

Alcoa Products

Extrusion Brazil



ALCOA

Alloys & Tempers

Alcoa Code	Main properties	Typical Applications	Minimum Mechanical Properties		
			Temper	Ultimate tensile Strength Mpa:N/mm2	Yield Tensile Strength Mpa:N/mm2
1050 1100	High corrosion resistance, excellent workability, easy welding, good response to bright anodization	Chemical, food processing and pharmaceutical industries, cooking utensils, refrigeration equipment parts	O O	60 75	20 30
1350	Excellent electrical conductivity, easy welding, high corrosion resistance	Bus bars	O	60	20
2011	Excellent machinability, high mechanical properties, fair corrosion resistance	Screw machine stock: excellent substitute for free machining brass	T3	290	205
3003	Good formability and weldability, fair corrosion resistance	Tubing for heat exchangers and car radiators	O	95	35
6005A	Excellent extrudability and strength, low impact resistance, good finishing response, weldability, formability and machinability	Structures, trucks and bus bodies, industrial equipments	T5	260	215
6060	Good corrosion resistance, finishing response, weldability, machinability, formability	Building products, bike rims, irrigation tubing, furniture, heat sinks	T5	150	110
6061	Excellent strength, corrosion resistance and machinability, poor finish response, good weldability and formability	Structures, trucks and bus bodies, boats	T4 T6	190 295	110 240
6063	Good corrosion resistance, finishing response, weldability, machinability, formability	Building products, bike rims, irrigation tubing, furniture, heat sinks	T4 T5 T6C T6	125 150 180 205	60 110 145 170
6082	Excellent strength, good corrosion resistance and formability	Structures, trucks and bus bodies, boats	T4 T6	180 290	120 255
6101	Best combination between strength and electrical conductivity	Bus bars	T6	200	170



ALCOA

Alloys & Tempers

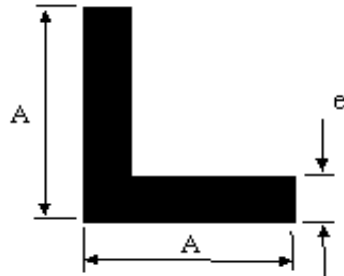
Alcoa Code	Main properties	Typical Applications	Minimum Mechanical Properties		
			Temper	Ultimate tensile Strength Mpa:N/mm2	Yield Tensile Strength Mpa:N/mm2
6261	Excellent strength, corrosion resistance and machinability, poor finish response, good weldability and formability	Structures, trucks and bus bodies, boats	T4	180	110
			T6C	255	215
			T6	265	225
6262	Excellent strength, corrosion resistance and formability	Screw machine stock: excellent substitute for free machining brass	T6	260	240
			T8	320	250
6351	High strength structural alloy. Provides good fatigue and impact resistance	Structures, trucks and bus bodies, boats	T4	220	130
			T6	290	255
6463	Produce a bright, mirror like, high quality finish, good machinability and formability	Home appliance trims, frames	T4	135	70
			T5	150	110
			T6C	180	145
			T6	205	170
7004	Excellent strength and weldability, good formability	Welded structures	T5	290	255
7075	Very high strength and machinability, good formability	Highly stressed parts, plastic and rubber molds, machine parts	T6	540	485
			T73	470	395



ALCOA

Angles

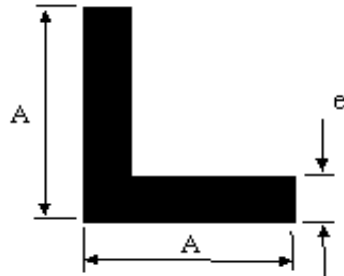
Equal Legs, Sharp Corners



ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
CT-083	0,472	0,047	0,050
CT-001	0,500	0,063	0,069
CT-002	0,500	0,094	0,100
CT-003	0,500	0,125	0,129
CT-084	0,591	0,051	0,068
CT-066	0,591	0,079	0,102
CT-005	0,625	0,063	0,087
CT-006	0,625	0,094	0,127
CT-004	0,625	0,125	0,165
CT-007	0,750	0,063	0,106
CT-009	0,750	0,094	0,155
CT-010	0,750	0,125	0,202
CT-085	0,787	0,051	0,089
CT-081	0,787	0,063	0,112
CT-052	0,787	0,079	0,138
CT-011	0,875	0,094	0,182
CT-012	0,875	0,125	0,239
CT-013	0,984	0,047	0,107
CT-086	0,984	0,055	0,124
CT-014	0,984	0,079	0,175
CT-015	1,000	0,047	0,108
CT-016	1,000	0,063	0,142
CT-018	1,000	0,094	0,210
CT-019	1,000	0,125	0,275
CT-020	1,000	0,188	0,399
CT-082	1,181	0,059	0,160
CT-054	1,181	0,118	0,311
CT-078	1,181	0,157	0,408
CT-075	1,181	0,197	0,501
CT-021	1,188	0,125	0,330
CT-022	1,250	0,125	0,349
CT-023	1,250	0,188	0,509
CT-087	1,417	0,126	0,395
CT-047	1,500	0,063	0,216
CT-049	1,500	0,079	0,270

Angles

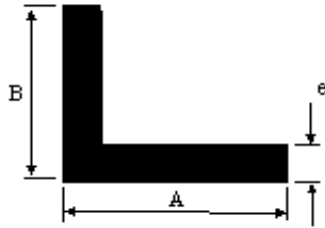
Equal Legs, Sharp Corners



ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
CT-026	1,500	0,125	0,422
CT-027	1,500	0,188	0,620
CT-028	1,500	0,250	0,808
CT-029	1,750	0,125	0,496
CT-059	1,969	0,118	0,530
CT-062	1,969	0,157	0,699
CT-060	1,969	0,197	0,865
CT-030	1,969	0,366	1,536
CT-031	2,000	0,079	0,363
CT-043	2,000	0,094	0,434
CT-032	2,000	0,125	0,569
CT-033	2,000	0,188	0,840
CT-034	2,000	0,250	1,102
CT-073	2,362	0,236	1,246
CT-035	2,500	0,125	0,716
CT-036	2,500	0,250	1,395
CT-063	2,756	0,236	1,464
CT-044	3,000	0,125	0,863
CT-045	3,000	0,188	1,281
CT-037	3,000	0,250	1,689
CT-038	3,000	0,375	2,478
CT-064	3,150	0,236	1,683
CT-040	3,937	0,394	3,460
CT-818	3,937	0,984	7,968
CT-046	4,000	0,125	1,155
CT-041	4,000	0,500	4,406

Angles

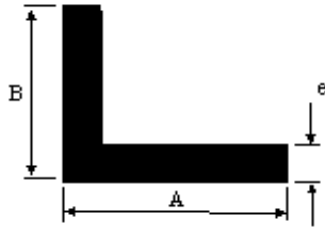
Unequal Legs, Sharp Corners



ALCOA Code	INCHES			Linear Weight WT/FT
	A	B	e	
CT-297	0,591	0,315	0,118	0,109
CT-293	0,748	0,315	0,059	0,070
CT-289	0,748	0,551	0,098	0,139
CT-285	0,750	0,500	0,063	0,087
CT-306	0,787	0,394	0,051	0,068
CT-203	0,906	0,748	0,079	0,146
CT-307	0,984	0,472	0,051	0,085
CT-286	1,000	0,500	0,094	0,155
CT-204	1,000	0,500	0,125	0,202
CT-205	1,000	0,750	0,125	0,239
CT-287	1,125	0,375	0,063	0,106
CT-300	1,181	0,354	0,059	0,102
CT-290	1,181	0,748	0,055	0,121
CT-292	1,181	0,787	0,063	0,141
CT-207	1,181	0,787	0,118	0,257
CT-209	1,260	0,638	0,047	0,103
CT-210	1,378	0,591	0,059	0,132
CT-244	1,496	1,181	0,118	0,355
CT-213	1,500	1,000	0,125	0,349
CT-237	1,500	0,750	0,125	0,313
CT-299	1,575	0,394	0,079	0,175
CT-296	1,575	0,472	0,079	0,182
CT-250	1,575	0,787	0,079	0,211
CT-277	1,575	1,181	0,079	0,248
CT-214	1,575	1,181	0,157	0,481
CT-216	1,693	0,591	0,118	0,301
CT-231	1,750	0,875	0,063	0,188
CT-305	1,949	1,122	0,047	0,168
CT-310	1,969	0,984	0,059	0,201
CT-268	1,969	0,787	0,079	0,248
CT-265	1,969	1,181	0,118	0,421
CT-217	2,000	1,000	0,125	0,423
CT-232	2,000	1,000	0,187	0,619
CT-218	2,000	1,250	0,079	0,293
CT-219	2,000	1,500	0,125	0,496

Angles

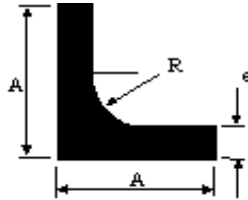
Unequal Legs, Sharp Corners



ALCOA Code	INCHES			Linear Weight WT/FT
	A	B	e	
CT-291	2,362	0,984	0,079	0,302
CT-251	2,362	1,575	0,118	0,530
CT-234	2,500	0,500	0,125	0,423
CT-328	2,500	1,976	0,313	1,531
CT-284	2,620	0,500	0,051	0,185
CT-271	2,953	1,969	0,197	1,093
CT-233	3,000	1,000	0,125	0,570
CT-226	3,000	2,000	0,125	0,717
CT-220	3,000	2,000	0,250	1,395
CT-253	3,937	1,969	0,197	1,320
CT-227	4,000	2,000	0,125	0,864
CT-273	4,000	3,000	0,375	2,921
CT-326	4,000	3,000	0,500	3,819
CT-327	4,000	3,000	0,313	2,459
CT-239	5,000	3,000	0,250	2,277
CT-298	6,378	2,000	0,374	3,517

Angles

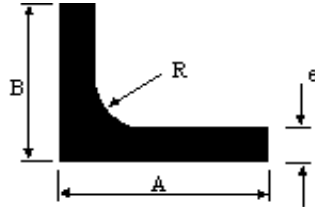
Equal Legs, Rounded Inside
Angle, Sharp Corners



ALCOA Code	INCHES			Linear Weight WT/FT
	A	e	R	
CT-431	1,000	0,188	0,188	0,408
CT-400	1,378	0,079	0,079	0,249
CT-401	1,378	0,138	0,118	0,427
CT-403	1,496	0,118	0,197	0,409
CT-408	1,500	0,188	0,188	0,628
CT-436	2,000	0,375	0,375	1,633
CT-411	2,000	0,250	0,250	1,117
CT-438	2,000	0,188	0,188	0,849
CT-441	2,000	0,157	0,315	0,735
CT-412	2,500	0,250	0,250	1,411
CT-425	2,500	0,375	0,375	2,073
CT-424	2,500	0,188	0,188	1,069
CT-437	3,000	0,250	0,250	1,705
CT-405	3,000	0,250	0,250	1,705
CT-429	3,500	0,375	0,375	2,955
CT-406	4,000	0,250	0,250	2,292

Angles

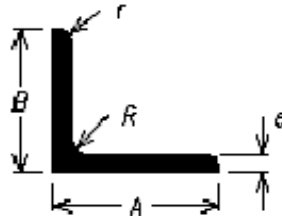
Unequal Legs, Rounded Inside Angle,
Sharp Corners



ALCOA Code	INCHES				Linear Weight WT/FT
	A	B	e	R	
CT-641	1,000	0,750	0,081	0,081	0,160
CT-626	1,250	1,000	0,125	0,125	0,316
CT-639	1,496	1,063	0,118	0,157	0,345
CT-644	1,969	0,709	0,098	0,039	0,299
CT-602	1,969	1,181	0,138	0,138	0,492
CT-617	2,000	1,500	0,188	0,188	0,739
CT-618	2,000	1,500	0,250	0,250	0,970
CT-620	2,500	1,500	0,250	0,250	1,117
CT-627	3,000	2,000	0,188	0,187	1,069
CT-605	3,000	2,000	0,250	0,250	1,411
CT-606	4,000	3,000	0,250	0,236	1,997
CT-607	4,000	3,000	0,375	0,375	2,955
CT-638	4,921	4,528	0,236	0,236	2,571
CT-628	5,000	3,500	0,375	0,375	3,616
CT-609	6,000	4,000	0,375	0,375	4,276

Angles

Equal Legs, Rounded Inside Angle, Rounded Inside Corners (Structural)



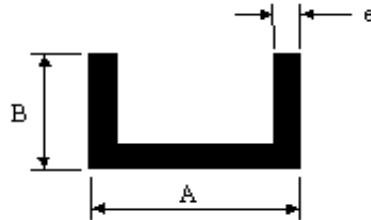
ALCOA Code	INCHES					Linear Weight WT/FT
	A	B	e	R	r	
CT-957	0,750	0,750	0,125	0,125	0,094	0,201
CT-833	1,250	1,250	0,125	0,188	0,125	0,350
CT-869	1,496	1,496	0,079	0,079		0,271
CT-802	1,500	1,500	0,125	0,188	0,125	0,423
CT-870	1,811	1,811	0,248	0,124	0,039	0,986
CT-992	2,000	2,000	0,125	0,197	0,148	0,569
CT-958	2,000	2,000	0,375	0,250	0,125	1,606
CT-806	2,000	2,000	0,188	0,250	0,125	0,848
CT-959	2,500	2,500	0,375	0,250	0,125	2,047
CT-930	3,000	2,000	0,188	0,313	0,188	1,067
CT-800	3,000	2,000	0,250	0,313	0,188	1,402
CT-955	3,000	2,000	0,375	0,312	0,188	2,046
CT-936	3,000	2,500	0,250	0,313	0,250	1,535
CT-810	3,000	3,000	0,250	0,313	0,250	1,682
CT-808	3,000	3,000	0,375	0,313	0,250	2,472
CT-960	3,000	3,000	0,500	0,312	0,250	3,224
CT-956	3,500	2,500	0,250	0,312	0,250	1,682
CT-948	3,500	3,000	0,250	0,375	0,250	1,840
CT-811	4,000	4,000	0,250	0,375	0,250	2,280
CT-812	4,000	4,000	0,375	0,375	0,250	3,364
CT-961	4,000	4,000	0,500	0,375	0,250	4,410
CT-0962	5,000	5,000	0,375	0,500	0,375	4,235
CT-986	6,000	6,000	0,375	0,500	0,375	5,114



ALCOA

Channels

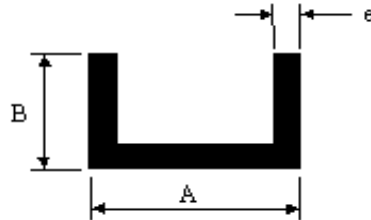
Sharp Corners



ALCOA Code	INCHES			Linear Weight WT/FT
	A	B	e	
PU-337	0,315	0,472	0,039	0,055
PU-301	0,315	0,480	0,047	0,066
PU-300	0,315	0,472	0,062	0,083
PU-335	0,315	0,748	0,079	0,153
PU-038	0,374	0,374	0,047	0,057
PU-340	0,374	0,622	0,051	0,091
PU-303	0,375	0,500	0,062	0,091
PU-001	0,375	0,375	0,063	0,074
PU-003	0,375	0,375	0,094	0,103
PU-336	0,394	0,787	0,059	0,128
PU-304	0,394	0,787	0,079	0,168
PU-339	0,472	0,591	0,039	0,073
PU-341	0,472	0,709	0,049	0,104
PU-201	0,500	0,375	0,063	0,083
PU-039	0,500	0,500	0,039	0,066
PU-041	0,500	0,500	0,055	0,090
PU-002	0,500	0,500	0,063	0,101
PU-040	0,591	0,591	0,063	0,122
PU-329	0,591	0,984	0,063	0,180
PU-316	0,591	1,000	0,059	0,172
PU-1209	0,610	0,551	0,059	0,111
PU-203	0,625	0,313	0,094	0,117
PU-204	0,625	0,375	0,094	0,131
PU-004	0,625	0,625	0,063	0,129
PU-021	0,625	0,625	0,094	0,186
PU-005	0,625	0,625	0,125	0,239
PU-006	0,630	0,630	0,059	0,123
PU-007	0,630	0,630	0,063	0,131
PU-315	0,681	0,984	0,059	0,176
PU-208	0,750	0,500	0,094	0,172
PU-206	0,750	0,375	0,094	0,145
PU-207	0,750	0,500	0,078	0,146
PU-008	0,750	0,750	0,063	0,156
PU-009	0,750	0,750	0,094	0,227
PU-010	0,750	0,750	0,125	0,294

Channels

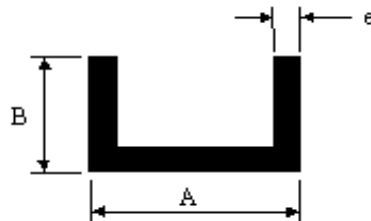
Sharp Corners



ALCOA Code	INCHES			Linear Weight WT/FT
	A	B	e	
PU-310	0,750	1,250	0,094	0,337
PU-1203	0,787	0,472	0,059	0,112
PU-285	0,787	0,591	0,059	0,128
PU-296	0,787	1,000	0,079	0,243
PU-317	0,827	1,614	0,051	0,238
PU-312	0,850	0,976	0,071	0,222
PU-241	0,866	0,445	0,051	0,099
PU-023	0,866	0,866	0,075	0,215
PU-011	0,875	0,875	0,094	0,268
PU-012	0,875	0,875	0,125	0,349
PU-259	0,906	0,591	0,059	0,137
PU-292	0,945	0,500	0,039	0,086
PU-1202	0,965	0,591	0,059	0,141
PU-013	0,984	0,984	0,079	0,259
PU-209	1,000	0,375	0,125	0,221
PU-210	1,000	0,500	0,079	0,170
PU-014	1,000	1,000	0,094	0,310
PU-211	1,000	0,500	0,125	0,257
PU-272	1,000	0,750	0,125	0,331
PU-015	1,000	1,000	0,125	0,404
PU-338	1,142	1,220	0,071	0,287
PU-212	1,181	0,591	0,118	0,295
PU-035	1,181	1,181	0,079	0,313
PU-016	1,181	1,181	0,091	0,358
PU-031	1,181	1,181	0,118	0,459
PU-213	1,250	0,375	0,125	0,257
PU-214	1,250	0,500	0,125	0,294
PU-018	1,250	1,250	0,125	0,515
PU-271	1,339	0,500	0,079	0,202
PU-019	1,375	1,375	0,125	0,570
PU-216	1,378	0,689	0,059	0,183
PU-280	1,394	0,394	0,047	0,116
PU-217	1,500	0,500	0,059	0,165
PU-218	1,500	0,500	0,071	0,196
PU-219	1,500	0,500	0,094	0,255

Channels

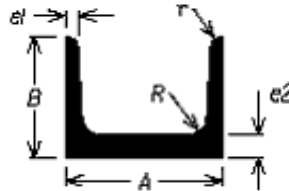
Sharp Corners



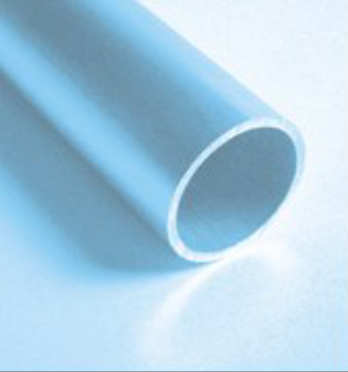
ALCOA Code	INCHES			Linear Weight WT/FT
	A	B	e	
PU-220	1,500	1,000	0,079	0,309
PU-256	1,500	1,000	0,125	0,478
PU-020	1,500	1,500	0,125	0,625
PU-279	1,575	0,984	0,138	0,529
PU-034	1,575	1,575	0,118	0,623
PU-221	1,875	0,750	0,094	0,351
PU-222	1,969	0,984	0,079	0,350
PU-1205	1,969	1,083	0,157	0,707
PU-1208	2,000	0,750	0,125	0,478
PU-270	2,000	0,875	0,125	0,515
PU-278	2,000	0,961	0,250	1,005
PU-1207	2,000	1,000	0,093	0,416
PU-223	2,000	1,000	0,125	0,552
PU-224	2,000	1,000	0,187	0,798
PU-290	2,150	0,591	0,118	0,429
PU-252	2,250	0,875	0,125	0,552
PU-226	2,362	0,787	0,079	0,350
PU-263	2,362	0,984	0,059	0,292
PU-1204	2,362	1,181	0,059	0,320
PU-277	2,362	1,575	0,157	0,962
PU-295	2,520	2,500	0,236	1,956
PU-227	3,000	1,000	0,125	0,699
PU-260	3,110	2,028	0,059	0,489
PU-1206	3,150	1,575	0,236	1,617
PU-230	3,150	1,969	0,157	1,253
PU-1211	3,248	1,000	0,055	0,333
PU-231	4,000	1,500	0,250	1,909
PU-233	4,000	2,000	0,124	1,130
PU-282	4,331	1,500	0,250	2,007
PU-234	4,528	0,787	0,071	0,496
PU-257	5,000	2,000	0,187	1,899
PU-245	5,000	2,000	0,250	2,497
PU-236	6,169	2,087	0,118	1,403
PU-237	8,000	2,433	0,386	5,483

Channels

Structural

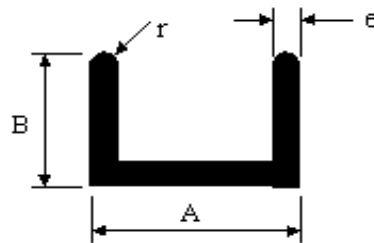


ALCOA Code	INCHES						Linear Weight WT/FT
	A	B	e1	e2	r	R	
PU-866	1,575	1,378	0,236	0,197	0,177	0,197	1,132
PU-851	3,000	1,378	0,170	0,170	0,100	0,270	1,415
PU-875	3,000	1,596	0,170	0,356	0,100	0,270	2,073
PU-854	4,000	1,580	0,180	0,180	0,110	0,280	1,845
PU-857	5,000	1,750	0,190	0,190	0,110	0,290	2,313
PU-859	6,000	1,920	0,200	0,200	0,120	0,300	2,823
PU-861	6,000	2,034	0,200	0,314	0,120	0,300	3,628
PU-863	7,000	2,110	0,210	0,230	0,130	0,310	3,539
PU-864	8,000	2,290	0,220	0,250	0,130	0,320	4,317
PU-873	10,000	2,600	0,240	0,240	0,140	0,340	5,081

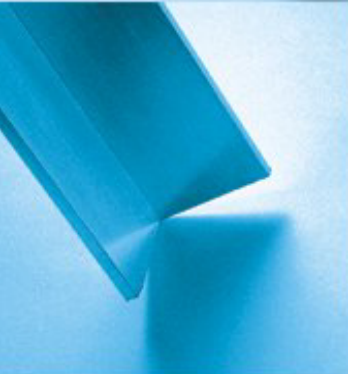


Channels

Sharp Angles, Rounded Corners

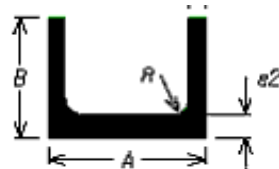


ALCOA Code	INCHES				Linear Weight WT/FT
	A	B	e	r	
PU-800	0,375	0,375	0,039	0,020	0,049



Channels

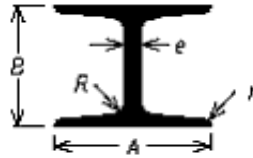
Miscellaneous



ALCOA Code	INCHES					Linear Weight WT/FT
	A	B	e1	e2	R	
PU-639	1,142	1,378	0,059	0,059	0,059	0,264
PU-652	1,969	1,417	0,118	0,118	0,236	0,662
PU-611	2,000	1,000	0,130	0,130	0,100	0,576
PU-663	2,000	1,250	0,260	0,170	0,150	1,070
PU-400	2,000	2,000	0,157	0,157	0,315	1,102
PU-613	3,000	1,500	0,200	0,130	0,250	1,133
PU-631	3,000	1,500	0,250	0,187	0,312	1,480
PU-627	3,000	1,500	0,312	0,250	0,312	1,846
PU-621	3,000	2,000	0,312	0,250	0,185	2,181
PU-601	3,150	1,260	0,079	0,079	0,079	0,513
PU-604	3,937	1,969	0,197	0,197	0,197	1,750
PU-622	4,000	1,750	0,281	0,250	0,374	2,236
PU-610	4,000	2,000	0,230	0,150	0,250	1,736
PU-632	4,000	2,000	0,250	0,187	0,375	2,015
PU-623	4,000	2,000	0,312	0,250	0,374	2,528
PU-664	4,000	2,250	0,290	0,190	0,250	2,330
PU-641	5,000	2,000	0,312	0,187	0,375	2,498
PU-615	5,000	2,250	0,260	0,150	0,300	2,209
PU-665	6,000	2,500	0,290	0,170	0,300	2,833
PU-628	6,000	2,500	0,312	0,250	0,437	3,507
PU-662	6,000	3,000	0,252	0,374	0,374	4,262
PU-618	6,000	3,250	0,350	0,210	0,300	4,025

H Beams

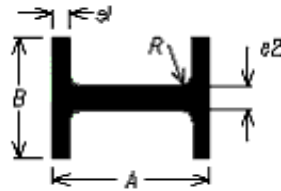
Structural



ALCOA Code	INCHES					Linear Weight WT/FT
	A	B	e1	e2	R	
PH-0001	2,330	3,000	0,170	0,270	0,100	1,962
PH-0005	4,000	4,000	0,313	0,313	0,145	4,761

H Beams

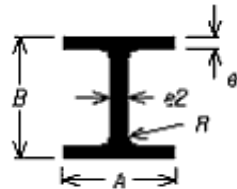
Wide Flange Beam (Structural)



ALCOA Code	INCHES					Linear Weight WT/FT
	A	B	e1	e2	R	
PF-003	0,976	1,500	0,079	0,079		0,353
PF-002	6,000	6,000	0,269	0,240	0,250	5,396

I Beams

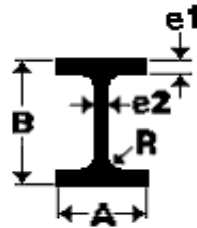
Rounded Inside angle (Structural)



ALCOA Code	INCHES					Linear Weight WT/FT
	A	B	e	r1	r2	
PI-0206	2,508	3,000	0,349	0,270	0,100	2,733
PI-0207	2,660	4,000	0,190	0,290	0,110	2,585
PI-0201	3,000	5,000	0,210	0,310	0,130	3,600

I Beams

Rounded Inside angle, Rounded Inside Corners
(Structural)

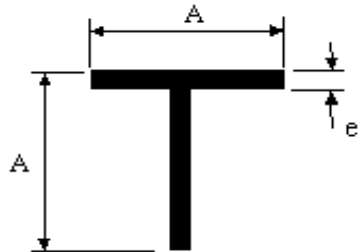


ALCOA Code	INCHES					Linear Weight WT/FT
	A	B	e1	e2	R	
PI-0410	1,500	3,000	0,100	0,100	0,120	0,356
PI-0412	2,362	6,299	0,087	0,087	0,118	1,102
PI-0408	2,500	3,000	0,250	0,187	0,375	1,875
PI-0409	3,000	4,000	0,250	0,187	0,375	2,386
PI-0212	3,000	4,000	0,290	0,170	0,250	1,875
PI-0419	3,000	5,000	0,250	0,217	0,374	2,910
PI-0420	3,543	5,906	0,315	0,197	0,236	2,610
PI-0418	5,000	8,000	0,410	0,242	0,300	6,841

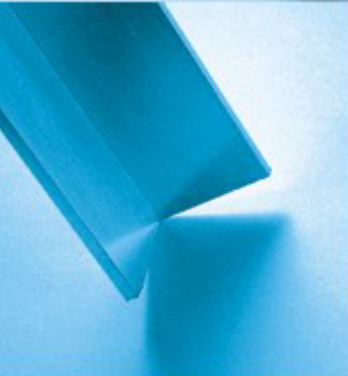


T Beams

Sharp angles, Sharp Corners

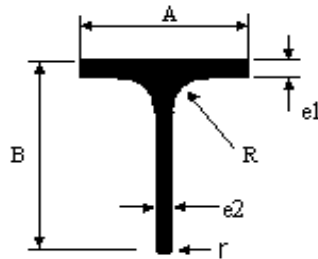


ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
PT-021	0,750	0,079	0,131
PT-004	0,750	0,062	0,105
PT-005	0,750	0,125	0,202
PT-007	0,875	0,125	0,239
PT-006	0,875	0,094	0,182
PT-010	1,000	0,125	0,276
PT-009	1,000	0,062	0,142
PT-008	1,000	0,047	0,108
PT-019	1,181	0,118	0,311
PT-012	1,250	0,125	0,349
PT-015	1,500	0,125	0,423
PT-014	1,500	0,062	0,215
PT-017	2,000	0,250	1,102
PT-016	2,000	0,125	0,570
PT-020	2,362	0,157	0,845
PT-018	3,000	0,125	0,864

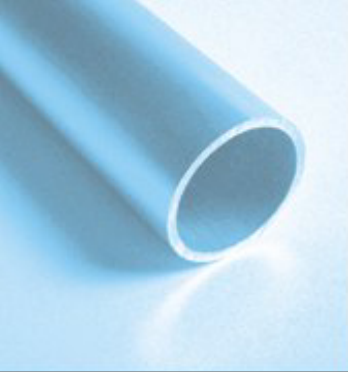


T Beams

Unequal Flanges and Thicknesses

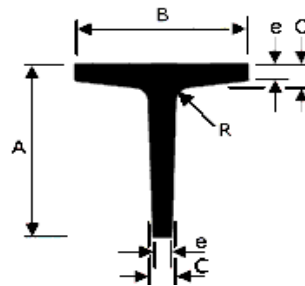
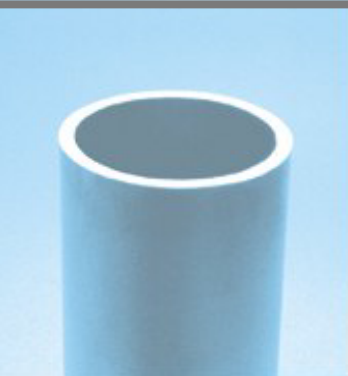


ALCOA Code	INCHES				Linear Weight WT/FT
	A	B	e1	e2	
PT-503	1,500	1,000	0,079	0,079	0,224
PT-504	3,346	2,953	0,157	0,157	1,136
PT-501	3,937	0,984	0,250	0,250	1,372
PT-502	4,000	4,000	0,254	0,188	2,060



T Beams

Taper Stem and Flanges Rounded angles, Sharp Corners

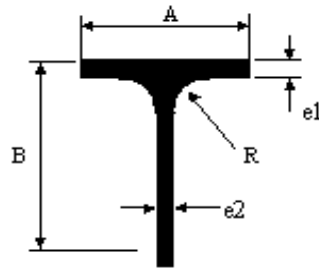


ALCOA Code	INCHES					Linear Weight WT/FT
	A	B	C	e	R	
PT-206	2,000	2,000	0,311	0,250	0,250	1,260



T Beams

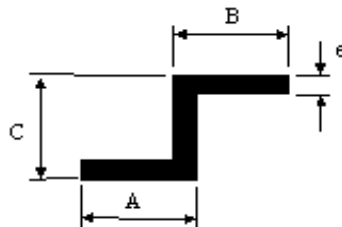
Rounde Inside angles



ALCOA Code	INCHES					Linear Weight WT/FT
	A	B	e1	e2	R	
PT-505	1,181	0,591	0,059	0,059	0,012	0,118
PT-207	2,559	1,260	0,197	0,197	0,079	0,839
PT-402	2,756	2,756	0,315	0,315	0,315	1,972
PT-208	2,953	1,260	0,236	0,236	0,079	1,105
PT-209	4,921	2,559	0,394	0,394	0,276	2,891
PT-403	5,500	3,516	0,250	0,250	0,250	2,606
PT-210	6,535	2,953	0,630	0,315	0,276	4,403

Z Beams

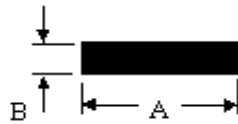
Sharp Corners



ALCOA Code	INCHES				Linear Weight WT/FT
	A	B	c	e	
PZ-003	0,630	0,984	0,886	0,098	0,266
PZ-005	0,984	0,898	0,626	-	0,267
PZ-006	0,984	0,984	2,047	0,079	0,357
PZ-008	1,000	0,622	1,000	-	0,347
PZ-009	1,102	0,488	0,858	0,094	0,251
PZ-016	1,102	0,492	0,984	0,098	0,275
PZ-015	1,181	0,669	1,181	0,079	0,266
PZ-017	1,181	1,732	1,181	0,079	0,364
PZ-010	1,575	0,945	3,937	0,079	0,583

Rods & Bars

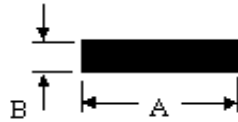
Extruded Rectangular Bar,
Sharp Corners



ALCOA Code	INCHES		Linear Weight WT/FT
	A	B	
BC-140	0,375	0,125	0,055
BC-220	0,375	0,187	0,083
BC-001	0,375	0,250	0,110
BC-243	0,437	0,125	0,064
BC-330	0,500	0,079	0,046
BC-002	0,500	0,125	0,073
BC-004	0,500	0,250	0,147
BC-005	0,500	0,375	0,220
BC-003	0,504	0,189	0,112
BC-326	0,625	0,095	0,069
BC-008	0,625	0,125	0,092
BC-009	0,625	0,187	0,138
BC-010	0,625	0,250	0,184
BC-011	0,625	0,375	0,275
BC-231	0,630	0,079	0,058
BC-171	0,748	0,150	0,131
BC-015	0,750	0,125	0,110
BC-016	0,750	0,187	0,165
BC-017	0,750	0,250	0,220
BC-018	0,750	0,375	0,330
BC-019	0,750	0,500	0,441
BC-0432	0,787	0,158	0,145
BC-020	0,799	0,118	0,111
BC-232	0,866	0,079	0,080
BC-021	0,875	0,125	0,129
BC-022	0,875	0,187	0,193
BC-023	0,875	0,250	0,257
BC-180	0,945	0,138	0,153
BC-170	0,984	0,079	0,091
BC-259	0,984	0,118	0,137
BC-310	0,984	0,315	0,364
BC-293	0,984	0,787	0,911
BC-329	1,000	0,062	0,073
BC-025	1,000	0,125	0,147
BC-357	1,000	0,126	0,148

Rods & Bars

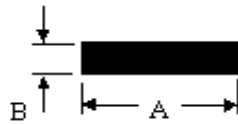
Extruded Rectangular Bar,
Sharp Corners



ALCOA Code	INCHES		Linear Weight WT/FT
	A	B	
BC-026	1,000	0,187	0,220
BC-027	1,000	0,250	0,294
BC-029	1,000	0,375	0,440
BC-030	1,000	0,500	0,587
BC-155	1,000	0,625	0,734
BC-031	1,000	0,750	0,881
BC-332	1,102	0,079	0,102
BC-251	1,181	0,118	0,164
BC-246	1,181	0,197	0,273
BC-276	1,181	0,472	0,656
BC-378	1,181	0,866	1,202
BC-344	1,181	0,945	1,311
BC-033	1,187	0,125	0,175
BC-035	1,187	0,250	0,349
BC-036	1,250	0,125	0,184
BC-037	1,250	0,187	0,275
BC-038	1,250	0,250	0,367
BC-040	1,250	0,375	0,550
BC-042	1,250	0,500	0,734
BC-156	1,250	0,625	0,918
BC-110	1,250	0,750	1,102
BC-111	1,250	1,000	1,469
BC-044	1,260	0,630	0,932
BC-360	1,299	0,669	1,022
BC-046	1,375	0,187	0,303
BC-048	1,375	0,375	0,605
BC-050	1,500	0,125	0,221
BC-051	1,500	0,187	0,330
BC-052	1,500	0,250	0,441
BC-053	1,500	0,375	0,661
BC-054	1,500	0,500	0,881
BC-157	1,500	0,625	1,101
BC-127	1,500	0,750	1,322
BC-112	1,500	1,000	1,762
BC-113	1,500	1,250	2,203

Rods & Bars

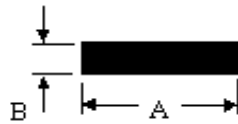
Extruded Rectangular Bar,
Sharp Corners



ALCOA Code	INCHES		Linear Weight WT/FT
	A	B	
BC-443	1,500	0,312	0,550
BC-302	1,575	0,118	0,219
BC-371	1,575	0,866	1,603
BC-168	1,614	0,118	0,224
BC-345	1,614	1,221	2,315
BC-237	1,693	0,169	0,337
BC-290	1,750	0,250	0,514
BC-173	1,750	0,375	0,771
BC-205	1,772	0,118	0,246
BC-343	1,772	1,181	2,459
BC-058	1,819	0,063	0,135
BC-342	1,850	0,079	0,171
BC-350	1,890	0,311	0,691
BC-059	1,969	0,079	0,182
BC-317	1,969	0,118	0,273
BC-253	1,969	0,315	0,728
BC-249	1,969	0,394	0,911
BC-139	1,969	0,551	1,275
BC-382	1,969	0,591	1,366
BC-281	1,969	0,787	1,821
BC-339	1,969	0,984	2,277
BC-337	1,972	0,071	0,164
BC-060	2,000	0,125	0,294
BC-061	2,000	0,187	0,440
BC-062	2,000	0,250	0,587
BC-153	2,000	0,312	0,734
BC-063	2,000	0,375	0,881
BC-064	2,000	0,500	1,175
BC-158	2,000	0,625	1,468
BC-065	2,000	0,750	1,762
BC-114	2,000	1,000	2,350
BC-163	2,000	1,250	2,937
BC-115	2,000	1,500	3,525
BC-066	2,008	1,260	2,972
BC-361	2,047	1,457	3,504

Rods & Bars

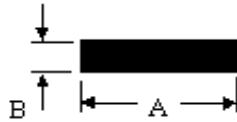
Extruded Rectangular Bar,
Sharp Corners



ALCOA Code	INCHES		Linear Weight WT/FT
	A	B	
BC-240	2,055	0,748	1,806
BC-146	2,126	0,945	2,360
BC-230	2,165	0,250	0,636
BC-305	2,165	0,394	1,002
BC-383	2,165	1,339	3,406
BC-346	2,205	0,079	0,204
BC-356	2,284	0,126	0,338
BC-193	2,362	0,158	0,437
BC-254	2,362	0,197	0,546
BC-308	2,362	0,236	0,656
BC-255	2,362	0,315	0,874
BC-256	2,362	0,394	1,093
BC-284	2,362	0,984	2,732
BC-436	2,362	1,181	3,278
BC-340	2,500	0,312	0,917
BC-068	2,500	0,187	0,550
BC-069	2,500	0,250	0,734
BC-327	2,500	0,335	0,983
BC-070	2,500	0,375	1,101
BC-071	2,500	0,500	1,469
BC-187	2,500	0,626	1,839
BC-159	2,500	0,750	2,203
BC-160	2,500	1,000	2,937
BC-128	2,500	1,500	4,406
BC-277	2,756	0,591	1,912
BC-144	2,874	0,118	0,399
BC-438	2,953	0,236	0,820
BC-435	2,953	0,394	1,366
BC-325	2,953	1,339	4,644
BC-072	3,000	0,125	0,441
BC-150	3,000	0,187	0,661
BC-131	3,000	0,250	0,881
BC-132	3,000	0,375	1,321
BC-073	3,000	0,500	1,762
BC-191	3,000	0,625	2,202

Rods & Bars

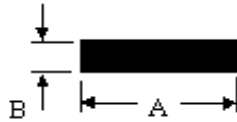
Extruded Rectangular Bar,
Sharp Corners



ALCOA Code	INCHES		Linear Weight WT/FT
	A	B	
BC-116	3,000	0,750	2,644
BC-129	3,000	1,000	3,525
BC-117	3,000	1,250	4,406
BC-074	3,000	1,500	5,287
BC-295	3,150	0,197	0,728
BC-297	3,150	0,315	1,166
BC-268	3,150	0,394	1,457
BC-296	3,150	0,787	2,914
BC-279	3,150	0,984	3,642
BC-280	3,150	1,181	4,371
BC-207	3,150	1,575	5,828
BC-075	3,228	2,008	7,616
BC-174	3,347	0,158	0,619
BC-196	3,347	2,559	10,062
BC-377	3,504	1,398	5,754
BC-178	3,543	0,118	0,492
BC-076	3,543	0,591	2,459
BC-077	3,563	1,457	6,098
BC-351	3,661	2,047	8,808
BC-078	3,740	0,158	0,692
BC-390	3,740	0,984	4,325
BC-257	3,937	0,394	1,821
BC-080	3,937	1,614	7,467
BC-081	4,000	0,125	0,588
BC-082	4,000	0,250	1,175
BC-083	4,000	0,375	1,762
BC-084	4,000	0,500	2,350
BC-086	4,000	0,750	3,525
BC-130	4,000	1,000	4,700
BC-164	4,000	1,250	5,875
BC-119	4,000	1,500	7,050
BC-120	4,000	2,000	9,400
BC-121	4,000	2,500	11,750
BC-393	4,000	3,500	16,450
BC-137	4,134	1,772	8,605

Rods & Bars

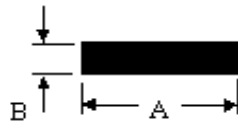
Extruded Rectangular Bar,
Sharp Corners



ALCOA Code	INCHES		Linear Weight WT/FT
	A	B	
BC-381	4,500	0,375	1,982
BC-394	4,500	2,500	13,219
BC-182	4,551	0,079	0,421
BC-434	4,567	0,394	2,113
BC-183	4,724	0,158	0,874
BC-399	4,724	0,236	1,311
BC-282	4,724	0,787	4,371
BC-136	4,764	2,677	14,985
BC-395	4,921	3,740	21,627
BC-134	5,000	0,187	1,101
BC-192	5,000	0,250	1,469
BC-089	5,000	0,375	2,202
BC-090	5,000	0,500	2,937
BC-091	5,000	0,625	3,671
BC-092	5,000	0,750	4,406
BC-123	5,000	1,000	5,875
BC-200	5,000	1,500	8,812
BC-364	5,000	1,750	10,281
BC-093	5,118	0,118	0,710
BC-359	5,315	2,559	15,981
BC-096	5,709	0,126	0,845
BC-372	5,787	0,126	0,857
BC-222	5,906	0,158	1,093
BC-097	6,000	0,250	1,762
BC-098	6,000	0,375	2,642
BC-124	6,000	0,500	3,525
BC-099	6,000	0,748	5,274
BC-162	6,000	1,000	7,050
BC-125	6,000	1,500	10,575
BC-126	6,000	2,000	14,100
BC-354	6,189	1,000	7,272
BC-101	6,299	0,394	2,914
BC-188	6,496	1,575	12,020
BC-433	6,535	1,654	12,698
BC-366	6,654	0,250	1,954

Rods & Bars

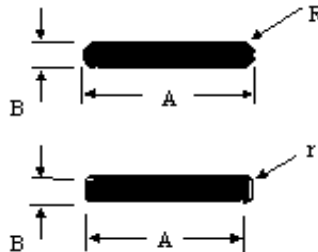
Extruded Rectangular Bar,
Sharp Corners



ALCOA Code	INCHES		Linear Weight WT/FT
	A	B	
BC-213	6,693	0,236	1,858
BC-102	6,890	0,374	3,028
BC-202	7,000	0,250	2,056
BC-103	7,087	0,158	1,311
BC-242	7,874	0,158	1,457
BC-348	7,874	0,500	4,626
BC-288	7,992	0,500	4,695
BC-203	8,000	0,250	2,350
BC-201	8,000	0,375	3,523
BC-105	8,000	1,000	9,400
BC-106	9,252	0,787	8,560
BC-107	10,000	0,250	2,937
BC-387	12,000	0,768	10,825
BC-392	12,000	0,250	3,525
BC-388	12,000	1,000	14,100

Rods & Bars

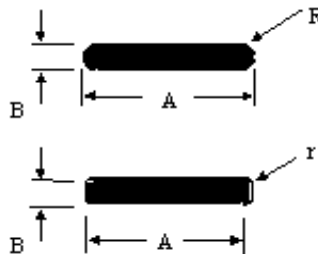
Extruded rectangular Bar Round Corners



ALCOA Code	INCHES				Linear Weight WT/FT
	A	B	R	r	
BC-566	0,472	0,098		0,020	0,054
BC-551	0,500	0,125		0,031	0,073
BC-555	0,500	0,156		0,031	0,091
BC-585	0,591	0,394		0,020	0,273
BC-500	0,625	0,125	0,062		0,088
BC-535	0,630	0,110	0,055		0,079
BC-534	0,630	0,150	0,075		0,105
BC-563	0,669	0,158	0,079		0,118
BC-575	0,748	0,126	0,063		0,107
BC-561	0,748	0,158		0,039	0,137
BC-538	0,748	0,185		0,039	0,161
BC-553	0,748	0,197	0,098		0,163
BC-557	0,748	0,250	0,125		0,204
BC-405	0,750	0,094		0,012	0,082
BC-568	0,750	0,187		0,059	0,162
BC-503	1,000	0,250	0,125		0,278
BC-556	1,000	0,375	0,187		0,405
BC-589	1,063	0,098			0,123
BC-590	1,063	0,197			0,236
BC-565	1,142	0,236			0,317
BC-504	1,221	0,622	0,311		0,794
BC-396	1,378	0,315		0,012	0,510
BC-569	1,500	0,126	0,063		0,218
BC-569	1,500	0,126	0,063		0,218
BC-505	1,500	0,250	0,125		0,425
BC-506	1,575	0,394		0,012	0,728
BC-507	1,626	1,063		0,012	2,031
BC-397	1,772	0,315		0,020	0,655
BC-596	1,811	1,024	0,197		2,139
BC-508	1,969	0,394		0,020	0,910
BC-543	2,000	0,472		0,079	1,104
BC-600	2,008	1,260	0,236		2,916
BC-510	2,362	0,472	0,043		1,309
BC-520	2,402	0,087		0,012	0,244
BC-511	2,500	1,500		0,020	4,406

Rods & Bars

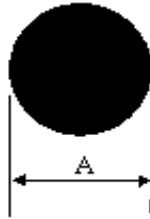
Extruded rectangular Bar Round Corners



ALCOA Code	INCHES				Linear Weight WT/FT
	A	B	R	r	
BC-512	2,559	0,591	0,079		1,769
BC-594	2,559	1,339	0,079		4,019
BC-560	2,559	1,496		0,016	4,498
BC-579	2,746	0,075	0,158		0,216
BC-593	2,835	1,732	0,250		5,707
BC-532	3,000	0,500	0,197		1,723
BC-592	3,701	2,047	0,125		8,886
BC-540	4,000	0,250	0,250		1,112
BC-515	4,000	0,500	0,250		2,287
BC-533	5,000	0,500		0,020	2,937
BC-516	5,512	0,787	0,250		5,036
BC-518	6,000	0,500		0,020	3,525
BC-586	7,250	0,313		0,039	2,661
BC-441	7,480	0,650		0,039	5,708
BC-442	7,480	0,492		0,016	4,325
BC-403	13,780	0,984		0,016	15,936
BC-404	15,748	0,984			18,212
BC-564	17,717	1,772			38,099

Rods & Bars

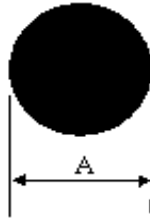
Extruded Round Rod



ALCOA Code	INCHES	Linear Weight WT/FT
	A	
VR-049	0,213	0,042
VR-001	0,219	0,044
VR-131	0,224	0,046
VR-002	0,250	0,058
VR-102	0,252	0,059
VR-156	0,258	0,061
VR-126	0,272	0,068
VR-050	0,276	0,070
VR-003	0,281	0,073
VR-130	0,295	0,080
VR-004	0,313	0,090
VR-052	0,315	0,091
VR-086	0,358	0,118
VR-157	0,362	0,121
VR-005	0,375	0,130
VR-006	0,394	0,143
VR-007	0,413	0,158
VR-008	0,423	0,165
VR-009	0,437	0,176
VR-061	0,472	0,206
VR-010	0,500	0,231
VR-011	0,512	0,242
VR-143	0,520	0,249
VR-115	0,531	0,261
VR-129	0,543	0,272
VR-012	0,562	0,292
VR-150	0,567	0,296
VR-142	0,571	0,301
VR-013	0,577	0,307
VR-172	0,581	0,311
VR-014	0,591	0,322
VR-083	0,602	0,335
VR-063	0,624	0,359
VR-015	0,625	0,360
VR-067	0,630	0,366

Rods & Bars

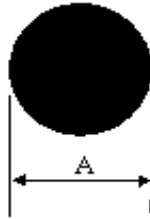
Extruded Round Rod



ALCOA Code	INCHES	Linear Weight WT/FT
	A	
VR-066	0,638	0,375
VR-058	0,646	0,385
VR-103	0,669	0,413
VR-173	0,705	0,458
VR-055	0,709	0,463
VR-062	0,748	0,516
VR-016	0,750	0,519
VR-153	0,768	0,544
VR-174	0,768	0,544
VR-125	0,776	0,555
VR-088	0,787	0,572
VR-139	0,799	0,589
VR-017	0,812	0,608
VR-074	0,827	0,630
VR-176	0,827	0,631
VR-122	0,835	0,643
VR-175	0,835	0,643
VR-105	0,866	0,692
VR-018	0,875	0,707
VR-145	0,894	0,737
VR-048	0,906	0,756
VR-120	0,913	0,770
VR-019	0,937	0,811
VR-099	0,945	0,823
VR-140	0,960	0,850
VR-092	0,965	0,858
VR-080	0,984	0,894
VR-020	1,000	0,922
VR-081	1,024	0,966
VR-051	1,051	1,019
VR-146	1,062	1,041
VR-047	1,067	1,050
VR-075	1,102	1,121
VR-021	1,125	1,167
VR-022	1,142	1,202

Rods & Bars

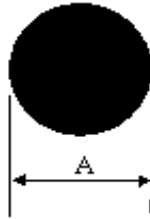
Extruded Round Rod



ALCOA Code	INCHES	Linear Weight WT/FT
	A	
VR-089	1,181	1,287
VR-148	1,187	1,300
VR-068	1,193	1,313
VR-023	1,250	1,441
VR-098	1,260	1,464
VR-123	1,268	1,482
VR-077	1,299	1,557
VR-060	1,311	1,585
VR-024	1,375	1,743
VR-085	1,378	1,751
VR-069	1,398	1,802
VR-182	1,437	1,906
VR-095	1,496	2,064
VR-025	1,500	2,075
VR-144	1,520	2,130
VR-117	1,535	2,175
VR-137	1,562	2,251
VR-026	1,575	2,287
VR-027	1,625	2,435
VR-124	1,642	2,486
VR-107	1,654	2,522
VR-078	1,732	2,768
VR-028	1,750	2,825
VR-076	1,772	2,895
VR-057	1,791	2,960
VR-135	1,811	3,025
VR-181	1,827	3,078
VR-053	1,874	3,239
VR-048	1,890	3,294
VR-138	1,937	3,462
VR-090	1,969	3,574
VR-029	2,000	3,689
VR-030	2,125	4,164
VR-091	2,165	4,325
VR-072	2,205	4,483

Rods & Bars

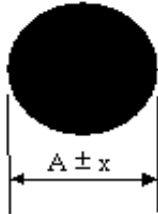
Extruded Round Rod



ALCOA Code	INCHES	Linear Weight WT/FT
	A	
VR-031	2,250	4,669
VR-032	2,283	4,809
VR-082	2,362	5,147
VR-046	2,375	5,202
VR-147	2,441	5,496
VR-033	2,500	5,765
VR-108	2,520	5,856
VR-079	2,559	6,040
VR-070	2,625	6,355
VR-035	2,752	6,985
VR-097	2,756	7,005
VR-071	2,874	7,619
VR-036	3,000	8,301
VR-110	3,150	9,150
VR-043	3,250	9,742
VR-111	3,346	10,329
VR-037	3,500	11,299
VR-133	3,661	12,365
VR-065	3,750	12,971
VR-038	4,000	14,758
VR-044	4,250	16,660
VR-154	4,331	17,299
VR-039	4,500	18,678
VR-155	4,724	20,587
VR-040	5,000	23,059
VR-160	5,118	24,161
VR-041	5,500	27,902
VR-161	5,512	28,022
VR-162	5,906	32,168
VR-134	5,945	32,598
VR-045	6,000	33,205
VR-127	6,142	34,792
VR-042	6,500	38,970

Rods & Bars

Wiredrawn Rod

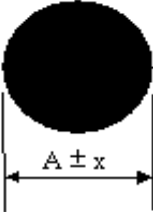


ALCOA Code	INCHES		Linear Weight WT/FT
	A	x	
VR-404	0,494	+ / - 0.002	0,231
VR-808	0,494	+ 0,00 - 0,04	0,231
VR-481	0,506	+ 0,00 - 0,04	0,242
VR-444	0,510	+ / - 0.002	0,246
VR-807	0,545	+ 0,00 - 0,04	0,280
VR-405	0,556	+ / - 0.002	0,292
VR-437	0,565	+ / - 0.002	0,302
VR-496	0,584	+ / - 0.002	0,322
VR-824	0,603	-	0,343
VR-446	0,616	+ / - 0.002	0,358
VR-406	0,618	+ / - 0.002	0,360
VR-479	0,630	+ / - 0.002	0,375
VR-497	0,634	+ / - 0.002	0,380
VR-454	0,679	+ / - 0.002	0,436
VR-483	0,679	+ 0,00 - 0,04	0,436
VR-438	0,703	+ / - 0.002	0,466
VR-498	0,720	+ / - 0.002	0,489
VR-436	0,739	+ / - 0.002	0,516
VR-407	0,741	+ / - 0.002	0,519
VR-829	0,755	+ / - 0.002	0,538
VR-499	0,763	+ / - 0.002	0,549
VR-478	0,772	+ / - 0.002	0,563
VR-484	0,778	+ 0,00 - 0,005	0,572
VR-449	0,798	+ / - 0.002	0,601
VR-408	0,803	+ / - 0.002	0,608
VR-814	0,811	+ / - 0.002	0,622
VR-442	0,817	+ / - 0.002	0,630
VR-806	0,821	+ / - 0.002	0,637
VR-441	0,825	+ / - 0.002	0,643
VR-467	0,834	+ / - 0.002	0,657
VR-809	0,840	+ / - 0.002	0,667
VR-471	0,856	+ / - 0.002	0,692
VR-409	0,865	+ / - 0.002	0,706
VR-815	0,874	+ / - 0.002	0,721
VR-465	0,875	+ / - 0.002	0,724

0,5000

Rods & Bars

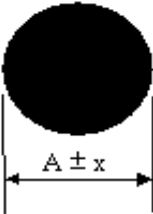
Wiredrawn Rod



ALCOA Code	INCHES		Linear Weight WT/FT
	A	x	
VR-810	0,883	+ / - 0.002	0,737
VR-439	0,896	+ / - 0.002	0,758
VR-801	0,903	+ / - 0.002	0,770
VR-466	0,926	+ / - 0.002	0,811
VR-421	0,934	+ / - 0.002	0,823
VR-816	0,936	+ / - 0.002	0,827
VR-819	0,940	+ / - 0.002	0,834
VR-812	0,944	+ / - 0.002	0,841
VR-450	0,957	+ / - 0.002	0,865
VR-448	0,973	+ / - 0.002	0,894
VR-410	0,988	+ / - 0.0024	0,922
VR-817	0,997	+ / - 0.0024	0,939
VR-820	1,001	+ / - 0.0024	0,946
VR-422	1,004	+ / - 0.0024	0,952
VR-435	1,012	+ / - 0.0024	0,966
VR-821	1,059	+ / - 0.0024	1,059
VR-455	1,089	+ / - 0.0024	1,121
VR-434	1,112	+ / - 0.0024	1,167
VR-818	1,121	+ / - 0.0024	1,187
VR-457	1,128	+ 0,00 - 0,005	1,202
VR-473	1,143	+ 0,00 - 0,005	1,233
VR-464	1,174	+ / - 0.0024	1,301
VR-460	1,235	+ / - 0.0024	1,441
VR-453	1,245	+ / - 0.0024	1,464
VR-811	1,253	+ / - 0.0024	1,482
VR-474	1,266	+ / - 0.0024	1,514
VR-459	1,272	+ / - 0.0024	1,529
VR-803	1,279	+ / - 0.0024	1,544
VR-468	1,284	+ / - 0.0024	1,557
VR-813	1,292	+ / - 0.0024	1,576
VR-492	1,359	+ / - 0.0024	1,743
VR-463	1,390	+ / - 0.0024	1,824
VR-493	1,401	+ / - 0.0024	1,853
VR-470	1,424	+ / - 0.0024	1,915
VR-462	1,513	+ / - 0.0024	2,163

Rods & Bars

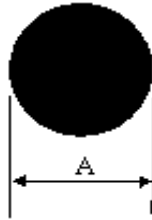
Wiredrawn Rod



ALCOA Code	INCHES		Linear Weight WT/FT
	A	x	
VR-443	1,518	+ / - 0,0024	2,175
VR-456	1,556	+ 0,00 - 0,063	2,287
VR-417	1,595	+ / - 0,0039	2,403
VR-489	1,606	+ / - 0,0039	2,435
VR-804	1,615	+ / - 0,0039	2,462
VR-827	1,619	+ / - 0,0039	2,474
VR-461	1,637	+ / - 0,0039	2,530
VR-487	1,730	+ / - 0,0039	2,825
VR-805	1,739	+ / - 0,0039	2,857
VR-828	1,743	+ / - 0,0039	2,869
VR-414	1,751	+ / - 0,0039	2,895
VR-494	1,757	+ 0,00 - 0,063	2,914
VR-800	1,829	+ / - 0,0039	3,158
VR-488	1,853	+ / - 0,0039	3,242
VR-476	1,868	+ / - 0,0039	3,294
VR-802	1,984	+ / - 0,0039	3,719
VR-472	2,004	+ / - 0,0039	3,792
VR-491	2,101	+ / - 0,0039	4,169
VR-418	2,140	+ 0,00 - 0,063	4,325

Rods & Bars

Round Billet



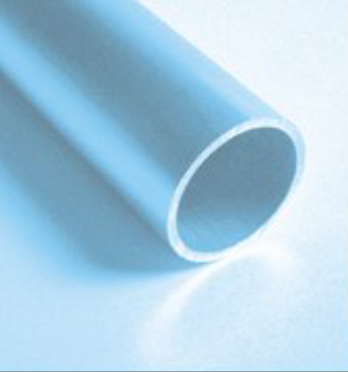
ALCOA Code	INCHES	Linear Weight WT/FT
	A	
VR-500	5,800	31,740
VR-512	6,000	33,031
VR-501	7,000	45,298
VR-502	8,000	58,915
VR-506	9,000	72,634
VR-513	9,000	74,712
VR-503	10,000	92,237
VR-508	13,307	163,331
VR-510	14,000	163,815

Rods & Bars

Extruded Square Bar, Sharp
Corners

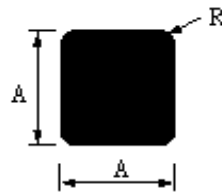


ALCOA Code	INCHES	Linear Weight WT/FT
	A	
VQ-028	0,236	0,066
VQ-001	0,250	0,073
VQ-002	0,312	0,115
VQ-029	0,315	0,117
VQ-003	0,375	0,165
VQ-004	0,437	0,225
VQ-026	0,472	0,262
VQ-005	0,500	0,294
VQ-006	0,625	0,459
VQ-022	0,661	0,514
VQ-007	0,750	0,661
VQ-008	0,875	0,900
VQ-023	0,937	1,032
VQ-009	1,000	1,175
VQ-010	1,181	1,639
VQ-011	1,250	1,836
VQ-025	1,375	2,221
VQ-012	1,500	2,644
VQ-013	1,575	2,914
VQ-014	1,750	3,598
VQ-015	2,000	4,700
VQ-021	2,250	5,948
VQ-016	2,500	7,344
VQ-017	2,752	8,899
VQ-018	3,000	10,575
VQ-024	3,250	12,411
VQ-019	3,500	14,394
VQ-033	3,937	18,212
VQ-020	4,000	18,800



Rods & Bars

Extruded Square Bar,
Round Corners

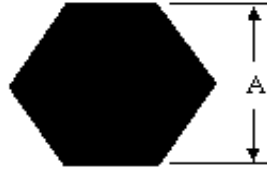


ALCOA Code	INCHES		Linear Weight WT/FT
	A	R	
VQ-503	2,165	0,315	5,641
VQ-504	2,165	0,374	5,368
VQ-509	2,441	0,276	6,924
VQ-508	2,756	0,197	8,852
VQ-511	3,740	0,256	16,264
VQ-510	4,488	0,512	23,405
VQ-506	5,000	0,039	29,377
VQ-507	5,315	0,039	33,194



Rods & Bars

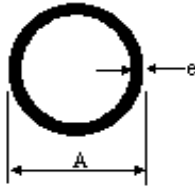
Extruded Hexagonal Bar



ALCOA Code	INCHES	Linear Weight WT/FT
	A	
VS-021	0,250	0,064
VS-001	0,375	0,143
VS-002	0,437	0,195
VS-003	0,500	0,254
VS-004	0,562	0,322
VS-006	0,625	0,397
VS-044	0,669	0,456
VS-033	0,717	0,522
VS-007	0,750	0,572
VS-036	0,780	0,619
VS-008	0,811	0,669
VS-037	0,859	0,751
VS-027	0,866	0,763
VS-009	0,875	0,779
VS-010	0,937	0,894
VS-011	1,000	1,018
VS-012	1,063	1,150
VS-013	1,125	1,287
VS-014	1,250	1,590
VS-046	1,313	1,753
VS-015	1,374	1,921
VS-016	1,417	2,044
VS-017	1,500	2,290
VS-022	1,622	2,677
VS-045	1,875	3,578
VS-039	2,500	6,360
VS-040	3,000	9,158

Pipes & Tubes

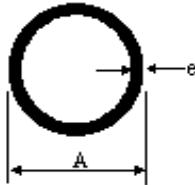
Tubing - Round



ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
TR-1042	0,312	0,059	0,055
TR-1009	0,374	0,104	0,104
TR-002	0,375	0,063	0,072
TR-1147	0,394	0,039	0,051
TR-1096	0,397	0,060	0,075
TR-831	0,433	0,072	0,096
TR-1015	0,500	0,039	0,067
TR-004	0,500	0,049	0,081
TR-005	0,500	0,063	0,101
TR-294	0,500	0,065	0,104
TR-999	0,500	0,071	0,112
TR-1097	0,500	0,079	0,122
TR-220	0,500	0,125	0,173
TR-1086	0,512	0,092	0,142
TR-1077	0,512	0,098	0,150
TR-935	0,551	0,063	0,113
TR-970	0,551	0,138	0,210
TR-320	0,571	0,043	0,084
TR-1087	0,596	0,074	0,143
TR-1049	0,598	0,053	0,107
TR-011	0,625	0,039	0,085
TR-012	0,625	0,047	0,101
TR-013	0,625	0,049	0,104
TR-014	0,625	0,063	0,130
TR-890	0,625	0,079	0,159
TR-916	0,625	0,094	0,184
TR-250	0,625	0,125	0,231
TR-364	0,630	0,039	0,086
TR-1089	0,630	0,120	0,226
TR-1085	0,681	0,128	0,261
TR-1082	0,689	0,118	0,249
TR-017	0,709	0,039	0,097
TR-1056	0,728	0,063	0,154
TR-018	0,748	0,039	0,103
TR-262	0,748	0,047	0,122

Pipes & Tubes

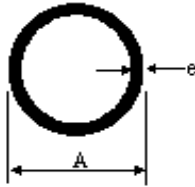
Tubing - Round



ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
TR-264	0,748	0,093	0,224
TR-927	0,750	0,039	0,103
TR-019	0,750	0,047	0,123
TR-020	0,750	0,063	0,159
TR-296	0,750	0,065	0,164
TR-905	0,750	0,075	0,186
TR-213	0,750	0,079	0,195
TR-249	0,750	0,094	0,227
TR-021	0,750	0,098	0,237
TR-238	0,750	0,125	0,289
TR-340	0,783	0,047	0,128
TR-022	0,787	0,059	0,159
TR-974	0,787	0,157	0,366
TR-379	0,787	0,187	0,415
TR-1021	0,787	0,193	0,423
TR-025	0,811	0,094	0,248
TR-026	0,815	0,071	0,195
TR-027	0,827	0,059	0,167
TR-265	0,839	0,079	0,221
TR-276	0,839	0,087	0,240
TR-1012	0,846	0,043	0,128
TR-029	0,866	0,059	0,176
TR-1083	0,874	0,142	0,383
TR-031	0,875	0,037	0,116
TR-032	0,875	0,039	0,121
TR-033	0,875	0,047	0,144
TR-952	0,875	0,049	0,149
TR-035	0,875	0,063	0,188
TR-297	0,875	0,065	0,194
TR-036	0,875	0,078	0,230
TR-862	0,875	0,079	0,231
TR-241	0,875	0,094	0,270
TR-942	0,875	0,118	0,330
TR-034	0,875	0,125	0,347
TR-827	0,875	0,177	0,456

Pipes & Tubes

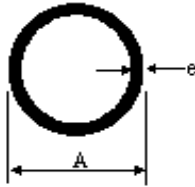
Tubing - Round



ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
TR-037	0,884	0,231	0,556
TR-1014	0,886	0,069	0,208
TR-910	0,890	0,150	0,409
TR-1091	0,945	0,047	0,157
TR-889	0,945	0,079	0,252
TR-038	0,965	0,114	0,358
TR-1133	0,984	0,079	0,263
TR-1138	0,984	0,246	0,670
TR-039	1,000	0,039	0,140
TR-923	1,000	0,049	0,171
TR-201	1,000	0,051	0,179
TR-227	1,000	0,057	0,199
TR-040	1,000	0,063	0,217
TR-298	1,000	0,065	0,224
TR-041	1,000	0,079	0,268
TR-299	1,000	0,094	0,316
TR-042	1,000	0,098	0,328
TR-300	1,000	0,120	0,390
TR-043	1,000	0,125	0,404
TR-898	1,000	0,187	0,562
TR-897	1,000	0,211	0,614
TR-371	1,024	0,079	0,275
TR-277	1,051	0,087	0,358
TR-997	1,051	0,105	0,367
TR-1132	1,051	0,102	0,359
TR-288	1,059	0,059	0,218
TR-266	1,059	0,079	0,285
TR-1078	1,062	0,141	0,479
TR-1084	1,062	0,190	0,612
TR-1099	1,063	0,191	0,615
TR-813	1,102	0,059	0,227
TR-1076	1,125	0,098	0,373
TR-378	1,125	0,039	0,158
TR-047	1,125	0,125	0,462
TR-048	1,125	0,125	0,462

Pipes & Tubes

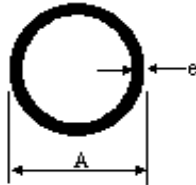
Tubing - Round



ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
TR-1079	1,142	0,193	0,676
TR-1098	1,142	0,197	0,687
TR-050	1,150	0,063	0,253
TR-1011	1,161	0,053	0,217
TR-1093	1,181	0,089	0,357
TR-903	1,181	0,098	0,393
TR-873	1,181	0,130	0,504
TR-984	1,181	0,246	0,849
TR-892	1,181	0,309	0,995
TR-053	1,181	0,321	1,019
TR-864	1,187	0,315	1,014
TR-963	1,193	0,179	0,670
TR-1081	1,224	0,183	0,704
TR-383	1,250	0,049	0,216
TR-202	1,250	0,059	0,260
TR-055	1,250	0,063	0,274
TR-301	1,250	0,065	0,284
TR-056	1,250	0,079	0,340
TR-057	1,250	0,095	0,405
TR-234	1,250	0,098	0,418
TR-302	1,250	0,120	0,501
TR-058	1,250	0,125	0,520
TR-059	1,250	0,169	0,675
TR-1088	1,250	0,196	0,762
TR-372	1,260	0,039	0,177
TR-1001	1,299	0,234	0,921
TR-063	1,315	0,079	0,359
TR-278	1,315	0,102	0,458
TR-918	1,315	0,133	0,581
TR-944	1,327	0,055	0,259
TR-289	1,327	0,067	0,311
TR-258	1,339	0,059	0,279
TR-325	1,358	0,059	0,283
TR-875	1,378	0,039	0,195
TR-812	1,378	0,059	0,288

Pipes & Tubes

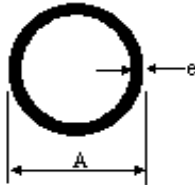
Tubing - Round



ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
TR-805	1,378	0,079	0,378
TR-1024	1,417	0,075	0,371
TR-893	1,417	0,246	1,064
TR-904	1,429	0,150	0,707
TR-0971	1,437	0,266	1,149
TR-342	1,496	0,059	0,313
TR-385	1,496	0,102	0,527
TR-068	1,496	0,157	0,778
TR-1027	1,496	0,197	0,944
TR-228	1,500	0,057	0,304
TR-884	1,500	0,059	0,314
TR-070	1,500	0,063	0,332
TR-303	1,500	0,065	0,344
TR-071	1,500	0,078	0,411
TR-072	1,500	0,094	0,486
TR-305	1,500	0,120	0,612
TR-073	1,500	0,125	0,635
TR-881	1,500	0,254	1,168
TR-988	1,500	0,266	1,211
TR-075	1,500	0,490	1,827
TR-366	1,516	0,217	1,038
TR-077	1,524	0,185	0,914
TR-078	1,535	0,464	1,836
TR-834	1,555	0,138	0,721
TR-911	1,575	0,098	0,536
TR-828	1,583	0,043	0,246
TR-917	1,622	0,059	0,341
TR-203	1,625	0,059	0,341
TR-240	1,625	0,079	0,449
TR-872	1,634	0,291	1,444
TR-079	1,638	0,063	0,364
TR-885	1,660	0,140	0,786
TR-919	1,660	0,191	1,036
TR-279	1,661	0,102	0,589
TR-080	1,661	0,118	0,673

Pipes & Tubes

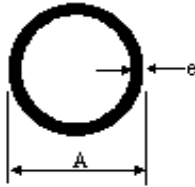
Tubing - Round



ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
TR-844	1,661	0,177	0,971
TR-290	1,669	0,067	0,396
TR-268	1,669	0,089	0,517
TR-843	1,685	0,197	1,081
TR-081	1,685	0,311	1,577
TR-293	1,693	0,055	0,333
TR-845	1,693	0,197	1,087
TR-083	1,701	0,319	1,627
TR-084	1,750	0,039	0,249
TR-306	1,750	0,065	0,404
TR-085	1,750	0,079	0,486
TR-086	1,750	0,125	0,751
TR-803	1,772	0,079	0,492
TR-814	1,772	0,098	0,608
TR-804	1,772	0,197	1,144
TR-896	1,772	0,217	1,243
TR-1055	1,791	0,220	1,278
TR-088	1,811	0,059	0,382
TR-1016	1,811	0,433	2,203
TR-948	1,811	0,472	2,334
TR-922	1,819	0,390	2,056
TR-204	1,875	0,059	0,396
TR-094	1,875	0,359	2,011
TR-198	1,898	0,079	0,529
TR-915	1,900	0,200	1,255
TR-280	1,902	0,102	0,680
TR-096	1,902	0,146	0,944
TR-865	1,909	0,325	1,900
TR-097	1,969	0,079	0,549
TR-398	1,969	0,394	2,289
TR-907	2,000	0,050	0,360
TR-229	2,000	0,057	0,409
TR-098	2,000	0,063	0,448
TR-307	2,000	0,065	0,464
TR-851	2,000	0,068	0,483

Pipes & Tubes

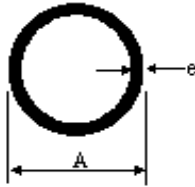
Tubing - Round



ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
TR-225	2,000	0,071	0,505
TR-099	2,000	0,079	0,558
TR-308	2,000	0,094	0,665
TR-318	2,000	0,120	0,833
TR-100	2,000		0,865
TR-921	2,000	0,157	1,071
TR-101	2,000	0,250	1,615
TR-920	2,008	0,266	1,709
TR-1058	2,008	0,339	2,086
TR-802	2,028	0,142	0,987
TR-102	2,039	0,075	0,542
TR-938	2,047	0,276	1,802
TR-839	2,057	0,452	2,680
TR-878	2,087	0,372	2,355
TR-816	2,106	0,531	3,090
TR-104	2,154	0,213	1,523
TR-945	2,157	0,331	2,230
TR-105	2,165	0,079	0,606
TR-928	2,165	0,087	0,665
TR-924	2,185	0,390	2,583
TR-106	2,250	0,125	0,982
TR-1048	2,283	0,650	3,918
TR-322	2,303	0,482	3,242
TR-205	2,313	0,067	0,555
TR-358	2,362	0,059	0,502
TR-108	2,362	0,079	0,664
TR-394	2,362	0,197	1,573
TR-895	2,362	0,394	2,861
TR-936	2,370	0,240	1,888
TR-292	2,375	0,079	0,667
TR-270	2,375	0,104	0,875
TR-281	2,375	0,118	0,984
TR-995	2,375	0,154	1,262
TR-369	2,409	0,250	1,993
TR-1143	2,441	0,079	0,687

Pipes & Tubes

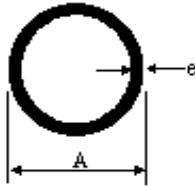
Tubing - Round



ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
TR-940	2,480	0,079	0,698
TR-891	2,480	0,087	0,765
TR-113	2,480	0,236	1,957
TR-309	2,500	0,065	0,584
TR-842	2,500	0,075	0,670
TR-310	2,500	0,120	1,055
TR-114	2,500	0,125	1,098
TR-116	2,500	0,244	2,033
TR-115	2,500	0,401	3,108
TR-117	2,520	0,079	0,709
TR-861	2,520	0,295	2,425
TR-251	2,559	0,067	0,616
TR-119	2,559	0,079	0,721
TR-122	2,559	0,197	1,716
TR-1071	2,587	0,335	2,782
TR-124	2,598	0,118	1,081
TR-946	2,638	0,276	2,403
TR-877	2,677	0,295	2,596
TR-125	2,717	0,079	0,767
TR-909	2,717	0,315	2,792
TR-126	2,728	0,260	2,368
TR-127	2,750	0,118	1,147
TR-128	2,756	0,055	0,550
TR-356	2,756	0,059	0,588
TR-129	2,756	0,079	0,778
TR-1013	2,795	0,354	1,556
TR-888	2,835	0,087	0,879
TR-1129	2,835	0,157	1,556
TR-282	2,875	0,132	1,336
TR-871	2,886	0,079	0,816
TR-131	2,913	0,079	0,824
TR-867	2,913	0,413	3,815
TR-132	2,953	0,079	0,835
TR-874	3,000	0,050	0,544
TR-901	3,000	0,059	0,641

Pipes & Tubes

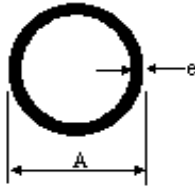
Tubing - Round



ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
TR-311	3,000	0,065	0,704
TR-135	3,000	0,079	0,849
TR-248	3,000	0,087	0,931
TR-271	3,000	0,118	1,256
TR-136	3,000	0,125	1,329
TR-137	3,000	0,189	1,961
TR-138	3,000	0,250	2,538
TR-139	3,000	0,197	2,037
TR-1044	3,114	0,138	1,514
TR-837	3,150	0,059	0,674
TR-140	3,150	0,079	0,893
TR-142	3,150	0,098	1,109
TR-143	3,150	0,118	1,322
TR-815	3,150	0,197	2,146
TR-1006	3,150	0,248	2,657
TR-144	3,150	0,315	3,296
TR-146	3,236	0,118	1,359
TR-263	3,250	0,500	5,076
TR-149	3,268	0,146	1,679
TR-931	3,307	0,091	1,075
TR-929	3,307	0,130	1,524
TR-894	3,346	0,050	0,608
TR-373	3,346	0,067	0,810
TR-852	3,346	0,102	1,226
TR-150	3,346	0,118	1,408
TR-376	3,346	0,827	7,690
TR-949	3,386	0,236	2,746
TR-214	3,500	0,089	1,115
TR-151	3,500	0,120	1,498
TR-283	3,500	0,148	1,827
TR-932	3,500	0,197	2,400
TR-152	3,500	0,250	2,999
TR-355	3,543	0,079	1,007
TR-153	3,543	0,118	1,493
TR-210	3,543	0,394	2,907

Pipes & Tubes

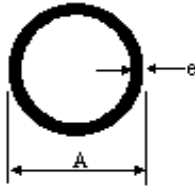
Tubing - Round



ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
TR-1131	3,650	0,230	2,907
TR-156	3,740	0,118	1,579
TR-933	3,740	0,157	2,083
TR-939	3,750	0,094	1,265
TR-960	3,780	0,394	4,921
TR-1134	3,780	1,181	11,329
TR-157	3,791	0,118	1,601
TR-1047	3,799	0,295	3,819
TR-973	3,858	0,142	1,944
TR-396	3,858	0,256	3,403
TR-362	3,937	0,079	1,121
TR-349	3,937	0,098	1,395
TR-159	3,937	0,138	1,932
TR-382	3,937	0,315	4,211
TR-1142	3,937	0,394	5,149
TR-1149	3,937	0,197	2,718
TR-868	4,000	0,050	0,729
TR-160	4,000	0,059	0,859
TR-161	4,000	0,065	0,944
TR-215	4,000	0,089	1,279
TR-162	4,000	0,102	1,473
TR-163	4,000	0,125	1,791
TR-969	4,000	0,226	3,148
TR-164	4,000	0,370	4,959
TR-165	4,016	0,079	1,144
TR-930	4,055	0,083	1,212
TR-1053	4,134	0,098	1,466
TR-352	4,331	0,098	1,538
TR-170	4,331	0,138	2,133
TR-1007	4,500	0,120	1,941
TR-273	4,500	0,132	2,127
TR-284	4,500	0,152	2,433
TR-171	4,500	0,375	5,713
TR-172	4,724	0,138	2,333
TR-806	4,724	0,197	3,290

Pipes & Tubes

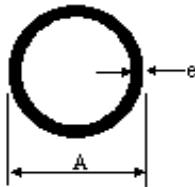
Tubing - Round



ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
TR-173	4,724	0,236	3,914
TR-998	4,724	0,315	5,127
TR-244	4,724	0,394	6,294
TR-377	4,724	0,827	11,895
TR-174	4,783	0,375	6,105
TR-887	4,921	0,098	1,752
TR-176	5,000	0,067	1,219
TR-177	5,000	0,118	2,128
TR-315	5,000	0,125	2,253
TR-178	5,000	0,236	4,154
TR-180	5,000	0,247	4,331
TR-179	5,000	0,375	6,405
TR-1052	5,000	0,500	8,306
TR-184	5,157	0,344	6,120
TR-186	5,276	0,079	1,510
TR-1063	5,512	0,197	3,862
TR-1107	5,642	0,297	5,864
TR-346	5,906	0,157	3,341
TR-189	5,906	0,236	4,943
TR-1141	5,906	0,315	6,500
TR-977	5,984	0,433	8,874
TR-869	6,000	0,059	1,295
TR-233	6,000	0,120	2,606
TR-191	6,000	0,150	3,231
TR-899	6,102	0,492	10,192
TR-1151	6,250	0,375	8,128
TR-972	6,289	0,539	11,448
TR-223	6,295	0,500	10,696
TR-860	6,299	0,276	6,128
TR-937	6,567	0,268	6,225
TR-286	6,625	0,165	3,943
TR-976	7,000	0,098	2,507
TR-941	7,283	0,197	5,149
TR-224	7,390	0,520	13,179
TR-1059	7,717	1,012	25,042

Pipes & Tubes

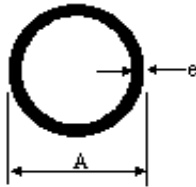
Tubing - Round



ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
TR-199	7,795	0,236	6,591
TR-1139	7,874	0,394	10,871
TR-218	7,992	0,144	4,163
TR-850	8,327	0,173	5,214
TR-391	8,465	0,375	11,204
TR-1017	8,622	0,906	25,793
TR-863	8,625	0,322	9,871
TR-854	9,646	0,827	26,914
TR-1043	9,843	0,394	13,732
TR-1054	10,000	0,197	7,123
TR-1061	10,000	0,118	4,308

Pipes & Tubes

Tube - Round (Thin Wall)



Light Line

ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
TI-001	2,000	0,043	0,313
TI-002	3,000	0,043	0,472
TI-004	4,000	0,043	0,632
TI-006	5,000	0,047	0,863
TI-008	6,000	0,051	1,123

Conventional Line

ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
TI-100	2,000	0,050	0,360
TI-101	3,000	0,050	0,544
TI-102	4,000	0,050	0,729
TI-103	5,000	0,052	0,949
TI-104	6,000	0,055	1,209

Heavy Line

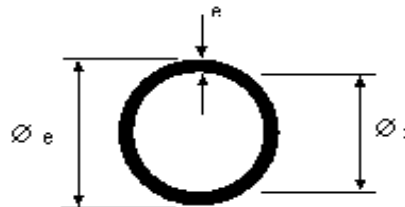
ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
TI-200	6,000	0,067	1,465
TI-201	7,000	0,071	1,812

Fittings

ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
TI-303	4,197	0,098	1,488

Pipes & Tubes

Pipe- Scheduled



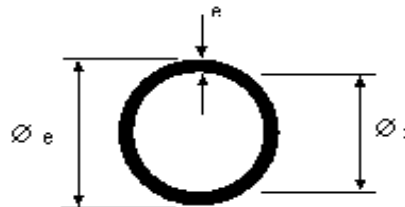
ALCOA Code	Pipe Size Designation	Schedule Number	Outer Diameter Inches	Inner Diameter Inches	Wall Inches	Linear Weight WT/FT
*	1/8	40	0,405	0,269	0,068	0,085
*	1/8	80	0,405	0,215	2,415	0,108
*	1/4	40	0,540	0,364	2,235	0,147
TS-037	1/4	80	0,540	0,302	3,025	0,184
*	3/8	40	0,675	0,493	2,315	0,196
*	3/8	80	0,675	0,423	3,205	0,254
*	1/2	5	0,840	0,710	1,655	0,185
*	1/2	10	0,840	0,674	2,110	0,231
TS-002	1/2	40	0,840	0,622	2,770	0,293
TS-036	1/2	80	0,840	0,546	3,735	0,374
*	1/2	160	0,840	0,466	4,750	0,449
*	3/4	5	1,050	0,920	1,650	0,235
*	3/4	10	1,050	0,884	2,110	0,295
TS-003	3/4	40	1,050	0,824	2,870	0,389
*	3/4	80	1,050	0,742	3,910	0,507
*	3/4	160	1,050	0,614	5,535	0,667
*	1	5	1,315	1,185	1,650	0,298
*	1	10	1,315	1,097	2,770	0,483
TS-004	1	40	1,315	1,049	3,380	0,578
TS-005	1	80	1,315	0,957	4,545	0,748
*	1.1/4	5	1,660	1,522	1,750	0,381
*	1.1/4	10	1,660	1,442	2,765	0,622
TS-007	1.1/4	40	1,660	1,380	3,555	0,783
*	1.1/4	80	1,660	1,278	4,850	1,031
*	1.1/4	160	1,900	1,160	9,400	1,296
*	1.1/2	5	1,900	1,770	1,650	0,438
*	1.1/2	10	1,900	1,682	2,770	0,718
TS-008	1.1/2	40	1,900	1,610	3,685	0,935
*	1.1/2	160	2,375	1,338	13,170	1,673
TS-026	1.1/2	80	2,375	2,245	1,655	0,552
*	2	5	2,375	2,157	2,770	0,909
TS-009	2	40	2,375	2,067	3,915	1,257
TS-010	2	80	2,375	1,939	5,540	1,729
*	2	160	2,375	1,689	8,715	2,562
*	2.1/2	5	2,875	2,709	2,110	0,853



ALCOA

Pipes & Tubes

Pipe- Scheduled



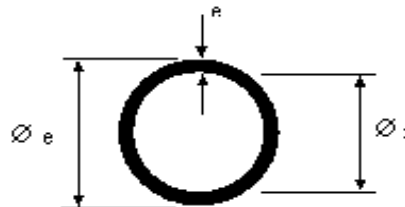
ALCOA Code	Pipe Size Designation	Schedule Number	Outer Diameter Inches	Inner Diameter Inches	Wall Inches	Linear Weight WT/FT
*	2.1/2	10	2,875	2,635	3,050	1,216
TS-011	2.1/2	40	2,875	2,469	5,160	1,995
TS-031	2.1/2	80	2,875	2,323	7,015	2,637
*	2.1/2	160	2,875	2,125	9,525	3,448
*	3	5	3,500	3,334	2,110	1,044
TS-012	3	10	3,500	3,260	3,050	1,492
TS-013	3	40	3,500	3,068	5,485	2,609
TS-014	3	80	3,500	2,900	7,620	3,529
*	3	160	3,500	2,626	11,100	4,920
*	3.1/2	5	4,000	3,834	2,110	1,196
*	3.1/2	10	4,000	3,760	3,050	1,712
TS-015	3.1/2	40	4,000	3,548	5,740	3,135
TS-016	3.1/2	80	4,000	3,364	8,075	4,305
*	4	5	4,500	4,334	2,110	1,349
TS-017	4	10	4,500	4,260	3,050	1,933
TS-018	4	40	4,500	4,026	6,020	3,714
TS-027	4	80	4,500	3,826	8,560	5,157
*	4	120	4,500	3,626	11,100	6,527
*	4	160	4,500	3,438	13,485	7,748
*	5	5	4,500	5,345	-10,730	2,186
TS-019	5	10	4,500	5,295	-10,095	2,671
TS-020	5	40	4,500	5,047	-6,945	5,029
TS-021	5	80	4,500	4,813	-3,975	7,155
*	5	120	4,500	4,563	-0,800	9,305
*	5	160	4,500	4,313	2,375	11,347
*	6	5	6,625	6,407	2,770	2,612
TS-022	6	10	6,625	6,357	3,405	3,194
TS-023	6	40	6,625	6,065	7,115	6,529
TS-034	6	80	6,625	5,761	10,975	9,832
*	6	120	6,625	5,501	14,275	12,522
*	6	160	6,625	5,189	18,240	15,593
*	8	5	8,625	8,407	2,770	3,414
TS-024	8	10	8,625	8,329	3,760	4,613
*	8	20	8,625	8,125	6,350	7,696
*	8	30	8,625	8,071	7,040	8,505



ALCOA

Pipes & Tubes

Pipe- Scheduled



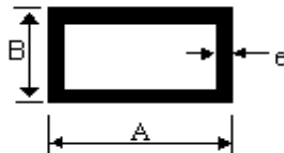
ALCOA Code	Pipe Size Designation	Schedule Number	Outer Diameter Inches	Inner Diameter Inches	Wall Inches	Linear Weight WT/FT
TS-025	8	40	8,625	7,981	8,180	9,829
*	8	60	8,625	7,813	10,315	12,263
*	8	80	8,625	7,625	12,700	14,933
*	8	100	8,625	7,439	15,065	17,506
*	8	120	8,625	7,189	18,240	20,872
*	8	140	8,625	7,001	20,625	23,316
*	8	160	8,625	6,813	23,015	25,705
*	10	5	10,750	10,482	3,405	5,229
*	10	10	10,750	10,420	4,190	6,420
*	10	20	10,750	10,250	6,350	9,649
*	10	30	10,750	10,136	7,800	11,785
*	10	40	10,750	10,020	9,270	13,933
*	10	60	10,750	9,750	12,700	18,839
*	10	80	10,750	9,562	15,090	22,175
*	10	100	10,750	9,312	18,265	26,511
*	12	5	12,750	12,438	3,960	7,222
*	12	10	12,750	12,390	4,570	8,317
*	12	20	12,750	12,250	6,350	11,487
*	12	30	12,750	12,090	8,380	15,066
TS-035	12	40	12,750	11,938	10,310	18,422
*	12	60	12,750	11,626	14,275	25,178
*	12	80	12,750	11,374	17,475	30,505



ALCOA

Pipes & Tubes

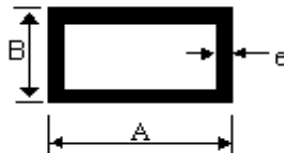
Extruded rectangular Tube, Sharp Corners



ALCOA Code	INCHES			Linear Weight WT/FT
	A	B	e	
TG-119	0,787	0,472	0,043	0,119
TG-088	0,866	0,484	0,039	0,118
TG-074	1,000	0,500	0,051	0,168
TG-001	1,000	0,500	0,062	0,201
TG-084	1,000	0,500	0,065	0,209
TG-103	1,000	0,750	0,047	0,184
TG-117	1,102	0,500	0,063	0,219
TG-049	1,181	0,787	0,059	0,257
TG-002	1,181	0,787	0,079	0,335
TG-536	1,181	0,984	0,059	0,284
TG-028	1,500	0,750	0,125	0,587
TG-003	1,500	1,000	0,079	0,433
TG-029	1,500	1,000	0,125	0,660
TG-086	1,575	0,787	0,051	0,272
TG-053	1,575	0,787	0,079	0,408
TG-067	1,575	0,787	0,118	0,590
TG-079	1,772	0,748	0,039	0,226
TG-097	1,772	0,787	0,063	0,360
TG-048	1,772	0,787	0,079	0,444
TG-110	1,969	0,984	0,059	0,393
TG-064	1,969	1,181	0,079	0,554
TG-090	1,969	1,575	0,118	0,918
TG-083	2,000	0,500	0,043	0,246
TG-004	2,000	0,500	0,062	0,347
TG-073	2,000	1,000	0,039	0,270
TG-071	2,000	1,000	0,047	0,323
TG-005	2,000	1,000	0,059	0,400
TG-006	2,000	1,000	0,067	0,451
TG-007	2,000	1,000	0,079	0,526
TG-030	2,000	1,000	0,125	0,807
TG-108	2,000	1,500	0,059	0,469
TG-008	2,000	1,500	0,078	0,613
TG-032	2,000	1,500	0,125	0,953
TG-111	2,362	1,181	0,059	0,475
TG-094	2,362	1,181	0,079	0,627

Pipes & Tubes

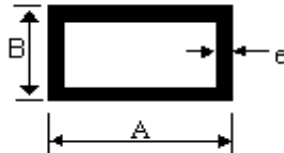
Extruded rectangular Tube, Sharp
Corners



ALCOA Code	INCHES			Linear Weight WT/FT
	A	B	e	
TG-069	2,362	1,575	0,098	0,865
TG-009	2,374	1,000	0,079	0,595
TG-026	2,374	1,500	0,067	0,588
TG-010	2,374	1,500	0,079	0,688
TG-091	2,500	0,827	0,079	0,586
TG-031	2,500	1,250	0,125	1,027
TG-098	2,500	2,000	0,120	1,202
TG-080	2,559	0,984	0,067	0,536
TG-109	2,598	0,787	0,059	0,453
TG-070	2,953	0,984	0,059	0,530
TG-011	2,953	2,031	0,087	0,979
TG-012	2,992	1,260	0,079	0,758
TG-013	3,000	1,000	0,079	0,711
TG-039	3,000	1,000	0,125	1,100
TG-014	3,000	1,500	0,078	0,796
TG-081	3,000	1,500	0,120	1,202
TG-538	3,000	1,750	0,125	1,324
TG-099	3,000	1,750	0,187	1,927
TG-093	3,000	2,000	0,120	1,343
TG-035	3,000	2,000	0,125	1,393
TG-015	3,031	0,984	0,087	0,782
TG-112	3,150	1,575	0,059	0,639
TG-077	3,150	1,575	0,079	0,845
TG-056	3,150	1,575	0,118	1,246
TG-016	3,150	1,575	0,157	1,632
TG-063	3,150	1,969	0,157	1,778
TG-120	3,250	1,500	0,055	0,601
TG-017	3,606	2,543	0,087	1,216
TG-089	3,937	1,575	0,059	0,749
TG-113	3,937	1,575	0,071	0,894
TG-078	3,937	1,772	0,098	1,275
TG-540	4,000	1,500	0,079	0,989
TG-018	4,000	1,500	0,094	1,179
TG-072	4,000	2,000	0,079	1,081
TG-019	4,000	2,000	0,094	1,290

Pipes & Tubes

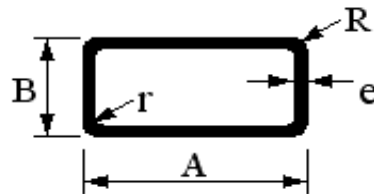
Extruded rectangular Tube, Sharp
Corners



ALCOA Code	INCHES			Linear Weight WT/FT
	A	B	e	
TG-020	4,000	2,000	0,110	1,497
TG-085	4,000	2,000	0,120	1,625
TG-021	4,000	2,000	0,125	1,687
TG-022	4,882	1,732	0,079	1,195
TG-047	4,921	3,150	0,098	1,821
TG-036	5,000	2,000	0,125	1,980
TG-101	5,079	4,488	0,236	5,048
TG-023	5,906	1,969	0,157	2,797
TG-037	6,000	1,500	0,094	1,623
TG-024	6,000	1,500	0,126	2,146
TG-082	6,000	2,000	0,118	2,155
TG-041	6,000	2,000	0,125	2,273
TG-042	6,000	3,000	0,188	3,806

Pipes & Tubes

Extruded rectangular Tube, Round Corners



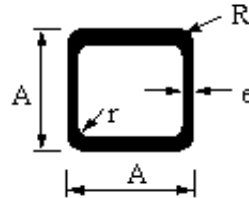
ALCOA Code	INCHES					Linear Weight WT/FT
	A	B	e	R	r	
TG-525	0,669	0,512	0,039	0,039	0,020	0,101
TG-115	0,787	0,472	0,047	0,012		0,129
TG-520	1,181	0,433	0,047	0,079		0,162
TG-517	1,181	0,984	0,079	0,118	0,039	0,359
TG-527	1,378	0,787	0,039	0,138	0,098	0,184
TG-519	1,508	0,728	0,071	0,059		0,345
TG-512	0,875	0,500	0,051	0,079	0,028	0,148
TG-514	1,969	0,984	0,079	0,138	0,059	0,502
TG-535	2,000	1,000	0,125	0,138	0,079	0,796
TG-523	2,000	1,012	0,055	0,197	0,197	0,376
TG-522	2,185	1,201	0,079	0,217	0,138	0,569
TG-534	4,724	3,740	0,787	0,315	0,079	12,655
TG-526	5,000	4,000	0,276	0,197	0,118	5,447
TG-511	7,480	5,512	0,189	1,000	0,811	5,257



ALCOA

Pipes & Tubes

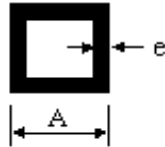
Extruded Square Tube, Round Corners



ALCOA Code	INCHES				Linear Weight WT/FT
	A	e	R	r	
TQ-509	0,750	0,043	0,039	0,020	0,142
TQ-511	0,984	0,079	0,118	0,039	0,319
TQ-508	1,000	0,047	0,039	0,020	0,210
TQ-506	1,000	0,065	0,138	0,073	0,261
TQ-519	1,000	0,125	0,138	0,079	0,502
TQ-507	1,500	0,062	0,125	0,063	0,398
TQ-516	1,575	0,098	0,236	0,138	0,608
TQ-510	1,575	0,118	0,197	0,079	0,763
TQ-514	1,772	0,197	0,079	0,079	1,444
TQ-521	2,000	0,125	0,138	0,079	1,090
TQ-520	2,000	0,236	0,138	0,079	1,946
TQ-505	2,992	0,098	0,079	0,039	1,331
TQ-512	6,000	0,118	0,015	0,103	3,254
TQ-513	8,000	0,169	0,015	0,154	6,206

Pipes & Tubes

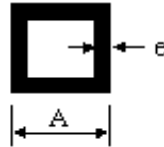
Extruded Square Tube, Sharp Corners



ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
TQ-001	0,500	0,050	0,106
TQ-002	0,500	0,062	0,128
TQ-056	0,500	0,065	0,133
TQ-076	0,625	0,039	0,108
TQ-003	0,625	0,062	0,164
TQ-057	0,626	0,059	0,157
TQ-004	0,750	0,039	0,131
TQ-005	0,750	0,047	0,156
TQ-006	0,750	0,063	0,203
TQ-052	0,750	0,079	0,248
TQ-024	0,750	0,125	0,367
TQ-036	0,787	0,079	0,262
TQ-073	0,984	0,059	0,257
TQ-023	1,000	0,039	0,178
TQ-054	1,000	0,043	0,195
TQ-007	1,000	0,047	0,212
TQ-058	1,000	0,059	0,261
TQ-009	1,000	0,062	0,274
TQ-010	1,000	0,079	0,341
TQ-025	1,000	0,125	0,513
TQ-074	1,181	0,059	0,311
TQ-038	1,181	0,079	0,408
TQ-040	1,181	0,118	0,590
TQ-011	1,248	0,079	0,433
TQ-059	1,250	0,059	0,331
TQ-012	1,250	0,062	0,347
TQ-026	1,250	0,125	0,660
TQ-013	1,500	0,047	0,323
TQ-060	1,500	0,059	0,400
TQ-014	1,500	0,062	0,420
TQ-015	1,500	0,079	0,526
TQ-027	1,500	0,125	0,807
TQ-075	1,575	0,059	0,421
TQ-016	1,575	0,079	0,554
TQ-028	1,750	0,125	0,953

Pipes & Tubes

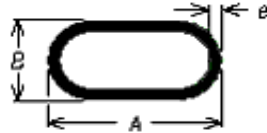
Extruded Square Tube, Sharp
Corners



ALCOA Code	INCHES		Linear Weight WT/FT
	A	e	
TQ-050	1,969	0,079	0,699
TQ-039	1,969	0,157	1,340
TQ-017	2,000	0,078	0,704
TQ-053	2,000	0,093	0,833
TQ-067	2,000	0,120	1,061
TQ-029	2,000	0,125	1,100
TQ-070	2,283	0,098	1,011
TQ-064	2,362	0,197	2,003
TQ-018	2,500	0,118	1,322
TQ-032	2,559	0,079	0,918
TQ-019	2,756	0,110	1,371
TQ-072	3,000	0,079	1,081
TQ-066	3,000	0,120	1,625
TQ-030	3,000	0,125	1,687
TQ-065	3,150	0,071	1,025
TQ-523	3,937	0,197	3,460
TQ-034	4,000	0,098	1,805
TQ-020	4,000	0,126	2,294
TQ-021	4,000	0,150	2,707
TQ-082	4,000	0,187	3,358
TQ-047	4,000	0,250	4,406
TQ-022	5,000	0,118	2,710

Pipes & Tubes

Pipe Coupling Parallel Laterals



ALCOA Code	INCHES			Linear Weight WT/FT
	A	B	e	
LV-034	0,709	0,512	0,157	0,279
LV-037	0,787	0,413	0,059	0,129
LV-009	0,866	0,591	0,157	0,354
LV-028	0,945	0,610	0,138	0,349
LV-032	0,991	0,591	0,079	0,223
LV-042	1,181	0,630	0,039	0,137
LV-045	1,181	0,630	0,079	0,262
LV-016	1,469	0,787	0,079	0,332
LV-019	1,543	0,984	0,213	0,885
LV-038	1,772	0,984	0,110	0,559
LV-020	1,906	1,217	0,264	1,354
LV-041	2,244	1,378	0,049	0,341
LV-021	2,370	1,516	0,331	2,110
LV-024	2,638	1,681	0,362	2,577
LV-025	3,102	1,980	0,406	3,425
LV-003	3,858	2,480	0,551	5,708
LV-004	4,567	2,953	0,669	8,177