

New Millennium Building Systems Versa-Dek LS ES Acoustical steel roof deck is secured to the structural supports. During construction 0.125 in. (3.2 mm) thick polyethylene lathe is loose laid in the bottom of the ribs. Nominal 3.0 pcf (48 kg/m³) fiberglass insulation 4.75 x 2 in. (121 x 50 mm) is loose laid within each rib opening. Minimum 2.0 in. (50 mm) thick FM Approved polyisocyanurate insulation is placed over the deck with insulation board edges bearing along the centerline of the deck top flange. 0.5 in. (13 mm) thick Retro-Fit Board is mechanically attached or secured with hot asphalt applied at 25 lb/sq (1.2 kg/m²) is placed over the insulation. Retro-Fit Board is covered with an FM Approved fully or partially adhered roof covering (three or four ply BUR or two, three or four ply modified bitumen roof cover mechanically attached or adhered with hot asphalt at 25 lb/sq (1.2 kg/m²) or single ply roof cover) or with a mechanically attached roof covering when the in-row fastener spacing is less than or equal to one-half of the deck span, per proprietary listings.

Versa-Dek LS ES Acoustical has a 6 in. (150 mm) rib module spacing and require minimum 2 in. (38 mm) thick polyisocyanurate insulation board be installed with edges along the centerline of the top flange.

Go to www.roofnav.com to obtain up to date information.

The maximum allowable span is the lesser of:

- the span shown in the tables below,
- the maximum span for the selected proprietary fastener used to secure the deck or
- the maximum span shown in the specified RoofNav assembly

The wind uplift rating of the completed roof assembly cannot exceed the wind rating of the above deck components shown in the specified RoofNav assembly.

The decks are secured to structural supports using fasteners FM Approved for securing steel deck to structural supports. Steel deck side laps are secured using fasteners FM Approved for securing steel deck laps. Refer to RoofNav product listings for fastener details.

In lieu of mechanical fasteners, the decks are secured to supports with puddle welds as noted in Tables below. The spacing shown is the maximum spacing permitted and the weld diameter shown is the minimum visible weld diameter. Maximum four sheets of 22 ga. (0.0295 in. [0.75 mm]) and 20 ga. (0.0358 in. [0.91 mm]) thick decks can be welded and maximum three sheets of 18 ga. (0.0474 in. [1.2 mm]) and two sheets of 16 ga. (0.0598 in. [1.52 mm]) thick decks can be welded.

Versa-Dek LS ES Acoustical						
Secured with FM Approved fasteners or						
Secured with 0.75 in. (19 mm) diameter welds spaced 6 in. (150 mm) o.c.						
Deck Design Thickness	Wind Rating - One Span					
	1-60		1-75		1-90	
MSG (in. [mm])	in.	mm	in.	mm	in.	mm
22 (0.0295 [0.75])	107	2718	107	2718	107	2718
20 (0.0358 [0.91])	118	2997	118	2997	118	2997
18 (0.0474 [1.20])	136	3454	136	3454	136	3454
16 (0.0598 [1.52])	152	3861	152	3861	152	3861

Deck Design Thickness	Wind Rating - Two or More Spans					
	1-60		1-75		1-90	
	in.	mm	in.	mm	in.	mm
MSG (in. [mm])						
22 (0.0295 [0.75])	126	3200	126	3200	126	3200
20 (0.0358 [0.91])	139	3531	139	3531	139	3531
18 (0.0474 [1.20])	160	4064	160	4064	160	4064
16 (0.0598 [1.52])	179	4547	179	4547	179	4547

Versa-Dek LS ES Acoustical						
Secured with 0.625 in. (15 mm) diameter welds spaced 6 in. (150 mm) o.c.						
Deck Design Thickness	Wind Rating - One Span					
	1-60		1-75		1-90	
	in.	mm	in.	mm	in.	mm
MSG (in. [mm])						
22 (0.0295 [0.75])	107	2718	107	2718	107	2718
20 (0.0358 [0.91])	118	2997	118	2997	118	2997
18 (0.0474 [1.20])	136	3454	136	3454	136	3454
16 (0.0598 [1.52])	152	3861	152	3861	152	3861

Deck Design Thickness	Wind Rating - Two Spans					
	1-60		1-75		1-90	
	in.	mm	in.	mm	in.	mm
MSG (in. [mm])						
22 (0.0295 [0.75])	126	3200	126	3200	110	2794
20 (0.0358 [0.91])	139	3531	139	3531	134	3404
18 (0.0474 [1.20])	160	4064	160	4064	160	4064
16 (0.0598 [1.52])	179	4547	179	4547	179	4547

Deck Design Thickness	Wind Rating - Three or More Spans					
	1-60		1-75		1-90	
	in.	mm	in.	mm	in.	mm
MSG (in. [mm])						
22 (0.0295 [0.75])	126	3200	126	3200	126	3200
20 (0.0358 [0.91])	139	3531	139	3531	139	3531
18 (0.0474 [1.20])	160	4064	160	4064	160	4064
16 (0.0598 [1.52])	179	4547	179	4547	179	4547