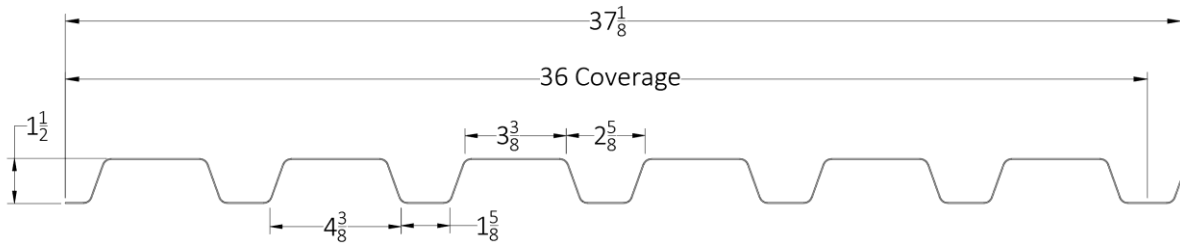


## 1.5 B Deck (WR)

- 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



### 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

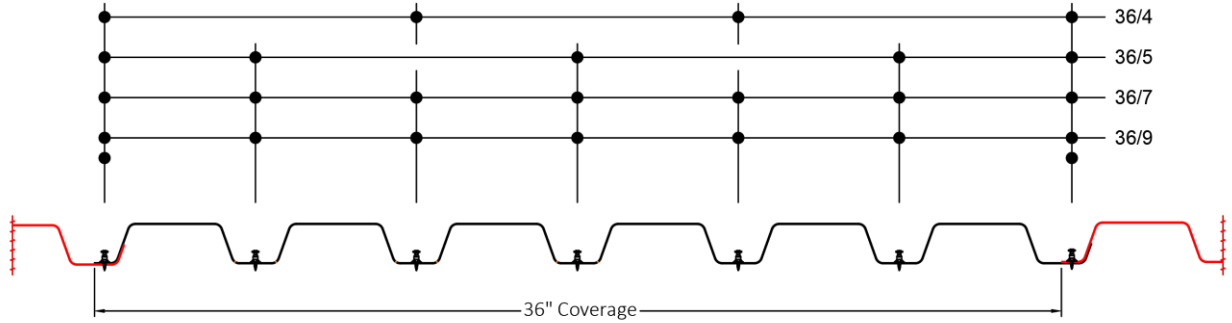
### Factory Mutual Spans (fmglobal.com)


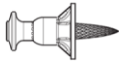


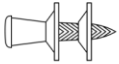


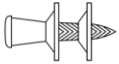





Deck Gauge	Max Center to Center Span
22	6'- 0"
20	6'- 6"

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. Structuraldeck.com disclaims any responsibility or liability for outcomes or damages arising from the improper evaluation or use of B Deck.

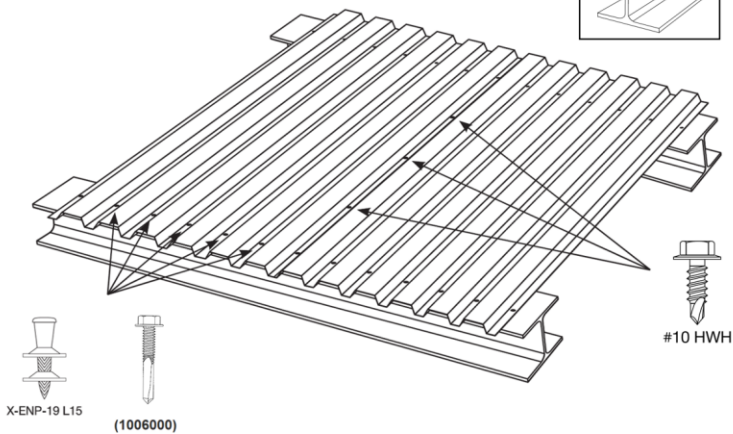
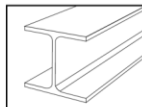


1.5 B Deck (WR)  
Fastener Layout  
(EOR to specify fastener pattern)

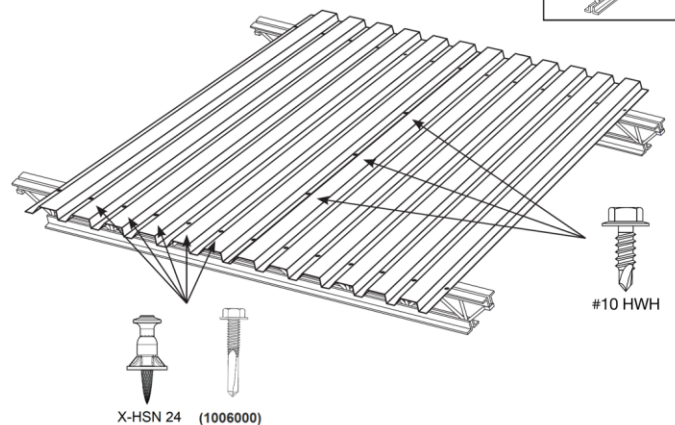
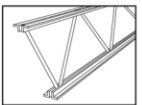


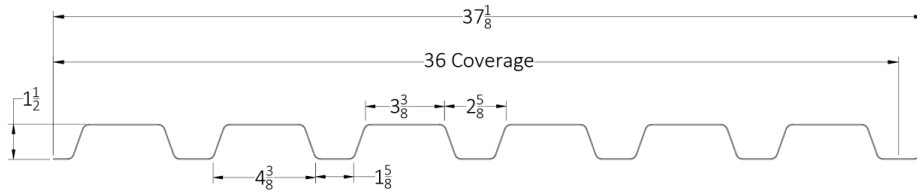
Base Material	Propellant	Fastener Type	Installation Tool
Joist and Structural Steel (0 - 1/4")	RED (short) 2128214 DX Cartridge 6.8/11 M40	Powder-Actuated (X-HSN 24)  	DX 9-HSN 
Joist and Structural Steel (1/4" - 3/8")	BLACK (long) 2208111 DX Cartridge 6.8/11 M40	Powder-Actuated (X-ENP-19 L15 MXR)  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

### Solutions for structural steel applications



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



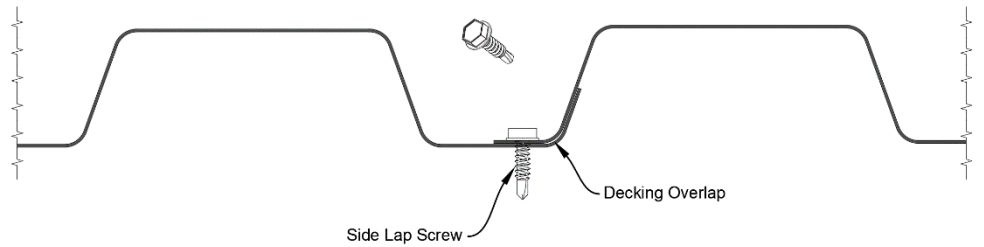
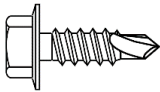


SDT 9 STAND-UP HANDLE



- 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

