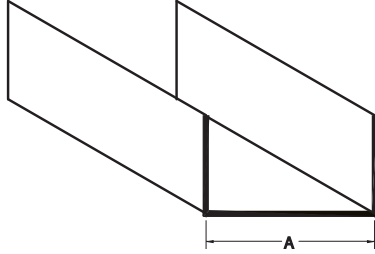


CHANNEL PROPERTIES

(CRC) Cold-Rolled Channel



Notes:

1. $F_y = 33$ ksi for all sections
2. Multiple span indicates two or more equal spans with channel continuous over interior supports
3. Bearing Lengths = 1.0
4. Table values based on the compression flange laterally unbraced
5. Multiple spans are two or more equal spans with member continuous over interior supports
6. Based on minimum 1 bearing length interior and ends

PHYSICAL/STRUCTURAL PROPERTIES FOR COLD ROLLED (U) CHANNEL (CRC)

Section	Design Thickness (in)	Area (in ²)	Weight (lb/ft)	Gross				Effective Properties 33 ksi			
				I_x (in ⁴)	R_x (in)	I_y (in ⁴)	R_y (in)	I_x (in ⁴)	S_x (in ³)	M_a (in-k)	V_a (lb)
75U050-54	0.056	0.087	0.30	0.007	0.288	0.002	0.155	0.007	0.019	0.45	315
150U050-54	0.056	0.129	0.44	0.039	0.547	0.003	0.144	0.039	0.052	1.22	840
200U050-54	0.056	0.157	0.54	0.079	0.709	0.003	0.136	0.079	0.079	1.87	1190
250U050-54	0.056	0.186	0.63	0.139	0.866	0.003	0.128	0.139	0.111	2.64	1540

ALLOWABLE U-CHANNEL CEILING SPANS - L/240

Section		4 psf Channel Spacing (in) o.c.					6 psf Channel Spacing (in) o.c.					13 psf Channel Spacing (in) o.c.					15 psf Channel Spacing (in) o.c.				
		24	36	48	60	72	24	36	48	60	72	24	36	48	60	72	24	36	48	60	72
75U050-54	Single	3' 11"	3' 5"	3' 1"	2' 10"	2' 8"	3' 5"	3' 0"	2' 8"	2' 6"	2' 4"	2' 7"	2' 4"	2' 1"	1' 11"	1' 9"	2' 6"	2' 2"	2' 0"	1' 10"	1' 8"
	Multiple	4' 10"	4' 2"	3' 10"	3' 7"	3' 4"	4' 2"	3' 8"	3' 4"	3' 1"	2' 10"	3' 3"	2' 9"	2' 4"	2' 1"	1' 11"	3' 1"	2' 7"	2' 2"	2' 0"	1' 9"
150U050-54	Single	5' 6"	4' 10"	4' 5"	4' 1"	3' 10"	4' 10"	4' 3"	3' 10"	3' 7"	3' 5"	3' 9"	3' 3"	3' 0"	2' 9"	2' 7"	3' 7"	3' 2"	2' 10"	2' 7"	2' 5"
	Multiple	7' 1"	6' 2"	5' 8"	5' 3"	4' 11"	6' 2"	5' 5"	4' 11"	4' 7"	4' 4"	4' 10"	4' 2"	3' 9"	3' 4"	3' 0"	4' 7"	4' 0"	3' 6"	3' 1"	2' 9"
200U050-54	Single	5' 10"	5' 1"	4' 8"	4' 4"	4' 1"	5' 1"	4' 6"	4' 1"	3' 10"	3' 7"	4' 0"	3' 6"	3' 2"	3' 0"	2' 10"	3' 10"	3' 4"	3' 1"	2' 10"	2' 8"
	Multiple	7' 5"	6' 6"	5' 11"	5' 6"	5' 2"	6' 6"	5' 8"	5' 2"	4' 10"	4' 7"	5' 1"	4' 5"	4' 0"	3' 9"	3' 6"	4' 10"	4' 3"	3' 10"	3' 7"	3' 2"
250U050-54	Single	6' 1"	5' 4"	4' 10"	4' 6"	4' 3"	5' 4"	4' 8"	4' 3"	4' 0"	3' 9"	4' 2"	3' 8"	3' 4"	3' 1"	2' 11"	4' 0"	3' 6"	3' 2"	3' 0"	2' 10"
	Multiple	7' 9"	6' 9"	6' 2"	5' 9"	5' 5"	6' 9"	5' 11"	5' 5"	5' 0"	4' 9"	5' 3"	4' 7"	4' 3"	3' 11"	3' 9"	5' 0"	4' 5"	4' 0"	3' 9"	3' 7"

ALLOWABLE U-CHANNEL CEILING SPANS - L/360

Section		4 psf Channel Spacing (in) o.c.					6 psf Channel Spacing (in) o.c.					13 psf Channel Spacing (in) o.c.					15 psf Channel Spacing (in) o.c.				
		24	36	48	60	72	24	36	48	60	72	24	36	48	60	72	24	36	48	60	72
75U050-54	Single	3' 5"	3' 0"	2' 8"	2' 6"	2' 4"	3' 0"	2' 7"	2' 4"	2' 2"	2' 1"	2' 4"	2' 0"	1' 10"	1' 8"	1' 7"	2' 2"	1' 11"	1' 9"	1' 7"	1' 6"
	Multiple	4' 2"	3' 8"	3' 4"	3' 1"	2' 11"	3' 8"	3' 2"	2' 11"	2' 8"	2' 7"	2' 10"	2' 6"	2' 3"	2' 1"	1' 11"	2' 8"	2' 4"	2' 2"	2' 0"	1' 9"
150U050-54	Single	5' 6"	4' 10"	4' 5"	4' 1"	3' 10"	4' 10"	4' 3"	3' 10"	3' 7"	3' 5"	3' 9"	3' 3"	3' 0"	2' 9"	2' 7"	3' 7"	3' 2"	2' 10"	2' 7"	2' 5"
	Multiple	7' 1"	6' 2"	5' 8"	5' 3"	4' 11"	6' 2"	5' 5"	4' 11"	4' 7"	4' 4"	4' 10"	4' 2"	3' 9"	3' 4"	3' 0"	4' 7"	4' 0"	3' 6"	3' 1"	2' 9"
200U050-54	Single	5' 10"	5' 1"	4' 8"	4' 4"	4' 1"	5' 1"	4' 6"	4' 1"	3' 10"	3' 7"	4' 0"	3' 6"	3' 2"	3' 0"	2' 10"	3' 10"	3' 4"	3' 1"	2' 10"	2' 8"
	Multiple	7' 5"	6' 6"	5' 11"	5' 6"	5' 2"	6' 6"	5' 8"	5' 2"	4' 10"	4' 7"	5' 1"	4' 5"	4' 0"	3' 9"	3' 6"	4' 10"	4' 3"	3' 10"	3' 7"	3' 2"
250U050-54	Single	6' 1"	5' 4"	4' 10"	4' 6"	4' 3"	5' 4"	4' 8"	4' 3"	4' 0"	3' 9"	4' 2"	3' 8"	3' 4"	3' 1"	2' 11"	4' 0"	3' 6"	3' 2"	3' 0"	2' 10"
	Multiple	7' 9"	6' 9"	6' 2"	5' 9"	5' 5"	6' 9"	5' 11"	5' 5"	5' 0"	4' 9"	5' 3"	4' 7"	4' 3"	3' 11"	3' 9"	5' 0"	4' 5"	4' 0"	3' 9"	3' 7"

Property Notes:

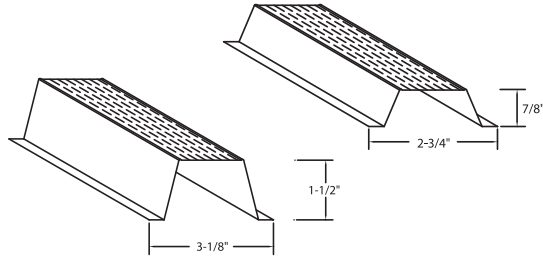
1. For Deflection calculations, use effective I_{xx}

Span Notes:

1. $F_y = 33$ ksi for all sections
2. Multiple span indicates two or more equal spans with channel continuous over interior supports
3. Bearing Lengths = 0.75"
4. Allowable spans based on the compression flange laterally unbraced

CHANNEL PROPERTIES

(DWFC) Drywall Furring Channel



Notes:

1. Properties based on the 2004 NASPEC
2. Design thickness used for determination of properties. Minimum delivered thickness must be no less than 95% of design thickness.
3. For deflection calculations, use effective lxx. Effective lxx is based on Procedure 1 of the NASPEC
4. Calculations based on Yield Strength of 33 ksi.
5. Multiple spans are two or more equal spans with member continuous over interior supports
6. Based on minimum 1 bearing length interior and ends

PHYSICAL/STRUCTURAL PROPERTIES FOR COLD ROLLED (U) CHANNEL (CRC)

Section	Design			Gross Properties					Effective Properties		
	Fy (ksi)	Thickness (in)	Area (in ²)	Weight (lb/ft)	Ix (in ⁴)	Rx (in)	Iy (in ⁴)	Ry (in)	Ixx (in ⁴)	Sxx (in ³)	Ma (FT-lb)
087F125-18	33	0.018	0.070	0.239	0.009	0.356	0.035	0.710	0.009	0.016	26.41
087F125-30	33	0.031	0.115	0.391	0.014	0.353	0.058	0.710	0.014	0.031	50.47
087F125-43	33	0.045	0.162	0.550	0.020	0.348	0.082	0.711	0.020	0.042	69.17
087F125-54	50	0.056	0.197	0.669	0.023	0.345	0.099	0.711	0.023	0.050	124.92
150F125-18	33	0.018	0.094	0.320	0.031	0.575	0.047	0.705	0.030	0.034	56.59
150F125-30	33	0.031	0.154	0.525	0.050	0.571	0.077	0.705	0.050	0.064	105.25
150F125-43	33	0.045	0.219	0.745	0.070	0.565	0.109	0.705	0.070	0.089	146.25
150F125-54	50	0.056	0.269	0.914	0.084	0.561	0.134	0.705	0.084	0.107	267.22

ALLOWABLE SPANS - L/240 DEFLECTION LIMIT

Section	Spans	4.0 psf			6.0 psf			13.0 psf		
		12	16	24	12	16	24	12	16	24
087F125-18	Single	5' 2"	4' 8"	4' 1"	4' 6"	4' 1"	3' 7"	3' 6"	3' 2"	2' 9"
	Multiple	6' 5"	5' 10"	5' 1"	5' 7"	5' 1"	4' 2"	4' 0"	3' 5"	2' 9"
087F125-30	Single	6' 1"	5' 7"	4' 10"	5' 4"	4' 10"	4' 3"	4' 1"	3' 9"	3' 3"
	Multiple	7' 7"	6' 11"	6' 0"	6' 7"	6' 0"	5' 3"	5' 1"	4' 8"	3' 11"
087F125-43	Single	6' 10"	6' 2"	5' 5"	5' 11"	5' 5"	4' 8"	4' 7"	4' 2"	3' 8"
	Multiple	8' 5"	7' 8"	6' 8"	7' 4"	6' 8"	5' 10"	5' 8"	5' 2"	4' 6"
087F125-54	Single	7' 3"	6' 7"	5' 9"	6' 4"	5' 9"	5' 0"	4' 10"	4' 5"	3' 10"
	Multiple	8' 11"	8' 1"	7' 1"	7' 10"	7' 1"	6' 2"	6' 0"	5' 6"	4' 9"
150F125-18	Single	7' 10"	7' 1"	6' 3"	6' 10"	6' 3"	5' 5"	5' 3"	4' 10"	4' 2"
	Multiple	9' 9"	8' 10"	7' 5"	8' 6"	7' 5"	5' 11"	5' 8"	4' 9"	3' 8"
150F125-30	Single	9' 4"	8' 6"	7' 5"	8' 2"	7' 5"	6' 6"	6' 3"	5' 9"	5' 0"
	Multiple	11' 7"	10' 6"	9' 2"	10' 1"	9' 2"	8' 0"	7' 9"	6' 11"	5' 8"
150F125-43	Single	10' 5"	9' 6"	8' 3"	9' 1"	8' 3"	7' 3"	7' 0"	6' 5"	5' 7"
	Multiple	12' 11"	11' 9"	10' 3"	11' 3"	10' 3"	8' 11"	8' 8"	7' 11"	6' 8"
150F125-54	Single	11' 1"	10' 1"	8' 10"	9' 8"	8' 10"	7' 8"	7' 6"	6' 10"	5' 11"
	Multiple	13' 9"	12' 6"	10' 11"	12' 0"	10' 11"	9' 6"	9' 3"	8' 5"	7' 4"

ALLOWABLE SPANS - L/360 DEFLECTION LIMIT

Section	Spans	4.0 psf			6.0 psf			13.0 psf		
		12	16	24	12	16	24	12	16	24
087F125-18	Single	4' 6"	4' 1"	3' 7"	3' 11"	3' 7"	3' 1"	3' 0"	2' 9"	2' 5"
	Multiple	5' 7"	5' 1"	4' 5"	4' 10"	4' 5"	3' 10"	3' 9"	3' 5"	2' 9"
087F125-30	Single	5' 4"	4' 10"	4' 3"	4' 8"	4' 3"	3' 8"	3' 7"	3' 3"	2' 10"
	Multiple	6' 7"	6' 0"	5' 3"	5' 9"	5' 3"	4' 7"	4' 5"	4' 1"	3' 6"
087F125-43	Single	5' 11"	5' 5"	4' 8"	5' 2"	4' 8"	4' 1"	4' 0"	3' 8"	3' 2"
	Multiple	7' 4"	6' 8"	5' 10"	6' 5"	5' 10"	5' 1"	4' 11"	4' 6"	3' 11"
087F125-54	Single	6' 4"	5' 9"	5' 0"	5' 6"	5' 0"	4' 4"	4' 3"	3' 10"	3' 4"
	Multiple	7' 10"	7' 1"	6' 2"	6' 10"	6' 2"	5' 5"	5' 3"	4' 9"	4' 2"
150F125-18	Single	6' 10"	6' 3"	5' 5"	6' 0"	5' 5"	4' 9"	4' 7"	4' 2"	3' 8"
	Multiple	8' 6"	7' 8"	6' 9"	7' 5"	6' 9"	5' 10"	5' 8"	4' 9"	3' 8"
150F125-30	Single	8' 2"	7' 5"	6' 6"	7' 1"	6' 6"	5' 8"	5' 6"	5' 0"	4' 4"
	Multiple	10' 1"	9' 2"	8' 0"	8' 10"	8' 0"	7' 0"	6' 10"	6' 2"	5' 5"
150F125-43	Single	9' 1"	8' 3"	7' 3"	8' 3"	7' 3"	6' 4"	6' 2"	5' 11"	4' 10"
	Multiple	11' 3"	10' 3"	8' 11"	9' 10"	8' 11"	7' 10"	7' 7"	6' 11"	6' 0"
150F125-54	Single	9' 8"	8' 10"	7' 8"	8' 6"	7' 8"	6' 8"	6' 6"	5' 11"	5' 2"
	Multiple	12' 0"	10' 11"	9' 6"	10' 6"	9' 6"	8' 4"	8' 1"	7' 4"	6' 5"

Notes:

1. Properties based on the 2001 NASPEC with the 2004 Supplement
2. Design thickness used for determination of properties. Minimum delivered thickness must be no less than 95% of design thickness.
3. For deflection calculations, use effective lxx. Effective lxx is based on Procedure 1 of the NASPEC
4. Multiple spans are two or more equal spans with member continuous over interior supports
5. Based on minimum 1" bearing length interior and ends.
6. Spans based on Yield Point, Fy as listed in section properties