

DHS PURLIN SYSTEM LOAD SPAN TABLES

Uniformly loaded bending capacities (kN/m) and axial compression capacities (kN) are given for DHS purlins and girts for spans between 3.0m and 18.0m in the following configurations -

1B, 2B, 3B Ultimate - 1, 2 or 3 Braces

FR Ultimate - Fully Restrained (Used when the compression flange is fully restrained against lateral movement)

Ws Serviceability - Load at which midspan deflection equates to span/150.

$\phi_c N_{ex}$ Elastic buckling capacity about the X-X axis.

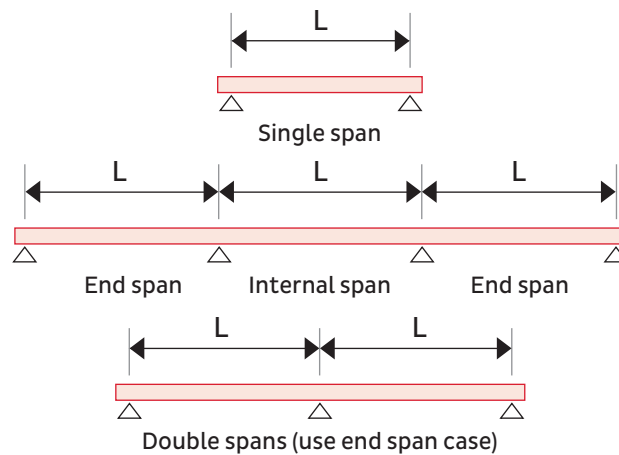
As deflection is proportional to loading, Ws loads may be factored by the deflection ratio for any deflection within the limit of the linear load capacities.

The following notes apply to the load span tables in this section -

1. No bolt slip or member rotation has been allowed for at fixed ends.
2. End and internal spans can be either Continuous or Lapped span type, however only tables of the corresponding span type may be used in conjunction.
3. Use of end span tables with corresponding internal span tables assumes that the end span is within plus 5% or minus 10% of the internal spans, provided that for a 3 span configuration both end spans are reduced by the same amount. Otherwise specific design to AS/NZS 4600 is required.
4. Linear interpolation is permitted for Loads between intermediate DHS purlin spans.

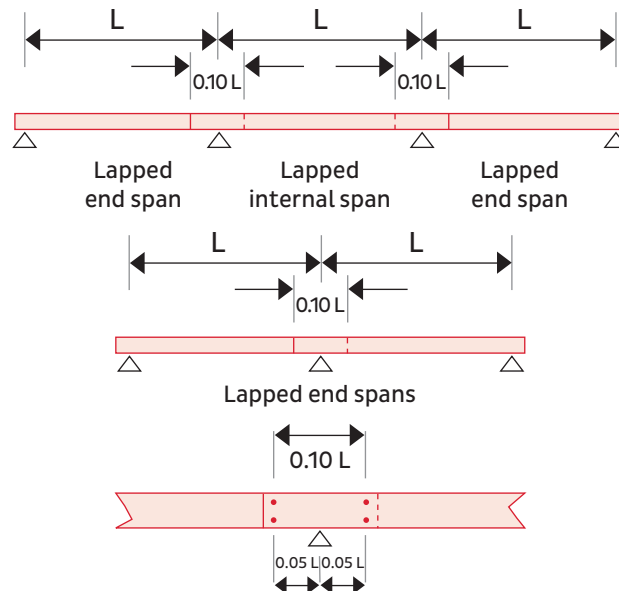
Typical DHS Purlin System Span Configurations

L = Span length



All lap lengths are to be a minimum of 0.1 of the maximum span, measured from bolt centre to bolt centre at each end of the lap, positioned equally each side of the portal rafter.

Refer CAD Details on-line (www.diamondstructural.co.nz/products/dhs-purlins).



DHS PURLIN SYSTEM LOAD SPAN TABLES - SINGLE SPANS

Uniformly Loaded Bending Capacities (kN/m) $\phi_b W_{bx}$

Span (m)	DHS 150/12					DHS 150/15					DHS 200/12					DHS 200/15					DHS 200/18					DHS 250/13						
	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s		
3.0	5.17	5.17	5.17	5.17	4.73																											
3.5	3.80	3.80	3.80	3.80	3.02	5.18	5.18	5.18	5.18	3.92	5.63	5.63	5.63	5.63	5.86																	
4.0	2.91	2.91	2.91	2.91	2.05	3.96	3.96	3.96	3.96	2.65	4.31	4.31	4.31	4.31	4.03	5.91	5.91	5.91	5.91	5.91	5.51	7.60	7.60	7.60	7.60	7.60	6.80	5.37	5.37	5.37	7.48	
4.5	2.30	2.30	2.30	2.30	1.45	3.09	3.13	3.13	3.13	1.86	3.40	3.40	3.40	3.40	2.90	4.67	4.67	4.67	4.67	4.67	3.91	6.00	6.00	6.00	6.00	6.00	4.82	4.77	4.77	4.77	5.37	
5.0	1.73	1.86	1.86	1.86	1.06	2.29	2.53	2.53	2.53	1.36	2.69	2.75	2.75	2.75	2.16	3.78	3.78	3.78	3.78	3.78	2.87	4.86	4.86	4.86	4.86	4.86	3.54	4.27	4.27	4.27	3.99	
5.5	1.26	1.54	1.54	1.54	0.80	1.67	2.09	2.09	2.09	1.02	2.09	2.28	2.28	2.28	1.65	3.02	3.12	3.12	3.12	3.12	2.17	3.85	4.02	4.02	4.02	4.02	2.66	3.43	3.53	3.53	3.05	
6.0	0.94	1.29	1.29	1.29	0.62	1.24	1.76	1.76	1.76	0.78	1.63	1.91	1.91	1.91	1.29	2.35	2.62	2.62	2.62	2.62	1.68	2.94	3.38	3.38	3.38	3.38	2.05	2.73	2.96	2.96	2.39	
6.5	0.71	1.10	1.10	1.10	0.49	0.94	1.50	1.50	1.50	0.62	1.27	1.63	1.63	1.63	1.02	1.79	2.23	2.23	2.23	2.23	1.33	2.24	2.88	2.88	2.88	2.88	1.61	2.20	2.53	2.53	1.91	
7.0	0.55	0.94	0.95	0.95	0.39	0.72	1.26	1.29	1.29	0.49	1.00	1.40	1.40	1.40	0.82	1.39	1.93	1.93	1.93	1.93	1.07	1.73	2.48	2.48	2.48	2.48	1.29	1.75	2.18	2.18	1.55	
7.5	0.43	0.78	0.82	0.82	0.32	0.56	1.03	1.12	1.12	0.40	0.81	1.21	1.22	1.22	0.67	1.09	1.68	1.68	1.68	1.68	0.87	1.36	2.16	2.16	2.16	2.16	1.05	1.41	1.90	1.90	1.28	
8.0						0.44	0.84	0.99	0.99	0.33	0.65	1.02	1.07	1.07	0.56	0.87	1.47	1.47	1.47	1.47	0.72	1.07	1.90	1.90	1.90	1.90	0.86	1.15	1.66	1.67	1.07	
8.5											0.53	0.86	0.95	0.95	0.47	0.70	1.25	1.30	1.30	1.30	0.60	0.85	1.60	1.68	1.68	1.68	0.72	0.94	1.43	1.48	0.90	
9.0											0.43	0.74	0.85	0.85	0.39	0.57	1.07	1.16	1.16	1.16	0.50	0.69	1.34	1.50	1.50	1.50	0.60	0.79	1.23	1.32	0.77	
9.5											0.35	0.62	0.76	0.76	0.34	0.47	0.89	1.04	1.04	1.04	0.43	0.56	1.11	1.34	1.34	1.34	0.51	0.66	1.06	1.18	0.66	
10.0											0.29	0.53	0.67	0.69	0.29	0.38	0.75	0.94	0.94	0.94	0.37	0.46	0.93	1.21	1.21	1.21	0.44	0.56	0.92	1.06	0.57	
10.5																0.32	0.63	0.85	0.85	0.85	0.32	0.38	0.79	1.10	1.10	1.10	0.38	0.48	0.79	0.97	0.49	
11.0																						0.32	0.67	0.97	1.00	1.00	1.00	0.33	0.40	0.68	0.86	0.43
11.5																						0.27	0.57	0.85	0.92	0.92	0.92	0.29	0.34	0.59	0.77	0.38
12.0																												0.29	0.52	0.68	0.74	0.33
12.5																												0.25	0.45	0.61	0.68	0.29
13.0																																
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1. 1B, 2B & 3B: Load Capacity for 1, 2 and 3 rows of bracing. 2. FR: Load Capacity for fully restrained compression flange. 3. W_s: Load at a deflection of span/150.

DHS PURLIN SYSTEM LOAD SPAN TABLES – SINGLE SPANS

Uniformly Loaded Bending Capacities (kN/m) $\phi_b W_{bx}$

Span (m)	DHS 250/15				DHS 250/18				DHS 300/15				DHS 300/18				DHS 350/18				DHS 400/20																
	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR			
3.0																																					
3.5																																					
4.0																																					
4.5																																					
5.0	5.24	5.24	5.24	5.24	4.90	6.77	6.77	6.77	6.77	6.35	5.53	5.53	5.53	5.53	7.44																						
5.5	4.31	4.33	4.33	4.33	3.75	5.60	5.60	5.60	5.60	4.81	5.03	5.03	5.03	5.03	5.69																						
6.0	3.44	3.64	3.64	3.64	2.94	4.63	4.70	4.70	4.70	3.73	4.61	4.61	4.61	4.61	4.46																						
6.5	2.77	3.10	3.10	3.10	2.35	3.74	4.01	4.01	4.01	2.95	3.86	4.05	4.05	4.05	3.56	5.17	5.25	5.25	5.25	5.25	4.63																
7.0	2.21	2.67	2.67	2.67	1.91	2.98	3.45	3.45	3.45	2.37	3.18	3.49	3.49	3.49	2.89	4.26	4.52	4.52	4.52	4.52	3.77	5.15	5.46	5.46	5.46	5.46	5.46	5.17									
7.5	1.78	2.33	2.33	2.33	1.57	2.36	3.01	3.01	3.01	1.94	2.64	3.04	3.04	3.04	2.39	3.54	3.94	3.94	3.94	3.94	3.11	4.27	4.76	4.76	4.76	4.76	4.76	4.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.54	
8.0	1.45	2.04	2.04	2.04	1.30	1.88	2.64	2.64	2.64	1.60	2.17	2.67	2.67	2.67	1.99	2.91	3.46	3.46	3.46	3.46	2.60	3.52	4.18	4.18	4.18	4.18	4.18	3.56	4.91	5.66	5.66	5.66	5.66	5.66	5.66	5.46	
8.5	1.20	1.79	1.81	1.81	1.09	1.52	2.34	2.34	2.34	1.34	1.79	2.36	2.36	2.36	1.68	2.41	3.07	3.07	3.07	3.07	2.20	2.91	3.70	3.70	3.70	3.70	3.70	3.00	4.06	5.01	5.01	5.01	5.01	5.01	5.01	4.60	
9.0	0.99	1.54	1.61	1.61	0.92	1.24	2.08	2.09	2.09	1.13	1.49	2.11	2.11	2.11	1.43	2.02	2.74	2.74	2.74	2.74	1.86	2.43	3.30	3.30	3.30	3.30	3.30	2.56	3.39	4.47	4.47	4.47	4.47	4.47	4.47	3.92	
9.5	0.82	1.34	1.45	1.45	0.78	1.02	1.80	1.87	1.87	0.96	1.26	1.85	1.89	1.89	1.23	1.70	2.45	2.45	2.45	2.45	1.59	2.05	2.96	2.96	2.96	2.96	2.96	2.20	2.85	4.01	4.01	4.01	4.01	4.01	4.01	3.37	
10.0	0.68	1.16	1.31	1.31	0.67	0.85	1.57	1.69	1.69	0.82	1.07	1.62	1.71	1.71	1.07	1.45	2.17	2.21	2.21	2.21	1.37	1.74	2.63	2.63	2.63	2.63	2.63	1.91	2.42	3.62	3.62	3.62	3.62	3.62	2.92		
10.5	0.57	1.00	1.19	1.19	0.58	0.71	1.35	1.53	1.53	0.71	0.91	1.43	1.55	1.55	0.93	1.23	1.91	2.01	2.01	2.01	1.18	1.49	2.31	2.42	2.42	2.42	2.42	1.66	2.07	3.22	3.22	3.22	3.22	3.22	2.54		
11.0	0.48	0.86	1.08	1.08	0.51	0.59	1.16	1.40	1.40	0.62	0.79	1.26	1.41	1.41	0.82	1.04	1.69	1.83	1.83	1.83	1.03	1.28	2.04	2.21	2.21	2.21	2.21	1.46	1.79	2.85	2.99	2.99	2.99	2.99	2.23		
11.5	0.41	0.75	0.96	0.99	0.45	0.50	0.99	1.28	1.28	0.54	0.68	1.12	1.29	1.29	0.72	0.89	1.50	1.67	1.67	1.67	0.91	1.11	1.81	2.02	2.02	2.02	2.02	1.29	1.55	2.52	2.73	2.73	2.73	2.73	1.97		
12.0	0.35	0.66	0.86	0.91	0.39	0.42	0.86	1.16	1.17	0.47	0.59	0.98	1.18	1.18	0.64	0.76	1.32	1.54	1.54	1.54	0.80	0.97	1.60	1.86	1.86	1.86	1.86	1.15	1.35	2.23	2.51	2.51	2.51	2.51	1.75		
12.5	0.30	0.58	0.77	0.83	0.35	0.36	0.74	1.04	1.04	0.42	0.45	0.86	1.07	1.09	0.57	0.66	1.16	1.42	1.42	1.42	0.71	0.84	1.40	1.71	1.71	1.71	1.71	1.02	1.17	1.96	2.31	2.31	2.31	2.31	1.56		
13.0	0.26	0.51	0.69	0.77	0.31	0.31	0.65	0.94	1.00	0.37	0.40	0.76	0.97	1.01	0.51	0.57	1.03	1.30	1.31	1.31	0.63	0.73	1.24	1.57	1.57	1.57	1.57	0.92	1.01	1.73	2.14	2.14	2.14	2.14	1.40		
13.5						0.27	0.57	0.84	0.93	0.33	0.40	0.67	0.88	0.93	0.46	0.50	0.91	1.18	1.21	1.21	0.57	0.63	1.10	1.42	1.42	1.42	1.42	0.82	0.87	1.54	1.98	1.98	1.98	1.98	1.26		
14.0						0.23	0.50	0.75	0.86	0.30	0.35	0.60	0.80	0.87	0.41	0.43	0.81	1.07	1.13	1.13	0.51	0.55	0.98	1.29	1.29	1.29	1.29	0.74	0.76	1.37	1.80	1.84	1.84	1.84	1.14		
14.5											0.30	0.54	0.72	0.81	0.37	0.38	0.73	0.97	1.05	1.05	0.46	0.48	0.88	1.18	1.18	1.18	1.18	0.66	0.66	1.22	1.64	1.72	1.72	1.72	1.03		
15.0											0.27	0.48	0.66	0.76	0.33	0.33	0.66	0.89	0.98	0.98	0.41	0.42	0.79	1.07	1.07	1.07	1.07	0.60	0.58	1.10	1.49	1.61	1.61	1.61	0.94		
15.5											0.24	0.43	0.60	0.71	0.30	0.29	0.59	0.81	0.92	0.92	0.38	0.37	0.71	0.98	0.98	0.98	0.98	0.55	0.51	0.99	1.36	1.50	1.50	1.50	0.85		
16.0																0.26	0.53	0.73	0.86	0.86	0.34	0.33	0.64	0.89	0.89	0.89	0.89	0.50	0.45	0.89	1.24	1.41	1.41	1.41	0.77		
16.5																0.23	0.47	0.66	0.81	0.81	0.31	0.29	0.58	0.80	0.80	0.80	0.80	0.45	0.40	0.81	1.12	1.33	1.33	1.33	0.71		
17.0																							0.26	0.53	0.73	0.92	0.92	0.41	0.36	0.73	1.02	1.25	1.25	1.25	0.65		
17.5																							0.23	0.48	0.67	0.87	0.87	0.38	0.32	0.67	0.93	1.18	1.18	1.18	0.59		
18.0																							0.21	0.44	0.61	0.82	0.82	0.35	0.29	0.61	0.85	1.11	1.11	1.11	0.54		

1. 1B, 2B & 3B: Load Capacity for 1, 2 and 3 rows of bracing. 2. FR: Load Capacity for fully restrained compression flange. 3. W_s: Load at a deflection of span/150.

DHS PURLIN SYSTEM LOAD SPAN TABLES - END SPANS

Uniformly Loaded Bending Capacities (kN/m) $\phi_b W_{bx}$

Span (m)	DHS 150/12					DHS 150/15					DHS 200/12					DHS 200/15					DHS 200/18					DHS 250/13											
	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s							
3.0	4.75	4.75	4.75	4.75	10.78	7.05	7.05	7.05	7.05	7.05	4.57	4.57	4.57	4.57	21.64																						
3.5	3.69	3.69	3.69	3.69	6.78	5.18	5.18	5.18	5.18	5.18	3.74	3.74	3.74	3.74	13.63	6.46	6.46	6.46	6.46	6.46	18.50	9.71	9.71	9.71	9.71	9.71	9.71	9.71	9.71	23.62	4.39	4.39	4.39	4.39	26.55		
4.0	2.91	2.91	2.91	2.91	4.54	3.96	3.96	3.96	3.96	3.96	3.11	3.11	3.11	3.11	9.13	5.27	5.27	5.27	5.27	5.27	12.39	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	15.83	3.73	3.73	3.73	3.73	17.78		
4.5	2.30	2.30	2.30	2.30	3.19	3.13	3.13	3.13	3.13	3.13	2.63	2.63	2.63	2.63	6.41	4.37	4.37	4.37	4.37	4.37	8.70	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	11.11	3.21	3.21	3.21	3.21	12.49		
5.0	1.86	1.86	1.86	1.86	2.33	2.53	2.53	2.53	2.53	2.53	2.25	2.25	2.25	2.25	4.67	3.68	3.68	3.68	3.68	3.68	6.34	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	8.10	2.79	2.79	2.79	2.79	9.10		
5.5	1.54	1.54	1.54	1.54	1.78	2.09	2.09	2.09	2.09	2.09	1.94	1.94	1.94	1.94	3.51	3.12	3.12	3.12	3.12	3.12	4.76	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	6.08	2.45	2.45	2.45	2.45	6.84		
6.0	1.29	1.29	1.29	1.29	1.39	1.76	1.76	1.76	1.76	1.76	1.69	1.69	1.69	1.69	2.70	2.62	2.62	2.62	2.62	2.62	3.67	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	4.69	2.17	2.17	2.17	2.17	5.27		
6.5	1.10	1.10	1.10	1.10	1.11	1.50	1.50	1.50	1.50	1.50	1.49	1.49	1.49	1.49	2.12	2.23	2.23	2.23	2.23	2.23	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	3.69	1.93	1.93	1.93	1.93	4.14		
7.0	0.95	0.95	0.95	0.95	0.89	1.29	1.29	1.29	1.29	1.29	1.31	1.31	1.31	1.31	1.70	1.93	1.93	1.93	1.93	1.93	2.33	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.97	1.73	1.73	1.73	1.73	3.31		
7.5	0.82	0.82	0.82	0.82	0.73	1.11	1.12	1.12	1.12	1.12	1.17	1.17	1.17	1.17	1.40	1.68	1.68	1.68	1.68	1.68	1.92	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.43	1.56	1.56	1.56	1.56	2.69		
8.0	0.70	0.72	0.72	0.72	0.60	0.93	0.99	0.99	0.99	0.99	1.05	1.05	1.05	1.05	1.16	1.47	1.47	1.47	1.47	1.47	1.61	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	2.01	1.41	1.41	1.41	1.41	2.22		
8.5	0.59	0.64	0.64	0.64	0.50	0.78	0.86	0.87	0.87	0.87	0.91	0.94	0.94	0.94	0.98	1.30	1.30	1.30	1.30	1.30	1.36	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.85	
9.0	0.49	0.55	0.57	0.57	0.43	0.65	0.74	0.78	0.78	0.78	0.85	0.85	0.85	0.85	0.84	1.14	1.16	1.16	1.16	1.16	1.15	1.46	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.43	1.17	1.17	1.17	1.17	1.56		
9.5	0.41	0.47	0.51	0.51	0.36	0.54	0.63	0.70	0.70	0.70	0.68	0.74	0.76	0.76	0.72	0.98	1.04	1.04	1.04	1.04	0.98	1.25	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.22	1.07	1.07	1.07	1.07	1.34		
10.0	0.34	0.40	0.46	0.46	0.31	0.45	0.53	0.63	0.63	0.63	0.40	0.59	0.64	0.69	0.69	0.62	0.85	0.93	0.94	0.94	0.85	1.06	1.20	1.21	1.21	1.21	1.21	1.21	1.21	1.05	0.98	0.98	0.98	0.98	1.16		
10.5						0.39	0.45	0.57	0.57	0.57	0.35	0.50	0.56	0.62	0.62	0.54	0.72	0.82	0.85	0.85	0.73	0.90	1.04	1.10	1.10	1.10	1.10	1.10	1.10	0.91	0.86	0.90	0.90	0.90	1.01		
11.0						0.33	0.39	0.52	0.52	0.52	0.30	0.44	0.50	0.57	0.57	0.47	0.61	0.72	0.78	0.78	0.64	0.77	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.79	0.75	0.82	0.83	0.83	0.88		
11.5											0.38	0.43	0.52	0.52	0.42	0.53	0.62	0.71	0.71	0.71	0.56	0.66	0.78	0.92	0.92	0.92	0.92	0.92	0.92	0.69	0.66	0.73	0.77	0.77	0.78		
12.0											0.33	0.38	0.47	0.47	0.37	0.46	0.54	0.65	0.65	0.65	0.50	0.57	0.68	0.84	0.84	0.84	0.84	0.84	0.84	0.61	0.57	0.65	0.72	0.72	0.69		
12.5											0.29	0.33	0.44	0.44	0.33	0.40	0.47	0.60	0.60	0.60	0.44	0.50	0.59	0.77	0.77	0.77	0.77	0.77	0.77	0.54	0.50	0.58	0.67	0.67	0.62		
13.0											0.26	0.29	0.40	0.40	0.30	0.35	0.41	0.56	0.56	0.56	0.39	0.43	0.51	0.72	0.72	0.72	0.72	0.72	0.72	0.48	0.45	0.51	0.62	0.62	0.55		
13.5																0.30	0.36	0.51	0.51	0.51	0.35	0.38	0.45	0.66	0.66	0.66	0.66	0.66	0.66	0.43	0.40	0.45	0.58	0.58	0.49		
14.0																0.27	0.32	0.47	0.48	0.48	0.31	0.33	0.40	0.61	0.61	0.61	0.61	0.61	0.61	0.38	0.35	0.40	0.54	0.54	0.45		
14.5																						0.29	0.35	0.55	0.57	0.57	0.57	0.57	0.57	0.57	0.35	0.31	0.36	0.49	0.50	0.40	
15.0																						0.25	0.31	0.50	0.54	0.54	0.54	0.54	0.54	0.54	0.31	0.28	0.32	0.45	0.47	0.37	
15.5																																					0.33
16.0																																					0.23
16.5																																					0.26
17.0																																					0.38
17.5																																				0.41	
18.0																																					0.31

1. 1B, 2B & 3B: Load Capacity for 1, 2 and 3 rows of bracing. 2. FR: Load Capacity for fully restrained compression flange. 3. W_s: Load at a deflection of span/150.

DHS PURLIN SYSTEM LOAD SPAN TABLES - END SPANS

Uniformly Loaded Bending Capacities (kN/m) $\phi_b W_{bx}$

Span (m)	DHS 250/15				DHS 250/18				DHS 300/15				DHS 300/18				DHS 350/18				DHS 400/20											
	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s		
3.0																																
3.5																																
4.0	5.41	5.41	5.41	5.41	21.61	8.47	8.47	8.47	8.47	27.70	5.01	5.01	5.01	5.01	34.35																	
4.5	4.61	4.61	4.61	4.61	15.17	7.12	7.12	7.12	7.12	19.45	4.36	4.36	4.36	4.36	24.13																	
5.0	3.97	3.97	3.97	3.97	11.06	6.05	6.05	6.05	6.05	14.18	3.82	3.82	3.82	3.82	17.59	6.11	6.11	6.11	6.11	6.11	22.56	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	32.21	
5.5	3.45	3.45	3.45	3.45	8.31	5.20	5.20	5.20	5.20	10.65	3.39	3.39	3.39	3.39	13.21	5.35	5.35	5.35	5.35	5.35	16.95	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	24.20	
6.0	3.03	3.03	3.03	3.03	6.40	4.52	4.52	4.52	4.52	8.20	3.02	3.02	3.02	3.02	10.18	4.73	4.73	4.73	4.73	4.73	13.05	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	18.64	
6.5	2.68	2.68	2.68	2.68	5.03	3.95	3.95	3.95	3.95	6.45	2.71	2.71	2.71	2.71	8.00	4.21	4.21	4.21	4.21	4.21	10.27	4.07	4.07	4.07	4.07	4.07	4.07	4.07	4.07	4.07	14.66	
7.0	2.38	2.38	2.38	2.38	4.03	3.45	3.45	3.45	3.45	5.16	2.45	2.45	2.45	2.45	6.41	3.76	3.76	3.76	3.76	3.76	8.22	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	11.74	
7.5	2.13	2.13	2.13	2.13	3.27	3.01	3.01	3.01	3.01	4.20	2.22	2.22	2.22	2.22	5.21	3.38	3.38	3.38	3.38	3.38	6.68	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	9.54	
8.0	1.91	1.91	1.91	1.91	2.70	2.64	2.64	2.64	2.64	3.46	2.02	2.02	2.02	2.02	4.29	3.05	3.05	3.05	3.05	3.05	5.50	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	7.86	
8.5	1.73	1.73	1.73	1.73	2.25	2.34	2.34	2.34	2.34	2.90	1.85	1.85	1.85	1.85	3.58	2.77	2.77	2.77	2.77	2.77	4.59	2.81	2.81	2.81	2.81	2.81	2.81	2.81	2.81	2.81	6.55	
9.0	1.57	1.57	1.57	1.57	1.90	2.09	2.09	2.09	2.09	2.47	1.70	1.70	1.70	1.70	3.01	2.52	2.52	2.52	2.52	2.52	3.86	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	5.52	
9.5	1.40	1.43	1.43	1.43	1.64	1.87	1.87	1.87	1.87	2.12	1.56	1.56	1.56	1.56	2.56	2.31	2.31	2.31	2.31	2.31	3.28	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39	4.69	
10.0	1.23	1.30	1.30	1.30	1.42	1.66	1.69	1.69	1.69	1.84	1.44	1.44	1.44	1.44	2.19	2.12	2.12	2.12	2.12	2.12	2.82	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	4.02	
10.5	1.08	1.17	1.19	1.19	1.23	1.45	1.53	1.53	1.53	1.60	1.33	1.33	1.33	1.33	1.89	1.95	1.95	1.95	1.95	1.95	2.43	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	3.47	
11.0	0.95	1.04	1.08	1.08	1.08	1.28	1.40	1.40	1.40	1.41	1.24	1.24	1.24	1.24	1.65	1.77	1.80	1.80	1.80	1.80	2.13	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	3.02	
11.5	0.83	0.92	0.99	0.99	0.96	1.12	1.24	1.28	1.28	1.24	1.15	1.15	1.15	1.15	1.45	1.58	1.66	1.66	1.66	1.66	1.88	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	2.64	
12.0	0.72	0.82	0.91	0.91	0.85	0.97	1.11	1.17	1.17	1.10	1.05	1.05	1.05	1.05	1.29	1.41	1.53	1.54	1.54	1.54	1.67	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	2.33	
12.5	0.64	0.73	0.83	0.83	0.76	0.85	0.99	1.08	1.08	0.98	0.94	0.94	0.94	0.94	1.00	1.15	1.26	1.26	1.26	1.26	1.42	1.49	1.52	1.55	1.55	1.55	1.55	1.55	1.55	1.55	2.06	
13.0	0.56	0.65	0.77	0.77	0.68	0.74	0.88	1.00	1.00	0.87	0.83	0.93	0.94	0.94	1.03	1.12	1.24	1.24	1.24	1.24	1.31	1.34	1.35	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.84	
13.5	0.50	0.58	0.72	0.72	0.61	0.65	0.78	0.93	0.93	0.78	0.74	0.84	0.88	0.88	0.93	1.00	1.12	1.21	1.21	1.21	1.21	1.20	1.20	1.20	1.36	1.37	1.37	1.37	1.37	1.37	1.66	
14.0	0.45	0.51	0.66	0.66	0.55	0.57	0.68	0.86	0.86	0.70	0.66	0.76	0.82	0.82	0.84	0.89	1.02	1.13	1.13	1.13	1.09	1.08	1.08	1.23	1.29	1.29	1.29	1.29	1.29	1.50	1.50	
14.5	0.40	0.46	0.62	0.62	0.50	0.51	0.61	0.80	0.80	0.63	0.59	0.68	0.78	0.78	0.78	0.76	0.80	0.92	1.05	1.05	0.98	0.96	1.11	1.21	1.21	1.21	1.21	1.21	1.21	1.36	1.36	
15.0	0.36	0.41	0.57	0.58	0.45	0.45	0.54	0.75	0.75	0.57	0.53	0.62	0.73	0.73	0.69	0.72	0.83	0.98	1.08	1.08	0.89	0.87	1.00	1.14	1.14	1.14	1.14	1.14	1.14	1.23	1.23	
15.5	0.32	0.37	0.52	0.54	0.41	0.40	0.48	0.70	0.70	0.52	0.48	0.55	0.69	0.69	0.63	0.65	0.75	0.92	1.02	1.02	0.82	0.78	0.90	1.08	1.08	1.08	1.08	1.08	1.08	1.12	1.12	
16.0	0.29	0.34	0.48	0.51	0.38	0.36	0.43	0.65	0.66	0.47	0.43	0.50	0.65	0.65	0.57	0.59	0.68	0.86	0.96	0.86	0.75	0.71	0.82	1.02	1.02	1.02	1.02	1.02	1.02	1.03	1.03	
16.5	0.26	0.31	0.44	0.48	0.35	0.32	0.39	0.59	0.62	0.43	0.39	0.45	0.61	0.62	0.53	0.54	0.62	0.81	0.97	0.81	0.68	0.64	0.74	0.97	0.97	0.97	0.97	0.97	0.97	0.94	0.94	
17.0	0.23	0.28	0.41	0.45	0.32	0.29	0.35	0.55	0.58	0.39	0.36	0.41	0.57	0.58	0.48	0.49	0.56	0.76	0.86	0.76	0.63	0.58	0.68	0.92	0.92	0.92	0.92	0.92	0.92	0.87	0.87	
17.5																																
18.0																																

1. 1B, 2B & 3B: Load Capacity for 1, 2 and 3 rows of bracing. 2. FR: Load Capacity for fully restrained compression flange. 3. W_s: Load at a deflection of span/150.

DHS PURLIN SYSTEM LOAD SPAN TABLES - INTERNAL SPANS

Uniformly Loaded Bending Capacities (kN/m) $\phi_b W_{bx}$

Span (m)	DHS 150/12					DHS 150/15					DHS 200/12					DHS 200/15					DHS 200/18					DHS 250/13													
	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s									
3.0																																							
3.5	5.18	5.18	5.18	5.18	14.11	7.77	7.77	7.77	7.77	18.74	4.93	4.93	4.93	4.93	28.35																								
4.0	4.17	4.17	4.17	4.17	9.45	5.95	5.95	5.95	5.95	12.55	4.15	4.15	4.15	4.15	18.99																								
4.5	3.43	3.43	3.43	3.43	6.64	4.70	4.70	4.70	4.70	8.81	3.54	3.54	3.54	3.54	13.34	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	
5.0	2.79	2.79	2.79	2.79	4.84	3.80	3.80	3.80	3.80	6.42	3.06	3.06	3.06	3.06	9.72	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	
5.5	2.31	2.31	2.31	2.31	3.63	3.14	3.14	3.14	3.14	4.83	2.67	2.67	2.67	2.67	7.30	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	
6.0	1.94	1.94	1.94	1.94	2.80	2.64	2.64	2.64	2.64	3.72	2.34	2.34	2.34	2.34	5.62	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	
6.5	1.65	1.65	1.65	1.65	2.20	2.25	2.25	2.25	2.25	2.92	2.07	2.07	2.07	2.07	4.42	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	
7.0	1.42	1.42	1.42	1.42	1.76	1.94	1.94	1.94	1.94	1.94	1.84	1.84	1.84	1.84	3.54	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	
7.5	1.24	1.24	1.24	1.24	1.45	1.69	1.69	1.69	1.69	1.69	1.65	1.65	1.65	1.65	2.88	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	
8.0	1.09	1.09	1.09	1.09	1.21	1.48	1.48	1.48	1.48	1.59	1.48	1.48	1.48	1.48	2.37	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	
8.5	0.96	0.96	0.96	0.96	1.02	1.31	1.31	1.31	1.31	1.33	1.34	1.34	1.34	1.34	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	
9.0	0.86	0.86	0.86	0.86	0.87	1.17	1.17	1.17	1.17	1.13	1.22	1.22	1.22	1.22	1.66	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	
9.5	0.77	0.77	0.77	0.77	0.74	1.05	1.05	1.05	1.05	0.96	1.11	1.11	1.11	1.11	1.41	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	
10.0	0.69	0.69	0.69	0.69	0.64	0.95	0.95	0.95	0.95	0.83	1.01	1.01	1.01	1.01	1.22	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	
10.5	0.63	0.63	0.63	0.63	0.55	0.86	0.86	0.86	0.86	0.72	0.93	0.93	0.93	0.93	1.06	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	
11.0	0.57	0.57	0.57	0.57	0.48	0.78	0.78	0.78	0.78	0.63	0.85	0.85	0.85	0.85	0.93	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	
11.5	0.52	0.52	0.52	0.52	0.42	0.72	0.72	0.72	0.72	0.55	0.78	0.78	0.78	0.78	0.82	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	
12.0	0.48	0.48	0.48	0.48	0.37	0.66	0.66	0.66	0.66	0.48	0.71	0.71	0.71	0.71	0.73	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
12.5	0.44	0.44	0.44	0.44	0.33	0.60	0.60	0.60	0.60	0.43	0.66	0.66	0.66	0.66	0.65	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
13.0	0.41	0.41	0.41	0.41	0.29	0.56	0.56	0.56	0.56	0.38	0.61	0.61	0.61	0.61	0.58	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84		
13.5						0.51	0.50	0.52	0.52	0.34	0.56	0.56	0.56	0.56	0.52	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	
14.0						0.46	0.46	0.48	0.48	0.31	0.52	0.52	0.52	0.52	0.47	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	
14.5											0.48	0.48	0.49	0.49	0.43	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	
15.0											0.44	0.44	0.46	0.46	0.39	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	
15.5											0.41	0.40	0.42	0.43	0.35	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	
16.0											0.37	0.37	0.39	0.40	0.32	0.54	0.53	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	
16.5											0.35	0.34	0.36	0.38	0.30	0.50	0.49	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	
17.0															0.46	0.45	0.48	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	
17.5															0.43	0.42	0.45	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	
18.0															0.39	0.38	0.41	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	

1. **1B, 2B & 3B**: Load Capacity for 1, 2 and 3 rows of bracing. 2. **FR**: Load Capacity for fully restrained compression flange. 3. **W_s**: Load at a deflection of span/150.

DHS PURLIN SYSTEM LOAD SPAN TABLES - INTERNAL SPANS

Uniformly Loaded Bending Capacities (kN/m) $\phi_b W_{bx}$

Span (m)	DHS 250/15			DHS 250/18			DHS 300/15			DHS 300/18			DHS 350/18			DHS 400/20													
	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s									
3.0																													
3.5																													
4.0																													
4.5	6.13	6.13	6.13	6.13	31.56	9.68	9.68	9.68	9.68	40.46	5.63	5.63	5.63	5.63	50.18														
5.0	5.33	5.33	5.33	5.33	23.01	8.31	8.31	8.31	8.31	29.49	4.98	4.98	4.98	4.98	36.58														
5.5	4.68	4.68	4.68	4.68	17.29	7.21	7.21	7.21	7.21	22.16	4.44	4.44	4.44	4.44	27.48														
6.0	4.14	4.14	4.14	4.14	13.31	6.31	6.31	6.31	6.31	17.07	3.98	3.98	3.98	3.98	21.17	6.36	6.36	6.36	6.36	6.36	27.15	5.90	5.90	5.90	38.77				
6.5	3.68	3.68	3.68	3.68	10.47	5.56	5.56	5.56	5.56	13.42	3.60	3.60	3.60	3.60	16.65	5.70	5.70	5.70	5.70	5.70	21.35	5.35	5.35	5.35	30.50				
7.0	3.29	3.29	3.29	3.29	8.38	4.93	4.93	4.93	4.93	10.75	3.27	3.27	3.27	3.27	13.33	5.13	5.13	5.13	5.13	5.13	17.10	4.87	4.87	4.87	24.42	5.97	5.97	5.97	38.44
7.5	2.96	2.96	2.96	2.96	6.81	4.40	4.40	4.40	4.40	8.74	2.98	2.98	2.98	2.98	10.84	4.64	4.64	4.64	4.64	4.64	13.90	4.46	4.46	4.46	19.85	5.48	5.48	5.48	31.25
8.0	2.68	2.68	2.68	2.68	5.61	3.94	3.94	3.94	3.94	7.20	2.73	2.73	2.73	2.73	8.93	4.22	4.22	4.22	4.22	4.22	11.45	4.10	4.10	4.10	16.36	5.06	5.06	5.06	25.75
8.5	2.43	2.43	2.43	2.43	4.68	3.51	3.51	3.51	3.51	6.00	2.51	2.51	2.51	2.51	7.44	3.85	3.85	3.85	3.85	3.85	9.55	3.78	3.78	3.78	13.63	4.68	4.68	4.68	21.47
9.0	2.22	2.22	2.22	2.22	3.94	3.13	3.13	3.13	3.13	5.05	2.31	2.31	2.31	2.31	6.27	3.52	3.52	3.52	3.52	3.52	8.04	3.49	3.49	3.49	11.49	4.35	4.35	4.35	18.08
9.5	2.03	2.03	2.03	2.03	3.35	2.81	2.81	2.81	2.81	4.30	2.14	2.14	2.14	2.14	5.33	3.24	3.24	3.24	3.24	3.24	6.84	3.24	3.24	3.24	9.76	4.05	4.05	4.05	15.37
10.0	1.86	1.86	1.86	1.86	2.87	2.54	2.54	2.54	2.54	3.68	1.98	1.98	1.98	1.98	4.57	2.98	2.98	2.98	2.98	2.98	5.86	3.01	3.01	3.01	8.37	3.78	3.78	3.78	13.18
10.5	1.71	1.71	1.71	1.71	2.48	2.30	2.30	2.30	2.30	3.18	1.84	1.84	1.84	1.84	3.95	2.75	2.75	2.75	2.75	2.75	5.06	2.81	2.81	2.81	7.23	3.54	3.54	3.54	11.39
11.0	1.58	1.58	1.58	1.58	2.16	2.10	2.10	2.10	2.10	2.77	1.72	1.72	1.72	1.72	3.43	2.55	2.55	2.55	2.55	2.55	4.40	2.62	2.62	2.62	6.29	3.32	3.32	3.32	9.90
11.5	1.46	1.46	1.46	1.46	1.89	1.92	1.92	1.92	1.92	2.42	1.60	1.60	1.60	1.60	3.00	2.37	2.37	2.37	2.37	2.37	3.85	2.45	2.45	2.45	5.50	3.12	3.12	3.12	8.66
12.0	1.36	1.36	1.36	1.36	1.66	1.76	1.76	1.76	1.76	2.15	1.50	1.50	1.50	1.50	2.64	2.20	2.20	2.20	2.20	2.20	3.39	2.30	2.30	2.30	4.84	2.93	2.93	2.93	7.63
12.5	1.25	1.25	1.25	1.25	1.48	1.62	1.62	1.62	1.62	1.91	1.41	1.41	1.41	1.41	2.34	2.06	2.06	2.06	2.06	2.06	3.00	2.16	2.16	2.16	4.28	2.76	2.76	2.76	6.75
13.0	1.16	1.16	1.16	1.16	1.32	1.50	1.50	1.50	1.50	1.72	1.32	1.32	1.32	1.32	2.08	1.92	1.92	1.92	1.92	1.92	2.67	2.03	2.03	2.03	3.81	2.61	2.61	2.61	6.00
13.5	1.08	1.08	1.08	1.08	1.19	1.39	1.39	1.39	1.39	1.54	1.24	1.24	1.24	1.24	1.85	1.80	1.80	1.80	1.80	1.80	2.38	1.92	1.92	1.92	3.40	2.47	2.47	2.47	5.35
14.0	1.00	1.00	1.00	1.00	1.07	1.29	1.29	1.29	1.29	1.39	1.17	1.17	1.17	1.17	1.66	1.69	1.69	1.69	1.69	1.69	2.13	1.81	1.81	1.81	3.05	2.34	2.34	2.34	4.80
14.5	0.93	0.93	0.93	0.93	0.97	1.20	1.20	1.20	1.20	1.26	1.10	1.10	1.10	1.10	1.50	1.58	1.58	1.58	1.58	1.58	1.92	1.71	1.71	1.71	2.74	2.21	2.21	2.21	4.32
15.0	0.87	0.87	0.87	0.87	0.88	1.13	1.13	1.13	1.13	1.13	1.11	1.11	1.11	1.11	1.41	1.41	1.41	1.41	1.41	1.41	1.74	1.62	1.62	1.62	2.48	2.10	2.10	2.10	3.90
15.5	0.81	0.81	0.81	0.81	0.81	1.05	1.05	1.05	1.05	1.05	0.99	0.99	0.99	0.99	1.23	1.38	1.38	1.38	1.38	1.38	1.59	1.53	1.53	1.53	2.24	2.00	2.00	2.00	3.54
16.0	0.76	0.76	0.76	0.76	0.74	0.99	0.99	0.99	0.99	0.96	0.93	0.93	0.93	0.93	1.12	1.30	1.30	1.30	1.30	1.30	1.45	1.45	1.45	1.45	2.04	1.90	1.90	1.90	3.21
16.5	0.70	0.70	0.72	0.72	0.68	0.93	0.93	0.93	0.93	0.88	0.89	0.89	0.89	0.89	1.03	1.22	1.22	1.22	1.22	1.22	1.33	1.38	1.38	1.38	1.86	1.81	1.81	1.81	2.93
17.0	0.65	0.65	0.68	0.68	0.62	0.87	0.87	0.87	0.87	0.81	0.84	0.84	0.84	0.84	0.95	1.15	1.15	1.15	1.15	1.15	1.23	1.31	1.31	1.31	1.70	1.72	1.72	1.72	2.68
17.5	0.61	0.60	0.64	0.64	0.57	0.81	0.81	0.81	0.83	0.74	0.80	0.80	0.80	0.80	0.87	1.08	1.08	1.08	1.08	1.08	1.13	1.25	1.25	1.25	1.56	1.64	1.64	1.64	2.46
18.0	0.56	0.56	0.59	0.60	0.53	0.76	0.76	0.78	0.78	0.68	0.76	0.76	0.76	0.76	0.81	1.02	1.02	1.02	1.02	1.02	1.05	1.19	1.19	1.19	1.44	1.57	1.57	1.57	2.26

1. 1B, 2B & 3B: Load Capacity for 1, 2 and 3 rows of bracing. 2. FR: Load Capacity for fully restrained compression flange. 3. W_s: Load at a deflection of span/150.

DHS PURLIN SYSTEM LOAD SPAN TABLES - LAPPED END SPAN

Uniformly Loaded Bending Capacities (kN/m) $\phi_b W_{bx}$

Span (m)	DHS 150/12					DHS 150/15					DHS 200/12					DHS 200/15					DHS 200/18					DHS 250/13						
	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s		
3.0	5.66	5.66	5.66	5.66	12.02	8.98	8.98	8.98	8.98	15.96	5.18	5.18	5.18	5.18	24.15																	
3.5	4.45	4.45	4.45	4.45	7.57	6.62	6.62	6.62	6.62	10.05	4.28	4.28	4.28	4.28	15.21																	
4.0	3.58	3.58	3.58	3.58	5.07	5.06	5.06	5.06	5.06	6.73	3.60	3.60	3.60	3.60	10.19	6.24	6.24	6.24	6.24	6.24	13.83	9.41	9.41	9.41	9.41	17.66	4.21	4.21	4.21	4.21	19.84	
4.5	2.94	2.94	2.94	2.94	3.56	4.00	4.00	4.00	4.00	4.73	3.06	3.06	3.06	3.06	7.15	5.22	5.22	5.22	5.22	5.22	9.71	7.67	7.67	7.67	7.67	12.40	3.65	3.65	3.65	3.65	13.94	
5.0	2.38	2.38	2.38	2.38	2.59	3.24	3.24	3.24	3.24	3.44	2.64	2.64	2.64	2.64	5.21	4.43	4.43	4.43	4.43	4.43	7.08	6.22	6.22	6.22	6.22	9.04	3.20	3.20	3.20	3.20	10.16	
5.5	1.96	1.96	1.96	1.96	1.95	2.68	2.68	2.68	2.68	2.59	2.30	2.30	2.30	2.30	3.92	3.80	3.80	3.80	3.80	3.80	5.32	5.14	5.14	5.14	5.14	6.79	2.83	2.83	2.83	2.83	7.63	
6.0	1.65	1.65	1.65	1.65	1.50	2.25	2.25	2.25	2.25	2.00	2.02	2.02	2.02	2.02	3.02	3.29	3.29	3.29	3.29	3.29	4.09	4.31	4.31	4.31	4.31	5.23	2.52	2.52	2.52	2.52	5.88	
6.5	1.40	1.40	1.40	1.40	1.20	1.92	1.92	1.92	1.92	1.58	1.78	1.78	1.78	1.78	2.37	2.86	2.86	2.86	2.86	2.86	3.22	3.68	3.68	3.68	3.68	4.11	2.25	2.25	2.25	2.25	4.62	
7.0	1.21	1.21	1.21	1.21	0.97	1.61	1.65	1.65	1.65	1.27	1.59	1.59	1.59	1.59	1.90	2.46	2.46	2.46	2.46	2.46	2.58	3.17	3.17	3.17	3.17	3.29	2.03	2.03	2.03	2.03	3.70	
7.5	1.00	1.05	1.05	1.05	0.80	1.33	1.44	1.44	1.44	1.04	1.42	1.42	1.42	1.42	1.54	2.14	2.14	2.14	2.14	2.14	2.09	2.76	2.76	2.76	2.76	2.68	1.84	1.84	1.84	1.84	3.01	
8.0	0.83	0.91	0.93	0.93	0.66	1.10	1.22	1.26	1.26	0.86	1.27	1.27	1.27	1.27	1.15	1.88	1.88	1.88	1.88	1.88	1.72	2.42	2.42	2.42	2.42	2.21	1.67	1.67	1.67	1.67	2.48	
8.5	0.68	0.78	0.82	0.82	0.55	0.90	1.03	1.12	1.12	0.72	1.11	1.15	1.15	1.15	1.06	1.60	1.67	1.67	1.67	1.67	1.45	2.04	2.15	2.15	2.15	1.85	1.53	1.53	1.53	1.53	2.06	
9.0	0.56	0.65	0.73	0.73	0.47	0.74	0.86	1.00	1.00	0.61	0.95	1.03	1.04	1.04	0.90	1.37	1.49	1.49	1.49	1.49	1.24	1.72	1.92	1.92	1.92	1.57	1.40	1.40	1.40	1.40	1.74	
9.5	0.47	0.54	0.66	0.66	0.40	0.62	0.72	0.89	0.89	0.52	0.80	0.89	0.95	0.95	0.77	1.15	1.29	1.33	1.33	1.33	1.06	1.44	1.65	1.72	1.72	1.34	1.28	1.28	1.28	1.28	1.48	
10.0	0.39	0.46	0.59	0.59	0.34	0.52	0.61	0.81	0.81	0.45	0.69	0.78	0.87	0.87	0.67	0.97	1.13	1.20	1.20	1.20	0.92	1.21	1.42	1.55	1.55	1.15	1.18	1.18	1.18	1.18	1.27	
10.5	0.33	0.38	0.54	0.54	0.30	0.44	0.51	0.73	0.73	0.39	0.59	0.67	0.80	0.80	0.58	0.82	0.97	1.09	1.09	1.09	0.80	1.03	1.21	1.41	1.41	1.00	1.02	1.09	1.09	1.09	1.09	
11.0						0.37	0.44	0.65	0.67	0.34	0.51	0.58	0.72	0.72	0.51	0.70	0.82	0.99	0.99	0.99	0.70	0.87	1.03	1.28	1.28	0.87	0.88	0.99	1.01	1.01	0.95	
11.5						0.31	0.37	0.58	0.61	0.30	0.44	0.50	0.66	0.66	0.45	0.60	0.71	0.91	0.91	0.91	0.62	0.75	0.89	1.17	1.17	0.76	0.77	0.88	0.94	1.01	0.94	
12.0											0.39	0.44	0.60	0.61	0.40	0.52	0.61	0.83	0.83	0.83	0.54	0.64	0.77	1.08	1.08	0.67	0.67	0.77	0.88	0.88	0.74	
12.5											0.34	0.39	0.54	0.56	0.36	0.45	0.53	0.77	0.77	0.77	0.48	0.55	0.66	0.99	0.99	0.60	0.59	0.67	0.82	0.82	0.66	
13.0											0.30	0.34	0.48	0.52	0.32	0.39	0.46	0.70	0.71	0.71	0.43	0.48	0.58	0.90	0.92	0.53	0.52	0.59	0.76	0.76	0.59	
13.5											0.26	0.30	0.44	0.48	0.29	0.34	0.40	0.63	0.66	0.66	0.38	0.42	0.50	0.81	0.85	0.48	0.46	0.53	0.72	0.72	0.53	
14.0																0.30	0.36	0.57	0.61	0.61	0.35	0.37	0.44	0.72	0.79	0.43	0.41	0.47	0.65	0.67	0.48	
14.5																0.27	0.31	0.51	0.57	0.57	0.31	0.32	0.39	0.64	0.74	0.39	0.37	0.42	0.60	0.63	0.43	
15.0																																
15.5																																
16.0																																
16.5																																
17.0																																
17.5																																
18.0																																

1. 1B, 2B & 3B: Load Capacity for 1, 2 and 3 rows of bracing. 2. FR: Load Capacity for fully restrained compression flange. 3. W_s: Load at a deflection of span/150.

DHS PURLIN SYSTEM LOAD SPAN TABLES - LAPPED END SPAN

Uniformly Loaded Bending Capacities (kN/m) $\phi_b W_{bx}$

Span (m)	DHS 250/15					DHS 250/18					DHS 300/15					DHS 300/18					DHS 350/18					DHS 400/20										
	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s						
3.0																																				
3.5																																				
4.0	6.18	6.18	6.18	6.18	24.11	9.86	9.86	9.86	9.86	30.91	5.61	5.61	5.61	5.61	38.33																					
4.5	5.31	5.31	5.31	5.31	16.93	8.36	8.36	8.36	8.36	21.71	4.89	4.89	4.89	4.89	26.92																					
5.0	4.61	4.61	4.61	4.61	12.34	7.17	7.17	7.17	7.17	15.82	4.32	4.32	4.32	4.32	19.62																					
5.5	4.04	4.04	4.04	4.04	9.27	6.21	6.21	6.21	6.21	11.89	3.85	3.85	3.85	3.85	14.74	6.19	6.19	6.19	6.19	6.19	18.91	5.69	5.69	5.69	5.69	27.01										
6.0	3.57	3.57	3.57	3.57	7.14	5.43	5.43	5.43	5.43	9.16	3.45	3.45	3.45	3.45	11.36	5.50	5.50	5.50	5.50	5.50	14.57	5.12	5.12	5.12	5.12	20.80										
6.5	3.17	3.17	3.17	3.17	5.62	4.78	4.78	4.78	4.78	7.20	3.12	3.12	3.12	3.12	8.93	4.92	4.92	4.92	4.92	4.92	11.46	4.64	4.64	4.64	4.64	16.36	5.66	5.66	5.66	5.66	5.66	5.66	5.66	25.76		
7.0	2.84	2.84	2.84	2.84	4.50	4.23	4.23	4.23	4.23	5.76	2.83	2.83	2.83	2.83	7.15	4.43	4.43	4.43	4.43	4.43	9.17	4.22	4.22	4.22	4.22	13.10	5.18	5.18	5.18	5.18	5.18	5.18	5.18	20.62		
7.5	2.55	2.55	2.55	2.55	3.65	3.77	3.77	3.77	3.77	4.69	2.58	2.58	2.58	2.58	5.81	4.00	4.00	4.00	4.00	4.00	7.46	3.86	3.86	3.86	3.86	10.65	4.76	4.76	4.76	4.76	4.76	4.76	4.76	16.76		
8.0	2.30	2.30	2.30	2.30	3.01	3.38	3.38	3.38	3.38	3.86	2.36	2.36	2.36	2.36	4.79	3.64	3.64	3.64	3.64	3.64	6.14	3.55	3.55	3.55	3.55	8.77	4.39	4.39	4.39	4.39	4.39	4.39	4.39	13.81		
8.5	2.09	2.09	2.09	2.09	2.51	2.99	2.99	2.99	2.99	3.22	2.17	2.17	2.17	2.17	3.99	3.31	3.31	3.31	3.31	3.31	5.12	3.27	3.27	3.27	3.27	7.31	4.06	4.06	4.06	4.06	4.06	4.06	4.06	11.51		
9.0	1.90	1.90	1.90	1.90	2.11	2.65	2.67	2.67	2.67	2.71	2.00	2.00	2.00	2.00	3.36	3.03	3.03	3.03	3.03	3.03	4.31	3.02	3.02	3.02	3.02	6.16	3.77	3.77	3.77	3.77	3.77	3.77	3.77	9.70		
9.5	1.71	1.74	1.74	1.74	1.80	2.30	2.39	2.39	2.39	2.30	1.85	1.85	1.85	1.85	2.86	2.78	2.78	2.78	2.78	2.78	3.67	2.80	2.80	2.80	2.80	5.24	3.51	3.51	3.51	3.51	3.51	3.51	3.51	8.25		
10.0	1.48	1.60	1.60	1.60	1.54	2.00	2.16	2.16	2.16	2.16	1.97	1.71	1.71	1.71	2.45	2.56	2.56	2.56	2.56	2.56	3.14	2.60	2.60	2.60	2.60	4.49	3.27	3.27	3.27	3.27	3.27	3.27	3.27	7.07		
10.5	1.28	1.42	1.47	1.47	1.33	1.73	1.92	1.96	1.96	1.72	1.59	1.59	1.59	1.59	2.12	2.37	2.37	2.37	2.37	2.37	2.71	2.42	2.42	2.42	2.42	3.88	3.06	3.06	3.06	3.06	3.06	3.06	3.06	6.11		
11.0	1.11	1.25	1.36	1.36	1.16	1.49	1.69	1.79	1.79	1.51	1.48	1.48	1.48	1.48	1.84	2.15	2.19	2.19	2.19	2.19	2.36	2.26	2.26	2.26	2.26	3.37	2.87	2.87	2.87	2.87	2.87	2.87	2.87	5.31		
11.5	0.97	1.10	1.25	1.25	1.03	1.28	1.49	1.63	1.63	1.33	1.38	1.38	1.38	1.38	1.61	1.91	2.03	2.03	2.03	2.03	2.06	2.12	2.12	2.12	2.12	2.95	2.69	2.69	2.69	2.69	2.69	2.69	2.69	4.65		
12.0	0.85	0.97	1.16	1.16	0.91	1.11	1.31	1.50	1.50	1.18	1.25	1.29	1.29	1.29	1.42	1.68	1.86	1.89	1.89	1.89	1.82	1.98	1.98	1.98	1.98	2.60	2.53	2.53	2.53	2.53	2.53	2.53	2.53	4.09		
12.5	0.75	0.85	1.07	1.07	0.81	0.96	1.14	1.38	1.38	1.06	1.10	1.21	1.21	1.21	1.25	1.48	1.67	1.76	1.76	1.76	1.61	1.78	1.86	1.86	1.86	2.30	2.38	2.38	2.38	2.38	2.38	2.38	2.38	3.62		
13.0	0.66	0.75	0.99	0.99	0.73	0.84	1.00	1.28	1.28	0.95	1.06	1.10	1.10	1.10	1.13	1.25	1.48	1.67	1.67	1.67	1.65	1.82	1.98	1.98	1.98	2.04	2.19	2.25	2.25	2.25	2.25	2.25	2.25	3.22		
13.5	0.59	0.67	0.90	0.92	0.65	0.74	0.88	1.18	1.18	0.85	0.97	1.07	1.07	1.07	1.13	1.13	1.34	1.54	1.54	1.54	1.54	1.75	1.98	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.87	
14.0	0.52	0.60	0.82	0.85	0.59	0.65	0.77	1.10	1.10	0.77	0.77	0.77	0.77	0.77	0.89	1.00	1.00	1.00	1.00	1.00	1.11	1.25	1.45	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	2.57	
14.5	0.46	0.53	0.75	0.79	0.53	0.57	0.68	1.01	1.03	0.69	0.69	0.69	0.69	0.69	0.89	0.95	0.95	0.95	0.95	0.95	1.06	1.12	1.30	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	2.32	
15.0	0.41	0.48	0.68	0.74	0.49	0.51	0.61	0.93	0.96	0.63	0.62	0.71	0.89	0.89	0.74	0.84	0.97	1.08	1.08	1.08	1.08	1.25	1.45	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	2.09	
15.5	0.36	0.43	0.63	0.69	0.44	0.45	0.54	0.85	0.85	0.57	0.56	0.64	0.85	0.85	0.67	0.76	0.87	1.01	1.01	1.01	1.01	1.25	1.45	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.90
16.0	0.32	0.38	0.57	0.65	0.40	0.40	0.48	0.77	0.84	0.52	0.51	0.58	0.80	0.80	0.62	0.69	0.79	1.08	1.08	1.08	1.08	1.25	1.45	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.72	
16.5	0.29	0.34	0.52	0.61	0.37	0.36	0.43	0.71	0.79	0.47	0.46	0.53	0.74	0.74	0.57	0.62	0.72	0.99	1.04	1.04	1.04	1.25	1.45	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.57	
17.0	0.26	0.31	0.47	0.58	0.34	0.32	0.39	0.64	0.74	0.43	0.42	0.48	0.68	0.72	0.52	0.55	0.65	0.92	0.98	0.98	0.98	1.25	1.45	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.44	
17.5	0.23	0.28	0.43	0.54	0.31	0.29	0.35	0.58	0.70	0.40	0.38	0.44	0.63	0.68	0.48	0.50	0.60	0.85	0.92	0.92	0.92	1.25	1.45	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.32	
18.0	0.21	0.25	0.40	0.51	0.29	0.26	0.31	0.53	0.66	0.37	0.35	0.40	0.59	0.65	0.44	0.45	0.54	0.79	0.87	0.87	0.87	1.25	1.45	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.22	

1. 1B, 2B & 3B: Load Capacity for 1, 2 and 3 rows of bracing. 2. FR: Load Capacity for fully restrained compression flange. 3. W_s: Load at a deflection of span/150.

DHS PURLIN SYSTEM LOAD SPAN TABLES - LAPPED INTERNAL SPANS

Uniformly Loaded Bending Capacities (kN/m) $\phi_b W_{bx}$

Span (m)	DHS 150/12					DHS 150/15					DHS 200/12					DHS 200/15					DHS 200/18					DHS 250/13					
	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	1B	2B	3B	FR	W _s	
3.0																															
3.5																															
4.0	5.43	5.43	5.43	5.43	11.72	8.46	8.46	8.46	8.46	15.56	5.04	5.04	5.04	5.04	23.54																
4.5	4.51	4.51	4.51	4.51	8.23	6.68	6.68	6.68	6.68	10.93	4.35	4.35	4.35	4.35	16.53																
5.0	3.80	3.80	3.80	3.80	6.00	5.41	5.41	5.41	5.41	7.96	3.79	3.79	3.79	3.79	12.05	6.60	6.60	6.60	6.60	6.60	16.35	9.98	9.98	9.98	9.98	20.89	4.43	4.43	4.43	23.47	
5.5	3.24	3.24	3.24	3.24	4.51	4.47	4.47	4.47	4.47	5.98	3.34	3.34	3.34	3.34	9.05	5.72	5.72	5.72	5.72	5.72	12.29	8.55	8.55	8.55	8.55	15.69	3.95	3.95	3.95	17.63	
6.0	2.76	2.76	2.76	2.76	3.47	3.76	3.76	3.76	3.76	4.61	2.96	2.96	2.96	2.96	6.97	5.01	5.01	5.01	5.01	5.01	9.46	7.21	7.21	7.21	7.21	12.09	3.55	3.55	3.55	13.58	
6.5	2.35	2.35	2.35	2.35	2.73	3.20	3.20	3.20	3.20	3.62	2.64	2.64	2.64	2.64	5.48	4.41	4.41	4.41	4.41	4.41	7.44	6.14	6.14	6.14	6.14	9.51	3.20	3.20	3.20	10.68	
7.0	2.02	2.02	2.02	2.02	2.18	2.76	2.76	2.76	2.76	2.90	2.37	2.37	2.37	2.37	4.39	3.91	3.91	3.91	3.91	3.91	5.96	5.29	5.29	5.29	5.29	7.61	2.91	2.91	2.91	8.55	
7.5	1.76	1.76	1.76	1.76	1.77	2.40	2.40	2.40	2.40	2.36	2.14	2.14	2.14	2.14	3.57	3.49	3.49	3.49	3.49	3.49	4.84	4.61	4.61	4.61	4.61	6.19	2.65	2.65	2.65	6.95	
8.0	1.55	1.55	1.55	1.55	1.46	2.11	2.11	2.11	2.11	1.94	1.93	1.93	1.93	1.93	2.94	3.13	3.13	3.13	3.13	3.13	3.99	4.05	4.05	4.05	4.05	5.10	2.43	2.43	2.43	5.73	
8.5	1.37	1.37	1.37	1.37	1.22	1.87	1.87	1.87	1.87	1.62	1.76	1.76	1.76	1.76	2.45	2.79	2.79	2.79	2.79	2.79	3.33	3.59	3.59	3.59	3.59	4.25	2.24	2.24	2.24	4.77	
9.0	1.22	1.22	1.22	1.22	1.02	1.63	1.67	1.67	1.67	1.37	1.61	1.61	1.61	1.61	2.06	2.49	2.49	2.49	2.49	2.49	2.80	3.20	3.20	3.20	3.20	3.58	2.06	2.06	2.06	4.02	
9.5	1.06	1.10	1.10	1.10	0.88	1.40	1.50	1.50	1.50	1.17	1.47	1.47	1.47	1.47	1.75	2.23	2.23	2.23	2.23	2.23	2.38	2.87	2.87	2.87	2.87	3.04	1.91	1.91	1.91	3.42	
10.0	0.92	0.99	0.99	0.99	0.76	1.22	1.35	1.35	1.35	1.00	1.35	1.35	1.35	1.35	1.50	2.01	2.01	2.01	2.01	2.01	2.04	2.59	2.59	2.59	2.59	2.61	1.77	1.77	1.77	2.93	
10.5	0.80	0.90	0.90	0.90	0.66	1.05	1.22	1.22	1.22	0.87	1.25	1.25	1.25	1.25	1.30	1.79	1.83	1.83	1.83	1.83	1.76	2.29	2.35	2.35	2.35	2.35	2.25	1.64	1.64	1.64	2.53
11.0	0.69	0.82	0.82	0.82	0.58	0.90	1.11	1.11	1.11	0.76	1.10	1.15	1.15	1.15	1.15	1.59	1.66	1.66	1.66	1.66	1.53	2.01	2.14	2.14	2.14	1.96	1.53	1.53	1.53	2.20	
11.5	0.59	0.75	0.75	0.75	0.51	0.78	1.02	1.02	1.02	0.67	0.98	1.07	1.07	1.07	1.07	1.41	1.52	1.52	1.52	1.52	1.34	1.76	1.96	1.96	1.96	1.96	1.71	1.43	1.43	1.93	
12.0	0.51	0.69	0.69	0.69	0.45	0.68	0.93	0.94	0.94	0.59	0.86	0.99	0.99	0.99	0.87	1.24	1.40	1.40	1.40	1.40	1.18	1.53	1.80	1.80	1.80	1.80	1.51	1.34	1.34	1.69	
12.5	0.45	0.63	0.63	0.63	0.40	0.59	0.84	0.86	0.86	0.52	0.76	0.92	0.92	0.92	0.77	1.08	1.29	1.29	1.29	1.29	1.05	1.34	1.66	1.66	1.66	1.66	1.34	1.25	1.25	1.50	
13.0	0.39	0.56	0.58	0.58	0.36	0.52	0.75	0.80	0.80	0.46	0.68	0.86	0.86	0.86	0.68	0.95	1.19	1.19	1.19	1.19	0.94	1.18	1.53	1.53	1.53	1.53	1.20	1.15	1.18	1.33	
13.5	0.35	0.51	0.54	0.54	0.32	0.46	0.67	0.74	0.74	0.42	0.61	0.78	0.80	0.80	0.61	0.84	1.10	1.10	1.10	1.10	0.85	1.04	1.42	1.42	1.42	1.42	1.07	1.03	1.11	1.19	
14.0	0.31	0.46	0.50	0.50	0.29	0.41	0.60	0.69	0.69	0.37	0.54	0.71	0.75	0.75	0.55	0.74	1.03	1.03	1.03	1.03	0.76	0.93	1.32	1.32	1.32	1.32	0.96	0.92	1.04	1.06	
14.5						0.36	0.54	0.63	0.64	0.34	0.49	0.65	0.70	0.70	0.50	0.66	0.94	0.96	0.96	0.96	0.69	0.82	1.20	1.23	1.23	1.23	0.87	0.83	0.98	0.96	
15.0						0.32	0.48	0.58	0.60	0.30	0.44	0.59	0.65	0.65	0.46	0.59	0.86	0.89	0.89	0.89	0.63	0.73	1.09	1.15	1.15	1.15	0.79	0.74	0.93	0.87	
15.5											0.40	0.54	0.61	0.61	0.42	0.53	0.78	0.84	0.84	0.84	0.57	0.65	0.99	1.08	1.08	1.08	0.71	0.67	0.88	0.78	
16.0											0.36	0.50	0.56	0.57	0.38	0.48	0.72	0.78	0.78	0.78	0.53	0.59	0.90	1.01	1.01	1.01	0.65	0.61	0.82	0.71	
16.5											0.32	0.45	0.52	0.54	0.35	0.43	0.65	0.74	0.74	0.74	0.48	0.52	0.81	0.95	0.95	0.95	0.59	0.55	0.76	0.65	
17.0											0.29	0.41	0.48	0.50	0.32	0.39	0.59	0.69	0.69	0.69	0.44	0.47	0.73	0.89	0.89	0.89	0.54	0.51	0.70	0.60	
17.5											0.27	0.38	0.44	0.48	0.29	0.35	0.53	0.64	0.65	0.65	0.40	0.43	0.67	0.82	0.84	0.84	0.50	0.46	0.64	0.55	
18.0											0.32	0.48	0.59	0.62	0.37	0.38	0.61	0.76	0.80	0.80	0.46	0.42	0.61	0.76	0.80	0.80	0.46	0.42	0.59	0.68	

1. 1B, 2B & 3B: Load Capacity for 1, 2 and 3 rows of bracing. 2. FR: Load Capacity for fully restrained compression flange. 3. W_s: Load at a deflection of span/150.

DHS PURLIN SYSTEM LOAD SPAN TABLES - SINGLE SPANS

Axial Compression Capacities (kN) $\phi_c N_c$

Span (m)	DHS 150/12			DHS 150/15			DHS 200/12			DHS 200/15			DHS 200/18			DHS 250/13															
	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$											
3.0	65.4	76.4	77.0	77.1	247.9																										
3.5	57.3	70.8	71.5	71.6	182.1	80.2	99.4	100.5	100.6	227.3	73.2	85.4	86.2	86.2	397.2																
4.0	49.2	64.7	65.6	65.7	139.4	67.9	90.8	92.2	92.3	174.0	66.4	81.1	82.1	82.1	304.1	93.6	114.5	115.9	116.0	380.6	123.3	151.2	153.2	153.3	455.1	91.2	106.4	107.5	107.6	614.5	
4.5	41.5	58.5	59.6	59.6	110.1	55.9	82.0	83.4	83.6	137.5	59.5	76.5	77.7	77.7	240.2	83.8	108.0	109.7	109.8	300.7	110.0	142.6	144.9	145.0	359.5	84.2	102.3	103.7	103.8	485.5	
5.0	35.2	52.3	53.4	53.5	89.2	46.8	72.7	74.5	74.7	111.4	52.6	71.7	73.0	73.1	194.6	74.1	101.2	103.1	103.2	243.6	95.4	133.4	136.1	136.2	291.2	77.0	98.0	99.6	99.7	393.2	
5.5	29.9	46.1	47.3	47.4	73.7	39.9	62.8	64.7	64.9	92.0	45.9	66.7	68.2	68.3	160.8	64.6	94.1	96.3	96.4	201.3	81.7	124.0	126.9	127.1	240.7	69.9	93.4	95.3	95.4	325.0	
6.0	25.8	40.3	41.5	41.5	61.9	34.6	53.9	55.6	55.7	77.3	40.4	61.7	63.3	63.4	135.1	55.9	87.0	89.4	89.5	169.1	70.6	114.4	117.6	117.8	202.2	62.8	88.7	90.8	90.9	273.1	
6.5	22.5	35.4	36.6	36.7	52.8	30.4	46.9	48.3	48.4	65.9	35.9	56.6	58.4	58.5	115.1	48.8	79.8	82.3	82.5	144.1	61.9	103.8	107.7	107.9	172.3	55.8	83.8	86.1	86.2	232.7	
7.0	19.9	31.1	32.1	32.2	45.5	26.9	41.2	42.4	42.6	56.8	32.1	51.6	53.5	53.6	99.3	43.1	72.7	75.3	75.5	124.2	54.8	93.2	97.2	97.4	148.6	50.0	78.8	81.4	81.5	200.6	
7.5	17.8	27.6	28.4	28.5	39.6	24.1	36.6	37.6	37.7	49.5	28.7	46.7	48.6	48.8	86.5	38.4	65.6	68.4	68.5	108.2	49.0	82.9	86.9	87.1	129.4	45.0	73.8	76.6	76.7	174.7	
8.0						21.8	32.7	33.6	33.7	43.5	25.7	42.4	44.2	44.3	76.0	34.5	59.0	61.8	62.0	95.1	44.2	74.2	77.6	77.8	113.7	40.9	68.8	71.7	71.8	153.6	
8.5											23.2	38.7	40.3	40.4	67.3	31.3	53.1	55.6	55.7	84.2	40.2	66.9	69.9	70.1	100.7	37.3	63.9	66.9	67.0	136.0	
9.0											21.1	35.5	37.0	37.0	60.0	28.5	48.1	50.3	50.4	75.1	36.7	60.7	63.3	63.5	89.8	34.1	59.0	62.2	62.3	121.3	
9.5											19.3	32.7	34.0	34.1	53.9	26.1	43.8	45.8	45.9	67.4	33.8	55.3	57.7	57.8	80.6	31.0	54.4	57.4	57.6	108.9	
10.0											17.7	30.1	31.5	31.5	48.6	24.1	40.1	41.9	42.0	60.9	31.2	50.7	52.8	53.0	72.8	28.3	50.4	53.2	53.3	98.3	
10.5															22.3	36.9	38.5	38.6	38.6	55.2	28.8	46.7	48.6	48.7	66.0	26.0	46.9	49.4	49.6	89.1	
11.0																				26.5	43.2	44.8	45.0	45.0	60.1	24.0	43.7	46.1	46.2	81.2	
11.5																				24.6	40.0	41.6	41.7	41.7	55.0	22.3	40.9	43.1	43.2	74.3	
12.0																										20.7	38.4	40.4	40.5	68.2	
12.5																											19.3	36.1	38.0	38.1	62.9
13.0																															
13.5																															
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1. **1B, 2B & 3B:** Load Capacity for 1, 2 and 3 rows of bracing. 2. **FR:** Load Capacity for fully restrained compression flange. 3. **$\phi_c N_{ex}$:** Elastic buckling capacity about the X-X axis.

DHS PURLIN SYSTEM LOAD SPAN TABLES - SINGLE SPANS

Axial Compression Capacities (kN) $\phi_c N_c$

Span (m)	DHS 250/15					DHS 250/18					DHS 300/15					DHS 300/18					DHS 350/18					DHS 400/20								
	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$				
3.0																																		
3.5																																		
4.0																																		
4.5																																		
5.0	95.9	122.2	124.3	124.4	453.6	126.3	161.7	164.5	164.6	543.6	114.7	137.8	139.9	139.9	775.1																			
5.5	86.9	116.5	118.9	119.0	374.9	114.2	154.2	157.4	157.4	449.2	106.8	133.3	135.6	135.7	640.6																			
6.0	78.0	110.6	113.3	113.4	315.0	102.2	146.3	149.9	150.1	377.5	98.7	128.5	131.2	131.3	538.3																			
6.5	69.3	104.5	107.5	107.6	268.4	89.7	138.2	142.2	142.4	321.6	90.6	123.5	126.5	126.6	458.6	119.8	163.9	168.0	168.1	550.4														
7.0	61.9	98.3	101.5	101.7	231.4	78.8	130.0	134.3	134.5	277.3	82.7	118.3	121.6	121.8	395.4	109.2	157.0	161.5	161.7	474.5	112.4	162.9	179.0	179.2	692.3									
7.5	55.7	92.1	95.5	95.7	201.6	69.9	121.6	126.3	126.4	241.6	74.8	113.0	116.6	116.8	344.5	98.6	150.0	154.9	155.1	413.4	101.5	155.6	173.4	173.5	603.1	120.9	187.5	217.8	222.0	933.9				
8.0	50.0	85.9	89.5	89.6	177.2	62.6	113.3	118.2	118.4	212.3	68.0	107.6	111.5	111.7	302.7	89.5	142.8	148.1	148.3	363.3	92.1	148.1	167.6	167.7	530.0	108.9	178.3	211.5	216.1	820.8				
8.5	45.0	79.7	83.5	83.6	156.9	56.4	105.1	110.1	110.3	188.1	62.2	102.1	106.3	106.5	268.2	81.7	135.6	141.2	141.4	321.8	84.0	140.6	161.6	161.8	469.5	98.0	169.0	204.9	210.0	727.0				
9.0	40.7	73.5	77.5	77.7	140.0	51.1	96.8	102.1	102.3	167.7	57.1	96.7	101.1	101.2	239.2	74.5	128.3	134.3	134.5	287.0	76.5	133.0	155.5	155.7	418.8	88.8	159.7	198.2	203.8	648.5				
9.5	37.1	67.8	71.6	71.7	125.6	46.6	88.2	93.8	94.0	150.5	52.7	91.2	95.8	96.0	214.7	67.8	121.0	127.3	127.5	257.6	69.7	125.5	149.3	149.5	375.9	80.9	150.4	191.3	197.3	582.0				
10.0	33.9	62.8	66.2	66.4	113.4	42.7	80.7	85.7	86.0	135.9	48.7	85.8	90.6	90.8	193.7	62.0	113.8	120.3	120.5	232.5	63.8	117.9	143.0	143.2	339.2	74.1	141.1	184.3	190.7	525.3				
10.5	31.2	58.3	61.5	61.7	102.8	39.3	74.2	78.8	79.0	123.2	45.3	80.4	85.4	85.6	175.7	57.0	106.6	113.3	113.6	210.9	58.6	110.5	136.7	136.9	307.7	68.2	131.9	177.3	184.1	476.4				
11.0	28.8	54.4	57.3	57.4	93.7	36.3	68.5	72.7	72.8	112.3	41.9	75.1	80.2	80.4	160.1	52.6	99.5	106.4	106.6	192.1	54.1	103.0	130.4	130.6	280.3	63.1	122.9	170.1	177.3	434.1				
11.5	26.7	50.3	53.4	53.6	85.7	33.6	63.5	67.3	67.4	102.7	38.8	70.4	75.1	75.3	146.5	48.8	93.2	99.6	99.8	175.8	50.2	96.4	124.1	124.3	256.5	58.5	114.8	163.0	170.5	397.2				
12.0	24.8	46.8	49.6	49.7	78.7	31.3	59.1	62.5	62.7	94.3	36.0	66.1	70.6	70.7	134.5	45.3	87.5	93.4	93.7	161.4	46.7	90.4	117.8	118.1	235.5	54.4	106.6	155.8	163.7	364.8				
12.5	23.2	43.6	46.2	46.3	72.5	29.2	55.2	58.3	58.4	86.9	33.6	62.2	66.4	66.6	124.0	42.3	82.3	87.9	88.1	148.8	43.5	85.0	111.6	111.9	217.1	50.8	99.3	148.7	156.9	336.2				
13.0	21.7	40.8	43.1	43.3	67.1	27.3	51.6	54.5	54.6	80.4	31.4	58.7	62.7	62.8	114.6	39.5	77.5	82.8	83.0	137.6	40.7	80.0	105.3	105.6	200.7	47.6	92.8	141.6	150.0	310.8				
13.5						25.6	48.5	51.1	51.2	74.5	29.4	55.6	59.3	59.4	106.3	37.1	72.7	78.2	78.4	127.5	38.2	74.9	99.5	99.7	186.1	44.7	87.0	134.5	143.2	288.2				
14.0						24.1	45.6	48.0	48.1	69.3	27.6	52.6	56.1	56.3	98.8	34.9	68.3	73.5	73.6	118.6	35.9	70.4	94.2	94.4	173.0	42.1	81.7	127.4	136.5	268.0				
14.5											26.0	50.0	53.3	53.4	92.1	32.9	64.3	69.1	69.3	110.6	33.9	66.2	89.3	89.6	161.3	39.7	76.9	120.7	129.7	249.8				
15.0											24.6	47.5	50.6	50.7	86.1	31.0	60.7	65.2	65.3	103.3	32.0	62.4	84.9	85.1	150.7	37.5	72.6	114.6	123.1	233.4				
15.5											23.2	45.2	48.2	48.3	80.6	29.3	57.4	61.6	61.7	96.7	30.3	59.0	80.7	80.9	141.2	35.5	68.7	108.3	117.1	218.6				
16.0																27.8	54.3	58.3	58.4	90.8	28.7	55.9	76.5	76.7	132.5	33.7	65.1	102.5	111.1	205.2				
16.5																26.4	51.5	55.3	55.4	85.4	27.3	53.0	72.5	72.7	124.6	32.0	61.8	97.1	105.4	192.9				
17.0																																		
17.5																																		
18.0																																		

1. **1B, 2B & 3B**: Load Capacity for 1, 2 and 3 rows of bracing. 2. **FR**: Load Capacity for fully restrained compression flange. 3. **$\phi_c N_{ex}$** : Elastic buckling capacity about the X-X axis.

DHS PURLIN SYSTEM LOAD SPAN TABLES - END SPANS

Axial Compression Capacities (kN) $\phi_c N_c$

Span (m)	DHS 150/12						DHS 150/15						DHS 200/12						DHS 200/15						DHS 200/18						DHS 250/13									
	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$					
3.0	64.5	78.3	85.3	85.6	506.0	90.4	110.1	120.1	120.6	631.5	78.8	89.6	95.1	95.5	1103.3																									
3.5	56.2	73.2	82.2	82.6	371.7	78.7	102.8	115.7	116.2	464.0	72.1	85.7	93.0	93.5	810.6	101.7	121.0	131.3	132.1	1014.6	134.0	159.8	173.6	174.7	1213.1	96.2	109.7	116.3	117.1	1638.0										
4.0	48.0	67.7	78.7	79.2	284.6	66.0	94.9	110.7	111.5	355.2	65.1	81.5	90.7	91.3	620.6	91.8	115.1	128.0	129.0	776.8	120.8	151.9	169.2	170.6	928.8	89.2	105.8	114.3	115.3	1254.0										
4.5	40.4	62.0	74.9	75.5	224.8	54.2	86.8	105.4	106.2	280.6	58.0	77.1	88.1	88.9	490.3	81.7	108.7	124.4	125.5	613.8	106.8	143.4	164.4	166.0	733.8	81.9	101.6	112.0	113.3	990.8										
5.0	34.1	56.2	70.9	71.6	182.1	45.4	78.5	99.7	100.7	227.3	51.0	72.3	85.3	86.3	397.2	71.8	102.0	120.4	121.8	497.1	92.1	134.5	159.1	161.1	594.4	74.5	97.1	109.5	111.1	802.6										
5.5	29.0	50.4	66.8	67.6	150.5	38.8	69.7	93.8	94.9	187.9	44.4	67.5	82.3	83.4	328.2	62.3	95.2	116.2	117.8	410.8	78.6	125.3	153.5	155.8	491.2	67.1	92.4	106.8	108.7	663.3										
6.0	25.0	44.7	62.5	63.4	126.5	33.6	60.7	87.7	88.9	157.8	39.0	62.6	79.2	80.4	275.8	53.7	88.2	111.8	113.6	345.2	68.0	116.0	147.6	150.1	412.8	59.7	87.5	104.0	106.1	557.3										
6.5	21.9	39.6	58.2	59.1	107.7	29.6	53.0	81.4	82.8	134.5	34.7	57.6	75.9	77.3	235.0	47.0	81.2	107.2	109.2	294.1	59.6	106.0	141.4	144.2	351.7	53.0	82.5	101.0	103.4	474.9										
7.0	19.3	35.2	53.8	54.8	92.9	26.2	46.8	75.2	76.6	116.0	31.0	52.7	72.6	74.1	202.6	41.5	74.2	102.4	104.6	253.6	52.9	95.6	135.1	138.1	303.2	47.4	77.4	97.8	100.6	409.5										
7.5	17.3	31.3	49.5	50.5	80.9	23.5	41.7	68.2	69.9	101.0	27.6	47.9	69.1	70.8	176.5	37.0	67.3	97.5	99.9	220.9	47.3	85.6	128.5	131.8	264.1	42.7	72.3	94.5	97.6	356.7										
8.0	15.6	28.0	45.1	46.3	71.1	21.3	37.5	61.3	63.1	88.8	24.7	43.5	65.6	67.4	155.1	33.3	60.9	92.6	95.1	194.2	42.7	76.8	121.9	125.4	232.2	38.7	67.2	91.2	94.6	313.5										
8.5	14.1	25.3	41.1	42.2	63.0	19.4	33.9	55.1	56.7	78.6	22.3	39.8	62.1	64.0	137.4	30.2	54.9	87.6	90.3	172.0	38.8	69.4	115.2	118.8	205.6	35.3	62.2	87.7	91.4	277.7										
9.0	12.9	22.9	37.7	38.6	56.2	17.7	30.9	49.9	51.3	70.1	20.3	36.5	58.6	60.5	122.5	27.5	49.9	82.6	85.4	153.4	35.3	63.2	108.1	112.3	183.4	32.0	57.2	84.2	88.2	247.7										
9.5	11.8	21.0	34.3	35.3	50.4	16.3	28.3	45.4	46.6	62.9	18.6	33.7	55.1	57.1	110.0	25.2	45.5	77.6	80.5	137.7	32.2	57.8	100.5	104.9	164.6	29.2	52.8	80.6	84.9	222.3										
10.0	10.9	19.2	31.4	32.2	45.5	15.1	26.1	41.5	42.6	56.8	17.1	31.2	51.6	53.7	99.3	23.3	41.8	72.6	75.6	124.2	29.4	53.2	93.2	97.6	148.6	26.7	48.9	77.0	81.5	200.6										
10.5						14.0	24.1	38.1	39.2	51.5	15.8	28.8	48.1	50.3	90.0	21.6	38.5	67.6	70.8	112.7	27.1	49.2	85.9	90.4	134.7	24.5	45.4	73.5	78.2	182.0										
11.0						13.0	22.4	35.2	36.1	46.9	14.6	26.6	44.9	47.0	82.0	19.9	35.7	63.0	65.9	102.7	25.0	45.6	79.4	83.4	122.8	22.6	42.3	69.9	74.8	165.8										
11.5											13.6	24.6	42.0	43.9	75.0	18.5	33.2	58.4	61.4	93.9	23.1	42.5	73.6	77.2	112.3	20.9	39.6	66.3	71.5	151.7										
12.0											12.7	22.9	39.4	41.2	68.9	17.1	30.9	54.3	57.0	86.3	21.5	39.7	68.4	71.7	103.2	19.5	37.1	62.8	68.1	139.3										
12.5											11.9	21.4	37.1	38.7	63.5	16.0	28.9	50.6	53.1	79.5	20.0	37.3	63.9	66.8	95.1	18.1	34.9	59.2	64.8	128.4										
13.0											11.2	20.1	35.0	36.5	58.7	14.9	27.2	47.3	49.6	73.5	18.7	35.0	59.8	62.4	87.9	17.0	32.6	55.8	61.5	118.7										
13.5															14.0	25.6	44.3	46.4	46.4	68.2	17.5	33.0	56.1	58.5	81.5	15.9	30.5	52.8	58.1	110.0										
14.0															13.1	24.1	41.7	43.6	43.6	63.4	16.3	31.2	52.8	54.9	75.8	14.9	28.6	50.0	55.0	102.3										
14.5																				15.2	29.6	49.7	51.7	51.7	70.6	14.1	26.9	47.4	52.2	95.4										
15.0																				14.2	28.0	47.0	48.8	48.8	66.0	13.3	25.4	45.0	49.6	89.1										
15.5																										12.6	24.0	42.9	47.3	83.5										
16.0																										11.9	22.7	40.9	45.1	78.3										
16.5																																								
17.0																																								
17.5																																								
18.0																																								

1. **1B, 2B & 3B:** Load Capacity for 1, 2 and 3 rows of bracing. 2. **FR:** Load Capacity for fully restrained compression flange. 3. **$\phi_c N_{ex}$:** Elastic buckling capacity about the X-X axis.

DHS PURLIN SYSTEM LOAD SPAN TABLES - END SPANS

Axial Compression Capacities (kN) $\phi_c N_c$

Span (m)	DHS 250/15					DHS 250/18					DHS 300/15					DHS 300/18					DHS 350/18					DHS 400/20						
	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$		
3.0																																
3.5																																
4.0	111.1	131.8	142.4	143.7	1446.7	146.7	174.3	188.4	190.3	1733.4	127.7	144.8	153.1	154.6	2471.8																	
4.5	102.0	126.6	139.5	141.2	1143.0	134.5	167.4	184.6	187.0	1369.6	120.0	140.5	150.9	152.8	1953.0																	
5.0	92.7	121.0	136.4	138.5	925.8	122.0	159.9	180.5	183.4	1109.4	111.9	136.0	148.4	150.7	1581.9	148.2	180.2	196.8	199.9	1898.3	153.0	186.4	203.7	210.7	210.7	2769.4						
5.5	83.4	115.2	133.1	135.5	765.1	109.5	152.1	176.0	179.4	916.8	103.6	131.1	145.8	148.5	1307.4	137.2	173.8	193.2	196.9	1568.8	141.5	179.7	200.0	208.3	2288.8							
6.0	74.1	109.1	129.6	132.4	642.9	97.0	143.9	171.3	175.2	770.4	95.2	126.0	142.9	146.1	1098.5	126.0	167.0	189.4	193.8	1318.2	129.9	172.6	196.1	205.7	1923.2	155.8	208.5	237.5	254.0	2978.0		
6.5	65.7	102.8	125.8	129.0	547.8	84.4	135.5	166.3	170.8	656.4	86.9	120.6	139.9	143.5	936.0	114.9	159.9	185.4	190.4	1123.2	118.3	165.2	191.8	203.0	1638.7	141.6	199.3	232.3	251.3	2537.5		
7.0	58.7	96.4	121.9	125.5	472.3	74.2	127.0	161.1	166.1	566.0	78.6	115.1	136.7	140.8	807.1	103.7	152.6	181.1	186.8	968.5	106.8	157.5	187.4	200.0	1412.9	127.4	189.9	226.8	248.4	2187.9		
7.5	52.6	90.0	117.8	121.8	411.5	65.8	118.4	155.6	161.2	493.0	71.0	109.5	133.3	137.9	703.0	93.6	145.1	176.7	183.0	843.7	96.3	149.7	182.7	196.9	1230.8	114.6	180.3	221.0	245.4	1905.9		
8.0	47.0	83.6	113.6	118.0	361.6	58.9	109.8	150.0	156.2	433.3	64.6	103.8	129.8	134.9	617.9	84.9	137.5	172.0	179.0	741.5	87.3	141.8	177.9	193.7	1081.8	102.5	170.5	215.0	242.2	1675.1		
8.5	42.3	77.3	109.3	114.0	320.3	53.1	101.3	144.2	150.9	383.8	59.0	98.1	126.2	131.8	547.3	77.4	129.8	167.2	174.9	656.8	79.5	133.8	172.8	190.3	958.2	92.3	160.7	208.8	238.8	1483.8		
9.0	38.3	71.0	104.9	110.0	285.7	48.1	92.3	138.3	145.6	342.4	54.2	92.4	122.4	128.6	488.2	70.1	122.1	162.2	170.7	585.9	72.0	125.9	167.6	186.7	854.7	83.6	150.9	202.4	235.3	1323.5		
9.5	34.9	65.5	100.4	105.9	256.4	43.9	84.0	132.3	140.1	307.3	49.9	86.7	118.6	125.2	438.2	63.8	114.5	157.2	166.3	525.8	65.6	117.9	162.3	183.1	767.1	76.2	141.1	195.8	231.6	1187.9		
10.0	31.9	60.6	95.9	101.8	231.4	40.2	76.8	126.3	134.6	277.3	46.2	81.0	114.7	121.8	395.4	58.4	107.0	152.0	161.8	474.5	60.0	110.1	156.9	179.3	692.3	69.8	131.4	189.2	227.8	1072.1		
10.5	29.4	56.2	91.4	97.6	209.9	37.0	70.6	120.3	129.0	251.5	42.8	75.4	110.8	118.4	358.7	53.7	99.4	146.7	157.2	430.4	55.2	102.3	151.4	175.4	627.9	64.3	122.0	182.4	223.9	972.4		
11.0	27.1	52.1	86.9	93.4	191.2	34.2	65.2	114.2	123.4	229.2	39.4	70.4	106.8	114.8	326.8	49.5	92.8	141.4	152.5	392.2	51.0	95.4	145.9	171.3	572.2	59.4	113.4	175.6	219.8	886.0		
11.5	25.1	48.2	82.4	89.2	175.0	31.7	60.3	108.2	117.7	209.7	36.5	65.9	102.7	111.2	299.0	45.9	86.8	136.0	147.7	358.8	47.3	89.2	140.3	167.3	523.5	55.1	105.0	168.7	215.7	810.6		
12.0	23.4	44.7	78.0	84.9	160.7	29.5	56.1	102.2	112.1	192.6	33.9	61.9	98.7	107.6	274.6	42.7	81.4	130.6	142.9	329.5	44.0	83.6	134.7	163.1	480.8	51.3	97.5	161.7	211.4	744.5		
12.5	21.8	41.7	73.5	80.8	148.1	27.5	52.3	96.1	106.5	177.5	31.6	58.2	94.7	104.0	253.1	39.8	76.2	125.2	138.1	303.7	41.0	78.4	129.1	158.9	443.1	47.9	90.9	154.8	207.1	686.1		
13.0	20.4	38.9	69.3	76.6	136.9	25.7	48.9	89.7	100.9	164.1	29.5	54.9	90.6	100.3	234.0	37.3	71.2	119.8	133.2	280.8	38.4	73.2	123.5	154.6	409.6	44.9	85.0	147.9	202.6	634.3		
13.5	19.1	36.5	65.4	72.4	127.0	24.1	45.8	84.0	95.1	152.1	27.7	51.9	86.6	96.6	217.0	34.9	66.7	114.5	128.3	260.4	36.0	68.6	117.9	150.3	379.8	42.1	79.7	141.1	198.1	588.2		
14.0	18.0	34.3	61.9	68.6	118.0	22.7	43.1	78.8	89.2	141.5	26.0	49.1	82.7	93.0	201.7	32.8	62.6	109.2	123.4	242.1	33.9	64.4	112.4	145.9	353.2	39.7	74.8	134.3	193.5	546.9		
14.5	16.9	32.3	58.7	65.0	110.0	21.4	40.6	74.2	83.9	131.9	24.5	46.6	78.6	89.3	188.1	31.0	58.9	103.7	118.6	225.7	31.9	60.6	106.8	141.5	329.3	37.4	70.5	127.4	188.9	509.9		
15.0	16.0	30.4	55.7	61.8	102.8	20.2	38.3	69.9	79.1	123.2	23.1	44.3	74.8	85.7	175.7	29.2	55.6	98.6	113.7	210.9	30.2	57.2	101.5	137.1	307.7	35.4	66.6	120.9	184.2	476.4		
15.5	15.1	28.8	52.8	58.8	96.3	19.1	36.2	66.1	74.8	115.4	21.9	41.9	71.3	82.1	164.6	27.6	52.5	93.9	108.9	197.5	28.6	54.1	96.6	132.7	288.1	33.5	63.0	115.0	179.5	446.2		
16.0	14.3	27.2	50.0	56.0	90.4	18.1	34.3	62.6	70.8	108.3	20.7	39.6	68.0	78.4	154.4	26.2	49.8	89.5	104.0	185.3	27.1	51.2	92.1	128.3	270.4	31.8	59.7	108.9	174.8	418.7		
16.5	13.6	25.8	47.4	53.3	85.0	17.1	32.6	59.3	67.1	101.8	19.7	37.5	65.0	75.0	145.2	24.9	47.2	85.5	99.3	174.3	25.7	48.6	87.9	123.9	254.3	30.2	56.6	103.2	170.0	393.7		
17.0	12.9	24.6	45.0	50.6	80.0	16.3	31.0	56.4	63.7	95.9	18.7	35.6	62.2	71.7	136.8	23.7	44.8	81.7	95.0	164.2	24.5	46.2	84.0	119.5	239.5	28.8	53.9	98.0	165.3	370.9		
17.5						15.5	29.5	53.6	60.6	90.5	17.8	33.9	59.5	68.7	129.1	22.5	42.7	78.2	91.0	154.9	23.3	43.9	80.4	115.1	226.0	27.4	51.3	93.2	160.5	350.0		
18.0						14.7	28.1	51.1	57.7	85.6	17.0	32.3	57.1	65.9	122.0	21.5	40.7	74.5	87.2	146.4	22.2	41.9	76.5	110.8	213.6	26.2	48.9	88.8	155.7	330.8		

1. **1B, 2B & 3B:** Load Capacity for 1, 2 and 3 rows of bracing. 2. **FR:** Load Capacity for fully restrained compression flange. 3. **$\phi_c N_{ex}$:** Elastic buckling capacity about the X-X axis.

DHS PURLIN SYSTEM LOAD SPAN TABLES - INTERNAL SPANS

Axial Compression Capacities (kN) $\phi_c N_c$

Span (m)	DHS 150/12						DHS 150/15						DHS 200/12						DHS 200/15						DHS 200/18						DHS 250/13								
	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$				
3.0																																							
3.5	58.5	75.7	83.5	88.3	728.6	81.9	106.3	117.4	124.3	909.4	73.9	87.5	93.3	97.2	1588.8																								
4.0	50.6	70.7	80.3	86.4	557.8	70.0	99.2	112.9	121.7	696.3	67.2	83.8	91.0	96.0	1216.4																								
4.5	42.9	65.4	76.9	84.3	440.7	58.0	91.8	108.1	118.7	550.1	60.4	79.7	88.5	94.7	961.1	85.1	112.5	124.8	133.6	1203.0	111.9	148.5	165.0	176.8	1438.3	84.2	103.9	112.0	118.1	1942.1									
5.0	36.5	60.1	73.3	82.1	357.0	48.6	84.1	102.9	115.5	445.6	53.7	75.5	85.7	93.2	778.5	75.5	106.4	121.0	131.6	974.4	97.5	140.4	159.8	174.1	1165.0	77.0	99.9	109.5	116.9	1573.1									
5.5	31.0	54.7	69.5	79.7	295.0	41.5	76.4	97.5	112.1	368.2	47.0	71.0	82.9	91.6	643.4	66.1	100.2	116.9	129.4	805.3	83.8	132.0	154.4	171.2	962.8	69.9	95.6	106.8	115.6	1300.1									
6.0	26.8	49.3	65.5	77.1	247.9	35.9	68.0	91.9	108.5	309.4	41.3	66.5	79.8	89.9	540.6	57.4	93.7	112.6	127.0	676.7	72.5	123.4	148.6	168.0	809.0	62.8	91.1	104.0	114.2	1092.4									
6.5	23.4	44.0	61.5	74.4	211.2	31.5	59.7	86.2	104.6	263.6	36.7	61.8	76.6	88.1	460.6	50.1	87.2	108.1	124.5	576.6	63.5	114.6	142.6	164.6	689.4	55.8	86.5	101.0	112.7	930.8									
7.0	20.7	39.4	57.5	71.6	182.1	28.0	52.7	80.4	100.6	227.3	32.9	57.2	73.3	86.2	397.2	44.3	80.6	103.4	121.8	497.1	56.3	105.1	136.3	161.0	594.4	50.0	81.7	97.8	111.1	802.6									
7.5	18.5	35.3	53.4	68.7	158.6	25.1	46.9	74.6	96.5	198.0	29.5	52.7	70.0	84.2	346.0	39.5	74.2	98.7	118.9	433.1	50.4	95.5	130.0	157.2	517.8	45.0	76.9	94.5	109.4	699.1									
8.0	16.6	31.6	49.4	65.7	139.4	22.7	42.1	68.2	92.3	174.0	26.4	48.2	66.5	82.1	304.1	35.5	67.7	93.8	116.0	380.6	45.4	86.1	123.5	153.3	455.1	40.9	72.1	91.2	107.6	614.5									
8.5	15.1	28.5	45.4	62.7	123.5	20.6	38.1	61.9	87.9	154.1	23.8	44.0	63.1	80.0	269.3	32.1	61.7	88.9	112.9	337.1	41.3	77.8	117.0	149.2	403.1	37.3	67.4	87.7	105.7	544.3									
9.0	13.7	25.8	41.7	59.6	110.1	18.9	34.7	56.2	83.6	137.5	21.7	40.4	59.6	77.7	240.2	29.3	56.0	84.0	109.8	300.7	37.5	70.7	110.3	145.0	359.5	34.1	62.6	84.2	103.8	485.5									
9.5	12.6	23.6	38.4	56.6	98.9	17.4	31.7	51.3	79.1	123.4	19.8	37.3	56.2	75.4	215.6	26.9	51.1	79.1	106.5	269.9	34.1	64.7	102.9	140.7	322.7	31.0	57.9	80.6	101.8	435.7									
10.0	11.6	21.6	35.4	53.5	89.2	16.1	29.2	47.0	74.7	111.4	18.2	34.6	52.8	73.1	194.6	24.8	46.8	74.3	103.2	243.6	31.3	59.5	95.7	136.2	291.2	28.3	53.6	77.0	99.7	393.2									
10.5	10.8	20.0	32.5	50.4	80.9	15.0	27.0	43.3	69.7	101.0	16.8	32.1	49.4	70.7	176.5	22.9	43.2	69.5	99.8	220.9	28.8	54.9	88.7	131.7	264.1	26.0	49.8	73.5	97.6	356.7									
11.0	10.0	18.5	30.0	47.4	73.7	13.9	25.1	40.1	64.9	92.0	15.6	29.9	46.1	68.3	160.8	21.2	39.9	64.8	96.4	201.3	26.5	50.9	82.0	127.1	240.7	24.0	46.5	69.9	95.4	325.0									
11.5	9.4	17.2	27.8	44.3	67.4	12.9	23.3	37.3	60.1	84.2	14.5	27.7	43.2	65.9	147.1	19.6	37.1	60.3	93.0	184.2	24.6	47.4	76.1	122.4	220.2	22.3	43.5	66.3	93.1	297.3									
12.0	8.8	16.0	25.9	41.5	61.9	12.1	21.8	34.8	55.7	77.3	13.5	25.7	40.5	63.4	135.1	18.2	34.6	56.1	89.5	169.1	22.8	44.3	70.9	117.8	202.2	20.7	40.8	62.8	90.9	273.1									
12.5	8.2	15.0	24.2	39.0	57.1	11.2	20.5	32.5	51.9	71.3	12.7	24.0	38.2	60.9	124.5	17.0	32.4	52.3	86.0	155.9	21.3	41.5	66.3	113.0	186.4	19.3	38.3	59.2	88.6	251.7									
13.0	7.8	14.1	22.6	36.7	52.8	10.4	19.3	30.5	48.4	65.9	11.9	22.5	36.0	58.5	115.1	15.9	30.4	49.0	82.5	144.1	19.9	39.0	62.1	107.9	172.3	18.0	36.1	55.8	86.2	232.7									
13.5						9.6	18.2	28.7	45.3	61.1	11.2	21.1	34.0	56.0	106.7	14.9	28.6	46.0	79.0	133.6	18.6	36.8	58.4	102.6	159.8	16.9	34.0	52.8	83.8	215.7									
14.0						8.9	17.2	27.1	42.5	56.8	10.5	19.9	32.2	53.6	99.3	14.0	26.9	43.3	75.5	124.2	17.4	34.8	55.0	97.4	148.6	15.9	31.9	50.0	81.5	200.6									
14.5											9.9	18.7	30.5	51.2	92.5	13.1	25.5	40.8	72.0	115.8	16.3	32.9	52.0	92.2	138.5	14.9	30.0	47.4	79.1	187.0									
15.0											9.3	17.7	28.8	48.7	86.5	12.4	24.1	38.6	68.5	108.2	15.2	31.2	49.2	87.1	129.4	14.1	28.3	45.0	76.7	174.7									
15.5											8.8	16.8	27.2	46.4	81.0	11.7	22.9	36.5	65.2	101.4	14.2	29.5	46.7	82.2	121.2	13.3	26.7	42.9	74.2	163.6									
16.0											8.4	15.9	25.8	44.2	76.0	11.1	21.8	34.7	62.0	95.1	13.4	27.9	44.4	77.8	113.7	12.6	25.3	40.9	71.8	153.6									
16.5											7.9	15.2	24.5	42.2	71.4	10.5	20.8	33.0	58.7	89.4	12.6	26.5	42.3	73.8	106.9	12.0	24.0	39.0	69.4	144.4									
17.0																9.9	19.8	31.4	55.7	84.2	11.8	25.1	40.3	70.1	100.7	11.4	22.8	37.3	67.0	136.0									
17.5																9.4	18.9	30.0	53.0	79.5	11.2	23.9	38.5	66.6	95.1	10.8	21.6	35.6	64.7	128.4									
18.0																8.9	18.1	28.6	50.4	75.1	10.5	22.8	36.9	63.5	89.8	10.3	20.6	34.1	62.3	121.3									

1. **1B, 2B & 3B:** Load Capacity for 1, 2 and 3 rows of bracing. 2. **FR:** Load Capacity for fully restrained compression flange. 3. **$\phi_c N_{ex}$:** Elastic buckling capacity about the X-X axis.

DHS PURLIN SYSTEM LOAD SPAN TABLES - LAPPED END SPAN

Axial Compression Capacities (kN) $\phi_c N_c$

Span (m)	DHS 150/12						DHS 150/15						DHS 200/12						DHS 200/15						DHS 200/18						DHS 250/13						
	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$		
3.0	64.7	78.4	85.8	86.1	536.2	90.7	110.2	120.8	121.3	669.2	78.9	89.6	95.3	95.8	1169.1																						
3.5	56.5	73.3	82.8	83.2	393.9	79.1	102.9	116.6	117.2	491.7	72.2	85.8	93.2	94.0	858.9																						
4.0	48.3	67.8	79.5	80.0	301.6	66.6	95.1	111.9	112.6	376.4	65.3	81.6	90.9	91.9	657.6	92.1	115.2	128.3	129.7	823.2	121.3	152.0	169.7	171.6	198.4	89.3	105.9	114.4	115.8	1328.9							
4.5	40.7	62.1	75.9	76.5	238.3	54.8	87.0	106.7	107.7	297.4	58.2	77.1	88.4	89.6	519.6	82.1	108.8	124.8	126.5	650.4	107.5	143.6	164.9	167.3	177.6	82.0	101.7	112.1	113.9	1050.0							
5.0	34.4	56.3	72.1	72.8	193.0	46.0	78.8	101.3	102.4	240.9	51.3	72.4	85.7	87.1	420.9	72.3	102.2	120.9	123.0	526.8	92.9	134.7	159.8	162.6	162.9	74.6	97.2	109.6	111.8	850.5							
5.5	29.3	50.5	68.1	68.9	159.5	39.3	70.0	95.6	96.8	199.1	44.7	67.6	82.8	84.4	347.8	62.8	95.3	116.8	119.2	435.4	79.4	125.5	154.3	157.6	152.0	67.2	92.5	107.0	109.5	702.9							
6.0	25.3	44.8	63.9	64.9	134.0	34.1	61.0	89.7	91.1	167.3	39.3	62.7	79.7	81.5	292.2	54.2	88.4	112.5	115.2	365.8	68.8	116.2	148.5	152.2	437.4	59.9	87.6	104.2	107.1	590.6							
6.5	22.1	39.7	59.7	60.8	114.2	30.0	53.3	83.7	85.2	142.5	34.9	57.8	76.5	78.6	249.0	47.4	81.4	108.0	111.0	311.7	60.4	106.3	142.5	146.6	372.7	53.1	82.6	101.2	104.5	503.2							
7.0	19.6	35.3	55.5	56.6	98.4	26.7	47.0	77.6	79.2	122.9	31.2	52.9	73.2	75.5	214.7	41.9	74.5	103.3	106.6	268.8	53.6	96.0	136.2	140.7	321.3	47.5	77.6	98.0	101.8	433.9							
7.5	17.5	31.4	51.3	52.4	85.7	24.0	41.9	71.1	73.0	107.0	27.8	48.1	69.8	72.3	187.0	37.5	67.6	98.5	102.1	234.1	48.0	85.9	129.8	134.7	279.9	42.8	72.5	94.8	99.0	378.0							
8.0	15.8	28.1	47.1	48.3	75.4	21.7	37.6	64.4	66.3	94.1	25.0	43.7	66.4	69.0	164.4	33.7	61.1	93.7	97.5	205.8	43.3	77.1	123.4	128.5	246.0	38.8	67.4	91.4	96.0	332.2							
8.5	14.3	25.4	43.0	44.2	66.7	19.8	34.1	58.0	59.8	83.3	22.6	39.9	63.0	65.7	145.6	30.6	55.1	88.8	92.8	182.3	39.0	69.7	116.8	122.2	217.9	35.4	62.4	88.0	93.0	294.3							
9.0	13.1	23.0	39.4	40.5	59.5	18.2	31.0	52.5	54.1	74.3	20.5	36.7	59.5	62.4	129.9	27.9	50.0	83.9	88.0	162.6	35.4	63.4	110.1	115.8	194.4	32.1	57.4	84.5	89.9	262.5							
9.5	12.1	21.1	36.1	37.2	53.4	16.8	28.4	47.8	49.2	66.7	18.8	33.8	56.0	59.1	116.5	25.6	45.7	79.0	83.3	145.9	32.3	58.1	102.7	109.1	174.4	29.3	52.9	81.0	86.8	235.6							
10.0	11.1	19.3	33.0	34.0	48.2	15.6	26.2	43.7	45.0	60.2	17.3	31.3	52.6	55.7	105.2	23.5	41.9	74.1	78.5	131.7	29.5	53.4	95.5	101.9	157.4	26.8	49.0	77.4	83.6	212.6							
10.5	10.3	17.8	30.3	31.2	43.7	14.5	24.2	40.1	41.3	54.6	16.0	28.9	49.2	52.4	95.4	21.6	38.7	69.2	73.8	119.4	27.2	49.4	88.4	94.9	142.8	24.6	45.5	73.8	80.3	192.8							
11.0						13.5	22.5	37.0	38.1	49.7	14.8	26.7	45.9	49.2	86.9	20.0	35.8	64.6	69.1	108.8	25.1	45.8	81.7	87.9	130.1	22.7	42.4	70.3	77.0	175.7							
11.5						12.4	21.0	34.3	35.2	45.5	13.8	24.7	43.0	46.0	79.5	18.5	33.3	60.1	64.5	99.5	23.2	42.7	75.8	81.4	119.0	21.0	39.7	66.7	73.8	160.7							
12.0											12.9	23.0	40.4	43.1	73.0	17.2	31.1	55.9	60.1	91.4	21.6	39.9	70.6	75.6	109.3	19.5	37.2	63.2	70.5	147.6							
12.5											12.1	21.5	38.0	40.6	67.3	16.0	29.1	52.1	56.0	84.2	20.1	37.4	66.0	70.4	100.7	18.2	34.9	59.6	67.3	136.0							
13.0											11.3	20.1	35.8	38.2	62.2	15.0	27.3	48.8	52.3	77.9	18.7	35.2	61.8	65.8	93.1	17.0	32.7	56.2	64.0	125.8							
13.5											10.6	18.9	33.9	36.1	57.7	14.0	25.7	45.7	48.9	72.2	17.5	33.2	58.1	61.6	86.4	16.0	30.6	53.2	60.8	116.6							
14.0																13.2	24.2	43.0	45.9	67.2	16.3	31.4	54.7	57.9	80.3	15.0	28.7	50.3	57.6	108.4							
14.5																12.4	22.9	40.6	43.2	62.6	15.2	29.7	51.6	54.5	74.9	14.1	27.0	47.8	54.7	101.1							
15.0																					14.2	28.1	48.8	51.4	69.9	13.3	25.5	45.4	52.0	94.5							
15.5																					13.3	26.6	46.3	48.6	65.5	12.6	24.1	43.2	49.5	88.5							
16.0																					12.5	25.2	43.9	46.0	61.5	11.9	22.8	41.2	47.2	83.0							
16.5																										11.3	21.6	39.3	45.0	78.1							
17.0																																					
17.5																																					
18.0																																					

1. **1B, 2B & 3B:** Load Capacity for 1, 2 and 3 rows of bracing. 2. **FR:** Load Capacity for fully restrained compression flange. 3. **$\phi_c N_{ex}$:** Elastic buckling capacity about the X-X axis.

DHS PURLIN SYSTEM LOAD SPAN TABLES - LAPPED END SPAN

Axial Compression Capacities (kN) $\phi_c N_c$

Span (m)	DHS 250/15					DHS 250/18					DHS 300/15					DHS 300/18					DHS 350/18					DHS 400/20					
	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	
3.0																															
3.5																															
4.0	111.3	131.9	142.5	144.3	1533.0	146.9	174.4	188.5	191.0	1836.9	127.8	144.8	153.2	155.1	2619.3																
4.5	102.2	126.7	139.7	141.9	1211.3	134.7	167.5	184.8	187.9	1451.4	120.1	140.6	151.0	153.3	2069.6																
5.0	92.9	121.1	136.6	139.3	981.1	122.2	160.1	180.7	184.5	1175.6	112.0	136.0	148.6	151.4	1676.3																
5.5	83.6	115.3	133.3	136.5	810.8	109.7	152.2	176.3	180.8	971.6	103.8	131.2	145.9	149.2	1385.4	137.4	173.9	193.4	197.9	1662.5	141.7	179.8	200.3	209.1	2425.4						
6.0	74.3	109.2	129.8	133.5	681.3	97.2	144.1	171.6	176.8	816.4	95.4	126.1	143.1	147.0	1164.1	126.2	167.1	189.7	194.9	1396.9	130.1	172.7	196.3	206.7	2038.0						
6.5	65.9	102.9	126.1	130.3	580.5	84.6	135.7	166.6	172.6	695.6	87.1	120.7	140.1	144.5	991.9	115.1	160.0	185.7	191.7	1190.3	118.6	165.3	192.1	204.1	204.1	1736.5	141.9	199.5	232.6	252.4	2688.9
7.0	58.9	96.6	122.2	127.0	500.5	74.4	127.2	161.4	168.1	599.8	78.9	115.3	136.9	141.9	855.2	104.0	152.7	181.4	188.3	1026.3	107.1	157.7	187.7	201.3	201.3	1497.3	127.7	190.1	227.2	249.7	2318.5
7.5	52.8	90.2	118.1	123.5	436.0	66.0	118.6	156.0	163.4	522.5	71.2	109.7	133.5	139.2	745.0	93.8	145.2	177.0	184.7	894.0	96.5	149.9	183.1	198.4	198.4	1304.3	114.9	180.5	221.4	246.8	2019.7
8.0	47.2	83.8	113.9	119.8	383.2	59.1	110.0	150.4	158.6	459.2	64.7	104.0	130.1	136.4	654.8	85.2	137.7	172.4	181.0	785.8	87.6	142.0	178.2	195.3	195.3	1146.3	102.8	170.8	215.5	243.7	1775.1
8.5	42.4	77.5	109.6	116.1	339.4	53.2	101.5	144.7	153.6	406.7	59.1	98.2	126.5	133.4	580.0	77.6	130.0	167.6	177.1	696.0	79.8	134.0	173.3	192.0	192.0	1015.4	92.5	161.0	209.3	240.5	1572.4
9.0	38.4	71.2	105.3	112.2	302.8	48.3	92.6	138.8	148.5	362.8	54.3	92.5	122.8	130.3	517.4	70.3	122.3	162.7	173.0	620.8	72.2	126.1	168.1	188.7	188.7	905.7	83.9	151.1	203.0	237.2	1402.5
9.5	35.0	65.6	100.8	108.3	271.7	44.0	84.2	132.9	143.2	325.6	50.1	86.8	119.0	127.1	464.3	64.0	114.7	157.6	168.8	572.2	65.8	118.2	162.8	185.2	185.2	812.9	76.5	141.4	196.5	233.7	1258.8
10.0	32.0	60.7	96.4	104.3	245.2	40.3	77.0	126.9	137.9	293.9	46.3	81.2	115.1	123.9	419.0	58.6	107.2	152.5	164.5	502.9	60.2	110.4	157.5	181.5	181.5	733.6	70.1	131.7	189.8	230.1	1136.0
10.5	29.5	56.4	91.9	100.2	222.4	37.1	70.8	120.9	132.5	266.5	42.9	75.6	111.2	120.6	380.1	53.8	99.7	147.3	160.1	456.1	55.4	102.6	152.0	177.8	177.8	665.4	64.5	122.3	183.1	226.4	1030.4
11.0	27.2	52.2	87.4	96.1	202.7	34.3	65.3	114.9	127.1	242.9	39.6	70.6	107.2	117.2	346.3	49.7	93.0	142.0	155.6	415.6	51.1	95.6	146.5	174.0	174.0	606.3	59.6	113.7	176.3	222.5	938.9
11.5	25.2	48.3	82.9	92.1	185.4	31.8	60.5	108.9	121.6	222.2	36.6	66.1	103.2	113.7	316.8	46.1	87.0	136.6	151.0	380.2	47.4	89.4	140.9	170.1	170.1	554.7	55.3	105.3	169.4	218.5	859.0
12.0	23.5	44.9	78.5	88.0	170.3	29.6	56.2	102.9	116.1	204.1	34.0	62.0	99.2	110.2	291.0	42.8	81.5	131.3	146.4	349.2	44.1	83.8	135.4	166.1	166.1	509.5	51.5	97.8	162.6	214.5	788.9
12.5	21.9	41.8	74.0	83.9	156.9	27.6	52.4	96.8	110.7	188.1	31.7	58.4	95.2	106.7	268.2	39.9	76.4	125.9	141.7	321.8	41.1	78.6	129.8	162.1	162.1	469.5	48.1	91.1	155.7	210.3	727.0
13.0	20.5	39.0	69.8	79.9	145.1	25.8	49.0	90.5	105.3	173.9	29.6	55.1	91.2	103.2	247.9	37.4	71.4	120.5	137.0	297.5	38.5	73.4	124.2	157.9	157.9	434.1	45.0	85.2	148.8	206.1	672.2
13.5	19.2	36.6	65.9	75.8	134.5	24.2	46.0	84.7	99.8	161.2	27.8	52.0	87.2	99.6	229.9	35.0	66.9	115.2	132.3	275.9	36.1	68.7	118.7	153.8	153.8	402.5	42.3	79.9	142.0	201.8	623.3
14.0	18.0	34.4	62.4	71.8	125.1	22.8	43.2	79.5	94.1	149.9	26.1	49.3	83.2	96.1	213.8	32.9	62.8	109.9	127.5	256.5	34.0	64.6	113.2	149.6	149.6	374.3	39.8	75.0	135.2	197.4	579.6
14.5	17.0	32.3	59.2	68.1	116.6	21.4	40.7	74.8	88.5	139.7	24.6	46.7	79.2	92.5	199.3	31.0	59.1	104.5	122.8	239.1	32.0	60.8	107.6	145.3	145.3	348.9	37.5	70.7	128.3	192.9	540.3
15.0	16.0	30.5	56.2	64.7	109.0	20.2	38.4	70.5	83.4	130.6	23.2	44.4	75.4	89.0	186.2	29.3	55.7	99.4	118.1	223.5	30.3	57.3	102.2	141.1	141.1	326.0	35.5	66.7	121.9	188.5	504.9
15.5	15.2	28.8	53.3	61.6	102.0	19.1	36.3	66.7	78.8	122.3	21.9	42.0	71.8	85.5	174.4	27.7	52.7	94.6	113.4	209.3	28.6	54.2	97.3	136.8	136.8	305.3	33.6	63.1	115.9	183.9	472.8
16.0	14.4	27.3	50.4	58.7	95.8	18.1	34.4	63.1	74.6	114.8	20.8	39.7	68.5	82.0	163.7	26.3	49.9	90.2	108.7	196.4	27.2	51.3	92.8	132.5	132.5	286.5	31.9	59.8	109.8	179.3	443.7
16.5	13.6	25.9	47.8	56.0	90.0	17.2	32.7	59.8	70.7	107.9	19.7	37.6	65.4	78.4	153.9	25.0	47.3	86.1	104.0	184.7	25.8	48.7	88.6	128.2	128.2	269.4	30.3	56.8	104.1	174.8	417.2
17.0	13.0	24.6	45.4	53.3	84.8	16.3	31.0	56.8	67.2	101.6	18.7	35.7	62.6	75.0	145.0	23.7	45.0	82.3	99.4	174.0	24.5	46.3	84.6	124.0	124.0	253.8	28.8	54.0	98.9	170.1	393.1
17.5	12.3	23.4	43.1	50.7	80.0	15.5	29.6	54.1	63.9	95.9	17.8	34.0	60.0	71.9	136.8	22.6	42.8	78.8	95.2	164.2	23.4	44.1	81.0	119.7	119.7	239.5	27.5	51.4	94.0	165.5	370.9
18.0	11.8	22.3	41.1	48.3	75.7	14.8	28.2	51.5	60.9	90.7	17.0	32.4	57.5	69.0	129.3	21.5	40.8	75.1	91.3	155.2	22.3	42.0	77.2	115.5	115.5	226.4	26.3	49.1	89.6	160.9	350.6

1. **1B, 2B & 3B:** Load Capacity for 1, 2 and 3 rows of bracing. 2. **FR:** Load Capacity for fully restrained compression flange. 3. **$\phi_c N_{ex}$:** Elastic buckling capacity about the X-X axis.

DHS PURLIN SYSTEM LOAD SPAN TABLES - LAPPED INTERNAL SPANS

Axial Compression Capacities (kN) $\phi_c N_c$

Span (m)	DHS 150/12						DHS 150/15						DHS 200/12						DHS 200/15						DHS 200/18						DHS 250/13					
	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	
3.0																																				
3.5																																				
4.0	51.1	70.8	80.1	87.4	605.3	70.9	99.5	112.6	123.0	755.5	67.5	83.8	90.7	96.6	1319.9																					
4.5	43.4	65.6	76.6	85.5	478.2	59.0	92.1	107.7	120.4	596.9	60.8	79.8	88.2	95.4	1042.8																					
5.0	37.1	60.3	73.0	83.5	387.4	49.5	84.5	102.5	117.5	483.5	54.1	75.5	85.4	94.1	844.7	76.2	106.6	120.5	132.9	1057.3	98.7	140.6	159.2	175.8	1264.2	77.3	99.7	108.9	117.6	1706.9						
5.5	31.5	54.9	69.1	81.3	320.1	42.3	76.9	97.1	114.5	399.6	47.5	71.1	82.4	92.7	698.1	66.8	100.3	116.3	130.9	873.8	85.1	132.2	153.6	173.2	1044.7	70.1	95.4	106.1	116.5	1410.7						
6.0	27.2	49.6	65.2	79.0	269.0	36.7	68.7	91.5	111.2	335.7	41.8	66.5	79.3	91.2	586.6	58.2	93.9	111.9	128.8	734.2	73.7	123.7	147.8	170.4	877.9	63.0	90.9	103.2	115.2	1185.3						
6.5	23.8	44.4	61.2	76.6	229.2	32.3	60.5	85.8	107.7	286.1	37.1	62.0	76.1	89.6	499.8	50.9	87.4	107.4	126.5	625.6	64.7	115.0	141.7	167.3	748.0	56.1	86.2	100.1	113.9	1010.0						
7.0	21.1	39.7	57.1	74.0	197.6	28.7	53.4	80.0	104.1	246.7	33.2	57.4	72.8	87.9	430.9	45.0	80.9	102.7	124.1	539.4	57.4	105.7	135.4	164.1	645.0	50.2	81.5	96.8	112.5	870.8						
7.5	18.9	35.7	53.1	71.4	172.1	25.8	47.6	74.2	100.3	214.9	29.9	52.8	69.4	86.1	375.4	40.1	74.5	97.9	121.6	469.9	51.4	96.2	129.0	160.7	561.8	45.2	76.7	93.4	110.9	758.6						
8.0	17.0	31.9	49.1	68.6	151.3	23.4	42.8	67.8	96.4	188.8	26.8	48.3	65.9	84.2	329.9	36.1	68.1	93.0	118.9	413.0	46.1	86.9	122.5	157.2	493.8	41.0	71.8	89.9	109.3	666.7						
8.5	15.4	28.8	45.1	65.9	134.0	21.3	38.8	61.6	92.5	167.3	24.2	44.2	62.4	82.2	292.2	32.8	62.2	88.1	116.1	365.8	41.5	78.6	115.9	153.5	437.4	37.4	67.0	86.4	107.7	590.6						
9.0	14.1	26.2	41.4	63.0	119.5	19.6	35.4	55.9	88.4	149.2	22.0	40.6	58.9	80.2	260.7	29.9	56.4	83.1	113.3	326.3	37.7	71.5	109.1	149.7	390.1	34.3	62.3	82.8	105.9	526.8						
9.5	13.0	23.9	38.2	60.2	107.3	18.1	32.4	51.1	84.3	133.9	20.1	37.5	55.5	78.1	234.0	27.3	51.5	78.2	110.3	292.9	34.3	65.5	101.8	145.7	350.1	31.2	57.6	79.1	104.1	472.8						
10.0	12.0	22.0	35.1	57.3	96.8	16.8	29.9	47.0	80.2	120.8	18.5	34.8	52.1	76.0	211.1	25.0	47.3	73.4	107.3	264.3	31.4	60.3	94.6	141.7	316.0	28.5	53.3	75.4	102.3	426.7						
10.5	11.1	20.3	32.3	54.4	87.8	15.6	27.7	43.4	76.0	109.6	17.1	32.3	48.6	73.8	191.5	23.0	43.6	68.5	104.2	239.7	28.9	55.7	87.6	137.5	286.6	26.2	49.5	71.7	100.3	387.0						
11.0	10.4	18.8	29.9	51.5	80.0	14.6	25.7	40.2	71.5	99.9	15.9	30.1	45.4	71.6	174.5	21.3	40.4	64.0	101.1	218.4	26.7	51.8	81.1	133.3	261.1	24.2	46.2	68.1	98.3	352.6						
11.5	9.7	17.5	27.7	48.7	73.2	13.3	24.0	37.4	66.9	91.4	14.8	27.9	42.5	69.3	159.6	19.7	37.6	59.5	97.9	199.8	24.7	48.3	75.4	129.0	238.9	22.4	43.2	64.4	96.3	322.6						
12.0	9.1	16.4	25.8	45.8	67.2	12.2	22.5	34.9	62.3	83.9	13.8	26.0	40.0	67.0	146.6	18.3	35.1	55.4	94.6	183.5	23.0	45.1	70.3	124.7	219.4	20.8	40.5	60.9	94.2	296.3						
12.5	8.6	15.3	24.1	43.0	61.9	11.3	21.2	32.7	58.0	77.3	12.8	24.3	37.6	64.7	135.1	17.1	32.8	51.7	91.4	169.1	21.4	42.3	65.8	120.3	202.2	19.4	38.1	57.2	92.1	273.1						
13.0	8.1	14.4	22.6	40.5	57.3	10.4	19.9	30.8	54.2	71.5	12.0	22.7	35.5	62.4	124.9	16.0	30.8	48.4	88.1	156.4	20.0	39.6	61.7	115.9	187.0	18.1	35.9	54.0	90.0	252.5						
13.5	7.7	13.6	21.3	38.2	53.1	9.7	18.8	29.0	50.7	66.3	11.3	21.3	33.6	60.1	115.8	15.0	29.0	45.5	84.8	145.0	18.7	37.1	58.1	111.5	173.4	17.0	33.7	51.0	87.8	234.1						
14.0	7.3	12.8	20.0	36.0	49.4	9.0	17.9	27.4	47.6	61.6	10.6	20.1	31.8	57.8	107.7	14.0	27.4	42.8	81.5	134.8	17.5	34.9	54.8	106.4	161.2	16.0	31.7	48.3	85.6	217.7						
14.5						8.4	17.0	25.9	44.7	57.4	10.0	19.0	30.1	55.5	100.4	13.2	25.9	40.4	78.2	125.7	16.4	32.8	51.8	101.5	150.3	15.0	29.8	45.8	83.3	202.9						
15.0						7.8	16.1	24.6	42.2	53.7	9.4	18.0	28.4	53.2	93.8	12.5	24.6	38.3	75.0	117.4	15.3	31.0	49.2	96.6	140.4	14.2	28.1	43.5	81.1	189.6						
15.5											8.9	17.0	26.9	51.0	87.9	11.8	23.3	36.3	71.7	110.0	14.3	29.3	46.6	91.8	131.5	13.4	26.5	41.4	78.9	177.6						
16.0											8.4	16.2	25.5	48.7	82.4	11.1	22.1	34.5	68.4	103.2	13.4	27.7	44.1	86.9	123.4	12.7	25.1	39.5	76.6	166.6						
16.5											8.0	15.4	24.2	46.5	77.5	10.5	21.0	32.8	65.3	97.0	12.6	26.3	41.8	82.4	116.0	12.1	23.8	37.7	74.3	156.7						
17.0											7.6	14.7	23.0	44.5	73.0	10.0	19.9	31.3	62.3	91.4	11.9	25.0	39.8	78.2	109.3	11.5	22.6	36.0	72.1	147.6						
17.5											7.2	14.0	22.0	42.6	68.9	9.5	18.9	29.9	59.2	86.3	11.2	23.8	37.8	74.4	103.2	10.9	21.5	34.4	69.8	139.3						
18.0																8.9	18.0	28.6	56.4	81.5	10.6	22.6	36.1	70.9	97.5	10.4	20.5	32.8	67.6	131.7						

1. 1B, 2B & 3B: Load Capacity for 1, 2 and 3 rows of bracing. **2. FR:** Load Capacity for fully restrained compression flange. **3. $\phi_c N_{ex}$:** Elastic buckling capacity about the X-X axis.

DHS PURLIN SYSTEM LOAD SPAN TABLES - LAPPED INTERNAL SPANS

Axial Compression Capacities (kN) $\phi_c N_c$

Span (m)	DHS 250/15					DHS 250/18					DHS 300/15					DHS 300/18					DHS 350/18					DHS 400/20					
	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	1B	2B	3B	FR	$\phi_c N_{ex}$	
3.0																															
3.5																															
4.0																															
4.5																															
5.0																															
5.5	87.2	118.8	132.2	145.1	1627.3	114.6	157.0	174.9	192.1	1949.9	107.0	134.1	145.1	155.7	2780.4																
6.0	78.3	113.2	128.6	143.6	1367.4	102.6	149.5	170.0	190.1	1638.5	99.0	129.5	142.1	154.5	2336.3																
6.5	69.6	107.4	124.7	141.9	1165.1	90.2	141.7	164.8	187.9	1396.1	91.0	124.6	138.9	153.3	1990.7																
7.0	62.2	101.4	120.6	140.2	1004.6	79.2	133.7	159.3	185.6	1203.8	83.0	119.5	135.6	152.0	1716.5	109.6	158.3	179.8	201.5	2059.8	112.9	163.6	185.9	212.0	3005.0						
7.5	56.0	95.4	116.4	138.3	875.1	70.3	125.6	153.7	183.1	1048.6	75.1	114.3	132.1	150.6	1495.2	99.1	151.4	175.1	199.7	1794.3	101.9	156.3	181.1	210.5	2617.7						
8.0	50.2	89.4	112.0	136.3	769.1	62.9	117.5	147.9	180.5	921.6	68.3	109.0	128.5	149.1	1314.2	89.9	144.3	170.3	197.7	1577.0	92.5	148.9	176.1	208.9	2300.7	109.5	179.3	212.8	257.1	3562.6	
8.5	45.2	83.4	107.6	134.3	681.3	56.7	109.4	141.9	177.8	816.4	62.4	103.6	124.7	147.5	1164.1	82.1	137.1	165.3	195.7	1396.9	84.4	141.5	170.8	207.3	2038.0	98.5	170.1	206.3	255.5	3155.8	
9.0	40.9	77.4	103.1	132.1	607.7	51.4	101.4	135.9	174.9	728.2	57.3	98.2	120.9	145.9	1038.3	74.9	129.9	160.2	193.5	1246.0	77.0	133.9	165.5	205.5	1817.8	89.3	160.8	199.7	253.8	2814.9	
9.5	37.3	71.4	98.5	129.9	545.4	46.8	93.0	129.8	171.9	653.5	52.9	92.8	116.9	144.2	931.9	68.1	122.7	154.9	191.2	1118.3	70.1	126.4	160.0	203.7	1631.5	81.4	151.6	193.0	252.0	2526.3	
10.0	34.1	66.1	93.9	127.5	492.2	42.9	85.0	123.6	168.8	589.8	49.0	87.4	112.9	142.4	841.1	62.4	115.5	149.6	188.9	1009.3	64.1	118.9	154.5	201.8	1472.4	74.5	142.3	186.1	250.1	2280.0	
10.5	31.4	61.4	89.3	125.1	446.5	39.5	78.1	117.4	165.7	535.0	45.5	82.1	108.9	140.5	762.9	57.3	108.3	144.2	186.4	915.4	58.9	111.5	148.8	199.8	1335.5	68.6	133.2	179.2	248.2	2068.0	
11.0	29.0	57.2	84.7	122.7	406.8	36.5	72.0	111.2	162.4	487.4	42.1	76.7	104.8	138.6	695.1	52.9	101.1	138.7	183.9	834.1	54.4	104.1	143.1	197.7	1216.9	63.4	124.1	172.1	246.1	1884.3	
11.5	26.8	53.3	80.1	120.1	372.2	33.8	66.7	105.0	159.0	446.0	39.0	71.8	100.6	136.6	635.9	49.0	94.6	133.2	181.3	763.1	50.4	97.4	137.4	195.5	1113.4	58.8	116.0	165.1	244.0	1724.0	
12.0	25.0	49.5	75.6	117.6	341.8	31.5	62.0	98.9	155.6	409.6	36.2	67.4	96.5	134.6	584.0	45.6	88.8	127.7	178.6	700.9	46.9	91.3	131.6	193.3	1022.5	54.7	107.8	158.0	241.8	1583.3	
12.5	23.3	46.1	71.1	114.9	315.0	29.4	57.8	92.4	152.1	377.5	33.8	63.5	92.4	132.5	538.3	42.5	83.5	122.2	175.9	645.9	43.8	85.8	125.9	191.0	942.3	51.1	100.5	150.9	239.6	1459.2	
13.0	21.8	43.1	67.0	112.2	291.2	27.5	54.0	86.3	148.5	349.0	31.6	59.9	88.3	130.4	497.6	39.8	78.7	116.7	173.0	597.2	40.9	80.9	120.2	188.7	871.2	47.8	93.9	143.9	237.2	1349.1	
13.5	20.4	40.3	63.3	109.5	270.1	25.8	50.6	80.8	144.9	323.6	29.6	56.6	84.2	128.2	461.5	37.3	73.8	111.2	170.2	553.8	38.4	75.8	114.5	186.3	807.9	44.9	88.0	136.9	234.8	1251.0	
14.0	19.2	37.9	59.9	106.8	251.1	24.2	47.6	75.8	141.3	300.9	27.8	53.6	80.1	125.9	429.1	35.0	69.2	105.7	167.2	514.9	36.1	71.2	108.8	183.8	751.2	42.3	82.7	129.8	232.4	1163.3	
14.5	18.1	35.6	56.7	104.0	234.1	22.8	44.8	71.3	137.6	280.5	26.2	50.9	76.1	123.7	400.0	33.0	65.1	100.3	164.2	480.0	34.1	67.0	103.2	181.3	700.3	39.9	77.8	123.1	229.9	1084.4	
15.0	17.1	33.6	53.8	101.2	218.7	21.5	42.3	67.3	133.8	262.1	24.7	48.3	72.4	121.4	373.8	31.2	61.4	95.4	161.2	448.5	32.2	63.2	98.1	178.7	654.4	37.7	73.4	116.9	227.3	1013.3	
15.5	16.1	31.8	50.8	98.4	204.9	20.4	40.0	63.6	130.1	245.5	23.3	46.0	68.9	119.0	350.0	29.5	58.1	90.8	158.1	420.1	30.4	59.7	93.4	176.1	612.8	35.7	69.5	110.7	224.7	949.0	
16.0	15.3	30.1	48.1	95.6	192.2	19.3	37.9	60.2	126.3	230.4	22.1	43.8	65.8	116.7	328.5	28.0	55.0	86.6	155.0	394.2	28.9	56.5	89.0	173.5	575.1	33.9	65.8	104.7	222.0	890.6	
16.5	14.5	28.5	45.6	92.8	180.8	18.3	35.9	57.1	122.5	216.6	21.0	41.5	62.8	114.3	308.9	26.5	52.1	82.6	151.8	370.7	27.4	53.6	85.0	170.8	540.8	32.2	62.5	99.3	219.2	837.4	
17.0	13.8	27.1	43.2	89.9	170.3	17.4	34.2	54.2	118.8	204.1	19.9	39.4	60.1	111.9	291.0	25.2	49.5	79.0	148.6	349.2	26.1	51.0	81.2	168.0	509.5	30.6	59.4	94.3	216.4	788.9	
17.5	13.1	25.8	41.1	87.1	160.7	16.5	32.5	51.6	115.0	192.6	19.0	37.5	57.6	109.5	274.6	24.0	47.1	75.2	145.4	329.5	24.8	48.5	77.3	165.2	480.8	29.2	56.6	89.7	213.6	744.5	
18.0	12.5	24.6	39.2	84.3	151.9	15.8	31.0	49.2	111.2	182.0	18.1	35.7	55.2	107.0	259.5	22.9	44.9	71.6	142.2	311.5	23.7	46.2	73.6	162.4	454.4	27.9	53.9	85.5	210.7	703.7	

1. **1B, 2B & 3B:** Load Capacity for 1, 2 and 3 rows of bracing. 2. **FR:** Load Capacity for fully restrained compression flange. 3. **$\phi_c N_{ex}$:** Elastic buckling capacity about the X-X axis.