

Extruded Wire, Rod, Bar and Profiles

TABLE 11.2 Cross-Sectional Dimension Tolerances—Profiles ^①

EXCEPT FOR T3510, T4510, T6510, T73510, T76510 AND T8510 TEMPERS ^⑦

SPECIFIED DIMENSION	TOLERANCE ② ③—in. plus and minus																
	METAL DIMENSIONS				SPACE DIMENSIONS												
	ALLOWABLE DEVIATION FROM SPECIFIED DIMENSION WHERE 75 PERCENT OR MORE OF THE DIMENSION IS METAL ⑨ ⑩				ALLOWABLE DEVIATION FROM SPECIFIED DIMENSION WHERE MORE THAN 25 PERCENT OF THE DIMENSION IS SPACE ⑥ ⑧												
	in.	All Except Those Covered by Column 3		Wall Thickness ④ Completely ⑤ Enclosing Space 0.11 sq. in. and Over (Eccentricity)		At Dimensioned Points 0.250–0.624 inches from Base of Leg		At Dimensioned Points 0.625–1.249 inches from Base of Leg		At Dimensioned Points 1.250–2.499 inches from Base of Leg		At Dimensioned Points 2.500–3.999 inches from Base of Leg		At Dimensioned Points 4.000–5.999 inches from Base of Leg		At Dimensioned Points 6.000–8.000 inches from Base of Leg	
Col. 1	Col. 2		Col. 3		Col. 4		Col. 5		Col. 6		Col. 7		Col. 8		Col. 9		
	Standard Tolerance, All Except 5XXX Alloys ⑪	Precision Tolerance, All Except 5XXX Alloys	Standard Tolerance, All Except 5XXX Alloys ⑪	Precision Tolerance, All Except 5XXX Alloys	Standard Tolerance, All Except 5XXX Alloys ⑪	Precision Tolerance, All Except 5XXX Alloys	Standard Tolerance, All Except 5XXX Alloys ⑪	Precision Tolerance, All Except 5XXX Alloys	Standard Tolerance, All Except 5XXX Alloys ⑪	Precision Tolerance, All Except 5XXX Alloys	Standard Tolerance, All Except 5XXX Alloys ⑪	Precision Tolerance, All Except 5XXX Alloys	Standard Tolerance, All Except 5XXX Alloys ⑪	Precision Tolerance, All Except 5XXX Alloys	Standard Tolerance, All Except 5XXX Alloys ⑪	Precision Tolerance, All Except 5XXX Alloys	
CIRCUMSCRIBING CIRCLE SIZES LESS THAN 10 INCHES IN DIAMETER																	
Up thru 0.124	0.006	0.004	±10% of specified dimension; ±.060 max. ±.010 min.	±10% of specified dimension; ±.060 max. ±.010 min.	0.010	0.007	0.012	0.008	..	0.016	0.011	..	..	..	..	..	
0.125–0.249	0.007	0.005			0.012	0.008	0.014	0.009	0.016	0.011	0.020	0.013	..	..	..	..	..
0.250–0.499	0.008	0.005			0.014	0.009	0.016	0.011	0.018	0.012	0.020	0.015	..	..	..	..	..
0.500–0.749	0.009	0.006			0.016	0.011	0.018	0.012	0.020	0.013	0.022	0.015	..	..	..	..	..
0.750–0.999	0.010	0.007			0.018	0.012	0.020	0.013	0.022	0.015	0.025	0.017	0.030	0.020	0.035	0.023	..
1.000–1.499	0.012	0.008	±10% of specified dimension; ±.060 max. ±.015 min.	±10% of specified dimension; ±.060 max. ±.015 min.	0.021	0.014	0.023	0.015	0.026	0.017	0.030	0.020	0.035	0.023	..	..	
1.500–1.999	0.014	0.009			0.024	0.016	0.026	0.017	0.031	0.020	0.036	0.024	0.042	0.028	0.050	0.033	
2.000–3.999	0.024	0.016			0.034	0.022	0.038	0.025	0.048	0.032	0.057	0.038	0.068	0.045	0.080	0.053	
4.000–5.999	0.034	0.022			0.044	0.029	0.050	0.033	0.064	0.042	0.078	0.051	0.094	0.062	0.110	0.073	
6.000–7.999	0.044	0.029			0.054	0.036	0.062	0.041	0.082	0.054	0.099	0.065	0.120	0.079	0.140	0.092	
8.000–9.999	0.054	0.036			0.064	0.042	0.074	0.049	0.100	0.066	0.120	0.079	0.145	0.096	0.170	0.112	
CIRCUMSCRIBING CIRCLE SIZES 10 INCHES IN DIAMETER AND OVER																	
Up thru 0.124	0.014	0.009	±15% of specified dimension; ±.090 max. ±.015 min.	±15% of specified dimension; ±.090 max. ±.015 min.	0.018	0.012	0.020	0.013	..	0.018	..	..	..	..	..	..	
0.125–0.249	0.015	0.010			0.019	0.013	0.022	0.015	0.028	0.018	..	..	..	..	..	..	..
0.250–0.499	0.016	0.011			0.020	0.013	0.024	0.016	0.030	0.020	0.050	0.033	..	..	..	..	..
0.500–0.749	0.017	0.011			0.022	0.015	0.027	0.018	0.040	0.026	0.060	0.040	..	..	..	..	..
0.750–0.999	0.018	0.012			0.023	0.015	0.030	0.020	0.050	0.033	0.070	0.046	0.090	0.059	..	..	..
1.000–1.499	0.019	0.013	±15% of specified dimension; ±.090 max. ±.015 min.	±15% of specified dimension; ±.090 max. ±.015 min.	0.024	0.016	0.034	0.022	0.060	0.040	0.080	0.053	0.100	0.066	..	..	
1.500–1.999	0.024	0.016			0.034	0.022	0.044	0.029	0.070	0.046	0.090	0.059	0.110	0.073	0.170	0.112	
2.000–3.999	0.034	0.022			0.044	0.029	0.054	0.036	0.080	0.053	0.100	0.066	0.120	0.079	0.180	0.119	
4.000–5.999	0.044	0.029			0.054	0.036	0.064	0.042	0.090	0.059	0.110	0.073	0.130	0.086	0.190	0.125	
6.000–7.999	0.054	0.036			0.064	0.042	0.074	0.049	0.100	0.066	0.120	0.079	0.140	0.092	0.200	0.132	
8.000–9.999	0.064	0.042	±15% of specified dimension; ±.090 max. ±.015 min.	±15% of specified dimension; ±.090 max. ±.015 min.	0.074	0.049	0.084	0.055	0.110	0.073	0.130	0.086	0.150	0.099	0.210	0.139	
10.000–11.999	0.074	0.049			0.084	0.055	0.094	0.062	0.120	0.079	0.140	0.092	0.160	0.106	0.220	0.145	
12.000–13.999	0.084	0.055			0.094	0.062	0.104	0.069	0.130	0.086	0.150	0.099	0.170	0.112	0.230	0.152	
14.000–15.999	0.094	0.062			0.104	0.069	0.114	0.075	0.140	0.092	0.160	0.106	0.180	0.119	0.240	0.158	
16.000–17.999	0.104	0.069			0.114	0.075	0.124	0.082	0.150	0.099	0.170	0.112	0.190	0.125	0.250	0.165	
18.000–19.999	0.114	0.075	±15% of specified dimension; ±.090 max. ±.015 min.	±15% of specified dimension; ±.090 max. ±.015 min.	0.124	0.082	0.134	0.088	0.160	0.106	1.800	1.188	0.200	0.132	0.260	0.172	
20.000–21.999	0.124	0.082			0.134	0.088	0.144	0.095	0.170	0.112	0.190	0.125	0.210	0.139	0.270	0.178	
22.000–24.000	0.134	0.088			0.144	0.095	0.154	0.102	0.180	0.119	0.200	0.132	0.220	0.145	0.280	0.185	

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Footnotes for Tables 11.2 Through 11.4:

Q These Standard and Precision Tolerances are applicable to the average profile. The extrusion conditions required to produce the wide variety of alloy-temper and profile combinations require close review between customer and producer to determine critical characteristics and tolerance capability. Aggressive profile characteristics may require wider than standard tolerance and closer than precision tolerance may be feasible for other characteristics.

W The tolerance applicable to a dimension composed of two or more component dimensions is the sum of the tolerances of the component dimensions if all of the component dimensions are indicated.

E When a dimension tolerance is specified other than as an equal bilateral tolerance, the value of the standard tolerance is that which applies to the mean of the maximum and minimum dimensions permissible under the tolerance for the dimension under consideration.

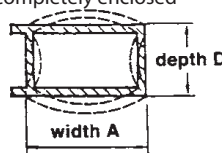
R Where dimensions specified are outside and inside, rather than wall thickness itself, the allowable deviation (eccentricity) given in Column 3 applies to mean wall thickness. (Mean wall thickness is the average of two wall thickness measurements taken at opposite sides of the void.)

T In the case of Class 1 Hollow Profiles the standard wall thickness tolerance for extruded round tube is applicable. (A Class 1 Hollow Profile is one whose void is round and one inch or more in diameter and whose weight is equally distributed on opposite sides of two or more equally spaced axes.)

Y At points less than 0.250 inch from base of leg the tolerances in Col. 2 are applicable.

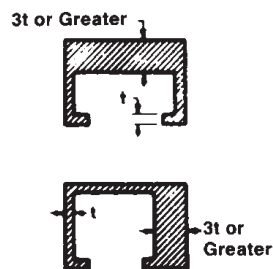
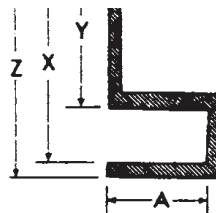
U Tolerances for extruded profiles in T3510, T4510, T6510, T73510, T76510 and T8510 tempers shall be as agreed upon between purchaser and vendor at the time the contract or order is entered.

I The following tolerances apply where the space is completely enclosed (hollow profiles); For the width (A), the tolerance is the value shown in Col. 4 for the depth dimension (D). For the depth (D), the tolerance is the value shown in Col. 4 for the width dimension (A). In no case is the tolerance for either width or depth less than the metal dimensions (Col. 2) at the corners.



Example—Alloy 6061 hollow profile having 1 × 3 rectangular outside dimensions; width tolerance is ± 0.021 inch and depth tolerance ± 0.034 inch. (Tolerances at corners, Col. 2, metal dimensions, are ± 0.024 inch for the width and ± 0.012 inch for the depth.) Note that the Col. 4 tolerance of 0.021 inch must be adjusted to 0.024 inch so that it is not less than the Col. 2 tolerance.

"X" and "Z" of the example (right), even when "Y" is 75 percent or more of "X." For the tolerance applicable to dimensions "X" and "Z," use Col. 4, 5, 6, 7, 8 or 9, dependent on distance "A."



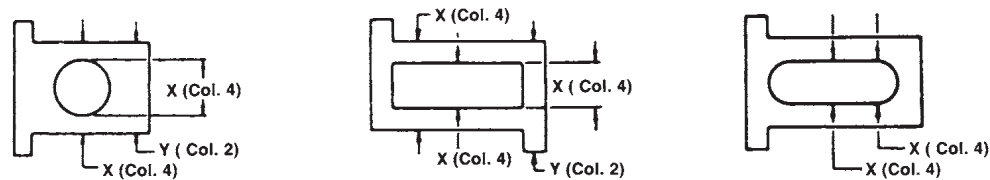
P The wall thickness tolerance for hollow or semihollow profiles shall be as agreed upon between purchaser and vendor at the time the contract or order is entered when the nominal thickness of one wall is three times or greater than that of the opposite wall.

{ For those 5xxx alloys with a magnesium content of greater than or equal to 4.0% nominal, tolerances are 150% of those values shown in the standard tolerance columns.

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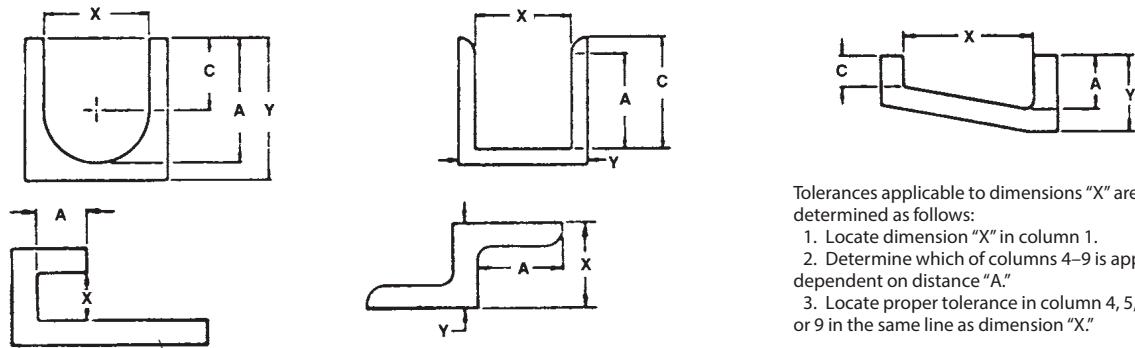
Examples Illustrating Use of Table 11.2, preceding page:

Closed-Space Dimensions



All dimensions designated "Y" are classed as "metal dimensions," and tolerances are determined from column 2.
Dimensions designated "X" are classed as "space dimensions through an enclosed void," and the tolerances applicable are determined from column 4 unless 75 percent or more of the dimension is metal, in which case column 2 applies.

Open-Space Dimensions



Dimensions "Y" are "metal dimensions"; tolerances are determined from column 2.
Distances "C" are shown merely to indicate incorrect values for determining which of columns 4-9 apply.

Tolerances applicable to dimensions "X" are determined as follows:

1. Locate dimension "X" in column 1.
2. Determine which of columns 4-9 is applicable, dependent on distance "A."
3. Locate proper tolerance in column 4, 5, 6, 7, 8 or 9 in the same line as dimension "X."



Tolerances applicable to dimensions "X" are determined as follows:

1. Locate distance "B" in column 1.
2. Determine which of columns 4-9 is applicable, dependent on distance "A."
3. Locate proper tolerance in column 4, 5, 6, 7, 8 or 9 in the same line as value chosen in column 1.

Tolerances applicable to dimensions "X" are not determined from Table 11.2; tolerances are determined by standard tolerances applicable to angles "A."

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Respect

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Quarter/Half Rounds, Hex/Rounds Rods and Square Bar.....	1
Rectangular Bars.....	2-4
Angles.....	6
Architectural Channels, Special Channels.....	7-10
"Z" Extrusion.....	11
"T" Extrusion, Cross Shape, Double "T" Sign Extrusion.....	12
Square Tubes (Square Corners).....	13
Rectangular Tubes (Square Corners).....	14
Square Tubes (Radius Corners).....	15-16
Rectangular tubes (Radius Corners).....	17
Round Tubes/ Pipes.....	18-20
Structural Angles.....	21-22
Structural Channels,special Channels.....	23
Structural "Z","T"/Plywood "H" molding,clips/ "I" Beams.....	24
Concrete "T" Bars.....	25
Threshold-Skylight Self-Flashing/Carpet/ Saddle/Panic/ Bump..	26-27
Replacement/Screen Window Parts.....	28
Canvas Awning and Carport.....	29
Carpet Trim,Nosing, Bulb "T".....	30-31
Boat Trailers, & P- Series Channels	32
Open Heatsinks.....	33

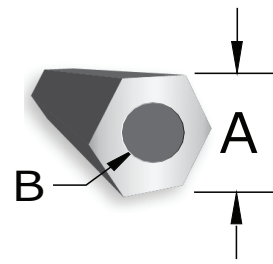
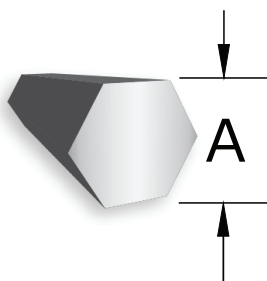
(S) = SEE PRINT

(*) = DIE HAS BEEN SCRAPPED, AVAILABLE UPON REQUEST

HEX RODS

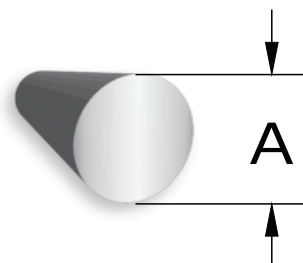
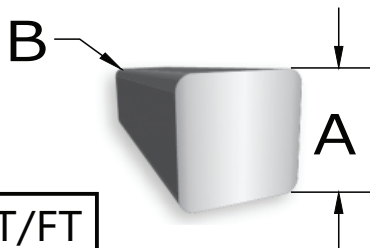
(*)

DIE #	A	WT/FT
NF1795	0.312	0.101
NF1319	0.375	0.146
NF7177	0.438	0.199
10179	0.563	0.329
11005	0.687	0.491
NF3808	1.000	1.039
NF7011	1.187	1.465
NF3791	1.250	1.624
NF7858	1.500	2.339



HOLLOW HEX

DIE #	A	B	WT/FT
NF6576	0.875	0.400	0.644
NF6577	0.875	0.565	0.494



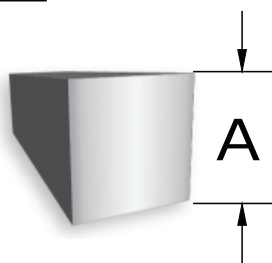
SQ. BARS w/RADIUS CORNERS

DIE #	A	B	WT/FT
11008	0.312	0.030	0.116
11009	0.317	0.030	0.120
NF6771	0.625	0.062	0.466

SQUARE BARS

(*)

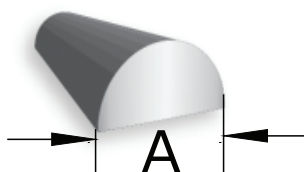
DIE #	A	WT/FT
NF1330	0.240	0.070
NF1643	0.250	0.075
NF1332	0.310	0.115
NF2094	0.375	0.169
NF1820	0.500	0.300
NF1809	0.750	0.676
NF1825	1.000	1.200
NF1024	1.125	1.519
NF1823	1.250	1.876
NF5189	1.500	2.700
NF7856	1.750	3.676
NF6973	2.000	4.798
NF6545	2.250	6.074



ROUND RODS

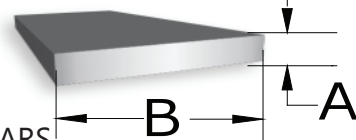
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DIE #	A	WT/FT
NF5085	0.225	0.048
NF6651	0.237	0.053
NF0353	0.250	0.059
NF0238	0.312	0.091
NF0239	0.375	0.132
NF0235	0.500	0.235
NF1793	0.595	0.334
NF1781	0.625	0.368
NF1779	0.750	0.530
NF2736	0.875	0.721
NF1780	1.000	0.942
NF6429	1.125	1.193
NF2067	1.250	1.472
NF7947	1.375	1.782
NF4303	1.500	2.120
NF3742	1.625	2.489
NF3741	1.750	2.886
NF7855	1.875	3.313
NF3740	2.000	3.770
NF6884	2.250	4.771
NF8154	2.375	5.316
NF6893	2.500	5.890
NF7928	3.000	8.483



HALF ROUNDS

DIE #	A	WT/FT
NF6261	0.375	0.066
NF6260	0.500	0.118
NF4775	1.000	0.210



RECTANGULAR BARS

DIE #	A	B	WT/FT
(*) NF0708	0.062	0.156	0.012
(*) NF2285	0.250	0.312	0.094
(*) NF0304	0.187	0.375	0.084
(*) NF1814	0.312	0.437	0.164
(*) NF0116	0.145	0.485	0.084
NF0216	0.125	0.500	0.075
NF1344	0.156	0.500	0.094
NF3033	0.188	0.500	0.113
NF2677	0.250	0.500	0.150
NF7121	0.375	0.500	0.224
NF4839	0.380	0.580	0.264
(*) NF1864	0.170	0.600	0.122
NF0545	0.125	0.625	0.094
NF6490	0.188	0.625	0.140
NF7015	0.250	0.625	0.187
NF5184	0.375	0.625	0.281
NF7860	0.500	0.625	0.376
(*) NF4016	0.315	0.688	0.260
(*) NF4017	0.165	0.748	0.148
NF0330	0.062	0.750	0.056
NF3919	0.090	0.750	0.082
NF1451	0.125	0.750	0.113
NF0709	0.187	0.750	0.168
(*) NF1777	0.250	0.750	0.226
NF2078	0.375	0.750	0.337
NF6689	0.438	0.750	0.394
NF1762	0.500	0.750	0.450
NF4470	0.625	0.750	0.563
(*) NF1611	0.193	0.875	0.203
NF2879	0.375	0.875	0.394
(*) NF0524	0.172	0.970	0.200
NF0735	0.062	1.000	0.074
NF0104	0.125	1.000	0.150
60343	0.125	1.000	0.150
10037	0.187	1.000	0.224
(*) NF0328	0.187	1.000	0.224
NF1243	0.250	1.000	0.300
NF1526	0.375	1.000	0.450
NF1778	0.500	1.000	0.600
NF6921	0.625	1.000	0.748

DIE #	A	B	WT/FT
NF4773	0.750	1.000	0.900
NF4851	0.063	1.125	0.084
NF5510	0.180	1.125	0.245
NF8961	0.062	1.250	0.094
NF8177	0.100	1.250	0.150
NF0382	0.125	1.250	0.187
NF7837	0.125	1.250	0.187
NF1367	0.187	1.250	0.281
NF0290	0.250	1.250	0.376
NF6788	0.312	1.250	0.468
NF2079	0.375	1.250	0.563
NF4231	0.750	1.250	1.126
NF8593	1.000	1.250	1.500
(*) NF3139	0.500	1.375	0.825
NF1482	0.090	1.500	0.161
NF1754	0.125	1.500	0.226
NF1366	0.187	1.500	0.377
NF1612	0.250	1.500	0.450
NF1707	0.375	1.500	0.676
NF0480	0.500	1.500	0.900
NF4853	0.750	1.500	1.350
NF1810	1.000	1.500	1.800
NF6914	1.250	1.500	2.248
NF1829	0.250	1.625	0.488
NF3996	0.500	1.625	0.975
NF5351	0.125	1.665	0.250
NF5305	0.700	1.700	1.428
NF5213	1.510	1.730	3.134
NF1416	0.187	1.750	0.392
NF7862	0.750	1.750	1.576
NF6683	1.000	1.750	2.100
NF9064	1.500	1.750	3.150
NF4181	0.130	1.930	0.301
(*) NF5693	0.060	2.000	0.144
NF0412	0.125	2.000	0.300
NF0161	0.187	2.000	0.449

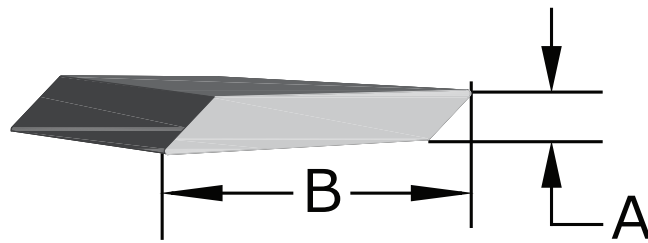


SECRET
EXTRUSIONS

RECTANGULAR BARS

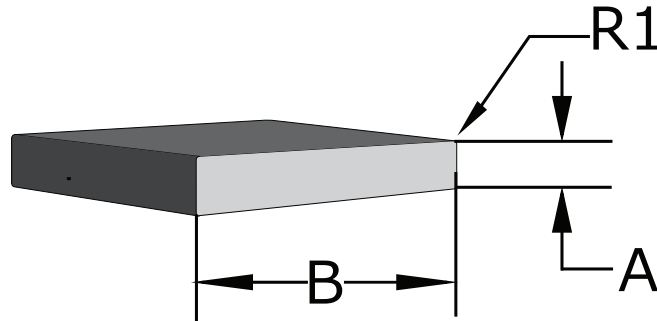
DIE #	A	B	WT/FT
NF1433	0.250	2.000	0.600
NF7041	0.312	2.000	0.750
NF1708	0.375	2.000	0.900
NF1801	0.500	2.000	1.200
NF4564	0.750	2.000	1.800
NF5138	1.000	2.000	2.400
NF6972	1.250	2.000	2.998
NF5101	1.500	2.000	3.600
NF6973	2.000	2.000	4.798
NF7161	2.500	2.000	6.000
NF5376	0.120	2.140	0.308
(*) NF3500	1.750	2.170	4.556
NF7769	0.125	2.250	0.337
NF1652	0.188	2.250	0.508
(*) NF1473	0.250	2.250	0.675
NF5212	1.190	2.360	3.370
NF0558	0.062	2.500	0.186
NF1717	0.125	2.500	0.376
NF1500	0.187	2.500	0.561
NF4550	0.250	2.500	0.750
NF2784	0.375	2.500	1.126
NF3512	0.500	2.500	1.500
NF7048	1.000	2.500	3.000
NF7010	1.250	2.500	3.749
(*) NF4244	0.188	2.750	0.620
NF7122	1.750	2.750	5.774
NF1739	0.063	2.830	0.214
NF6754	0.085	3.000	0.306
NF4055	0.125	3.000	0.450
NF4362	0.188	3.000	0.677
NF2443	0.250	3.000	0.900
NF8501	0.313	3.000	1.127
NF3614	0.375	3.000	1.350
NF4994	0.500	3.000	1.800
NF6141	0.625	3.000	2.250
NF6851	0.750	3.000	2.700
NF6915	1.000	3.000	3.600
NF4928	1.340	3.000	4.824
NF7049	1.500	3.000	5.400
NF0144	0.125	3.500	0.525
NF7334	0.187	3.500	0.769

DIE #	A	B	WT/FT
NF1830	0.250	3.500	1.050
NF0806	0.375	3.500	1.576
NF6936	0.500	3.500	2.100
NF6163	0.625	3.500	2.625
NF9065	1.250	3.500	5.250
NF9066	1.750	3.500	7.350
(*) NF1364	0.050	3.875	0.233
(*) NF0500	0.125	4.000	0.600
NF2245	0.188	4.000	0.902
NF1680	0.250	4.000	1.200
NF8196	0.3125	4.000	2.450
NF3553	0.375	4.000	1.800
NF3820	0.500	4.000	2.400
NF5136	0.750	4.000	3.600
NF6015	1.000	4.000	4.800
NF7861	1.250	4.000	6.000
NF6913	1.500	4.000	7.198
NF3555	0.250	4.500	1.350
NF4029	0.375	4.500	2.025
NF5417	0.500	4.500	2.700
NF8079	1.750	4.500	9.450
10181	2.750	4.500	14.850
NF1434	0.125	4.750	0.713
NF3570	0.250	5.000	1.500
NF3552	0.375	5.000	2.250
NF6132	0.500	5.000	3.000
NF8738	0.625	5.000	3.750
NF8047	0.750	5.000	4.500
(*) NF1831	0.250	5.375	1.613
NF4451	0.125	6.000	0.900
NF3252	0.188	6.000	1.354
NF3554	0.250	6.000	1.800
NF3737	0.375	6.000	2.700
NF5135	0.500	6.000	3.600
NF6140	0.625	6.000	4.500
NF7123	0.750	6.000	5.400
NF7050	0.250	7.000	2.100
10180	0.375	7.000	3.150
10277	0.250	8.000	2.400
NF8134	0.375	8.000	3.600
NF8132	0.500	8.000	4.800



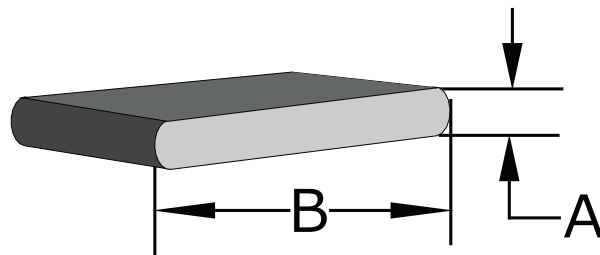
RECTANGULAR BARS (WITH BEVEL)

DIE #	A	B	BEVEL	WT/FT
61057	0.250	5.000	45°	1.433



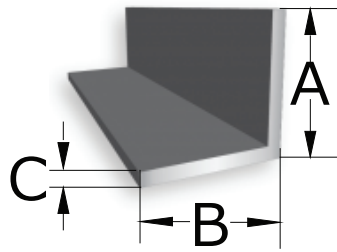
RECTANGULAR BARS (RADIUS CORNERS)

DIE #	A	B	R1	WT/FT
60223	0.312	1.650	0.031	0.616
60366	0.250	2.000	0.062	0.595
61349	0.250	7.500	0.030	2.249



RECTANGULAR BARS (FULL RADIUS)

DIE #	A	B	WT/FT
61200	0.250	0.875	0.246
61050	0.250	1.000	0.284
61268	0.250	2.000	0.584
61269	0.250	2.500	0.734
61188	0.250	4.000	1.184
61201	0.500	4.000	2.335
61298	0.250	5.000	1.484
61270	0.500	6.000	3.535



ANGLES

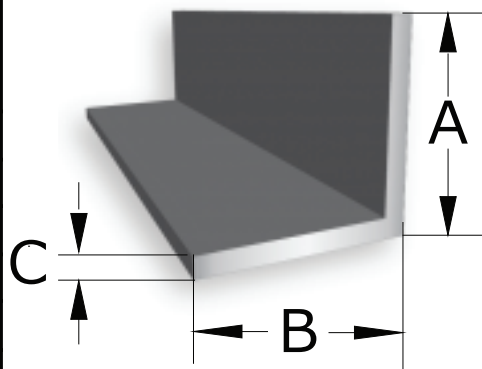
DIE #	A	B	C	WT/FT
NF2063	0.165	0.900	0.040	0.049
(*) NF0405	0.187	0.250	0.062	0.028
(*) NF0764	0.250	0.500	0.062	0.051
(*) NF4867	0.250	0.500	0.093	0.073
(*) NF2812	0.374	1.496	0.063	0.137
(*) NF1789	0.375	0.750	0.090	0.112
NF0275	0.500	0.500	0.050	0.056
(*) NF1790	0.500	0.500	0.125	0.131
(*) NF1298	0.500	0.500	0.155	0.157
(*) NF3501	0.500	0.500	0.250	0.226
NF3420	0.500	0.750	0.049	0.071
NF1553	0.500	0.750	0.062	0.089
NF2614	0.500	0.910	0.094	0.149
NF7149	0.500	1.000	0.125	0.206
(*) NF1465	0.500	1.125	0.125	0.226
NF6930	0.500	1.25	0.125	0.244
(*) NF0716	0.500	2.250	0.050	0.162
(*) NF0713	0.500	2.250	0.068	0.218
NF6681	0.625	0.625	0.125	0.169
NF0188	0.625	1.000	0.055	0.103
(*) NF0463	0.625	2.500	0.050	0.185
NF5655	0.750	0.750	0.050	0.086
NF2528	0.750	0.750	0.062	0.107
(*) NF0270	0.750	0.750	0.078	0.133
(*) NF1758	0.750	0.750	0.094	0.158
NF2529	0.750	0.750	0.125	0.206
60191	0.750	1.000	0.062	0.126
(*) NF0810	0.750	1.000	0.065	0.132
NF5869	0.750	1.000	0.125	0.244
(*) NF1784	0.750	1.250	0.125	0.281
(*) NF1747	0.750	2.000	0.125	0.394
(*) NF2024	0.750	2.000	0.125	0.394
NF8428	0.750	3.125	0.125	0.563

DIE #	A	B	C	WT/FT
NF6268	0.752	3.000	0.126	0.548
NF5223	0.875	0.875	0.125	0.244
NF0157	1.000	1.000	0.060	0.139
NF0348	1.000	1.000	0.060	0.139
NF1351	1.000	1.000	0.125	0.280
NF6744	1.000	1.000	0.188	0.408
60325	1.000	1.500	0.065	0.189
60326	1.000	1.500	0.078	0.255
NF1697	1.000	1.500	0.125	0.356
NF0722	1.000	2.500	0.062	0.256
NF0535	1.000	2.000	0.125	0.431
NF4359	1.000	3.000	0.188	0.860
(*) NF0788	1.125	1.500	0.062	0.191
NF6102	1.250	1.250	0.050	0.146
NF0720	1.250	1.250	0.068	0.198
NF1242	1.250	1.250	0.120	0.343
NF7067	1.250	1.250	0.125	0.356
NF6892	1.250	1.250	0.188	0.522
NF6772	1.250	1.250	0.250	0.674
NF5022	1.250	1.500	0.188	0.578
(*) NF5873	1.250	3.500	0.125	0.694
NF0906	1.375	1.375	0.060	0.194
60346	1.500	1.500	0.062	0.218
NF0230	1.500	1.500	0.125	0.431
NF3529	1.500	1.500	0.188	0.635
NF7009	1.500	1.500	0.250	0.825
NF6885	1.500	1.750	0.060	0.229
NF2608	1.500	2.000	0.112	0.455
(*) NF1966	1.500	2.750	0.125	0.619
NF1254	1.500	4.000	0.062	0.404
(*) NF1546	1.500	7.000	0.125	1.256
NF1204	1.750	1.750	0.188	0.748
NF7433	1.750	1.750	0.125	0.495
NF4363	1.750	2.250	0.188	0.860
NF7071	2.000	1.500	0.125	0.506
NF6711	2.000	1.500	0.250	0.974
NF6765	2.000	2.000	0.062	0.293
NF3664	2.000	2.000	0.105	0.491



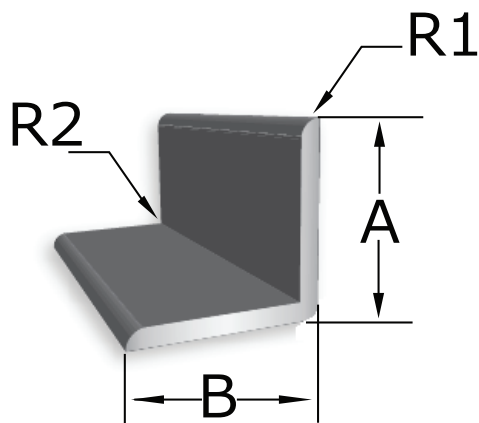
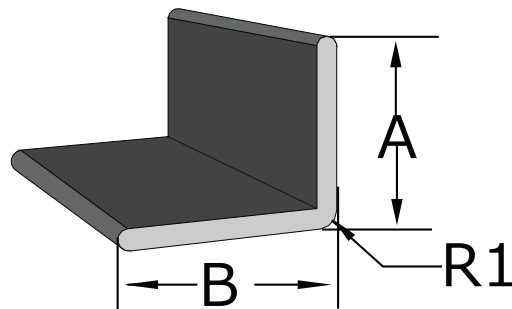
ANGLES

DIE #	A	B	C	WT/FT
NF5008	2.000	2.000	0.125	0.581
(*) NF0241	2.000	2.000	0.156	0.720
NF3762	2.000	2.000	0.188	0.860
NF0771	2.000	2.000	0.250	1.124
NF5824	2.000	2.250	0.125	0.619
NF6685	2.000	2.500	0.188	0.973
NF2186	2.000	3.000	0.125	0.731
NF4208	2.000	3.000	0.250	1.425
NF7148	2.000	4.000	0.187	1.304
NF5825	2.250	2.875	0.125	0.750
NF7109	2.500	1.500	0.125	0.581
NF3799	2.500	2.500	0.187	1.080
NF3051	2.500	2.500	0.250	1.426
NF6679	2.500	2.500	0.375	2.081
NF0779	2.750	2.750	0.250	1.576
NF2077	3.000	3.000	0.125	0.881



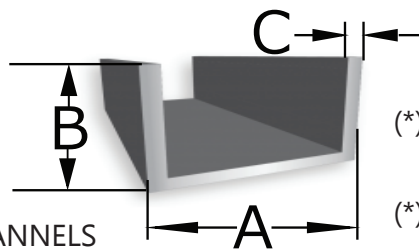
ANGLES w/FULL RADIUS

DIE #	A	B	C	R1	WT/FT
61112	2.000	4.500	0.250	0.250	1.531



ANGLES w/RADIUS

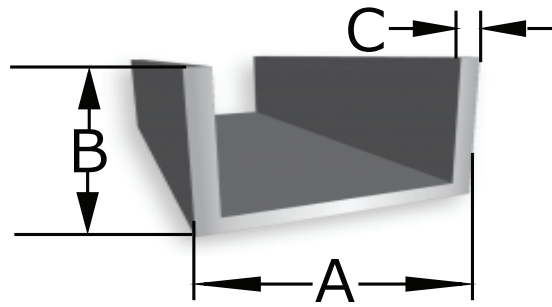
DIE #	A	B	C	R1	R2	WT/FT
10197	1.750	1.750	0.188	0.125	0.188	0.748



ARCHITECTURAL CHANNELS

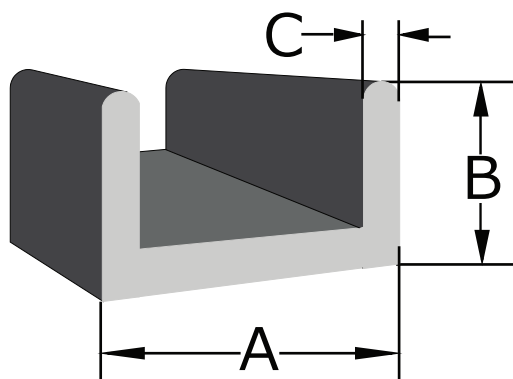
DIE #	A	B	C	WT/FT
NF3092	0.375	0.500	0.125	0.162
NF3746	0.437	1.000	0.062	0.172
NF4186	0.466	0.938	0.063	0.158
NF3745	0.490	0.470	0.089	0.133
NF4112	0.500	0.313	0.060	0.072
NF6510	0.500	0.500	0.062	0.102
NF3300	0.500	0.750	0.093	0.203
(*) NF1915	0.537	0.425	0.050	0.077
(*) NF4193	0.625	1.000	0.125	0.356
(*) NF1983	0.630	0.630	0.060	0.127
NF5204	0.750	0.375	0.125	0.187
NF7003	0.750	0.500	0.125	0.226
NF1300	0.750	0.750	0.062	0.160
NF2716	0.750	0.750	0.125	0.300
NF5517	0.750	1.500	0.125	0.526
(*) NF1753	0.751	0.751	0.094	0.233
NF6155	0.812	0.781	0.062	0.168
NF3920	0.875	0.395	0.050	0.094
NF2633	0.906	0.750	0.062	0.169
(*) NF0491	0.925	0.825	0.125	0.349
NF3774	0.960	0.380	0.045	0.088
NF4396	0.963	1.500	0.094	0.426
NF2258	1.000	0.500	0.125	0.263
NF2282	1.000	1.000	0.125	0.413
NF3032	1.000	1.375	0.092	0.426
NF6653	1.000	2.125	0.125	1.050
NF3077	1.062	1.250	0.125	0.497
(*) NF5025	1.100	0.196	0.050	0.084
(*) NF1558	1.125	0.750	0.062	0.186
(*) NF0388	1.125	1.125	0.070	0.271
NF7119	1.250	1.250	0.125	0.524
(*) NF3681	1.125	1.750	0.125	0.656
NF5508	1.125	4.500	0.125	1.481

DIE #	A	B	C	WT/FT
(*) NF0725	1.175	0.875	0.065	0.281
NF1163	1.250	0.750	0.100	0.306
(*) NF5026	1.475	0.211	0.050	0.108
NF6929	1.500	0.500	0.125	0.337
(S) 60367	1.500	0.625	0.070	0.223
NF5205	1.500	0.875	0.125	0.450
NF1237	1.500	1.000	0.120	0.469
NF2086	1.500	1.500	0.125	0.637
NF3761	1.500	1.500	0.188	0.930
NF5878	1.500	2.125	0.375	2.250
10169	1.580	0.790	0.040	0.148
NF3030	1.750	0.750	0.040	0.152
NF6574	1.750	0.750	0.125	0.450
10015	1.750	1.000	0.125	0.524
NF7976	1.750	1.750	0.125	0.750
NF1608	1.825	1.000	0.250	0.997
NF5650	2.000	0.750	0.125	0.487
60344	2.000	1.000	0.062	0.288
NF1236	2.000	1.000	0.125	0.563
NF6443	2.000	2.000	0.125	0.863
60060	2.000	2.000	0.188	1.268
NF6444	2.000	2.000	0.250	1.650
NF4877	2.100	1.500	(S)	1.296
NF4461	2.184	1.000	0.092	0.442
NF6633	2.196	1.250	0.083	0.392
NF4206	2.210	2.000	0.105	0.756
(*) NF3192	2.250	0.625	0.125	0.487
NF1994	2.250	1.500	0.250	1.428
NF6133	2.250	1.750	0.125	0.825
NF6109	2.250	1.750	0.188	1.212
NF6830	2.500	1.000	0.125	0.637
NF7781	2.500	1.500	0.125	0.787
NF2246	2.500	2.000	0.188	1.350
(*) NF1207	2.600	0.875	0.250	1.156
NF6684	2.625	2.250	0.125	1.031
(S) NF7001	2.638	0.354	0.236	0.823
60645	2.750	1.500	0.062	0.417
NF4878	2.750	1.500	(S)	1.440



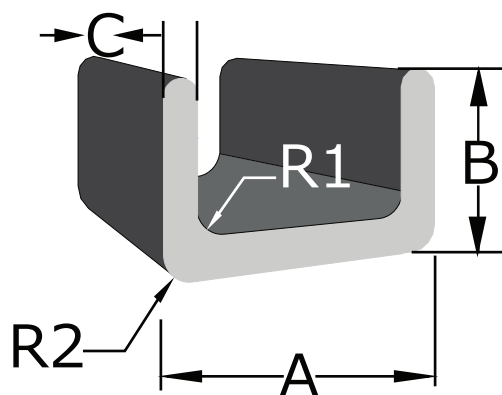
ARCHITECTURAL CHANNELS

DIE #	A	B	C	WT/FT
NF3773	2.825	0.750	0.045	0.228
(*) NF1604	3.000	0.500	0.062	0.282
NF7209	3.000	0.500	0.125	0.563
NF1555	3.000	1.000	0.125	0.713
NF1715	3.000	2.000	0.125	1.031
61214	3.000	2.000	0.130	1.019
NF3403	3.015	1.500	0.062	0.472
NF7000	3.740	1.850	0.276	2.266
NF0908	3.750	0.875	0.070	0.450
NF6115	3.750	1.875	0.063	0.140
NF3836	3.750	2.125	0.250	2.250
NF6860	3.800	3.500	0.070	0.977
NF6349	3.813	1.500	0.082	0.654
NF6799	3.820	1.725	0.055	0.505
NF5119	3.938	1.844	0.094	0.839
NF0800	4.000	0.750	0.125	0.787
NF0907	4.000	0.875	0.062	0.419
NF8461	4.000	1.000	0.110	0.763
NF1846	4.000	2.000	0.090	0.845
NF2142	4.000	2.000	0.105	0.982
NF5002	4.000	4.000	0.375	5.063
NF4054	4.184	1.000	0.092	0.662
NF6629	4.196	1.750	0.083	0.750
NF4573	4.210	2.000	0.105	0.982
(S) NF6909	4.304	1.750	0.500	3.701
(*) NF1854	4.530	1.590	0.090	0.813
(*) NF6859	4.900	3.500	0.070	0.986
NF4460	6.184	1.000	0.092	0.883
NF6373	6.184	2.000	0.092	1.104
NF6631	6.196	1.750	0.083	0.954



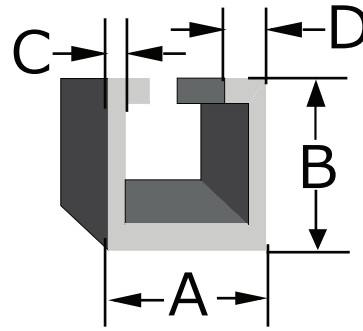
CHANNELS w/FULL RADIUS

	DIE #	A	B	C	WT/FT
(S)	60158	0.674	0.697	0.072	0.157
	60224	1.440	1.625	0.125	0.661



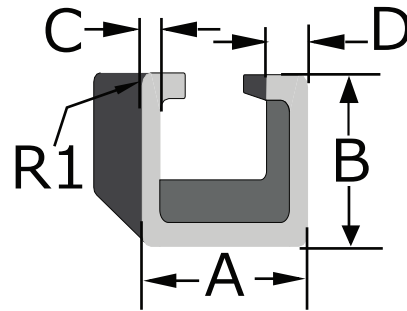
CHANNELS w/FULL RADIUS & CORNERS

	DIE #	A	B	C	R1	R2	WT/FT
	60254	1.020	0.540	0.060	0.020	0.040	0.118
	60216	1.126	0.500	0.063	0.010	0.062	0.147
(S)	60208	1.126	1.000/0.500	0.063	0.010	0.062	0.194
	61341	1.250	3.000	0.125	0.125	0.171	1.196
	60314	1.280	0.500	0.125	0.062	0.125	0.294
	NF8188	1.374	0.625	0.063	0.031	0.093	0.193
(S)	10161	1.400	1.375	0.125	0.125	0.250	0.560
(S)	61243	1.438	1.750	0.125	0.125	0.250	0.679
	60237	1.624	0.812	0.062	0.015	0.031	0.230
	60214	1.749	0.999	0.187	0.187	0.187	0.747
(S)	61235	1.870	0.750	0.060	0.015	0.060	0.367
(S)	61246	3.020	1.000/0.625	0.080	0.108/0.010	0.188/0.031	0.422



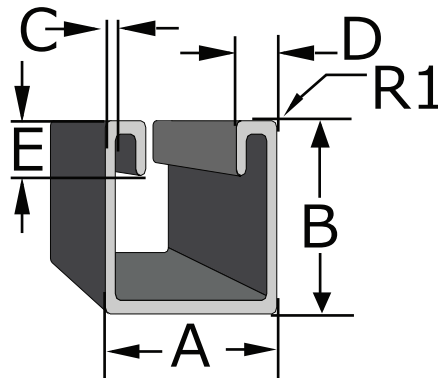
"C " CHANNELS w/SQ. CORNERS

DIE #	A	B	C	D	WT/FT
60220	1.000	0.625	0.125	0.230	0.325
60252	2.500	2.000	0.180	1.000	1.680



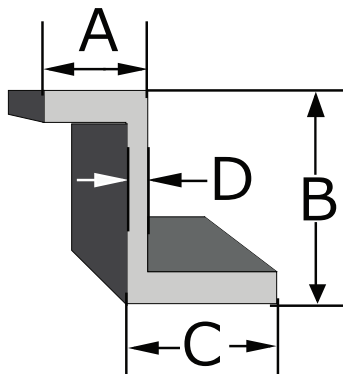
"C " CHANNELS w/RADIUS CORNERS

DIE #	A	B	C	D	R1	WT/FT
60215	1.500	1.000	0.050	0.375	0.125	0.231
60217	1.749	1.749	0.187	0.500	0.187	1.224
61136	2.500	1.000	0.125	0.750	0.250	0.817



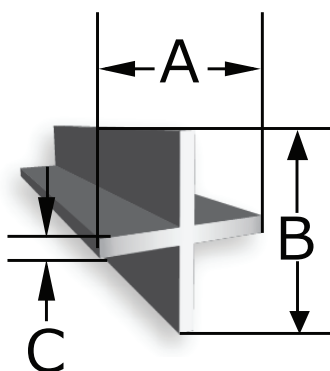
"C " CHANNELS w/RETUEN LEGS

DIE #	A	B	C	D	E	R1	WT/FT
60175	1.629	0.810	0.080	0.375	0.281	0.125	0.369



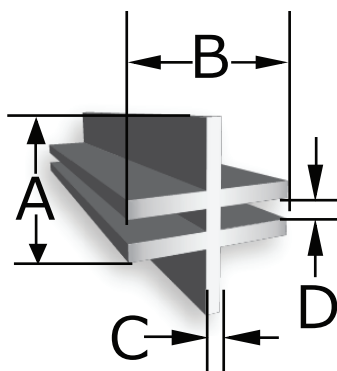
" Z " EXTRUSIONS (r) = RADIUS CORNERS

DIE #	A	B	C	D	WT/FT
NF1759	0.483	0.320	0.392	0.090	0.110
NF0168	0.500	0.475	0.500	0.055	0.090
NF3779	0.500	0.563	0.625	0.125	0.216
(r) NF5625	0.625	0.250	1.000	0.125	0.232
NF0738	0.625	1.000	0.625	0.062	0.158
NF0495	0.650	0.870	0.312	0.150	0.269
NF5209	0.750	0.625	0.750	0.125	0.281
NF2305	0.750	0.875	0.750	0.125	0.319
NF2264	0.750	0.375	2.000	0.125	0.431
(r) NF5676	0.754	3.250	0.754	0.073	0.395
NF5620	1.000	0.438	1.188	0.188	0.491
NF3167	1.000	1.000	1.000	0.125	0.413
NF7332	1.000	1.000	1.000	0.312	0.769
NF5654	1.375	2.500	2.375	0.375	2.020
NF5446	1.500	0.250	1.000	0.125	0.375



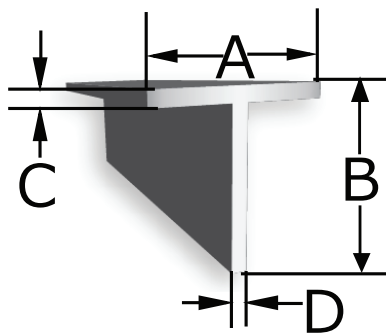
CROSS SHAPE EXTRUSION

DIE #	A	B	C	WT/FT
NF5679	1.625	1.625	0.125	0.468



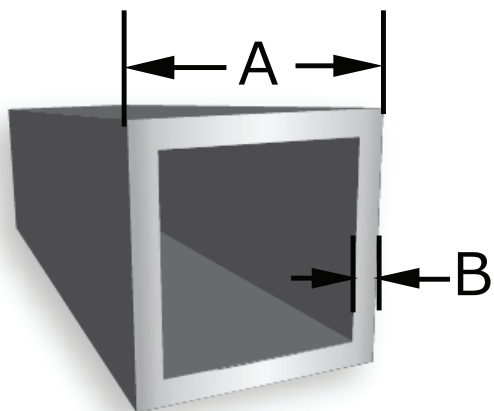
DOUBLE " T " SIGN EXTRUSION

DIE #	A	B	C	D	WT/FT
NF6870	1.500	1.750	0.125	0.281	0.584
NF6871	1.500	2.750	0.125	0.300	0.824



" T " EXTRUSION (o) = OFFSET

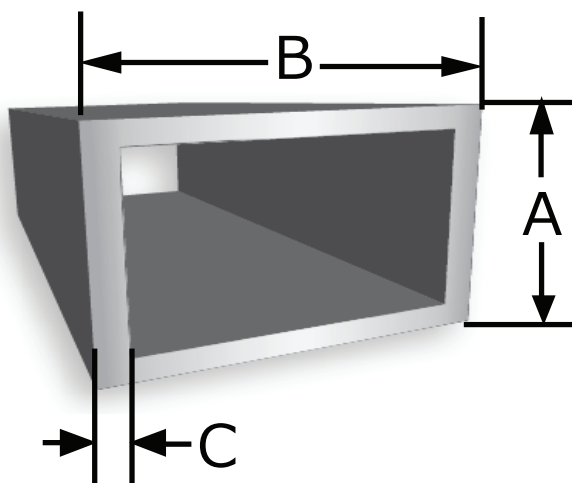
DIE #	A	B	C	D	WT/FT
NF2193	0.290	0.900	0.040	0.040	0.055
NF1349	0.750	0.500	0.040	0.040	0.058
NF4962	0.750	1.500	0.125	0.125	0.319
NF8059	1.000	2.000	0.188	0.188	0.632
NF4089	1.500	1.500	0.125	0.125	0.431
NF2127	1.500	1.000	0.188	0.188	0.522
NF8500	1.500	1.500	0.188	0.188	0.635
NF7166	1.500	3.000	0.187	0.187	0.971
NF4232	1.625	0.875	0.125	0.125	0.356
NF0381	1.750	1.500	0.188	0.188	0.691
NF1878	1.750	3.750	0.125	0.125	0.806
NF4071	1.875	1.000	0.125	0.125	0.413
NF2343	2.000	0.750	0.125	0.125	0.394
NF6447	2.000	2.000	0.188	0.188	0.860
NF8456	2.000	2.000	0.125	0.125	0.581
NF6436	2.000	2.000	0.250	0.250	1.125
NF6720	2.000	3.000	0.250	0.250	1.424
NF8031	2.000	3.000	0.375	0.375	2.081
NF6719	2.000	4.000	0.250	0.250	1.724
NF7020	2.000	5.000	0.250	0.250	2.024
NF7169	2.000	5.000	0.375	0.375	2.981
NF7167	2.000	6.000	0.250	0.250	2.326
NF8037	2.000	6.000	0.375	0.625	3.431
NF5911	2.360	1.000	0.125	0.100	0.557
NF1817	3.000	1.750	0.500	0.500	2.550
NF6235	3.000	1.188	0.188	0.188	0.900
NF5910	3.360	1.000	0.125	0.100	0.707
(o) NF6606	3.437	1.187	0.188	0.188	0.988
NF4869	4.000	2.000	0.188	0.313	1.579
NF5909	4.360	1.000	0.125	0.100	0.857
NF4585	4.500	4.000	0.630	0.625	5.971



SQ. TUBES w SQ. CORNERS. (M)=MAX RUN OUT

DIE #	A	B	WT/FT
NF4959	0.500	0.050	0.108
NF7932	0.500	0.065	0.136
NF2926	0.500	0.120	0.218
NF1633	0.625	0.125	0.300
NF2038	0.750	0.062	0.205
NF5207	0.750	0.125	0.374
NF1964	1.000	0.062	0.280
60264	1.000	0.075	0.333
NF2711	1.000	0.083	0.365
NF1972	1.000	0.125	0.525
NF4580	1.125	0.109	0.530
NF1889	1.250	0.062	0.354
NF6853	1.250	0.125	0.674
(mod) NF1888(S)	1.250	0.125	0.676
NF7129	1.500	0.040	0.281
NF2935	1.500	0.050	0.348
NF0103	1.500	0.062	0.429
NF1973	1.500	0.125	0.821
NF2848	1.750	0.055	0.448

DIE #	A	B	WT/FT
NF3613	1.750	0.090	0.718
NF5217	1.750	0.125	0.974
NF5491	2.000	0.090	0.825
NF1976	2.000	0.125	1.125
NF6717	2.000	0.188	1.636
NF6770	2.000	0.250	2.100
(M) NF1858	2.000	0.500	3.600
NF2989	2.063	0.125	1.163
NF7859	2.500	0.125	1.424
NF7159	2.500	0.187	2.076
NF7868	2.500	0.250	2.700
10089	3.000	0.090	1.258
NF2014	3.000	0.125	1.725
NF7008	3.000	0.188	2.538
NF3815	3.000	0.250	3.300
NF6944	4.000	0.125	2.323 @36'
NF6378	4.000	0.250	4.500 @24'
NF7182	4.000	0.375	6.526

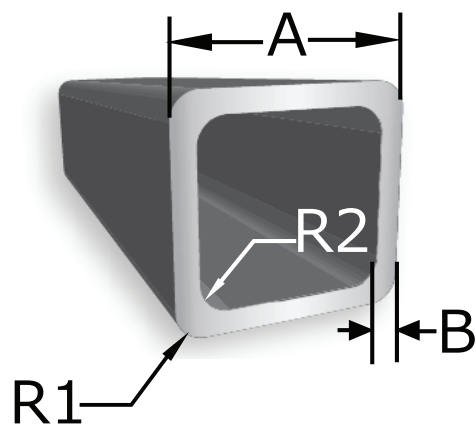


RECTANGULAR TUBES

DIE #	A	B	C	WT/FT
NF4378	0.750	1.500	0.063	0.322
NF5144	0.750	2.500	(S)	1.238
NF1562	0.930	1.020	0.065	0.286
NF4361	1.000	1.375	0.073	0.390
10075	1.000	1.500	0.050	0.288
NF4562	1.000	1.500	0.125	0.675
NF4360	1.000	2.000	0.073	0.500
NF2555	1.000	2.000	0.094	0.634
NF4740	1.000	2.000	0.094	0.635
NF2011	1.000	2.000	0.125	0.824
NF4979	1.000	2.000	0.250	1.500
NF8245	1.000	2.500	0.125	0.974
NF2647	1.000	3.000	0.125	1.126
NF8244	1.000	3.500	0.125	1.274
NF3226	1.000	3.515	0.188	1.868
NF7391	1.000	4.000	0.125	1.392
NF5122	1.000	1.750	0.075	0.468
NF7152	1.500	2.000	0.062	0.503
NF4048	1.500	2.000	0.125	0.974
NF6891	1.500	3.000	0.125	1.276
NF2665	1.500	3.000	0.188	1.861
NF7213	1.500	4.000	0.125	1.576

DIE #	A	B	C	WT/FT
NF1322	1.625	2.625	0.070	0.691
NF3455	1.750	3.000	0.060	0.667
NF5247	1.750	3.000	0.100	1.092
NF7101	1.750	3.000	0.125	1.350
NF2996	1.750	4.000	0.090	1.204
NF7102	1.750	4.000	0.125	1.650
NF3134	1.750	4.500	0.115	1.662
NF4238	1.990	3.990	0.080	1.117
NF5310	2.000	2.500	0.125	1.276
NF1945	2.000	3.000	0.125	1.425
NF6753	2.000	3.000	0.250	2.700
NF3081	2.000	4.000	0.125	1.724
NF5274	2.000	4.000	0.188	2.523
NF7919	2.000	4.000	0.250	3.300
NF4838	2.000	4.500	0.115	1.730
NF6130	2.000	5.000	0.125	2.026
NF6500	2.000	6.000	0.125	2.326
NF3492	3.000	4.000	0.125	2.025
NF6810	3.000	4.000	0.188	2.981
10165	3.000	6.000	0.125	2.624
10193	3.000	6.000	0.187	3.872
10164	3.000	6.000	0.250	5.099

RECTANGULAR TUBES



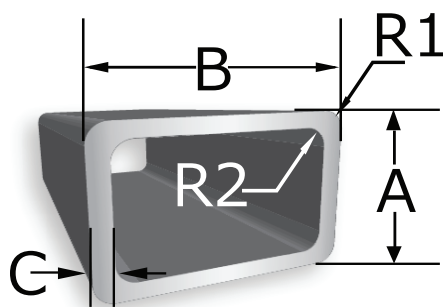
SQ. TUBE w/RADIUS

DIE #	A	B	R.1	R.2	WT/FT
NF6863	0.625	0.125	0.062	0.015	0.298
NF6395	0.740	0.049	0.047	0.015	0.161
NF6396	0.740	0.062	0.047	0.015	0.200
NF6150	0.750	0.049	0.031	0.020	0.165
NF2222	0.750	0.062	0.031	0.020	0.204
61056	0.750	0.065	0.062	0.010	0.210
NF2980	0.750	0.065	0.031	0.020	0.214
NF4739	0.750	0.090	0.020	0.015	0.285
NF2557	0.750	0.125	0.090	0.020	0.365
60069	1.000	0.040	0.156	0.116	0.174
60206	1.000	0.040	0.140	0.100	0.175
10156	1.000	0.045	0.064	0.062	0.206
60311	1.000	0.050	0.015	0.060	0.231
NF5821	1.000	0.060	0.125	0.093	0.259
60312	1.000	0.062	0.082	0.140	0.266
NF1931	1.000	0.062	0.093	0.041	0.271
NF4337	1.000	0.067	0.125	0.058	0.288
NF6346	1.000	0.080	0.040	0.032	0.353
NF2519	1.000	0.083	0.093	0.045	0.355
61350	1.000	0.095	0.010	0.030	0.414
61038	1.000	0.100	0.062	0.010	0.428
60382	1.000	0.125	0.010	0.062	0.529
NF2202	1.000	0.125	0.125	0.062	0.510
10203	1.000	0.125	0.188	0.062	0.493
NF3324	1.000	0.110	0.160	0.074	0.449
NF3325	1.000	0.110	0.160	0.219	0.493
61109	1.004	0.062	0.200	0.140	0.260



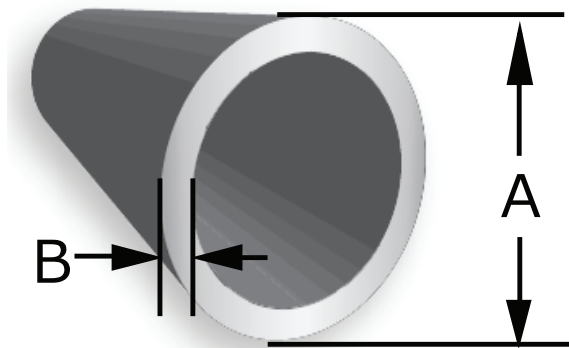
SQ. TUBE w/RADIUS

	DIE #	A	B	R.1	R.2	WT/FT
	NF6199	1.026	0.075	0.093	0.041	0.277
	61138	1.100	0.065	0.070	0.015	0.319
	60321	1.125	0.065	0.156	0.091	0.314
	60002	1.193	0.059	0.157	0.098	0.290
	61054	1.210	0.090	0.275	0.150	0.429
	60221	1.250	0.062	0.168	0.123	0.340
	61052	1.250	0.065	0.140	0.075	0.355
	NF6897	1.250	0.093	0.125	0.020	0.500
	60222	1.250	0.094	0.062	0.015	0.518
	60383	1.250	0.115	0.010	0.062	0.614
	NF2725	1.250	0.125	0.090	0.020	0.665
	NF8006	1.250	0.188	0.125	0.010	0.942
(S)	10013	1.375	0.062	0.140	0.078	0.376
(S)	10014	1.500	0.062	0.140	0.078	0.414
	61162	1.500	0.062	0.015	0.032	0.429
	NF7308	1.500	0.062	0.190	0.125	0.397
	NF5314	1.500	0.125	0.125	0.063	0.814
	10067	1.500	0.125	0.140	0.031	0.805
	NF6316	1.500	0.188	0.125	0.020	1.169
	NF2735	1.862	0.080	0.046	0.020	0.670
	NF2734	2.000	0.063	0.109	0.046	0.570
	NF2230	2.000	0.125	0.125	0.062	1.102
	NF7223	2.000	0.125	0.250	0.125	1.052
	NF2962	2.000	0.188	0.188	0.188	1.673
	NF6713	2.000	0.188	0.438	0.250	1.501
	NF6737	2.000	0.250	0.375	0.125	1.970
	NF6400	2.500	0.083	0.125	0.063	0.952
	NF6813	2.500	0.188	0.125	0.015	2.071
	NF7822	2.500	0.250	0.282	0.094	2.628
	NF6623	3.000	0.188	0.156	0.125	2.528
	NF6649	3.000	0.250	0.312	0.063	3.203
	NF7420	3.250	0.250	0.188	0.250	3.545
	NF6864	4.000	0.188	0.437	0.249	3.307@24'
	NF7922	4.000	0.250	0.250	0.031	4.436
	NF3846	4.000	0.375	0.188	0.250	6.553 @10'



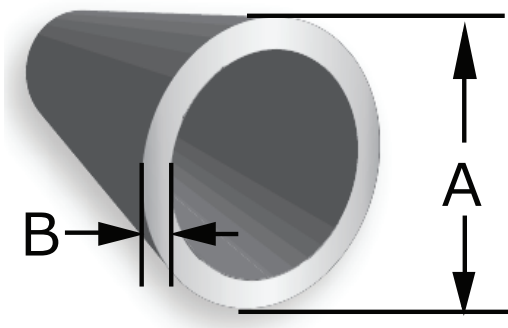
REC. TUBE w/RADIUS

DIE #	A	B	C	R1	R2	WT/FT
60370	0.292	0.750	0.035	0.030	0.010	0.080
60212	0.500	0.750	0.065	0.062	0.010	0.170
61010	0.508	0.674	0.050	0.081	0.031	0.124
61008	0.528	1.304	0.050	0.066	0.016	0.171
60371	0.550	3.188	0.080	0.060	0.020	0.684
NF4977	0.750	1.500	0.125	0.125	0.125	0.584
61301	0.970	4.344	0.200	0.050	0.010	2.349
61329	0.982	2.000	0.056	0.165	0.109	0.371
60003	0.982	2.527	0.056	0.165	0.109	0.440
60018	0.998	2.543	0.064	0.165	0.109	0.505
NF4531	1.000	1.375	0.073	0.093	0.047	0.384
NF6077	1.000	1.375	0.094	0.063	0.015	0.488
61137	1.000	1.375	0.100	0.100	0.100	0.511
NF4532	1.000	2.000	0.073	0.093	0.047	0.494
NF3322	1.000	2.000	0.125	0.125	0.062	0.814
61100	1.000	2.500	0.065	0.125	0.063	0.498
(S) 61053	1.000	3.000	0.065	0.140	0.060	0.744
NF8573	1.000	3.000	0.125	0.250	0.125	1.076
(S) 61134	1.375	2.500	0.110	0.250/0.125	0.140/0.015	0.890
(S) 61135	1.375	5.000	0.156/0.125	0.250/0.125	0.125	1.892
61011	1.475	2.200	0.157	0.141	0.015	1.246
61242	1.500	2.000	0.125	0.031	0.031	0.974
NF7131	1.500	3.000	0.125	0.375	0.235	1.187
NF6513	1.578	2.359	0.312	0.125	0.010	2.467
NF3428	2.000	3.000	0.125	0.125	0.062	1.426
61292	2.000	3.000	0.125	0.250	0.125	1.430
NF2954	2.000	3.000	0.188	0.188	0.188	2.096
10133	2.000	3.000	0.188	0.260	0.260	2.086
NF7222	2.000	4.000	0.125	0.250	0.125	1.639
NF6822	2.000	4.000	0.188	0.125	0.015	2.522
NF6981	2.000	4.000	0.250	0.250	0.010	3.235
10132	2.000	4.000	0.250	0.250	0.250	3.298
NF7132	1.500	6.000	0.096	0.125	0.030	1.669
61029	2.000	5.000	0.125	0.125	0.063	2.013
61288	2.000	6.000	0.250	0.094	0.094	4.500
NF5210	2.040	5.040	0.125	0.125	0.030	2.034
NF3709	2.500	3.800	0.100	0.250	0.250	1.512
10131	3.000	4.000	0.250	0.250	0.250	3.898
NF8032	3.000	6.000	0.250	0.375	0.125	4.970



ROUND TUBES/PIPES

DIE #	A	B	WT/FT	PIPE SIZE
NF4211	0.500	0.045	0.077	
NF4761	0.500	0.045	0.077	
60195	0.500	0.050	0.085	
NF4951	0.500	0.060	0.100	
NF2477	0.500	0.125	0.175	
NF2132	0.532	0.045	0.084	
NF2236	0.540	0.088	0.150	1/4" SCH.40
NF3781	0.585	0.045	0.092	
60196	0.625	0.050	0.108	
NF2948	0.625	0.062	0.129	
NF3607	0.675	0.091	0.192	3/8" SCH.40
NF3813	0.750	0.050	0.132	
60219	0.750	0.065	0.168	
NF7342	0.750	0.125	0.287	
NF2440	0.840	0.109	0.300	1/2" SCH.40
NF6569	0.840	0.139	0.379	1/2" SCH.80
NF4547	0.875	0.049	0.152	
NF5121	0.875	0.058	0.179	
60087	0.875	0.065	0.199	
NF2763	0.937	0.070	0.229	
NF3895	0.980	0.250	0.688	
NF7241	1.000	0.055	0.192	
NF2073	1.000	0.062	0.218	
NF7240	1.000	0.065	0.224	
60218	1.000	0.082	0.284	
NF2493	1.000	0.118	0.394	
NF7857	1.000	0.125	0.412	

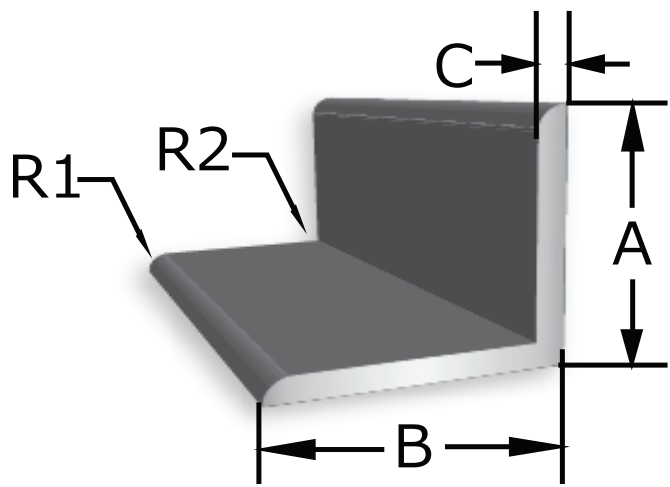


DIE #	A	B	WT/FT	PIPE SIZE
NF3318	1.000	0.240	0.688	
NF4063	1.000	0.250	0.707	
NF2237	1.050	0.113	0.398	3/4" SCH.40
NF7680	1.050	0.154	0.521	3/4" SCH.80
61036	1.105	0.080	0.310	
NF3894	1.230	0.085	0.464	
NF4062	1.230	0.105	0.445	
NF2342	1.250	0.055	0.247	
NF3900	1.250	0.060	0.269	
61163	1.250	0.062	0.277	
NF4162	1.250	0.065	0.290	
NF3023	1.315	0.133	0.593	1" SCH. 40
NF3548	1.315	0.179	0.767	1" SCH. 80
NF6575	1.380	0.284	1.172	
NF3893	1.480	0.110	0.568	
61161	1.500	0.062	0.338	
NF7258	1.500	0.065	0.344	
NF4298	1.500	0.085	0.454	
NF2129	1.500	0.125	0.648	
NF5683	1.500	0.250	1.171	
NF4111	1.625	0.453	2.002	
NF2251	1.660	0.140	0.805	1-1/4" SCH.40
NF6782	1.660	0.191	1.057	1-1/4" SCH.80
NF3901	1.687	0.060	0.367	
NF4859	1.750	0.125	0.766	
NF3044	1.875	0.281	1.688	
NF3280	1.875	0.312	1.841	
NF3587	1.900	0.109	0.736	1-1/2" SCH.10
NF2040	1.900	0.145	0.959	1-1/2" SCH.40
NF6161	1.900	0.200	1.281	1-1/2" SCH.80
NF5185	1.900	0.277	1.697	
NF5051	1.969	0.197	1.316	
NF3278	2.000	0.125	0.884	
NF8071	2.000	0.250	1.650	
NF3902	2.124	0.060	0.467	
NF7980	2.250	0.125	1.000	
NF7125	2.250	0.188	1.458	
NF8113	2.250	0.250	1.885	



ROUND TUBES/PIPES

DIE #	A	B	WT/FT	PIPE SIZE
NF6781	2.373	0.217	1.764	2" SCH.80
NF8025	2.375	0.109	0.931	2" SCH.10
NF3549	2.375	0.154	1.289	2" SCH.40
NF7982	2.500	0.250	2.120	
NF8095	2.500	0.500	3.770	
NF4266	2.555	0.216	1.904	
NF3903	2.561	0.070	0.658	
NF3875	2.750	0.156	1.526	
NF4452	2.875	0.206	2.072	2-1/2" SCH.40
NF3860	2.875	0.276	2.705	2-1/2" 'SCH.80
NF3864	2.875	0.406	3.779	
NF3904	3.000	0.070	0.774	
NF3100	3.000	0.125	1.355	
NF6374	3.350	0.425	4.686	
NF7782	3.500	0.188	2.341	
11004	3.500	0.189	2.674	
NF8026	3.500	0.120	1.529	3" SCH. 10
NF6836	3.500	0.216	2.674	3" SCH. 40
NF5035	3.500	0.250	3.062	
NF7012	3.500	0.300	3.619	3" SCH. 80
NF8094	3.500	0.500	5.654	
NF7907	3.500	1.000	9.425	
NF3101	4.000	0.125	1.825	
NF3772	4.000	0.226	3.215	3-1/2" SCH.40
NF7981	4.000	0.250	3.534	
NF6866	4.500	0.237	3.809	4" SCH. 40
NF7925	4.500	0.337	5.288	4" SCH. 80
NF6716	5.000	0.125	2.297	
NF4593	5.000	0.250	4.447	
NF7952	5.563	0.258	5.166	5" SCH. 40
10124	6.000	0.125	2.768	
NF8673	6.625	0.280	6.698	6" SCH. 40
NF8674	6.625	0.432	10.086	6" SCH. 80



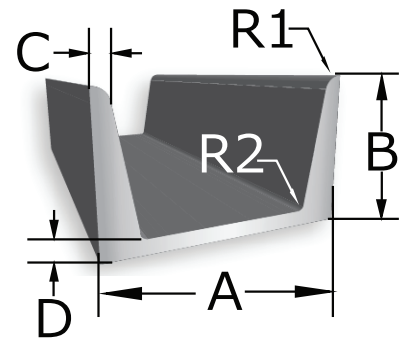
STRUCTURAL ANGLES

DIE #	A	B	C	R1	R2	WT/FT
NF6874	0.750	0.750	0.125	0.094	0.125	0.205
NF2492	1.000	1.000	0.125	0.094	0.125	0.282
NF3550	1.000	1.000	0.188	0.094	0.125	0.408
NF3220	1.000	1.000	0.250	0.094	0.094	0.524
NF5867	1.250	1.250	0.188	0.188	0.250	0.524
NF4442	1.250	1.250	0.250	0.125	0.094	0.670
NF6392	1.250	1.500	0.188	0.125	0.188	0.577
NF2016	1.500	1.500	0.125	0.125	0.188	0.432
NF2022	1.500	1.500	0.188	0.125	0.188	0.636
NF2430	1.500	1.500	0.250	0.188	0.125	0.826
NF2545	1.500	2.000	0.188	0.125	0.188	0.744
NF5387	1.500	3.000	0.125	0.125	0.188	0.658
NF4059	1.500	5.000	0.125	0.125	0.188	0.958
NF1203	1.750	1.750	0.188	0.125	0.188	0.752
NF7836	1.750	1.750	0.250	0.125	0.188	0.976
NF7880	2.000	1.500	0.250	0.125	0.188	0.976
NF2506	2.000	2.000	0.125	0.250	0.125	0.589
NF2247	2.000	2.000	0.188	0.188	0.188	0.850
NF2444	2.000	2.000	0.250	0.125	0.250	1.133
NF6736	2.000	2.000	0.375	0.250	0.250	1.615
NF2526	2.000	2.500	0.188	0.125	0.250	0.980
NF7823	2.000	2.500	0.250	0.125	0.250	1.283
NF1628	2.000	3.000	0.188	0.188	0.250	1.069
NF2226	2.000	3.000	0.250	0.188	0.312	1.432
NF2225	2.000	3.000	0.312	0.188	0.312	1.762
NF7853	2.000	3.000	0.375	0.188	0.312	2.088



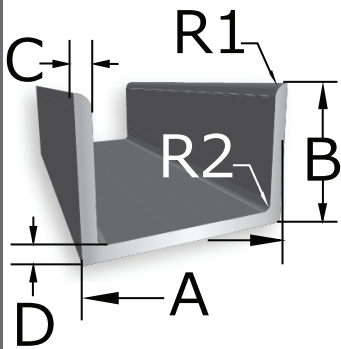
STRUCTURAL ANGLES

DIE #	A	B	C	R1	R2	WT/FT
NF3288	2.000	4.000	0.188	0.188	0.188	1.309
NF2509	2.000	4.000	0.250	0.250	0.375	1.724
NF8060	2.000	6.000	0.188	0.187	0.500	1.805
NF2354	2.250	2.500	0.250	0.125	0.250	1.355
NF3780	2.500	2.500	0.188	0.125	0.250	1.092
NF2523	2.500	2.500	0.250	0.125	0.250	1.433
NF2346	2.500	2.500	0.375	0.125	0.250	2.089
NF3783	2.500	3.500	0.250	0.250	0.312	1.717
NF3472	3.000	3.000	0.188	0.250	0.312	1.309
NF2544	3.000	3.000	0.250	0.250	0.312	1.706
NF6945	3.000	3.000	0.375	0.250	0.312	2.524
NF7535	3.000	3.000	0.500	0.250	0.313	3.210
NF3775	3.000	4.000	0.375	0.250	0.375	2.986
NF3776	3.000	4.000	0.500	0.250	0.375	3.904
NF7975	3.000	5.000	0.250	0.250	0.380	2.330
NF7854	3.000	5.000	0.375	0.312	0.375	3.418
NF7879	3.500	3.500	0.250	0.250	0.375	2.029
NF8634	3.500	5.000	0.313	0.313	0.438	3.070
NF8615	3.500	5.000	0.375	0.313	0.438	3.655
NF6835	4.000	3.000	0.250	0.250	0.375	2.029
NF7277	4.000	4.000	0.250	0.250	0.375	2.275
NF7278	4.000	4.000	0.375	0.250	0.375	3.357
NF7924	4.000	4.000	0.500	0.250	0.375	4.504
NF8135	4.000	6.000	0.250	0.250	0.500	2.957
10190	4.000	6.000	0.375	0.375	0.500	4.323
NF7953	4.000	6.000	0.500	0.375	0.500	5.692
NF8035	5.000	5.000	0.500	0.375	0.500	5.692



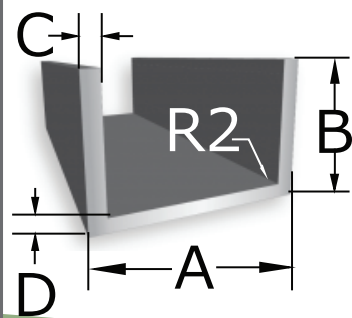
STRUCTURAL CHANNELS-AMERICAN STANDARD
(SR)= STRCT. CHANNEL w/SLOPE RATIO 1/6

	DIE #	A	B	C	D	R1	R2	WT/FT
	NF7930	3.000	1.250	(S)	0.358	0.100	0.270	2.310
(SR)	NF1629	3.000	1.410	(S)	0.170	0.100	0.270	1.531
(SR)	NF7059	3.000	1.498	(S)	0.258	0.100	0.270	1.799
(SR)	NF7037	3.000	1.596	(S)	0.356	0.110	0.280	2.106
	NF7318	3.000	1.750	(S)	0.437	0.312	0.250	3.230
(SR)	NF7060	4.000	1.580	(S)	0.180	0.110	0.280	1.837
(SR)	NF7061	4.000	1.647	(S)	0.247	0.110	0.280	2.159
(SR)	NF7160	4.000	1.720	(S)	0.320	0.110	0.280	2.502
(SR)	NF7062	5.000	1.750	(S)	0.190	0.110	0.290	2.212
	NF6999	6.000	1.945	(S)	0.225	0.120	0.300	3.018
	NF7322	6.000	1.920	(S)	0.200	0.120	0.300	2.774
	NF7961	6.000	2.034	(S)	0.314	0.120	0.300	3.678
	NF8070	6.000	2.157	(S)	0.437	0.120	0.300	4.582
	NF7927	8.000	2.290	(S)	0.250	0.138	0.320	4.480
	NF8691	8.000	2.527	0.220	0.487	0.320	0.320	6.691
	NF8692	10.000	2.600	0.240	0.240	0.140	0.340	5.194
	NF8693	12.000	2.960	0.280	0.300	0.170	0.380	7.338



SPECIAL CHANNELS

DIE #	A	B	C	D	R1	R2	WT/FT
NF4917	2.020	0.875	0.125	0.125	0.125	0.012	0.521
NF3806	3.000	1.410	0.170	0.170	0.100	0.270	1.151
NF5229	4.528	2.320	0.462	0.475	0.010	0.250	4.658



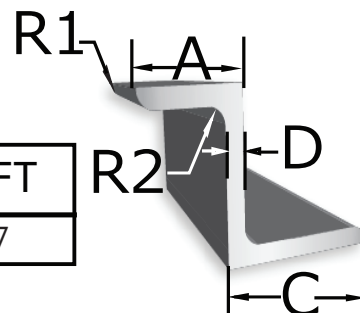
ALUMINUM ASSOCIATION CHANNELS

DIE #	A	B	C	D	R1	R2	WT/FT
NF8687	4.000	2.500	0.250	0.250		0.250	2.582
NF7979	5.000	2.750	0.320	0.190		0.300	3.152
NF7884	6.000	2.500	0.290	0.170	(S)	0.300	2.892
NF8048	6.000	3.250	0.350	0.210		0.300	4.112



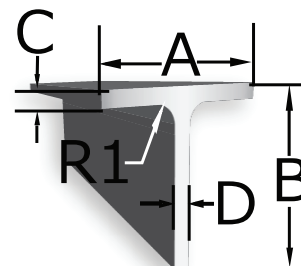
STRUCTURAL "Z"

DIE #	A	B	C	D	R1	R2	WT/FT
NF2167	1.750	4.000	1.750	0.188	0.188	0.188	1.607



STRUCTURAL "T"

DIE #	A	B	C	D	R	WT/FT
NF6436	2.000	2.000	0.250	0.250	0.093	1.125

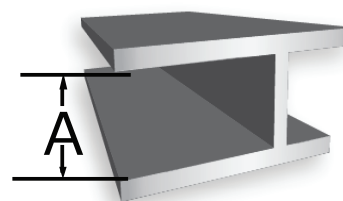


PLYWOOD CLIPS

DIE #	A	WT/FT
NF1026	0.437	0.150
NF1025	0.468	0.152
NF0796	0.500	0.155
NF0809	0.625	0.162
NF1317	0.593	0.150
NF1363	0.750	0.148
NF6166	0.750	0.187

PLYWOOD "H" MOLDING

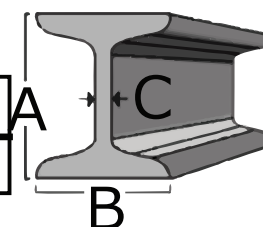
DIE #	A	WT/FT
NF0472	0.375	0.115
NF4364	0.375	0.269
NF0406	0.438	0.110
NF6114	0.500	0.118



"I" BEAMS

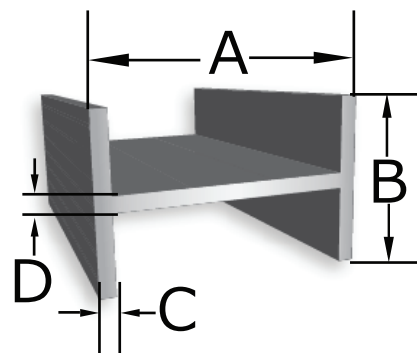
(AMERICAN STD., SEE DRAWING)

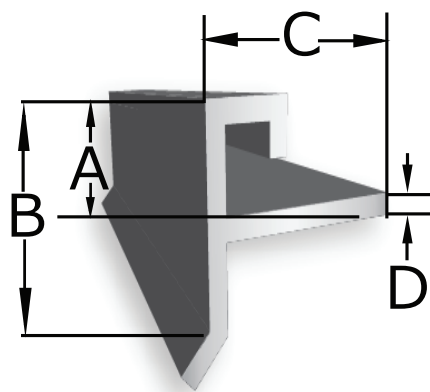
DIE #	A	B	C	WT/FT
NF7939	6.000	3.330	0.230	4.162



"I" BEAMS (FOR BOAT TRAILER BEAMS USE 6061-T6.)

DIE #	A	B	C	D	WT/FT
61031	1.500	0.750	0.060	0.085	0.252
60235	1.600	1.050	0.050	0.500	0.215
NF8027	3.000	2.500	0.260	0.150	2.029
NF7484	3.500	3.000	0.260	0.175	2.470
61139	4.000	2.250	0.130	0.090	1.121
NF8243	4.000	3.000	0.290	0.170	2.862
NF6982	4.015	2.250	0.250	0.188	2.131
NF6640	4.500	2.938	0.260	0.175	2.699
NF6330	4.697	3.583	0.100	0.100	1.369
10159	5.000	3.000	0.210	0.210	2.680
NF6641	5.500	3.500	0.280	0.175	3.532





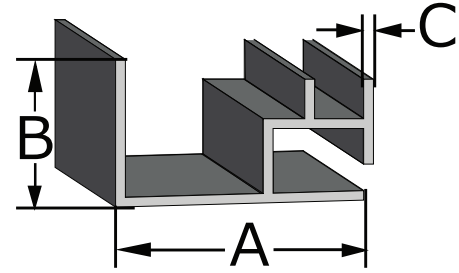
CONCRETE " T " BARS,(d) RAIN DRIP, (g)GROOVES ON DIM. B

	DIE #	A	B	C	D	WT/FT
	NF0155	1.000	2.425	2.000	0.050	0.310
(d)	NF1383	1.465	3.000	1.830	0.070	0.478
(d)	NF4087	1.500	2.500	2.000	0.050	0.338
(d)	NF5428	1.500	2.625	4.000	0.050	0.458
(d)	NF7108	1.500	2.750	3.000	0.050	0.406
(g)(d)	NF1409	1.500	2.750	3.000	0.070	0.544
	NF0167	1.500	2.925	2.050	0.050	0.322
	NF1407	1.500	3.000	3.000	0.070	0.539
(d)	NF5514	1.500	3.000	2.000	0.050	0.371
(d)	NF6506	1.500	3.000	3.000	0.050	0.454
	NF6620	1.500	3.000	4.000	0.062	0.553
(d)	NF6283	1.500	3.000	4.000	0.062	0.593
	NF6153	1.500	3.500	2.000	0.050	0.351
(d)	NF6154	1.500	3.870	2.000	0.050	0.394
(d)	NF5697	1.500	3.870	2.500	0.050	0.421
(d)	NF1391	1.500	4.000	1.070	0.070	0.499
(d)	NF1420	1.500	4.500	1.570	0.070	0.587
(d)	NF6357	1.500	5.000	3.500	0.085	1.024
(d)	NF4391	2.000	2.625	4.000	0.050	0.458
	NF1514	2.000	2.625	4.000	0.050	0.426
(d)	NF1371	2.000	3.000	1.800	0.050	0.347
(d)	NF4824	2.000	3.056	3.000	0.065	0.565
(d)	NF7106	2.000	3.100	3.000	0.065	0.565
	NF1853	2.000	3.375	2.000	0.062	0.442
(d)	NF4388	2.000	3.375	3.000	0.070	0.637
(d)	NF5304	2.000	3.875	2.500	0.050	0.434
(d)	NF4594	2.000	5.597	2.000	0.070	0.718
(d)	NF6281	2.000	2.489	2.750	0.0625	0.533
(d)	NF5317	2.500	3.500	2.000	0.070	0.511
	NF3916	2.500	3.935	2.000	0.060	0.466
(d)	NF4789	2.500	3.935	2.000	0.060	0.500
(d)	NF4945	2.500	4.000	2.000	0.075	0.604
(d)	NF6282	2.500	4.000	4.000	0.078	0.863
(d)	NF6384	2.500	4.500	4.000	0.070	0.809
(d)	NF5640	2.500	5.000	2.000	0.060	0.577
(d)	NF6158	2.500	6.500	3.000	0.093	1.140
(d)	NF1959	2.850	3.500	2.000	0.080	0.620
(d)	NF4132	3.000	5.000	2.000	0.062	0.599
(d)	NF7107	3.000	5.000	3.000	0.080	0.948
(d)	NF4575	3.500	4.000	3.500	0.080	0.826
(d)	NF6271	3.500	5.375	2.500	0.080	0.856
(d)	NF6270	4.000	5.875	2.500	0.080	0.904



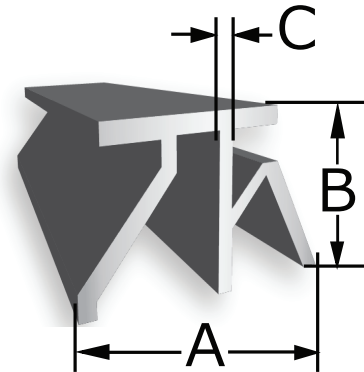
SKYLIGHT SELF-FLASHING

DIE #	A	B	C	WT/FT
NF1358	2.125	2.750	0.070	0.917
NF6101	3.500	3.000	0.058	0.664



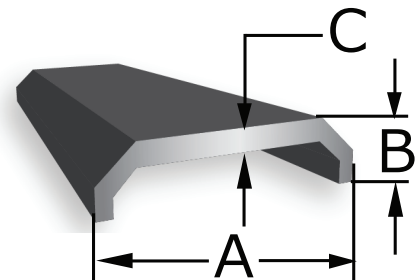
THRESHOLD-CARPET

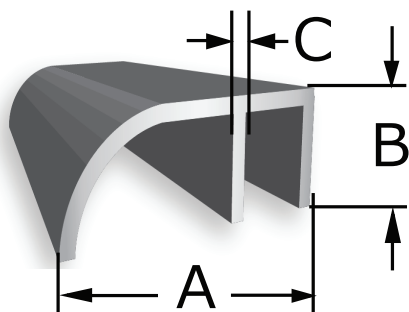
DIE #	A	B	C	WT/FT
NF6530	3.375	0.500	0.070	0.325
NF7018	3.882	1.233	0.075	0.589
NF1162	4.000	1.250	0.062	0.518
NF0107	4.000	1.626	0.062	0.682



THRESHOLD-SADDLE (COMMERCIAL & RESIDENTIAL)

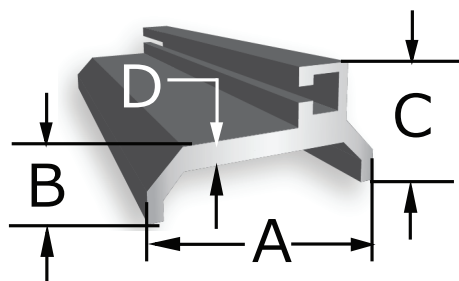
DIE #	A	B	C	WT/FT
NF3149	3.000	0.500	0.125	0.606
NF6751	4.000	0.250	0.125	0.583
NF0294	4.000	0.500	0.109	0.620
NF6255	4.000	0.500	0.188	0.784
NF5739	4.000	0.525	0.050	0.385
NF6397	5.000	0.250	0.100	0.624
NF5725	5.000	0.500	0.050	0.527
NF5743	5.000	0.500	0.050	0.555
NF5726	5.000	0.500	0.100	0.725
NF4874	6.000	0.500	0.080	0.713
NF6408	7.000	0.500	0.188	1.378





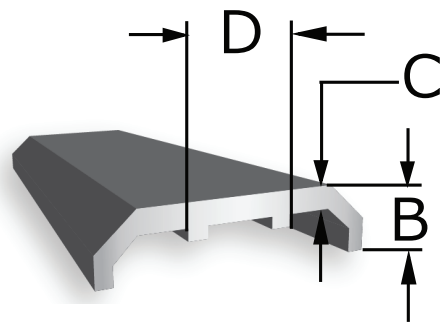
THRESHOLD-BUMP

DIE #	A	B	C	WT/FT
NF1205	1.785	1.250	0.062	0.425
NF0754	2.750	0.625	0.055	0.270
NF3149	3.000	0.500	0.125	0.606
NF6078	4.500	0.500	0.187	0.904



THRESHOLD-PANIC

DIE #	A	B	C	D	WT/FT
NF0903	3.690	0.625	0.950	0.125	0.749
NF3056	4.000	0.500	0.925	0.125	0.780
NF3314	5.000	0.250	0.500	0.125	0.806
NF5744	5.000	0.250	0.500	0.125	0.815
NF3050	5.000	0.375	0.625	0.125	0.860
NF6868	5.000	0.405	0.850	0.140	0.962

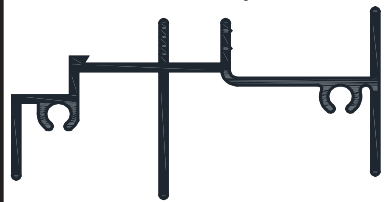
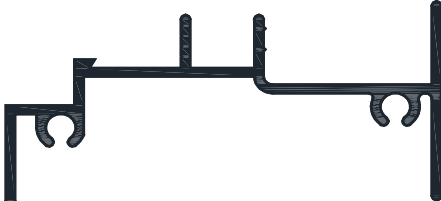
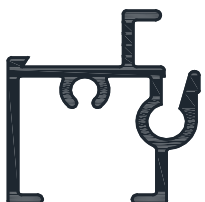
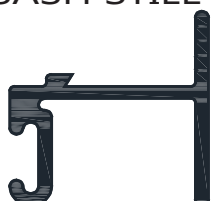
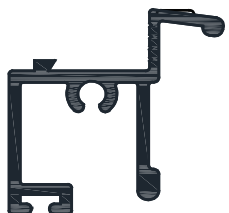


THRESHOLD w/LEGS

DIE #	A	B	C	D	WT/FT
NF6756	6.000	0.250	0.125	2.500	0.886



REPLACEMENT SECTIONS

MUTIN  DIE#NF0181 WT./FT.= 0.164	MAIN FRAME, HEADER W/FIN  DIE#NF1017 WT./FT.= 0.361	HEAD  DIE#NF1110 WT./FT.= 0.244
MAIN FRAME, JAMB W/FIN  DIE#NF1019 WT./FT.= 0.418	JAMB  DIE#NF1112 WT./FT.= 0.418	SILL  DIE#NF1111 WT./FT.= 0.286
FIXED MEETING RAIL  DIE#NF1114 WT./FT.= 0.228	INT. MEETING RAIL  DIE#NF1113 WT./FT.= 0.332	SASH STILE  DIE#NF1116 WT./FT.= 0.143
LIFT RAIL #1  DIE#NF1115 WT./FT.= 0.283		

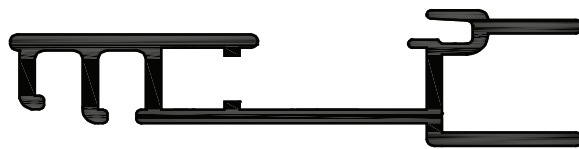
SCREEN WINDOW

GLASS LIFT W/POCKET



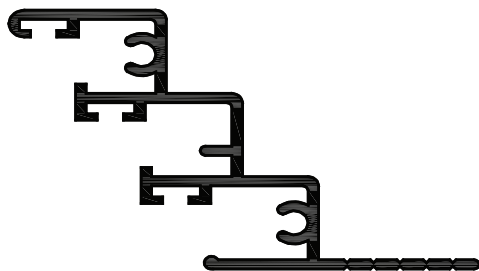
DIE#NF1156 WT./FT.= 0.230

SCREEN LIFT W/POCKET



DIE#NF0745 WT./FT.= 0.263

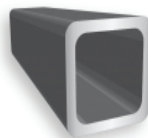
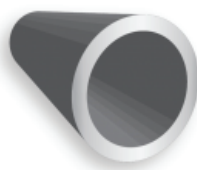
MAIN FRAME JAMB, HEAD & SILL



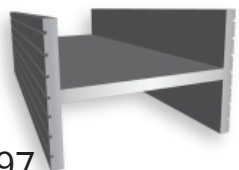
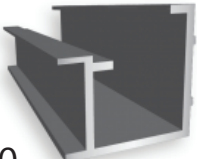
DIE#NF0180 WT./FT.= 0.409



CANVAS AWNING

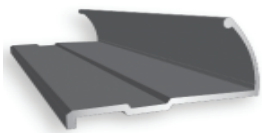
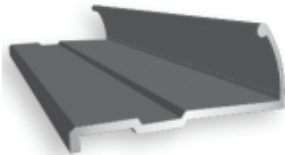
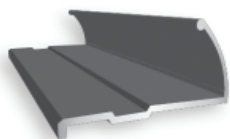
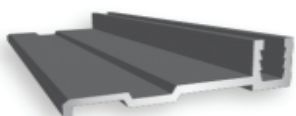
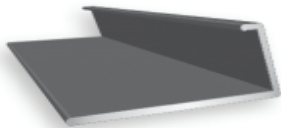
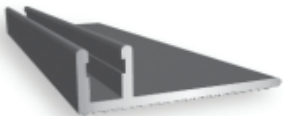
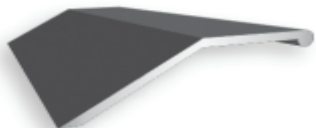
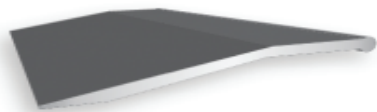
1" x 1-1/6" TUBE w/RADIUS  DIE#NF1931 STOCK LENGHT:24'	3/4" x 3/4" x 1/16" TUBE w/RADIUS  DIE#NF2222 STOCK LENGHT:24'
TRAILER MOLDING  DIE#NF1832 STOCK LENGHT:24'	LACE BAR  DIE#NF2236 STOCK LENGHT:24'

CARPORT

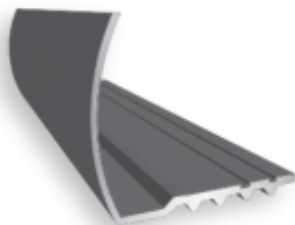
	3" CARPORT "C" CHANNEL  DIE#NF1218 STOCK LENGHT: 20' & 24'
3" CARPORT "I" BEAM  DIE#NF0297 STOCK LENGHT: 20' & 24'	3" CARPORT "E" CHANNEL  DIE#NF1320 STOCK LENGHT: 20' & 24'
GUTTER  DIE#NF6730 STOCK LENGHT: 20' & 24'	DOUBLE "I" BEAM  DIE#NF7627 STOCK LENGHT: 20' & 24'



CARPET TRIM

		5/8" CARPET TRIM	
			
		DIE# NF2583	WT/FT: 0.122
1/2" CARPET TRIM		BLANK TAP DOWN CARPET TRIM	
			
DIE# NF2219		WT/FT: 0.096	DIE# NF2525
			WT/FT: 0.110
3/4" CARPET TRIM		UNIVERSAL TRIM PIN TYPE	
			
DIE# NF2218		WT/FT: 0.120	DIE# NF2220
			WT/FT: 0.102
1/2" TRIM		3/4" OVERLAP DOOR MOULDING FOR 5/32"	
			
DIE# NF2179		WT/FT: 0.085	DIE# NF2605
			WT/FT: 0.133
F-CLIP		1'-1/2" BINDER BAR	
			
DIE# NF2180		WT/FT: 0.091	DIE# NF2420
			WT/FT: 0.092
1" BINDER BAR		2" BINDER BAR	
			
DIE# NF2421		WT/FT: 0.061	DIE# NF2512
			WT/FT: 0.193

1-1/8" STAIR NOSING
APPLIED AFTER



DIE:NF2549

WT/FT: 0.096

CAP FOR 1/16" MATERIAL
APPLIED BEFORE



DIE:NF2584

WT/FT: 0.135

2" x 1" x 1/2" x 0.188"
BULB "T"



DIE:NF7392

WT/FT: 1.239

3" x 1/4" BULB "T"



DIE:NF7393

WT/FT: 1.342

3" BULB "T"



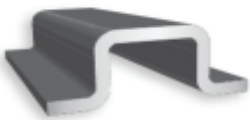
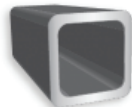
DIE:NF7394

WT/FT: 0.685



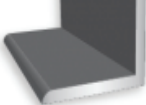
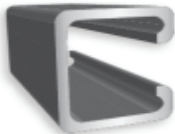
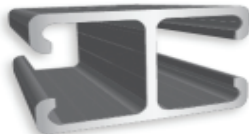
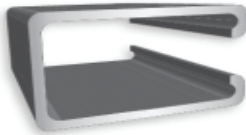
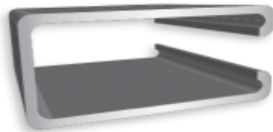
BOAT TRAILER EXTRUSIONS 6061-T6

(b) FABRICATION DRAWINGS AVAILABLE

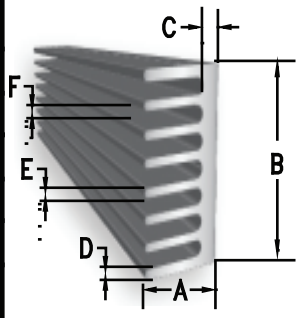
CHANNEL BRACKET	ANGLE BRACKET	STEP EXTRUSION
 (b) DIE# NF6678 WT/FT: 3.539	 (b) DIE# NF6642 WT/FT: 2.731	 DIE# NF6639 WT/FT: 1.474
"I" BEAM 3.5"x5.5"  DIE# NF6641 WT/FT: 3.532	"I" BEAM 2.938"x4.5"  DIE# NF6640 WT/FT: 2.699	2"x.188" SQ. TUBE w/RADIUS (MATES w/NF6678)  DIE# NF2962 WT/FT: 1.598
3"x.188" SQ. TUBE w/RADIUS  DIE# NF6623 WT/FT: 2.471	3"x.250" SQ. TUBE w/RADIUS  (b) DIE# NF6649 WT/FT: 3.203	HEAVY ANGLE 2.281"x1.750"x0.375"  (b) DIE# NF6643 WT/FT: 1.721

STRUCTURAL ANGLE 3"x3"x0.250"  DIE# NF2544 WT/FT: 1.679
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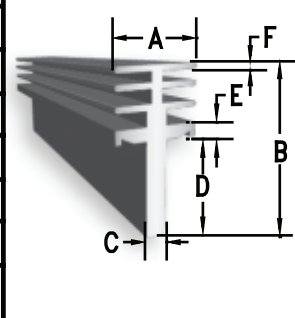
P-SERIES CHANNELS

 DIE# NF2544 WT/FT: 1.679	P-1000 CHANNEL  DIE# NF1226 WT/FT: 0.742	P-1001 DOUBLE CHANNEL  DIE# NF1380 WT/FT: 1.390
P-4000 CHANNEL  DIE# NF1283 WT/FT: 0.445	P-5500 CHANNEL  DIE# NF1469 WT/FT: 0.950	P-5000 CHANNEL  DIE# NF1345 WT/FT: 1.104

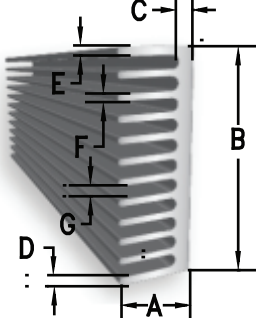
NF3165
A= 1.500
B= 2.500
C= 0.200
D= 0.185
E= 0.075
F= 0.240
G=
WT/FT= 1.931



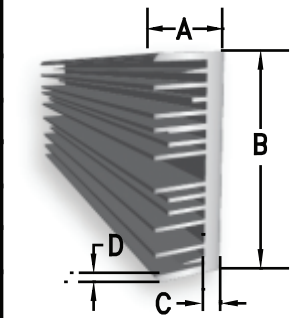
NF3185
A= 1.050
B= 1.890
C= 0.250
D= 1.070
E= 0.156
F= 0.063
G=
WT/FT= 0.828



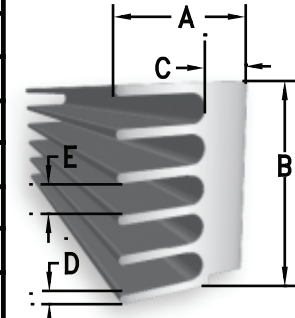
NF2637
A= 0.643
B= 1.846
C= 0.150
D= 0.075
E= 0.050
F= 0.060
G= 0.110
WT/FT= 0.758



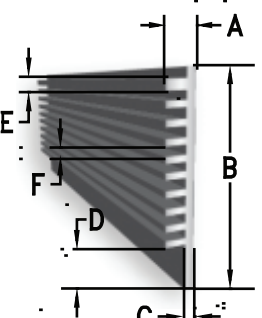
NF2644
A= 1.300
B= 4.000
C= 0.300
D= 0.100
E=
F=
G=
WT/FT= 2.389



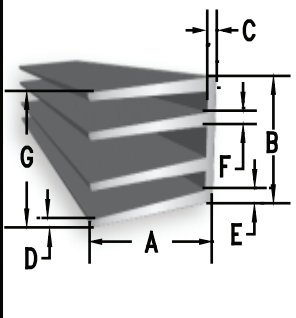
NF2733
A= 1.375
B= 1.900
C= 0.500
D= 0.080
E= 0.284
F=
G=
WT/FT= 1.661



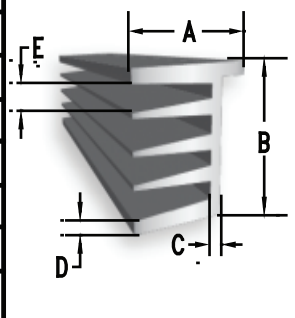
NF2760
A= 0.640
B= 4.450
C= 0.200
D= 1.013
E= 0.080
F= 0.233
G=
WT/FT= 1.517



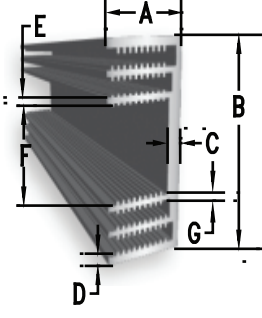
NF2795
A= 1.500
B= 1.180
C= 0.100
D= 0.060
E= 0.120
F= 0.100
G= 1.110
WT/FT= 0.707



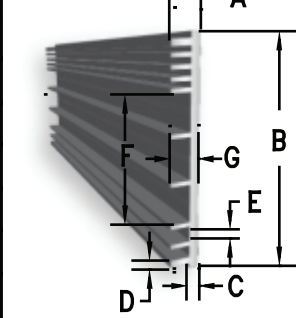
NF2809
A= 2.000
B= 2.000
C= 0.187
D= 0.167
E= 0.345
F=
G=
WT/FT= 1.991



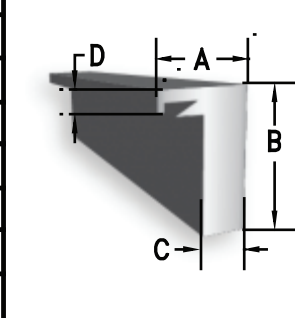
NF3063
A= 1.313
B= 2.875
C= 0.200
D= 0.078
E= 0.062
F= 1.317
G= 0.093
WT/FT= 1.312



NF3121
A= 0.500
B= 4.460
C= 0.100
D= 0.060
E= 0.150
F= 2.240
G= 0.445
WT/FT= 0.943



NF3147
A= 0.729
B= 1.100
C= 0.375
D= 0.098
E=
F=
G=
WT/FT= 0.560



NF3153
A= 0.630
B= 4.510
C= 0.100
D= 0.042
E= 0.075
F= 0.360
G=
WT/FT= 1.027

