1.5VL-36 Composite Steel Deck-Slab (ASD)

with 5 in. 145 pcf 3000 psi NWC

NUCOR® VULCRAFT

Superimposed Allowable Load, Wn/Ω, Limited by L/900 ,psf[1]									
Gage	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"
22	388	260	182	133	100	77	60	48	39
20	416	279	196	142	107	82	65	52	42
19	442	296	208	151	114	87	69	55	44
18	464	311	218	159	119	92	72	58	47
16	510	342	240	175	131	101	79	63	51

Notes: [1] For high loads, commonly in excess of 200 psf, dynamic or impact loading, and long term concrete creep should be considered. Contact Vulcraft for further assistance.

Maximum Unshored Span			
Gage	1 Span	2 Span	3 Span
22	5'-7"	6'-7"	6'-8"
20	6'-9"	7'-10"	7'-11"
19	7'-3"	8'-8"	8'-10"
18	7'-8"	9'-3"	9'-6"
16	8'-4"	10'-4"	10'-4"

Maximum Unshored Span based on:

Uniform Construction Load	20.00	psf	Minimum End Bearing	2.00	in.
Concentrated Construction Load	150.00	plf	Minimum Interior Bearing	4.00	in.
Concrete Ponding Allowance	3.00	psf	Maximum Deflection L/	180	≤ 0.75 in.
Concrete Volume	1.24	yd^3 / 100 ft^2 (Note: Does not include allowance for ponding)			

Composite Steel Deck-Slab Properties							Min. Temperature & Shrinkage	
Gage	w_1 psf	Ic $in.^4/ft$	Iu $in.^4/ft$	Id [1] $in.^4/ft$	Mno/Ω kip-ft/ft	Vno/Ω kip/ft	As min [2] $in.^2/ft$	or Dramix® Steel Fiber 4D 65/60BG, lbs/cy
22	50.3	4.85	10.4	7.62	3.22	3.29	0.032	29
20	50.7	5.59	10.77	8.18	3.83	3.29	0.032	29
19	51	6.24	11.12	8.68	4.4	3.29	0.032	29
18	51.3	6.81	11.43	9.12	4.9	3.29	0.032	29
16	52	7.95	12.09	10.02	6	3.29	0.032	29

Notes: [1] Id = (Ic + Iu)/2

[2] Minimum area of steel for temperature and shrinkage