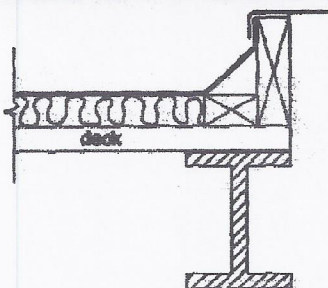


AVOID THE CRUNCH

DECK DESIGN DATA SHEET



QUESTION

What is the crushing capacity of roof deck that is sandwiched between a load and a support?

ANSWER

This is defined as the "Two Flange End Loading Web Crippling Capacity" when the load is near the end of a deck sheet.

For technical assistance please contact our engineering office at 1 866 608 1189 or visit us on the web at www.cmcjd.com.

Allowable Two Flange End Loading for Fastened Deck -- PLF ($F_y = 40$ ksi)

Deck Type	B				F			N			
Min. "a"	2.25"				2.25"			4.5"			
Bearing Width	22	20	18	16	22	20	18	22	20	18	16
2	870	1020	1855	3010	745	1120	1990	480	740	1360	2220
2.5	710	1080	1980	3165	790	1185	2100	510	785	1435	2340
3	750	1140	2050	3310	835	1245	2200	540	825	1505	2445
3.5	770	1170	2100	3370	875	1300	2295	565	860	1570	2540
4	770	1170	2100	3370	910	1355	2380	585	895	1625	2635
4.5	770	1170	2100	3370	915	1360	2385	610	930	1680	2720
5	770	1170	2100	3370	915	1360	2385	630	960	1735	2800
5.5	770	1170	2100	3370	915	1360	2385	650	990	1790	2875
6	770	1170	2100	3370	915	1360	2385	670	1015	1835	2950
6.5	770	1170	2100	3370	915	1360	2385	675	1045	1880	3020
7	770	1170	2100	3370	915	1360	2385	675	1070	1920	3085

1. Choose the lesser bearing width of the load or support to determine the capacity.
2. "Two Flange Interior Loading" applies when the end of the deck extends less than 1.5 times the deck depth beyond the edge of the beam or load point.
3. The above table is based on the AISI Standard North American Specification for the Design of Cold-Formed Steel Structural Members, 2007 Edition.



CMC Joist & Deck

For further information on any of our products or for the nearest CMC Joist & Deck sales representative, contact us at:

CMC Joist & Deck
11777 Katy Freeway, Suite 305 North, Houston, TX 77079
deborah.hoover@cmc.com
www.cmcjd.com

"Manufacturers of

USD

United Steel Deck products"



CMC Joist & Deck Manufacturing Facilities:

JOIST: Hope, AR • Starke, FL • Iowa Falls, IA • Juarez, MX • Fallon, NV • New Columbia, PA • Eastover, SC DECK: Peru, IL • So. Plainfield, NJ • Rock Hill, SC

AVOID THE CRUNCH



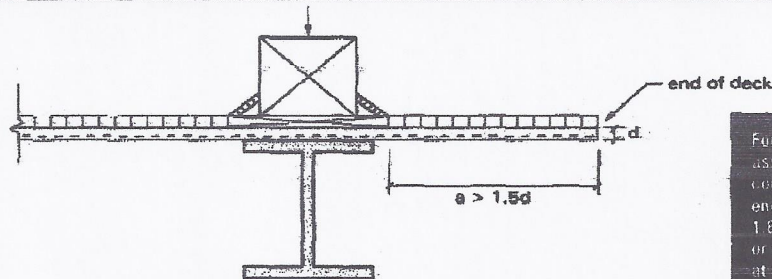
DECK DESIGN DATA SHEET

QUESTION

What is the crushing capacity of roof deck that is sandwiched between a load and a support?

ANSWER

This is defined as the "Two Flange Interior Loading Web Crippling Capacity" when the load is not near the end of a deck sheet.



For technical assistance please contact our engineering office at 1 866 808 1189 or visit us on the web at www.cmcjd.com

Allowable Two Flange Interior Loading for Fastened Deck — PLF ($F_y = 40$ ksi)											
Deck Type	B				F			N			
Min. "a"	2.25"				2.25"			4.5"			
Bearing Width	22	20	18	16	22	20	18	22	20	18	16
2	1185	1745	3040	4780	1320	1915	3270	945	1365	2385	3755
2.5	1275	1870	3250	5090	1420	2055	3495	1015	1485	2560	3995
3	1365	1985	3435	5370	1510	2180	3685	1080	1575	2705	4215
3.5	1400	2050	3525	5490	1590	2295	3880	1135	1660	2840	4420
4	1400	2050	3525	5490	1665	2400	4070	1180	1735	2885	4605
4.5	1400	2050	3525	5490	1675	2410	4070	1245	1810	3085	4785
5	1400	2050	3525	5490	1675	2410	4070	1280	1875	3200	4880
5.5	1400	2050	3525	5490	1675	2410	4070	1335	1940	3305	5110
6	1400	2050	3525	5490	1675	2410	4070	1380	2000	3405	5280
6.5	1400	2050	3525	5490	1675	2410	4070	1395	2060	3505	5405
7	1400	2050	3525	5490	1675	2410	4070	1385	2120	3600	5545

1. Choose the lesser bearing width of the load or support to determine the capacity.
2. "Two Flange Interior Loading" applies when the end of the deck extends more than 1.5 times the deck depth beyond the edge of the beam or load point. An Interior Reaction is such a case.
3. The above table is based on the AISI Standard North American Specification for the Design of Cold-Formed Steel Structural Members, 2007 Edition.



CMC Joist & Deck

"Manufacturers of  United Steel Deck products"

For further information on any of our products or for the nearest CMC Joist & Deck sales representative, contact us at:

CMC Joist & Deck
11777 Katy Freeway, Suite 305 North, Houston, TX 77079
deborah.hoover@cmc.com
www.cmcjd.com



CMC Joist & Deck Manufacturing Facilities:

JOIST: Hope, AR • Starke, FL • Iowa Falls, IA • Juarez, MX • Fallon, NV • New Columbia, PA • Eastover, SC DECK: Peru, IL • So. Plainfield, NJ • Rock Hill, SC