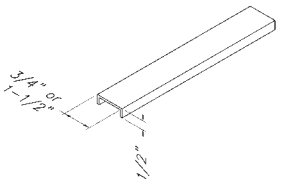
Span tables

Physical/structural properties for hat furring channels

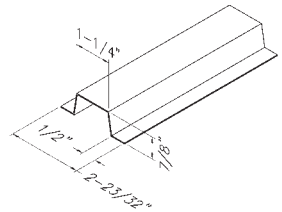
Section	Fy (ksi)	Thickness (in)	Area (in^2)	Weight (lb/ft)	Gross properties				Effective properties			
					Ix (in^4)	Rx (in)	Iy (in^4)	Ry (in)	Ix (in^4)	Sx (in^3)	Ma (Ft-lb)	Va (lb)
087F125-18	33	0.0188	0.070	0.239	0.009	0.356	0.0422	0.774	0.0085	0.0159	26.23	323.7
087F125-27	33	0.0283	0.105	0.357	0.013	0.353a	0.0628	0.774	0.0130	0.0270	44.53	480.6
087F125-30	33	0.0312	0.115	0.392	0.014	0.352	0.0691	0.774	0.0142	0.0305	50.21	527.6
087F125-33	33	0.0346	0.127	0.433	0.016	0.351	0.0763	0.774	0.0156	0.0336	55.25	582.2
087F125-43	33	0.0451	0.164	0.558	0.020	0.347	0.0984	0.774	0.0198	0.0424	69.84	747.1
087F125-54	33	0.0566	0.201	0.682	0.024	0.344	0.1203	0.774	0.0237	0.0508	83.62	867.0
150F125-18	33	0.0188	0.094	0.320	0.031	0.574	0.0539	0.758	0.0298	0.0342	56.37	604.4
150F125-27	33	0.0283	0.140	0.477	0.046	0.571	0.0806	0.758	0.0458	0.0567	93.41	910.6
150F125-30	33	0.0312	0.154	0.525	0.050	0.570	0.0886	0.758	0.0502	0.0637	104.92	1001.7
150F125-33	33	0.0346	0.171	0.581	0.055	0.569	0.0980	0.758	0.0553	0.0702	115.58	1107.9
150F125-43	33	0.0451	0.221	0.751	0.071	0.565	0.1267	0.758	0.0705	0.0896	147.50	1432.4
150F125-54	33	0.0566	0.272	0.925	0.085	0.561	0.1561	0.758	0.0855	0.1085	178.65	1727.1

Notes:

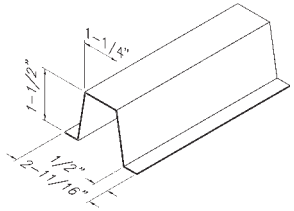
1. Properties based on the 2001 NASPEC
2. Design thickness used for determination of properties. Minimum delivered thickness must be no less than 95% of design thickness.
3. For deflection calculations, use effective Ixx. Effective Ixx is based on Procedure 1 of the NASPEC
4. Effective properties based on 33 ksi steel



COLD-ROLLED CHANNEL
75U50 & 150U50



7/8" DRYWALL FURRING CHANNEL
087F125



1-1/2" DRYWALL FURRING CHANNEL
150F125

Cee member ceiling spans

Lateral support of compression flange (none, midspan or full)

Section	Thickness gauge	None Joist spacing [in] o.c.			Midspan Joist spacing [in] o.c.			Full Joist spacing [in] o.c.		
		12	16	24	12	26	24	12	24	24
Ceiling total load = 5 PSF										
362S125-18	25	8'-8"	8'-0"	7'-1"	11'-10"	10'-9"	9'-3"	14'-2"	12'-6"	10'-2"
362S125-27	22	9'-11"	9'-3"	8'-3"	14'-1"	13'-0"	11'-6"	16'-5"	14'-11"	13'-1"
362S125-30	20 DW	10'-4"	9'-6"	8'-6"	14'-6"	13'-5"	12'-0"	17'-0"	15'-5"	13'-6"
362S162-33	20 STR	13'-9"	12'-9"	11'-5"	19'-3"	17'-6"	15'-4"	19'-3"	17'-6"	15'-4"
362S162-43	18	15'-1"	13'-11"	12'-6"	21'-0"	19'-1"	16'-8"	21'-0"	19'-1"	16'-8"
362S162-54	16	16'-7"	15'-3"	13'-6"	22'-6"	20'-5"	17'-10"	22'-6"	20'-5"	17'-10"
600S125-30	20 DW	12'-0"	11'-1"	10'-0"	17'-4"	16'-0"	14'-3"	25'-2"	22'-10"	19'-11"
600S162-33	20 STR	15'-11"	14'-9"	13'-3"	23'-0"	21'-4"	19'-3"	28'-7"	26'-0"	22'-8"
600S162-43	18	17'-3"	16'-0"	14'-4"	24'-9"	22'-11"	20'-7"	31'-2"	28'-4"	24'-9"
600S162-54	16	18'-8"	17'-3"	15'-5"	26'-6"	24'-6"	22'-0"	33'-5"	30'-4"	26'-6"
Ceiling total load = 10 PSF										
362S125-18	25	7'-1"	6'-6"	5'-9"	9'-3"	8'-3"	7'-0"	10'-2"	8'-10"	7'-2"
362S125-27	22	8'-3"	7'-7"	6'-9"	11'-6"	10'-5"	8'-10"	13'-1"	11'-7"	9'-5"
362S125-30	20 DW	8'-6"	7'-10"	7'-0"	12'-0"	11'-0"	9'-5"	13'-6"	12'-3"	10'-2"
362S162-33	20 STR	11'-5"	10'-7"	9'-6"	15'-4"	13'-11"	12'-2"	15'-4"	13'-11"	12'-2"
362S162-43	18	12'-5"	11'-6"	10'-4"	16'-8"	15'-2"	13'-3"	16'-8"	15'-2"	13'-3"
362S162-54	16	13'-6"	12'-6"	11'-1"	17'-10"	16'-2"	14'-2"	17'-10"	16'-2"	14'-2"
600S125-30	20 DW	10'-0"	9'-3"	8'-4"	14'-3"	13'-2"	11'-10"	16'-2"	14'-11"	12'-4"
600S162-33	20 STR	13'-3"	12'-4"	11'-1"	19'-3"	17'-10"	15'-3"	21'-10"	20'-1"	15'-3"
600S162-43	18	14'-4"	13'-3"	11'-11"	20'-7"	19'-1"	17'-2"	23'-6"	21'-9"	19'-2"
600S162-54	16	15'-5"	14'-3"	12'-9"	22'-0"	20'-4"	18'-3"	24'-10"	23'-1"	20'-6"

Notes

1. Values are for single spans.
2. Allowable ceiling span calculations based on 33 ksi yield strength steel.
3. End bearing length = 1" minimum
4. Values based upon 2001 NAS.
5. L/240 deflection limit was used.

Allowable uniform loads (lb/ft) for U channels

Simple span Allowable uniform load (lb/ft)						
L/120 Deflection Limit						
Section	Span ft.	1.33	2	3	4	5
075U050-54		170.5	75.4	33.5	14.8	7.6
150U050-54		460.4	203.6	90.5	50.9	32.6
L/180 Deflection Limit						
Section	Span ft.	1.33	2	3	4	5
075U050-54		170.5	75.4	23.3	9.8	5.0
150U050-54		460.4	203.6	90.5	50.9	27.1
L/240 Deflection Limit						
Section	Span ft.	1.33	2	3	4	5
075U050-54		170.5	59.0	17.5	7.4	3.8
150U050-54		460.4	203.6	90.5	39.6	20.3
L/360 Deflection Limit						
Section	Span ft.	1.33	2	3	4	5
075U050-54		133.8	39.3	11.7	4.9	2.5
150U050-54		460.4	203.6	62.6	26.4	13.5

Notes:

1. Allowable uniform loads are taken as the minimum value based on:
   a. Moment
   b. End shear
   c. Web crippling (1" end bearing)
   d. Listed deflection