New Millennium Building Systems N-Dek Acoustical steel roof deck is secured to the structural supports. Nominal 1.65 pcf (26.4 kg/m^3) fiberglass insulation, 2 x 3 in. (52 x 76 mm), is loose laid within each rib opening. Minimum 0.5 in. (13 mm) thick Dens Deck is loose laid followed by minimum 2 in. (52 mm) polyisocyanurate insulation and an FM Approved fully or partially adhered roof covering (single ply roof cover or a three or four ply glass or organic BUR) 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.

N-Dek Acoustical has an 8 in. (203 mm) rib module spacing. When utilizing an FM Approved above-deck system with a mechanically fastened cover, select one with a cover fastener spacing greater than the 8 in. (203 mm) and reduce this fastener spacing to coincide with placement of the fastener into the deck top flanges (e.g., FM Approved 12 in. (305 mm) spacing is reduced to 8 in. (203 mm) spacing; FM Approved 18 in. (457 mm) spacing is reduced to 16 in. (406 mm) spacing).

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.

N-Dek Acoustical
Secured with FM Approved fasteners

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])	141	3581	141	3581	141	3581
20 (0.0358 [0.91])	159	4039	159	4039	159	4039
18 (0.0474 [1.20])	189	4801	189	4801	189	4801
16 (0.0598 [1.52])	216	5486	216	5486	216	5486

Deck Design Thickness	Wind Rating - Two Spans					
	1-60		1-75		1-90	
MSG (in. [mm])	in.	mm	in.	mm	in.	mm
22 (0.0295 [0.75])	164	4166	146	3708	132	3353
20 (0.0358 [0.91])	190	4826	168	4267	153	3886
18 (0.0474 [1.20])	230	5842	205	5207	186	4724
16 (0.0598 [1.52])	259	6579	237	6020	214	5436

Deck Design Thickness	Wind Rating - Three or More Spans					
	1-60		1-75		1-90	
MSG (in. [mm])	in.	mm	in.	mm	in.	mm
22 (0.0295 [0.75])	180	4572	163	4140	148	3759
20 (0.0358 [0.91])	200	5080	188	4775	171	4343
18 (0.0474 [1.20])	230	5842	229	5817	207	5258
16 (0.0598 [1.52])	259	6579	259	6579	239	6071

N-Dek Acoustical
Secured with 0.75 in. (19 mm) diameter welds spaced 8 in. (203 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])	141	3581	141	3581	141	3581
20 (0.0358 [0.91])	159	4039	159	4039	159	4039
18 (0.0474 [1.20])	189	4801	189	4801	189	4801
16 (0.0598 [1.52])	216	5486	216	5486	216	5486

Deck Design Thickness	Wind Rating - Two Spans					
	1-60		1-75		1-90	
MSG (in. [mm])	in.	mm	in.	mm	in.	mm
22 (0.0295 [0.75])	153	3886	120	3048	99	2515
20 (0.0358 [0.91])	187	4750	147	3734	121	3073
18 (0.0474 [1.20])	230	5842	195	4953	160	4064
16 (0.0598 [1.52])	259	6579	237	6020	203	5156

Deck Design Thickness	Wind Rating - Three or More Spans					
	1-60		1-75		1-90	
MSG (in. [mm])	in.	mm	in.	mm	in.	mm
22 (0.0295 [0.75])	180	4572	151	3835	124	3150
20 (0.0358 [0.91])	200	5080	184	4674	151	3835
18 (0.0474 [1.20])	230	5842	229	5817	201	5105
16 (0.0598 [1.52])	259	6579	259	6579	239	6071

N-Dek Acoustical Secured with two 0.75 in. (19 mm) diameter welds spaced 8 in. (203 mm) o.c.						
Deck Design Thickness	Wind Rating - Two Spans					
	1-60		1-75		1-90	
MSG (in. [mm])	in.	mm	in.	mm	in.	mm
22 (0.0295 [0.75])	164	4166	146	3708	132	3353
20 (0.0358 [0.91])	190	4826	168	4267	153	3886
18 (0.0474 [1.20])	230	5842	205	5207	186	4724
16 (0.0598 [1.52])	259	6579	237	6020	214	5436
Deck Design Thickness	Wind Rating - Three or More Spans					
	1-60		1-75		1-90	
MSG (in. [mm])	in.	mm	in.	mm	in.	mm
22 (0.0295 [0.75])	180	4572	163	4140	148	3759
20 (0.0358 [0.91])	200	5080	188	4775	171	4343
18 (0.0474 [1.20])	230	5842	229	5817	207	5258
16 (0.0598 [1.52])	259	6579	259	6579	239	6071