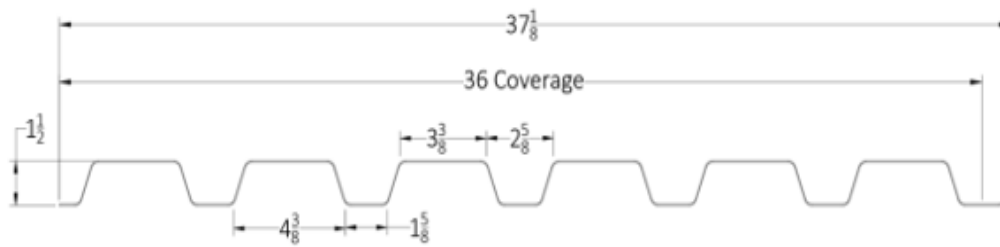
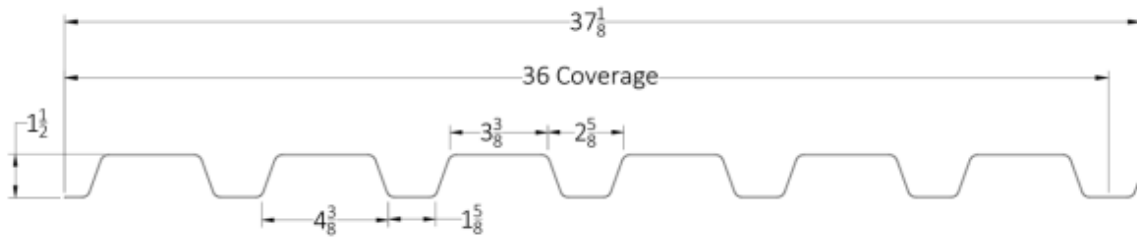


## 1.5 B Deck (WR)

- \* Deck Options and Material specifications
  - \* Galvanized: 20 Gauge, G60, Minimum Thickness .036" Grade: A1011 CS Type B
  - \* Galvanized: 18 Gauge, G60, Minimum Thickness .047" Grade : A1011 CS Type B
  - \* 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 1.5"
- \* Minimum interior bearing length shall be shall be 3"
- \* 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 greater than the cantilever distance.



- Decking 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 specifications.



Construction Spans (ASD)				
Deck Gauge	Span Condition	ASD Span	Span Condition	ASD Span
20	Single	8' - 1"	Double or Triple	9' - 11"
18		10' - 8"		13' - 0"

Cantilever Uniform Loads (psf)						
Span	Deck Gauge	1' - 6"	2' - 0"	3' - 0"	3' - 6"	4' - 0"
Cantilever	20	394	221	97	71	54
	18	520	292	128	93	71

ASD Max Allowable Uniform Loads (psf)												
		Span (ft. - in.)										
Span	Deck Gauge	5' - 0"	5' - 6"	6' - 0"	6' - 6"	7' - 0"	7' - 6"	8' - 0"	8' - 6"	9' - 0"	9' - 6"	10' - 0"
Single	20	133	110	92	78	67	58	51	45	40	36	32
	18	181	149	125	106	91	79	69	61	54	48	43
Double	20	141	116	97	82	71	61	54	47	42	37	34
	18	186	153	128	109	93	81	71	63	56	50	44
Triple	20	176	145	122	103	89	77	68	60	53	47	43
	18	233	192	161	137	117	102	89	79	70	63	56

## Maximum Center-to-Center Spans for Type B (FM-Rated)

### Single-Span Condition

- **20 ga:** up to **75 in** (~6' 3")
- **18 ga:** up to **79 in** (~6' 7")

- **Multi-Span Condition (Two or More Spans)**

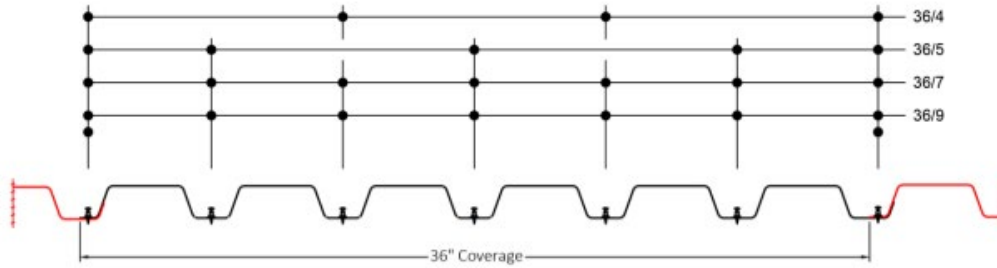










- **20 ga:** up to **89 in** (~7' 5")
- **18 ga:** up to **100 in** (~8' 4")

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

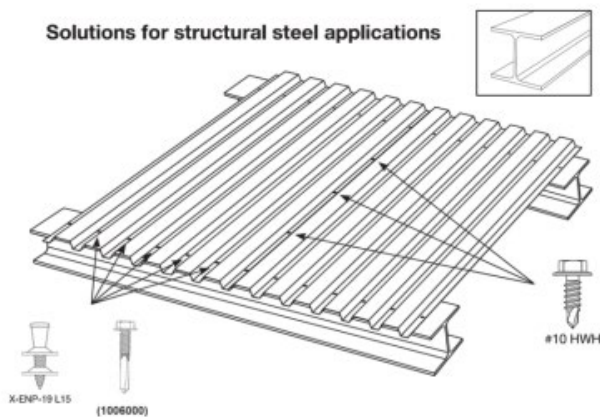


1.5 B Deck (WR)  
Fastener Layout  
(EOR to specify fastener pattern)

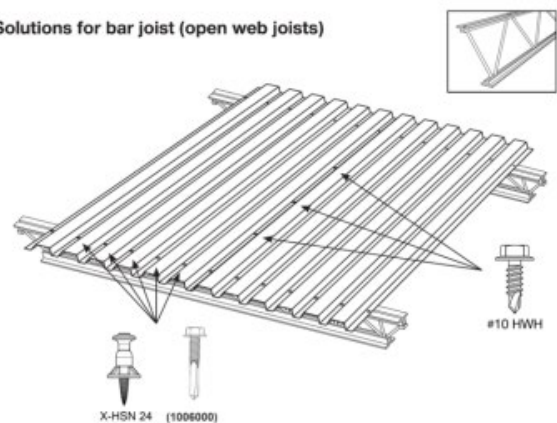


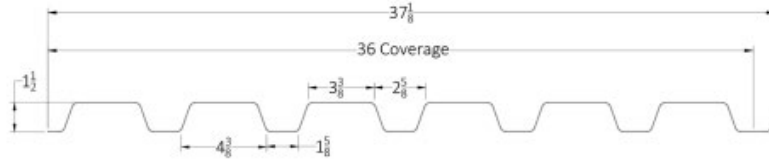
Base Material	Propellant	Fastener Type	Installation Tool
Joist and Structural Steel (0 - 1/4")	RED (short) 2128214 DX Cartridge 6.8/11 M40	Powder-Actuated (X-HSN 24)	DX 9-HSN
Joist and Structural Steel (1/4" - 3/8")	BLACK (long) 2208111 DX Cartridge 6.8/11 M40	 	
Joist and Structural Steel (1/4" - 1"+)	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	  ITW Buildex TEKS® 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)





- 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



SDT 9 STAND-UP HANDLE



Hilti #10 HWH Screw



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



Shims



No Shims

