition. (see chart on page 2)
- Design Process Step 2: Confirm max live load. (see chart on page 2)
- Design Process Step 3: Consult with EOR (engineer of record) on design approval and fastening method.
- Design Process Step 4: Order decking material and install per EOR specs

**NOMINAL.  
ACTUAL  
DIMENSIONS  
MAY  
VARY.**



### Construction Spans (ASD)

| Deck Gauge | Span Condition | ASD Span | Span Condition   | ASD Span |
|------------|----------------|----------|------------------|----------|
| 22         | Single         | 6'- 7"   | Double or Triple | 8' - 1"  |
| 20         |                | 6'- 6"   |                  | 9'- 11"  |

### Cantilever Uniform Loads (psf)

| Span       | Deck Gauge | 1'- 6" | 2'- 0" | 2'- 6" | 3'- 0" | 3'- 6" | 4'- 0" |
|------------|------------|--------|--------|--------|--------|--------|--------|
| Cantilever | 22         | 317    | 177    | 113    | 78     | 57     | 43     |
|            | 20         | 394    | 221    | 141    | 97     | 71     | 54     |

### ASD Max Allowable Uniform Loads (psf)

|        |            | Span (ft-in.) |        |        |        |        |        |        |        |        |        |        |        |        |        |         |
|--------|------------|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Span   | Deck Gauge | 3'- 0"        | 3'- 6" | 4'- 0" | 4'- 6" | 5'- 0" | 5'- 6" | 6'- 0" | 6'- 6" | 7'- 0" | 7'- 6" | 8'- 0" | 8'- 6" | 9'- 0" | 9'- 6" | 10'- 0" |
| Single | 22         | 312           | 226    | 171    | 134    | 108    | 89     | 74     | 63     | 54     | 47     | 41     | 36     | 32     | 29     | 26      |
|        | 20         | 364           | 269    | 207    | 164    | 133    | 110    | 92     | 78     | 67     | 58     | 51     | 45     | 40     | 36     | 32      |
| Double | 22         | 300           | 226    | 175    | 139    | 113    | 93     | 78     | 66     | 57     | 49     | 43     | 38     | 34     | 30     | 27      |
|        | 20         | 400           | 292    | 222    | 174    | 141    | 116    | 97     | 82     | 71     | 61     | 54     | 47     | 42     | 37     | 34      |
| Triple | 22         | 372           | 282    | 220    | 175    | 142    | 117    | 98     | 83     | 71     | 62     | 54     | 48     | 43     | 38     | 34      |
|        | 20         | 479           | 356    | 274    | 217    | 176    | 145    | 122    | 103    | 89     | 77     | 68     | 60     | 53     | 47     | 43      |

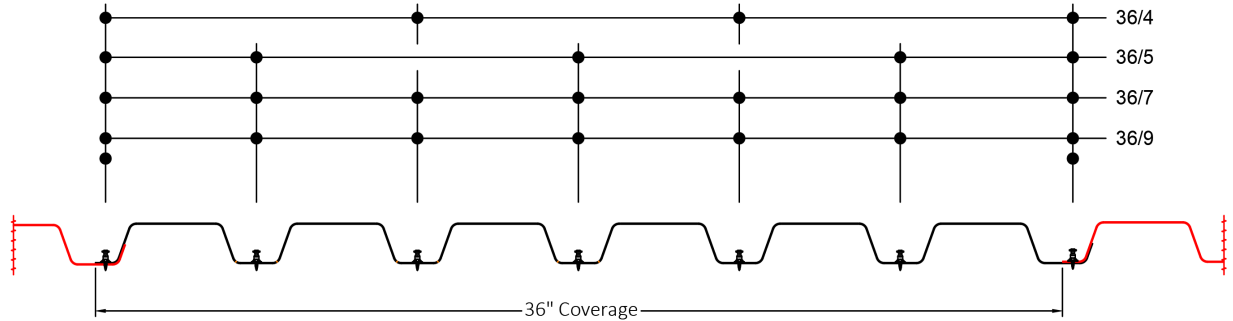
### Factory Mutual Spans (fmglobal.com)


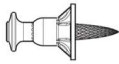


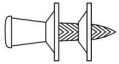


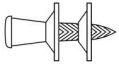


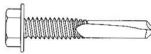


| Deck Gauge | Max Center to Center Span |
|------------|---------------------------|
| 22         | 6'- 0"                    |
| 20         | 6'- 6"                    |

The technical information presented is intended for assessment by individuals with technical expertise and is of a theoretical nature. Any utilization of this information is at the independent discretion and risk of the user. PWI disclaims any responsibility or liability for outcomes or damages arising from the improper evaluation or use of B Deck.

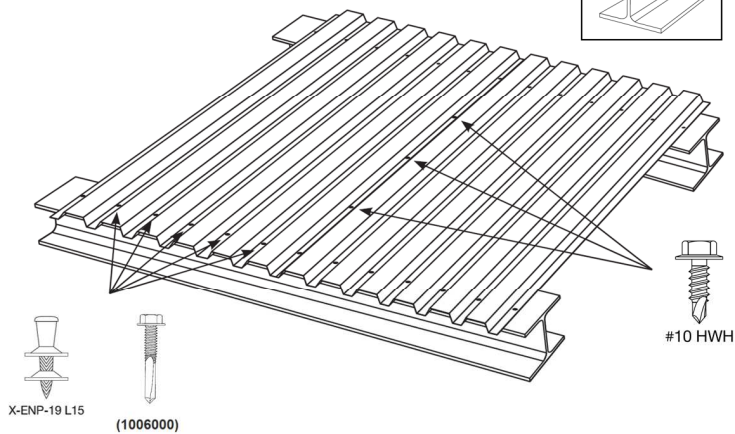
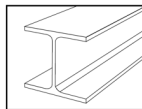


1.5 B Deck (WR)  
Fastener Layout  
(EOR to specify fastener pattern)

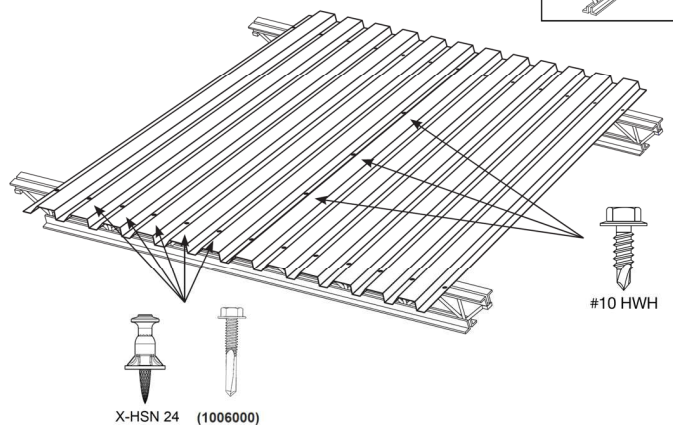
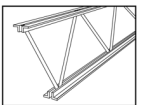


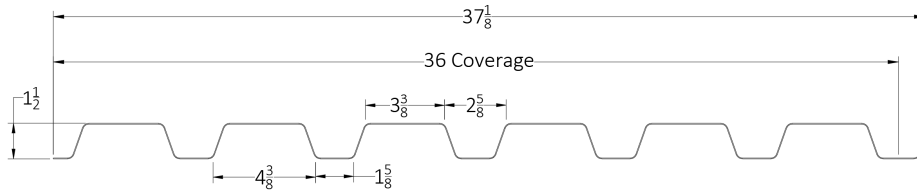
| Base Material                            | Propellant                                      | Fastener Type  | Installation Tool   |
|--|---|--|---|
| Joist and Structural Steel (0 - 1/4")    | RED (short) 2128214<br>DX Cartridge 6.8/11 M40  | Powder-Actuated (X-HSN 24)<br>                    | DX 9-HSN<br>   |
| Joist and Structural Steel (1/4" - 3/8") | BLACK (long) 2208111<br>DX Cartridge 6.8/11 M40 | Powder-Actuated (X-ENP-19 L15 MXR)<br>        | DX 9-ENP<br>  |
| Joist and Structural Steel (1/4" - 1"+)  | BLACK (long) 2128213<br>DX Cartridge 6.8/18 M40 | Powder-Actuated (X-ENP-19 L15 MXR)<br>        | DX 9-ENP<br>  |
| Joist and structural steel (1/8" - 1/2") | N/A   | <br>12-24 x 1-1/4" Hex Screw<br>(1006000)<br> | Screw Gun/Impact Driver (5/16" hex)<br><br> |

### Solutions for structural steel applications



### Solutions for bar joist (open web joists)



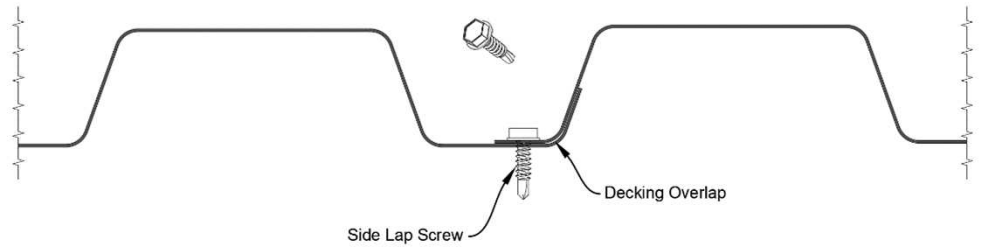
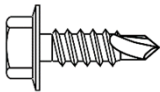


SDT 9 STAND-UP HANDLE



- Side Lap Screw
  - Hilti #10 HWH Screw
- Support Member Spacing:
  - Only use side lap screws if required by EOR
  - 5': use (2) side lap screws
  - 6': use (3) side lap screws

Hilti #10 HWH Screw



Install valley shims on under mezzanine flooring as show below.  
20ga. Galvanized sheetmetal (6"x46")



Shims

No Shims

