

# MARINE SECTIONS



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## FLAT BAR



SECTION NUMBER	DIMENSIONS		MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
	W (mm)	T (mm)				
920 002	6.00	3.00	0.049	14	54	A
920 001	10.00	3.00	0.081	23	250	A
920 003	12.00	3.00	0.098	27	432	A
920 005	12.00	8.60	0.280	636	1,238	A
920 004	16.00	7.00	0.304	457	2,389	A
920 008	16.00	3.00	0.130	36	1,024	A
920 010	16.00	11.00	0.477	1,775	3,755	A
920 017	20.00	1.60	0.087	7	1,067	A
920 020	20.00	2.50	0.136	26	1,667	A
920 025	20.00	3.00	0.163	45	2,000	A
920 028	20.00	4.00	0.217	107	2,667	A
920 030	20.00	5.00	0.271	208	3,333	A
920 031	20.00	8.00	0.434	853	5,333	A
920 032	20.00	6.00	0.325	360	4,000	A
920 033	25.00	1.60	0.108	9	2,083	A
920 035	25.00	2.50	0.169	33	3,255	A
920 040	25.00	3.00	0.203	56	3,906	S
920 045	25.00	4.00	0.271	133	5,208	A
920 047	25.00	5.00	0.339	260	6,510	S
920 050	25.00	6.00	0.407	450	7,813	S
920 052	25.00	10.00	0.678	2,083	13,021	S
920 053	25.00	12.00	0.813	3,600	15,625	S
920 054	25.00	9.90	0.671	2,021	12,891	S
920 056	30.00	19.00	1.545	17,148	42,750	S
920 055	32.00	3.00	0.260	72	8,192	S
920 057	32.00	5.00	0.434	333	13,653	S
920 058	32.00	6.00	0.520	576	16,384	A
920 059	32.00	10.00	0.867	2,667	27,307	S
920 060	35.00	3.00	0.285	79	10,719	A
920 070	40.00	3.00	0.325	90	16,000	S
920 075	40.00	4.00	0.434	213	21,333	A
920 077	40.00	5.00	0.542	417	26,667	S
920 080	40.00	6.00	0.650	720	32,000	S
920 081	40.00	8.00	0.867	1,707	42,667	S
920 082	40.00	10.00	1.084	3,333	53,333	S
920 083	40.00	12.00	1.301	5,760	64,000	S
920 084	40.00	16.00	1.734	13,653	85,333	S
920 085	45.00	5.00	0.610	469	37,969	S
920 086	45.00	3.00	0.366	101	22,781	S
920 090	50.00	3.00	0.407	113	31,250	S
920 093	50.00	4.00	0.542	267	41,667	S

## FLAT BAR



SECTION NUMBER	DIMENSIONS		MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
	W (mm)	T (mm)				
920 096	50.00	5.00	0.678	521	52,083	S
920 100	50.00	6.00	0.813	900	62,500	S
920 105	50.00	8.00	1.084	2,133	83,333	S
920 111	50.00	20.00	2.710	33,333	208,333	S
920 112	50.00	12.00	1.626	7,200	125,000	S
920 114	50.00	25.00	3.388	65,104	260,417	S
920 108	55.00	3.00	0.447	124	41,594	S
920 113	55.00	5.00	0.745	573	69,323	S
920 115	60.00	3.00	0.488	135	54,000	S
920 116	60.00	4.00	0.650	320	72,000	S
920 117	60.00	6.00	0.976	1,080	108,000	S
920 099	60.00	10.00	1.626	5,000	180,000	S
920 129	63.00	8.00	1.366	2,688	166,698	S
920 118	65.00	3.00	0.528	146	68,656	S
920 235	65.00	5.00	0.881	677	114,427	S
920 131	70.00	4.00	0.759	373	114,333	S
920 120	70.00	10.00	1.897	5,833	285,833	S
920 124	75.00	3.00	0.610	169	105,469	A
920 125	75.00	5.00	1.016	781	175,781	S
920 127	80.00	1.60	0.347	27	68,267	A
920 128	80.00	3.00	0.650	180	128,000	A
920 130	80.00	4.00	0.867	427	170,667	S
920 140	80.00	6.00	1.301	1,440	256,000	S
920 145	80.00	8.00	1.734	3,413	341,333	S
920 150	80.00	10.00	2.168	6,667	426,667	S
920 152	80.00	12.00	2.602	11,520	512,000	S
920 153	80.00	16.00	3.469	27,307	682,667	S
920 155	80.00	25.00	5.420	104,167	1,066,667	S
920 157	100.00	1.60	0.434	34	133,333	A
920 160	100.00	3.00	0.813	225	250,000	A
920 162	100.00	4.00	1.084	533	333,333	A
920 165	100.00	6.00	1.626	1,800	500,000	S
920 167	100.00	8.00	2.168	4,267	666,667	S
920 170	100.00	10.00	2.710	8,333	833,333	S
920 172	100.00	12.00	3.252	14,400	1,000,000	S
920 174	100.00	20.00	5.420	66,667	1,666,667	S
920 175	100.00	25.00	6.775	130,208	2,083,333	S
920 177	101.60	50.80	13.985	1,109,406	4,437,606	S
920 180	108.00	3.00	0.878	243	314,928	A
920 185	108.00	8.00	2.341	4,608	839,808	S
920 186	120.00	6.00	1.951	2,160	864,000	S
920 189	120.00	16.00	5.203	40,960	2,304,000	S

## FLAT BAR



SECTION NUMBER	DIMENSIONS		MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
	W (mm)	T (mm)				
920 187	125.00	3.00	1.016	281	488,281	A
920 190	125.00	5.00	1.694	1,302	813,802	S
920 195	125.00	6.00	2.033	2,250	976,563	S
920 198	132.00	8.00	2.862	5,632	1,533,312	S
920 200	138.00	8.00	2.992	5,888	1,752,048	A
920 207	150.00	6.00	2.439	2,700	1,687,500	S
920 208	150.00	8.00	3.252	6,400	2,250,000	S
920 210	150.00	12.00	4.878	21,600	3,375,000	S
920 240	150.00	12.20	4.959	22,698	3,431,250	S
920 213	150.00	16.00	6.504	51,200	4,500,000	S
920 250	150.00	20.00	8.130	100,000	5,625,000	S
920 265	160.00	6.00	2.602	2,880	2,048,000	S
920 270	160.00	10.00	4.336	13,333	3,413,333	S
920 274	160.00	12.00	5.203	23,040	4,096,000	S
920 276	160.00	16.00	6.938	54,613	5,461,333	S
920 280	160.00	25.00	10.840	208,333	8,533,333	S
920 290	175.00	4.00	1.897	933	1,786,458	S
920 293	175.00	5.00	2.371	1,823	2,233,073	S
920 295	175.00	6.00	2.846	3,150	2,679,688	S
920 297	175.00	8.00	3.794	7,467	3,572,917	S
920 300	175.00	10.00	4.743	14,583	4,466,146	S
920 340	195.00	12.00	6.341	28,080	7,414,875	S
920 350	200.00	6.00	3.252	3,600	4,000,000	S
920 352	200.00	10.00	5.420	16,667	6,666,667	S
920 355	200.00	12.00	6.504	28,800	8,000,000	S
920 375	200.00	15.00	8.130	56,250	10,000,000	S

### MISCELLANEOUS FLAT BAR

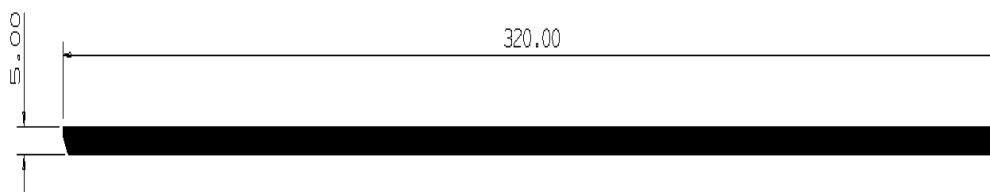
SECTION NUMBER	DIMENSIONS		MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
	W (mm)	T (mm)				
ICT 010	124.00	8.00	2.664	5,204	1,237,589	S
ICT 009	124.50	6.00	1.990	2,178	917,736	S
ICT 139	320.00	5.00	4.322	3,319	13,521,269	S



ICT-010



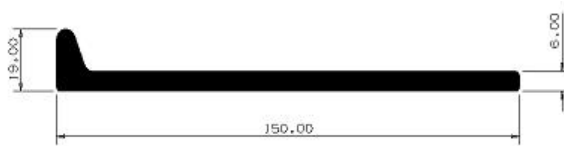
ICT-009



ICT-139

### BULB FLAT

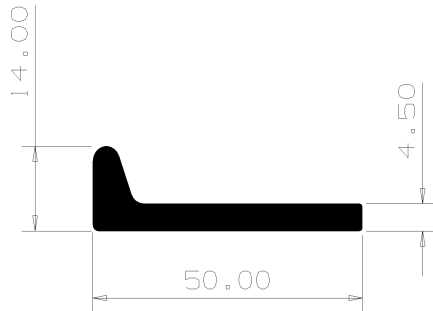
SECTION NUMBER	DESCRIPTION (mm)	MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
983 213	150MM BULB FLAT	2.7	10, 245	2, 118, 311	S
985 102	40 x 4	0.853	9,123	40,046	S
985 066	50 X 15	0.807	2,783	72,424	S
985 099	76.2 X 19.05	1.397	8,672	294,591	S
985 064	50 X 14	0.759	2,545	68,091	S
985 063	76.2 X 21	1.373	11,460	293,449	S
985 065	76.2 X 19.1	1.414	9,123	297,760	S
985 100	98.7 X 19.05	1.718	9,272	607,713	S



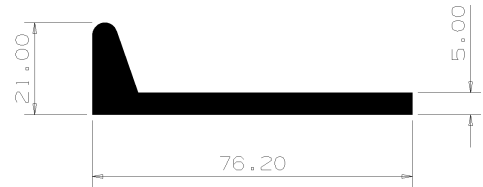
983 213



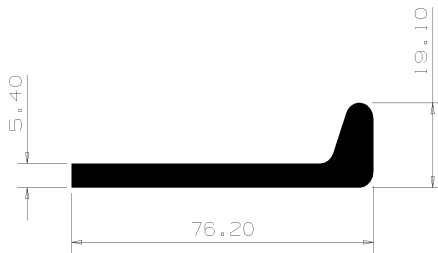
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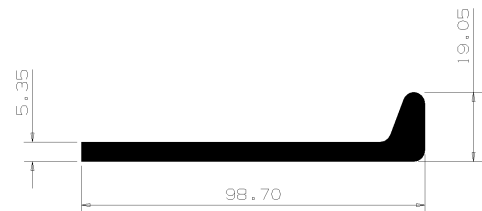
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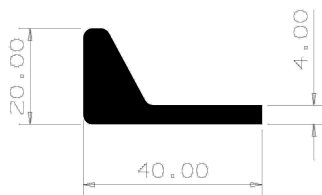
985 063



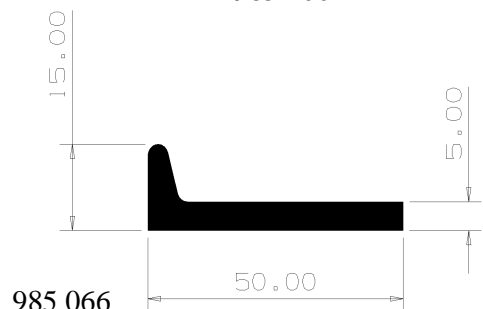
985 065



985 100



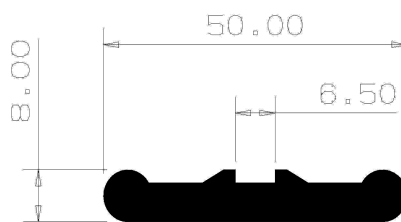
985 102



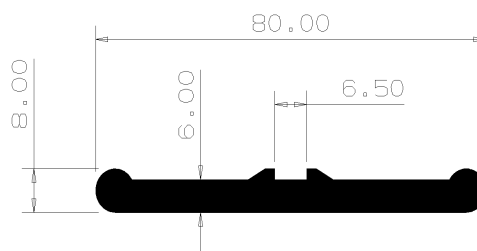
985 066

### RIDER BARS

SECTION NUMBER	DESCRIPTION (mm)	MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
985 061	RIDER BAR 50 X 8	0.886	1,314	67,231	S
985 062	RIDER BAR 80 X 8	1.374	1,877	270,350	S

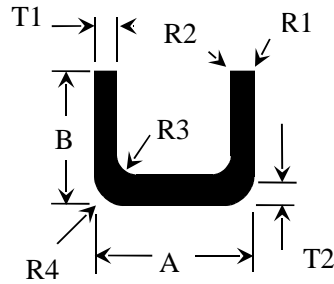


985-061



985-062

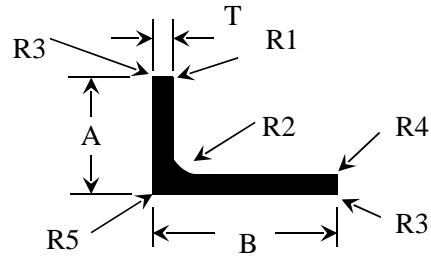




## CHANNEL – RADIUS CORNER

SECTION NUMBER	DIMENSIONS (mm)								MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
	A	B	T1	T2	R1	R2	R3	R4				
911 190	44.00	20.00	1.50	1.50	0.40	0.40	1.00	2.50	0.323	4,553	34,663	A
ICT 119	50.00	50.00	3.00	3.00	0.40	0.40	3.00	0.40	1.181	113,990	188,955	S
911 195	51.00	25.00	1.50	1.50	0.40	0.40	1.00	2.50	0.392	8,898	58,354	A
ICT 096	63.50	38.10	3.20	3.20	0.40	0.40	3.00	0.40	1.166	61,687	274,513	S
911 360	80.00	40.00	4.00	4.00	0.40	0.40	3.00	0.40	1.658	92,341	591,745	S
ICT 025	100.00	25.00	3.00	3.00	0.40	0.40	3.00	0.40	1.181	19,884	568,889	S
911 380	100.00	45.00	4.90	4.90	0.40	0.40	5.00	0.40	2.422	164,493	1,318,415	A
ICT 023	100.00	50.00	3.00	3.00	0.40	0.40	3.00	0.40	1.588	143,368	921,839	S
911 390	101.60	50.80	7.92	6.35	0.40	0.40	9.40	0.40	3.754	337,663	2,163,319	S
911 395	101.60	63.50	6.00	6.00	0.40	0.40	8.00	1.00	3.594	521,713	2,152,466	A
911 425	125.00	65.00	9.50	6.50	0.40	0.40	10.50	0.40	5.342	823,839	4,894,825	A
911 435	127.00	50.80	3.20	3.20	0.40	0.40	5.00	0.40	1.956	170,916	1,751,350	A
911 450	127.00	50.80	4.00	4.00	0.40	0.40	6.35	0.40	2.438	209,016	2,157,776	S
911 460	127.00	63.50	9.52	6.35	0.40	0.40	10.66	0.40	5.267	773,625	4,976,695	A
980 006	128.00	63.50	9.00	6.00	0.40	0.40	7.00	12.00	4.776	4,547,104	713,861	A
911 470	133.35	89.90	9.53	9.53	3.18	3.18	6.35	0.40	7.391	2,098,372	7,447,565	S
985 040	140.00	25.00	3.00	3.00	0.40	0.40	3.00	0.40	1.506	21,336	1,322,472	A
911 475	140.00	60.00	10.00	8.00	0.40	0.40	10.00	0.40	5.970	728,641	6,375,374	A
980 030	147.00	100/50	6.00	5.00	1.00	1.00	3.00	7.50	3.939	1,207,834	4,967,510	A
911 490	147.00	63.00	7.00	6.00	2.00	2.00	8.00	0.40	4.689	688,240	5,728,111	A
910 463	150.00	22.00	3.00	3.00	0.40	0.40	0.40	0.40	1.528	14,773	1,459,692	A
911 500	150.00	50.00	5.00	5.00	0.40	0.40	0.40	0.40	3.252	253,281	3,772,500	A
ICT 074	150.00	60.00	5.00	5.00	0.40	0.40	5.00	0.40	3.552	426,380	4,348,148	S
980 008	150.00	75/65	8.00	6.00	0.80	0.80	7.00	12.00	5.102	938,173	6,601,558	S
911 520	150.00	75/65	16.00	16.00	0.40	0.40	10.00	0.40	11.737	2,086,710	13,153,967	A
911 525	152.40	63.50	7.92	6.35	0.40	0.40	10.67	0.40	5.208	725,898	6,814,341	A
980 065	152.40	76.20	9.60	9.60	0.40	0.40	7.00	16.60	7.167	1,432,436	8,826,686	S
911 550	160.00	60.00	9.00	6.00	0.40	0.40	6.00	0.40	5.278	675,551	7,670,201	A
980 015	180.00	95.00	6.00	6.00	0.40	0.40	7.00	12.00	5.695	1,889,100	10,636,900	A
911 800	240.00	105.00	6.00	6.00	1.00	1.00	10.00	16.00	6.938	2,717,408	22,212,274	A
980 050	250.00	110.00	12.00	12.00	1.00	1.00	7.00	19.00	14.139	5,798,300	46,947,600	A
911 900	280.00	95.00	7.50	5.50	1.00	1.00	1.00	5.00	7.781	2,508,192	34,774,467	A
911 195	51.00	25.00	1.50	1.50	0.40	0.40	1.00	2.50	0.392	8,898	58,354	A

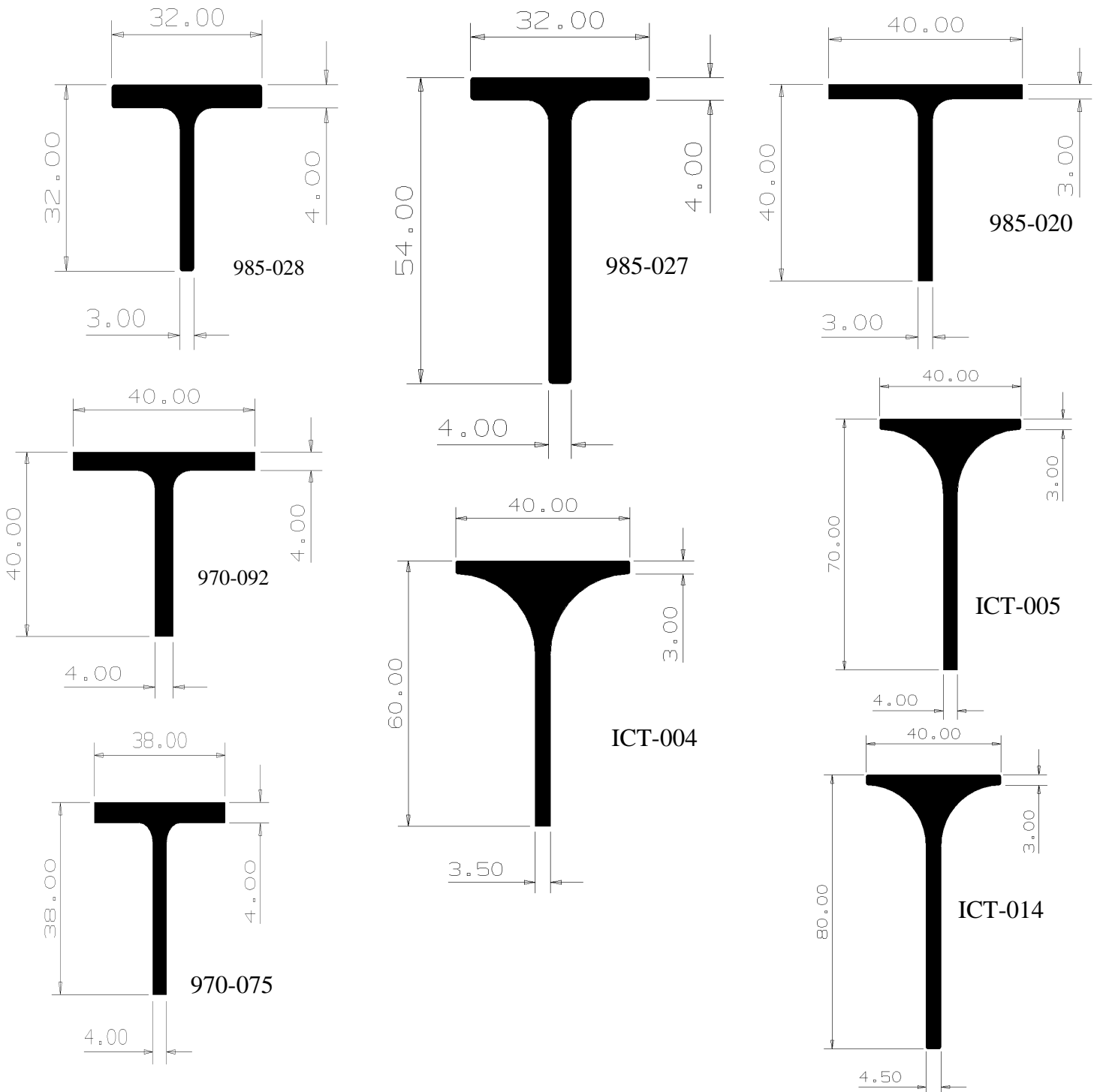
## ANGLE – RADIUS CORNER



SECTION NUMBER	DIMENSIONS (mm)								MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
	A	B	T	R1	R2	R3	R4	R5				
902 510	25.00	100.00	3.00	0.40	3.00	0.40	0.40	0.50	0.996	11,291	379,387	S
902 580	25.00	140.00	2.50	0.40	3.00	0.40	0.40	0.50	1.105	10,076	805,819	A
902 130	28.00	28.00	3.00	0.40	0.40	3.00	0.40	3.00	0.415	10,806	10,806	A
901 154	30.00	50.00	5.00	0.40	4.00	0.40	0.40	0.40	1.026	25,792	94,992	S
902 500	30.00	99.00	4.00	0.40	4.00	0.40	0.40	4.00	1.327	24,734	493,540	A
902 180	38.10	38.10	4.75	0.40	5.30	0.40	0.40	0.40	0.936	45,854	45,854	A
902 200	40.00	40.00	3.00	0.40	1.00	0.40	0.40	2.00	0.624	35,734	35,734	A
ICT 036	40.00	40.00	4.00	0.40	4.00	0.40	0.40	0.40	0.833	46,230	46,230	S
902 205	40.00	40.00	6.00	0.40	4.00	0.40	0.40	0.40	1.213	64,578	64,578	S
902 270	50.00	50.00	4.00	0.40	6.00	0.40	0.40	0.40	1.062	93,183	93,183	S
902 274	50.00	50.00	6.00	0.40	4.00	0.40	0.40	0.40	1.538	131,468	131,468	S
ICT 022	50.00	100.00	4.00	0.40	4.00	0.40	0.40	0.40	1.592	111,832	627,016	S
985 049	50.00	100.00	4.00	0.40	3.00	0.40	0.40	0.40	1.587	109,576	585,078	S
ICT 117	50.00	125.00	6.00	0.40	4.00	0.40	0.40	0.40	2.757	166,909	1,674,155	S
902 280	50.80	50.80	6.35	0.40	6.10	0.40	0.40	0.40	1.661	145,111	145,111	S
902 295	63.50	63.50	6.35	0.40	6.85	0.40	0.40	0.40	2.104	239,751	293,751	S
902 300	65.00	65.00	4.00	0.40	7.50	0.40	0.40	0.40	1.399	210,699	210,699	A
ICT 128	75.00	75.00	3.00	0.40	3.00	0.40	0.40	0.40	1.200	248,960	248,960	S
902 527	75.00	100.00	8.00	0.40	8.00	0.40	0.40	0.40	3.658	657,319	1,355,139	A
902 380	76.20	63.20	6.35	0.40	7.62	0.40	0.40	0.40	2.547	520,107	520,107	S
902 385	76.20	76.20	9.53	0.40	7.00	0.40	0.40	0.40	3.718	734,138	734,138	S
901 555	76.20	101.00	6.35	3.17	3.20	0.40	3.17	0.40	2.934	556,092	1,123,490	S
901 885	76.20	228.00	6.35	3.17	6.00	0.40	3.17	0.40	5.135	669,462	10,436,612	S
902 400	80.00	80.00	6.00	0.40	4.00	0.40	0.40	0.40	2.513	573,897	573,879	A
902 410	80.00	80.00	10.00	0.40	6.00	0.40	0.40	0.40	4.086	891,011	891,011	S
ICT 123	80.00	125.00	8.00	0.40	6.00	0.40	0.40	0.40	4.292	839,609	2,563,701	S
902 530	80.80	101.60	6.35	0.40	8.13	0.40	0.40	0.40	2.552	175,459	1,012,375	S
902 528	100.00	80.00	10.00	0.40	9.00	0.40	0.40	0.40	4.654	1,679,556	954,580	S
901 770	101.00	152.00	6.35	3.17	3.20	0.40	3.17	0.40	4.239	1,383,383	3,801,493	A
902 650	130.00	160.00	10.00	0.40	10.00	0.40	0.40	0.40	8.294	4,950,852	7,594,258	A
ICT 083	150.00	150.00	10.00	0.40	5.00	0.40	0.40	0.40	7.874	6,377,296	6,377,296	A
902 500	30.00	99.00	4.00	0.40	4.00	0.40	0.40	0.40	1.327	24, 734	493, 540	S

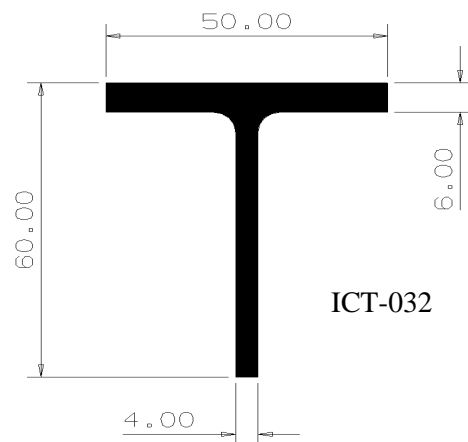
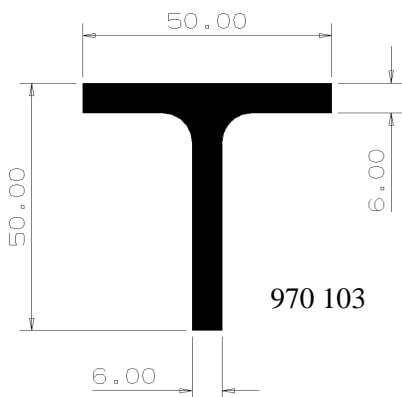
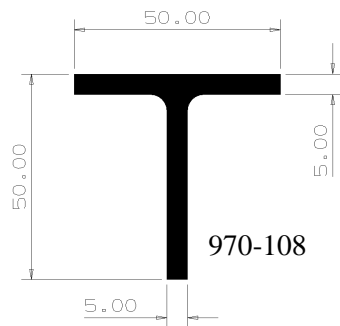
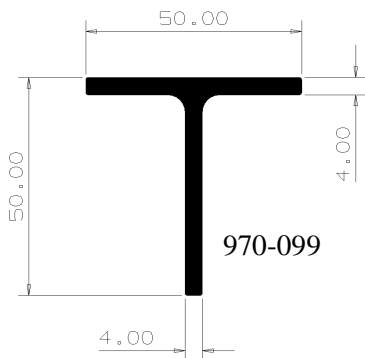
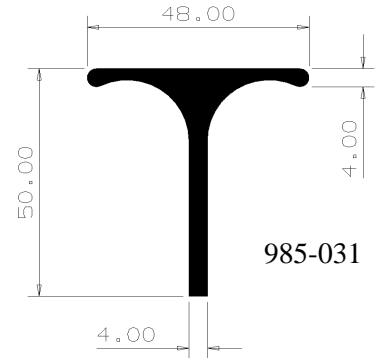
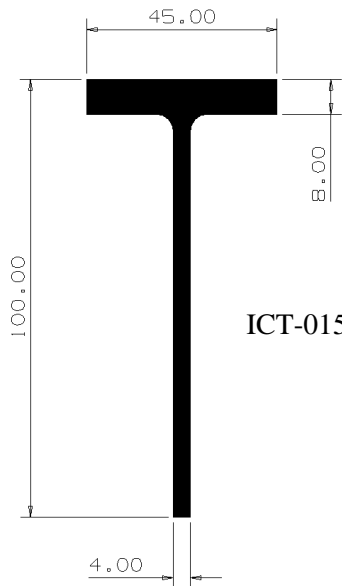
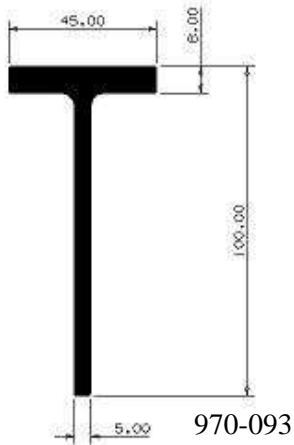
### TEE SECTION

SECTION NUMBER	DESCRIPTION (MM)	MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
985 028	32 X 32 X 4/3	0.590	18,648	10,967	S
985 027	32 X 54 X 4	0.907	99,784	11,196	S
970 075	38 X 38 X 4	0.799	39,467	18,533	S
985 020	40 X 40 X 3	0.645	36,169	16,126	S
970 092	40 X 40 X 4	0.842	46,376	21,587	S
ICT 004	40 X 60 X 3.5/3	1.253	140,263	22,647	S
ICT 005	40 X 70 X 4/3	1.428	239,011	22,899	S
ICT 014	40 X 80 X 4.5/3	1.630	376,589	23,222	S



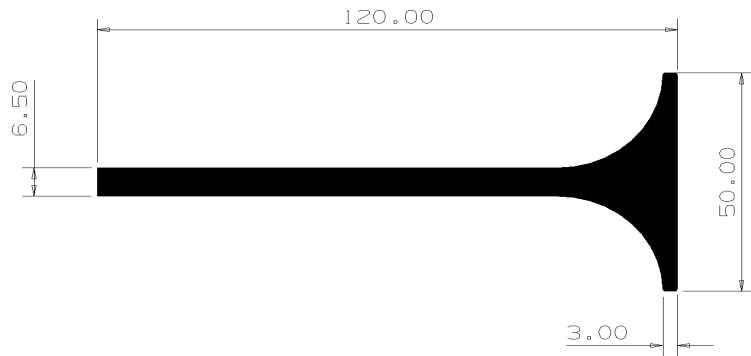
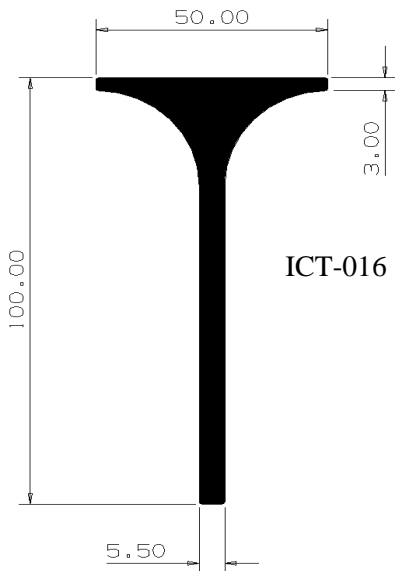
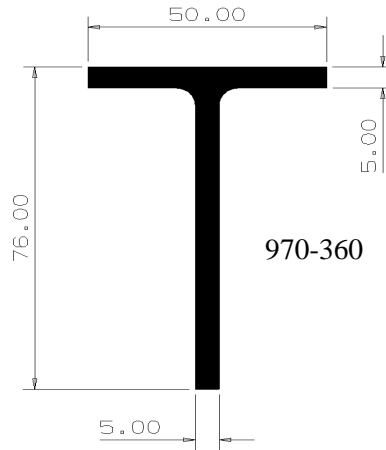
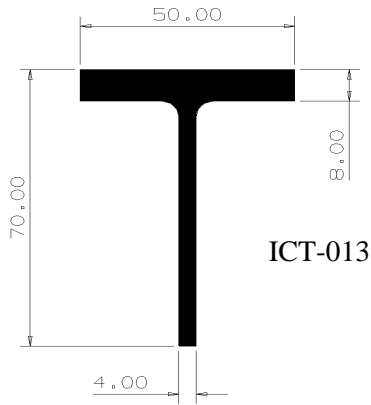
### TEE SECTION

SECTION NUMBER	DESCRIPTION (mm)	MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
970 093	45 X 100 X 8/5	2.240	834,240	61,683	S
ICT 015	45 X 100 X 4/8	1.991	719,258	61,302	S
985 031	48 X 50 X 4	1.075	90,935	30,024	S
970 099	50 X 50 X 4	1.058	92,998	41,840	S
970 108	50 X 50 X 5	1.306	112,990	52,635	S
970 103	50 X 50 X 6	1.570	132,093	63,603	S
ICT 032	50 X 60 X 4/6	1.417	166,924	62,849	S



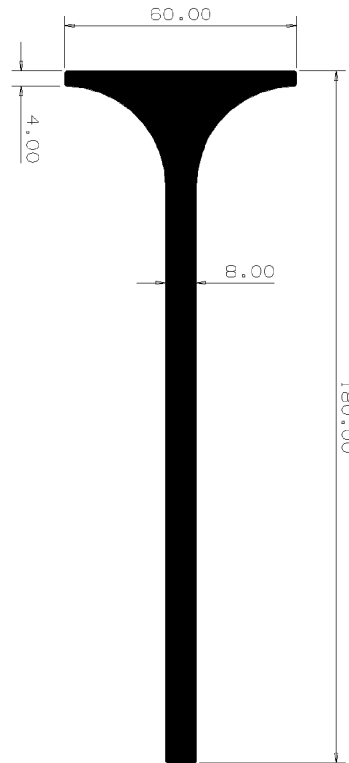
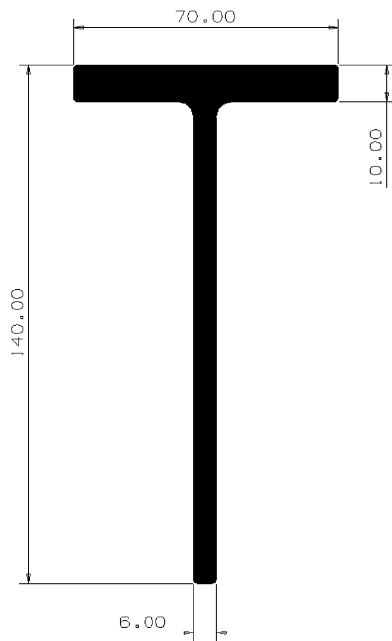
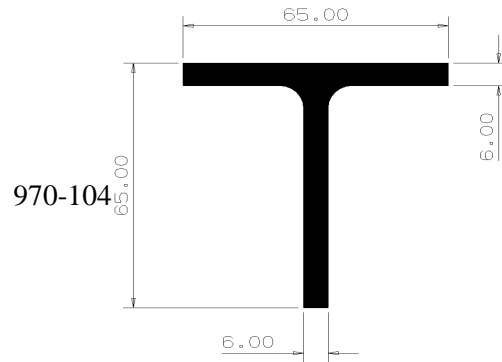
**TEE SECTION**

SECTION NUMBER	DESCRIPTION (mm)	MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
ICT 013	50 X 70 X 4/8	1.775	269,602	83,725	S
970 360	50 X 76 X 5	1.658	363,907	52,906	S
ICT 016	50 X 100 X 5.5/3	2.427	885,994	48,825	S
ICT 007	50 X 120 X 6.5/3	3.017	1,639,565	50,523	S



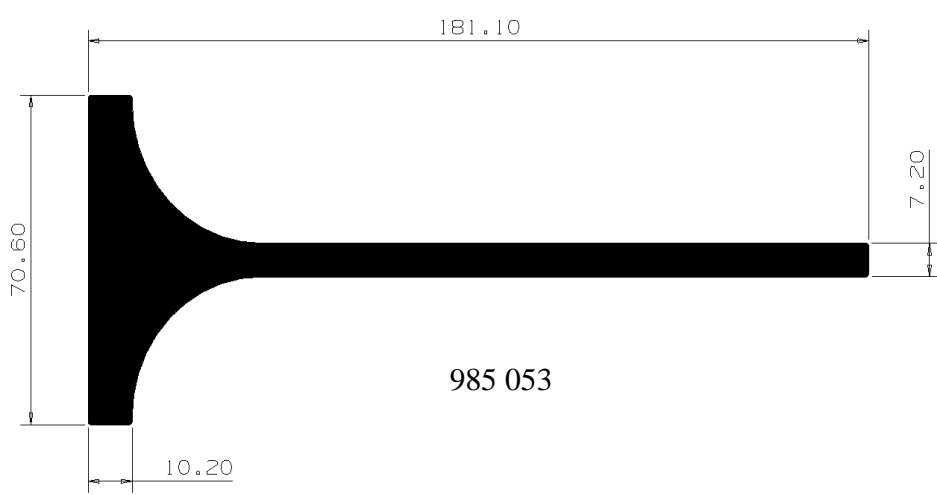
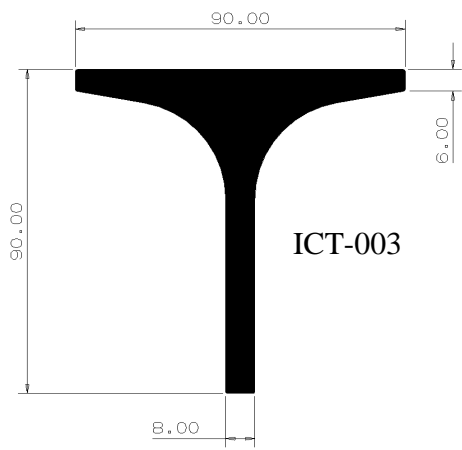
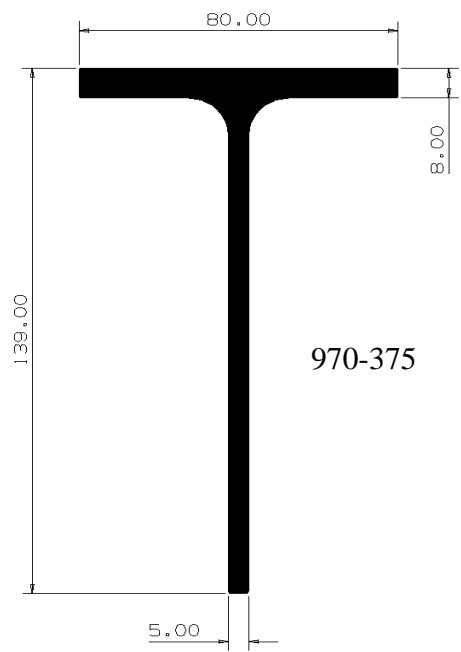
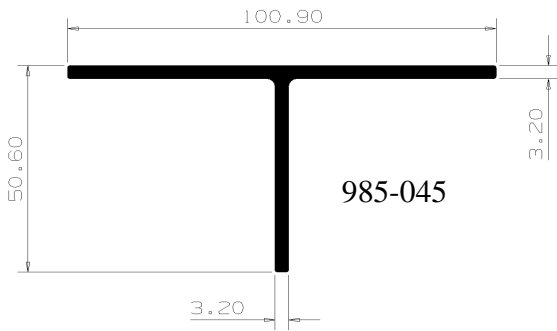
### TEE SECTION

SECTION NUMBER	DESCRIPTION (mm)	MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
985 077	60 X 180 X 8/4	5.251	114,038	6,476,987	S
970 104	65 X 65 X 6	2.058	301,755	138,685	S
ICT 017	70 X 140 X 6/10	4.026	291,305	287,240	S



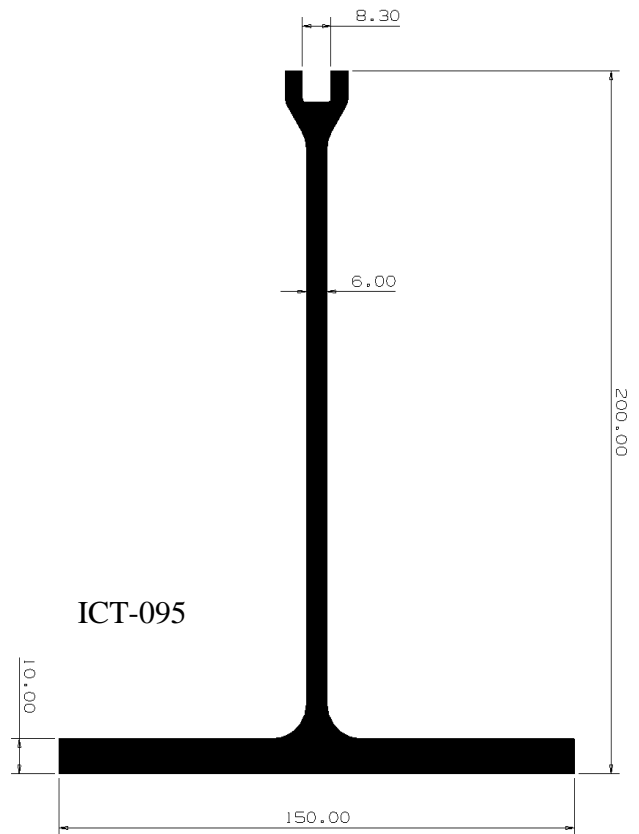
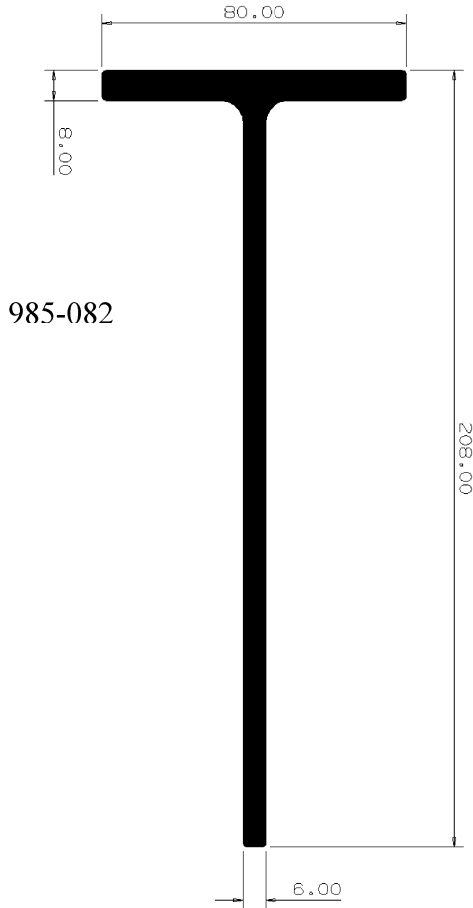
**TEE SECTION**

SECTION NUMBER	DESCRIPTION (mm)	MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
970 375	80 X 139 X 8/5	3.625	343,469	2,537,253	S
ICT 003	90 X 90 X 8/6	4.644	1,107,127	507,579	S
985 045	100.9 X 50.6 X 3.2	1.290	94,601	273,524	S
985 053	70.6 X 181.1 X 7.2/10.2	6.332	357,372	7,397,998	S



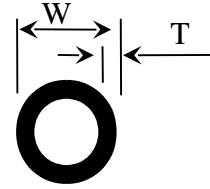
**TEE SECTION**

SECTION NUMBER	DESCRIPTION (mm)	MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
985 082	80 X 208 X 6/8	5.025	343,883	8,565,868	S
ICT 095	150 X 200 X 6/10	7.549	2,823,055	11,990,149	S

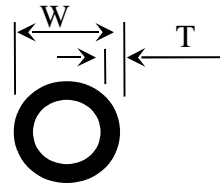




## ROUND TUBE

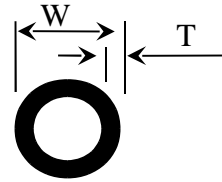


SECTION NUMBER	DIMENSIONS (mm)		MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
	W	T				
950 002	10.00	1.00	0.077	290	290	A
950 005	10.00	2.40	0.155	455	445	A
950 006	10.90	1.50	0.120	502	502	A
950 008	12.00	1.00	0.094	527	527	A
950 010	12.00	1.60	0.142	724	724	A
950 011	12.70	1.00	0.100	634	634	A
950 013	14.00	1.60	0.169	1,218	1,218	A
950 012	14.00	2.00	0.204	1,395	1,395	A
950 022	14.75	1.65	0.184	1,480	1,480	A
950 016	15.88	1.20	0.150	1,501	1,501	A
950 007	15.90	1.40	0.173	1,692	1,692	A
950 014	16.00	1.20	0.149	1,538	1,538	A
950 015	16.00	1.60	0.196	1,899	1,899	A
950 018	18.00	1.60	0.223	2,798	2,798	A
950 020	19.00	1.20	0.182	2,670	2,670	A
950 026	19.00	1.50	0.223	3,180	3,180	A
950 025	19.00	1.60	0.237	3,338	3,338	A
950 023	19.00	3.20	0.430	5,160	5,160	S
950 024	19.04	5.08	0.604	6,146	6,146	S
950 027	20.00	1.20	0.192	3,144	3,144	A
950 030	20.00	1.60	0.251	3,944	3,944	A
950 031	20.00	2.00	0.306	4,637	4,637	A
950 032	20.00	2.50	0.372	5,369	5,369	A
950 033	21.00	2.00	0.324	5,447	5,447	A
950 036	22.00	1.20	0.231	4,255	4,255	A
950 040	22.00	2.00	0.341	6,346	6,346	A
950 042	22.20	1.60	0.281	5,526	5,526	A
950 041	22.23	5.99	0.828	11,446	11,446	A
950 043	22.45	1.15	0.209	4,377	4,377	A
950 045	24.00	1.60	0.305	7,098	7,098	A
950 055	25.00	1.60	0.319	8,088	8,088	A
950 057	25.00	2.50	0.479	11,321	11,321	A
950 060	25.00	3.00	0.562	12,778	12,778	S
950 063	25.00	5.30	0.895	17,122	17,122	S
950 065	25.00	7.00	1.073	18,456	18,456	A
950 059	25.40	1.22	0.251	6,790	6,790	A
950 061	25.40	1.60	0.324	8,509	8,509	A
950 062	25.60	2.00	0.402	10,398	10,398	A

**ROUND TUBE**

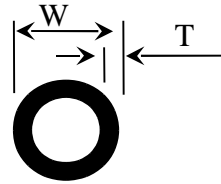
SECTION NUMBER	DIMENSIONS (mm)		MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
	W	T				
950 066	27.00	8.00	1.294	25,368	25,368	A
950 067	27.50	2.50	0.532	15,493	15,493	A
950 068	28.00	1.60	0.360	11,603	11,603	A
950 069	28.00	2.50	0.543	16,435	16,435	A
950 070	28.45	1.20	0.278	9,554	9,554	A
950 071	28.45	1.42	0.328	11,076	11,076	A
950 075	28.80	1.80	0.414	13,975	13,975	A
950 080	30.00	1.60	0.387	14,438	14,438	A
950 082	30.50	4.50	0.996	31,991	31,991	A
950 081	31.70	3.10	0.755	28,813	28,813	A
950 085	32.00	1.20	0.315	13,790	13,790	A
950 090	32.00	1.60	0.414	17,701	17,701	A
950 093	32.00	2.00	0.511	21,300	21,300	A
950 094	32.00	2.50	0.628	25,385	25,385	A
950 095	32.00	3.00	0.741	29,040	29,040	S
950 091	33.00	3.65	0.921	37,928	37,928	S
950 096	35.00	1.50	0.428	22,190	22,190	A
950 098	35.00	1.60	0.455	23,465	23,465	A
950 099	35.00	3.00	0.817	38,943	38,943	A
950 097	36.00	2.00	0.579	30,976	30,976	A
950 106	36.00	5.50	1.428	63,273	63,273	A
950 100	37.00	4.00	1.124	57,279	57,279	A
950 103	38.00	1.20	0.376	23,510	23,510	A
950 101	38.00	1.60	0.496	30,361	30,361	A
950 104	38.00	2.39	0.725	42,572	42,572	A
950 102	38.10	1.80	0.556	33,894	33,894	A
950 107	38.10	2.00	0.615	37,063	37,063	A
950 105	38.10	3.00	0.896	51,317	51,317	A
950 109	40.00	1.60	0.523	35,639	35,639	A
950 112	40.00	2.00	0.647	43,216	43,216	A
950 120	40.00	3.00	0.945	60,066	60,066	A

## ROUND TUBE



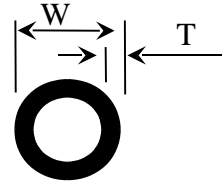
SECTION NUMBER	DIMENSIONS (mm)		MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
	W	T				
ICT 145	40.00	6.00	1.737	95,492	95,492	A
950 121	41.60	4.55	1.435	92,244	92,244	A
950 122	42.00	4.50	1.437	94,531	94,531	A
950 124	42.00	6.75	2.026	120,360	120,360	A
950 128	44.45	1.45	0.531	45,324	45,324	A
950 130	44.45	3.25	1.140	89,811	89,811	S
950 135	44.45	1.50	0.548	46,727	46,727	A
950 138	46.00	3.50	1.266	106,226	106,226	S
950 141	47.60	1.30	0.512	50,709	50,709	A
950 146	47.90	3.60	1.358	123,718	123,718	A
950 162	48.40	8.00	2.752	215,227	215,227	A
950 150	48.41	3.25	1.250	118,154	118,154	A
950 160	48.41	4.47	1.672	150,459	150,459	S
950 165	48.41	2.60	1.023	101,003	101,003	S
950 168	48.80	1.60	0.659	71,317	71,317	A
950 170	50.00	2.00	0.817	87,010	87,010	A
950 175	50.00	3.00	1.200	122,812	122,812	S
950 177	50.00	3.50	1.386	138,976	138,976	S
950 180	50.00	4.00	1.567	154,051	154,051	S
950 182	50.00	5.00	1.916	181,132	181,132	A
950 184	50.00	6.12	2.288	207,109	207,109	S
950 185	50.80	1.63	0.682	76,177	76,177	A
950 190	50.80	2.64	1.082	116,152	116,152	S
950 200	50.80	3.25	1.316	137,854	137,854	A
950 191	50.85	2.64	1.084	166,513	116,513	A
950 199	55.00	15.00	5.108	430,005	430,005	S
950 203	51.70	1.60	0.682	79,093	79,093	A
950 201	52.00	3.00	1.252	139,122	139,122	A
950 207	52.37	5.54	2.209	226,557	226,557	A
950 202	54.70	1.60	0.723	94,158	94,158	A
950 204	57.15	3.25	1.491	200,579	200,579	S

## ROUND TUBE



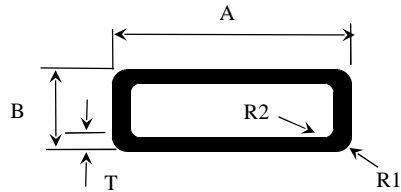
SECTION NUMBER	DIMENSIONS (mm)		MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
	W	T				
950 206	57.15	4.47	2.005	258,476	258,476	A
950 209	60.00	1.50	0.747	118,006	118,006	A
950 210	60.00	2.00	0.988	153,423	153,423	A
950 215	60.00	3.00	1.456	218,780	218,780	A
950 216	60.00	4.00	1.907	277,264	277,264	S
950 217	60.00	5.00	2.341	329,376	329,376	S
950 218	60.00	6.00	2.758	375,596	375,596	S
950 220	60.20	5.54	2.578	358,936	358,936	S
950 221	61.00	3.00	1.481	230,476	230,476	A
950 232	63.40	3.95	1.999	327,360	327,360	S
950 226	63.50	1.60	0.843	149,122	149,122	A
950 231	63.50	2.10	1.098	191,114	191,114	A
950 222	63.50	3.20	1.643	276,301	276,301	A
950 227	63.50	4.00	2.026	332,376	332,376	A
950 228	63.50	6.00	2.937	452,812	452,812	S
950 223	63.50	6.35	3.090	471,206	471,206	S
950 236	64.20	6.35	3.127	488,591	488,591	S
950 225	66.00	1.60	0.877	167,921	167,921	A
950 245	67.00	3.00	1.635	309,510	309,510	S
950 258	70.00	3.00	1.711	355,038	355,038	S
950 265	70.00	4.20	2.353	471,794	471,794	S
950 290	75.00	1.20	0.754	189,463	189,463	A
950 294	75.00	2.00	1.243	305,763	305,763	A
950 296	75.00	3.00	1.839	440,486	440,486	S
950 298	75.00	7.00	4.053	873,499	873,499	S
950 301	76.20	3.50	2.166	529,342	529,342	S
950 304	76.20	3.80	2.342	567,877	567,877	A
950 303	76.20	4.75	2.889	683,401	683,401	S
950 305	76.20	6.35	3.776	856,855	856,855	S
950 311	76.80	6.35	3.809	879,004	879,004	S

## ROUND TUBE



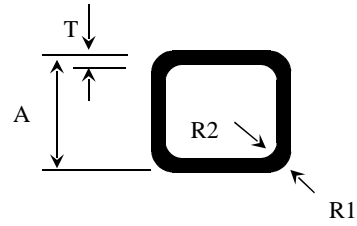
SECTION NUMBER	DIMENSIONS (mm)		MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
	W	T				
950 315	80.00	2.00	1.328	372,957	372,957	A
950 320	80.00	3.00	1.967	538,657	538,657	S
950 323	80.00	4.00	2.588	691,542	691,542	A
950 330	80.30	2.30	1.527	428,992	428,992	A
950 345	82.50	5.20	3.422	947,464	947,464	S
950 350	88.90	3.20	2.335	792,059	792,059	S
950 352	90.00	1.70	1.278	459,782	459,782	S
950 380	95.00	4.00	3.099	1,185,994	1,185,994	S
950 395	100.00	2.00	1.669	739,518	739,518	A
950 402	100.00	2.20	1.837	816,033	816,033	A
950 400	100.00	3.00	2.477	1,076,246	1,076,246	S
950 401	100.00	4.00	3.269	1,392,153	1,392,153	S
ICT 138	100.00	5.00	4.044	1,688,115	1,688,115	S
950 403	100.00	8.00	6.266	2,464,818	2,464,818	S
ICT 146	100.00	10.00	7.662	2,898,119	2,898,119	S
950 405	101.00	2.50	2.097	938,833	938,833	A
950 410	101.00	3.00	2.503	1,109,855	1,109,855	S
950 407	101.00	6.50	5.230	2,164,305	2,164,305	S
950 415	101.60	1.60	1.362	628,479	628,479	A
950 408	101.60	3.18	2.661	1,190,067	1,190,067	S
950 430	110.00	3.00	2.733	1,444,354	1,444,354	S
950 435	110.00	15.00	12.132	5,176,265	5,176,265	S
950 442	114.30	2.20	2.100	1,217,493	1,217,493	S
950 444	114.30	6.35	5.836	3,147,761	3,147,761	S
950 447	120.00	1.60	1.613	1,043,072	1,043,072	A
950 470	125.00	3.00	3.116	2,140,539	2,140,539	S
950 475	127.00	3.00	3.167	2,247,503	2,247,503	S
950 477	127.00	4.30	4.492	3,123,166	3,123,166	S
950 478	127.00	5.00	5.193	3,571,398	3,571,398	S
950 460	139.00	2.40	2.791	2,403,019	2,403,019	A
950 482	145.00	3.80	4.568	4,203,993	4,203,993	S
950 485	150.00	3.00	3.755	3,743,812	3,743,812	S
950 489	152.00	2.64	3.366	3,483,263	3,483,263	S
950 492	152.00	4.70	5.894	5,904,837	5,904,837	S
950 495	152.40	5.00	6.275	6,295,377	6,295,377	S
950 540	160.00	6.00	7.867	8,618,507	8,618,507	S
950 560	162.00	6.00	7.969	8,958,327	8,958,327	S

## RECTANGULAR HOLLOW - RADIUS CORNER



SECTION NUMBER	DIMENSIONS (MM)					MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
	A	B	T	R1	R2				
941 040	25.40	13.40	1.60	3.20	1.60	0.291	2,861	7,987	A
941 050	30.00	15.00	1.50	1.50	0.40	0.336	4,450	13,651	A
941 055	31.30	11.00	2.00	1.50	0.00	0.410	2,640	15,787	A
941 120	35.00	16.60	3.20	1.50	0.40	0.779	10,690	38,857	A
941 121	35.00	16.70	3.40	2.00	0.40	0.788	10,801	39,420	A
941 125	37.00	19.00	3.00	3.00	2.00	0.801	14,995	46,247	S
941 127	38.00	25.00	1.50	3.00	1.60	0.472	17,559	33,684	A
941 130	38.10	25.40	3.20	3.20	3.20	0.990	33,325	65,687	A
983 051	40.00	12.00	3.00	1.50	3.00	0.764	5,130	45,664	A
941 232	50.00	25.00	1.60	1.60	0.40	0.617	24,375	72,868	A
941 290	75.00	50.00	6.00	4.00	4.00	3.675	489,693	960,458	S
941 300	76.00	50.80	2.40	5.00	2.60	1.545	242,996	452,618	A
985 044	80.00	40.00	3.00	0.40	3.00	1.875	186,355	568,731	S
985 043	80.00	50.00	3.00	0.40	3.00	2.037	311,549	657,711	S
941 355	100.00	50.00	3.00	3.00	6.00	2.279	360,571	1,064,568	S
941 365	100.00	50.00	6.00	8.00	2.00	4.348	610,728	1,887,359	S
941 360	100.00	50.00	3.00	10.00	7.00	2.223	347,238	1,011,942	S
941 368	100.00	60.00	4.00	4.00	4.00	3.295	719,027	1,620,509	S
941 010	100.00	75.00	2.00	6.00	4.00	1.807	628,348	972,587	S
941 370	101.60	76.20	2.30	5.50	3.20	2.113	754,495	1,170,325	S
941 372	101.60	76.20	3.25	2.00	2.00	3.017	1,061,803	1,662,953	S
941 382	120.00	60.00	3.60	2.00	2.00	3.372	775,653	2,323,476	S
941 385	125.00	25.00	2.50	1.00	0.40	1.962	82,631	1,185,681	A
941 387	150.00	50.00	3.00	0.40	0.40	3.145	538,222	3,094,807	A
941 388	150.00	50.00	3.00	6.00	3.00	3.092	526,471	2,985,493	S
941 400	150.00	100.00	5.00	10.00	7.50	6.402	3,889,571	7,315,682	S
941 395	152.00	64.00	6.00	10.00	4.00	6.439	1,612,370	6,437,174	S
941 390	152.00	76.00	6.00	6.00	2.00	6.950	2,463,865	7,451,102	S
941 405	156.60	105.80	1.60	2.60	1.00	2.234	1,634,718	2,966,114	A
941 403	156.60	120.00	3.00	2.60	1.00	4.377	3,926,978	5,871,678	A
ICT 026	160.00	100.00	3.00	0.40	3.00	4.151	2,690,757	5,568,946	S
ICT 027	180.00	50.00	3.00	0.40	3.00	3.663	643,349	5,041,493	A

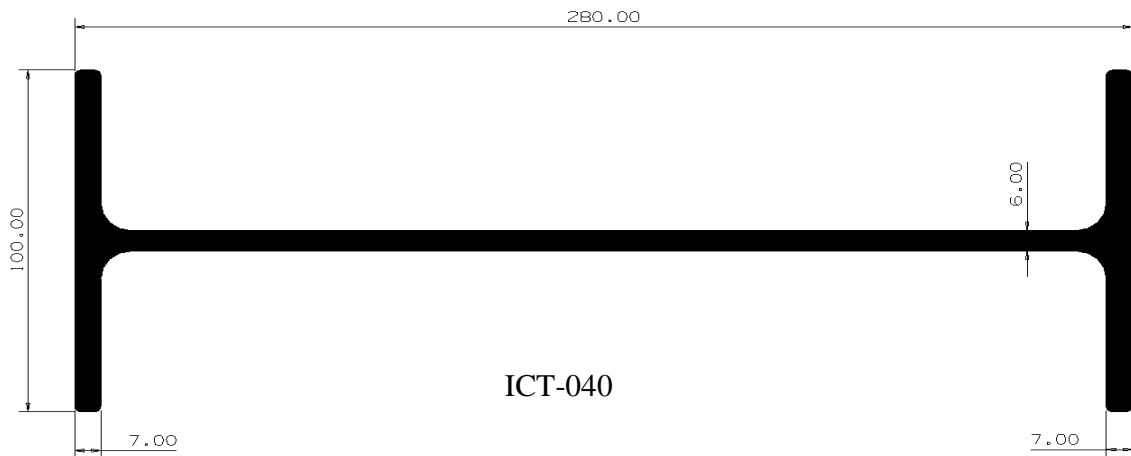
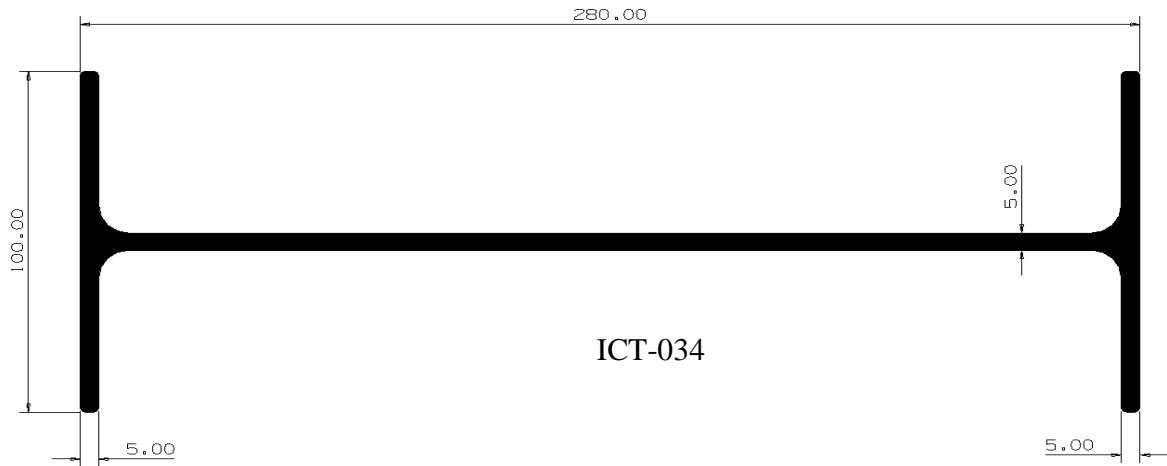
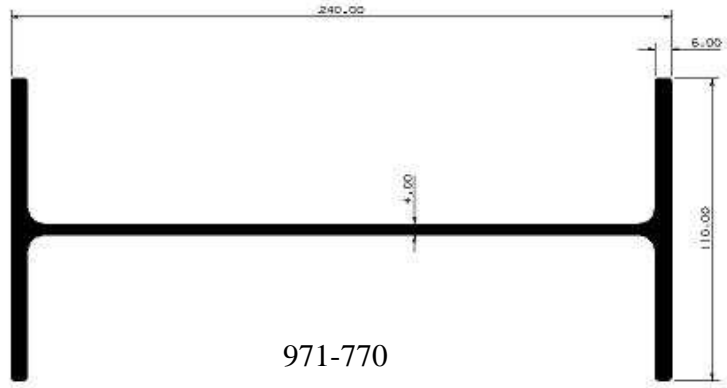
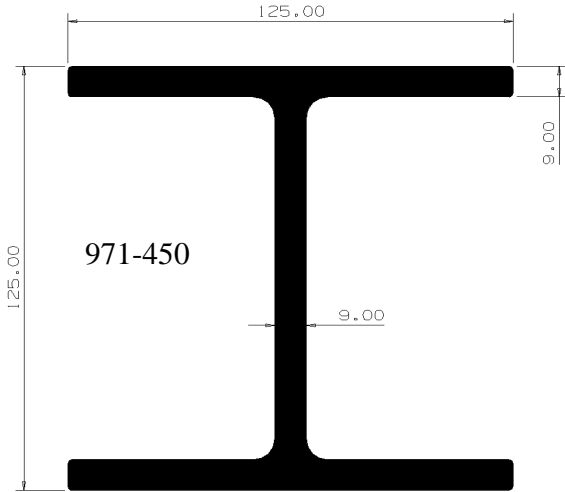
## SQUARE HOLLOW RADIUS CORNERS



SECTION NUMBER	DIMENSIONS (MM)				MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
	A	T	R1	R2				
ICT 116	47.00	3.00	0.40	3.00	1.452	174,200	174,200	S
931 007	15.00	1.60	1.60	0.40	0.226	2,491	2,491	A
931 008	16.00	1.50	2.00	0.50	0.227	2,894	2,894	A
931 010	19.00	1.50	1.60	0.40	0.279	5,215	5,215	A
931 015	22.00	1.20	2.00	0.50	0.262	6,860	6,860	A
931 016	20.00	1.60	1.60	1.60	0.319	6,633	6,633	A
931 018	25.00	1.80	1.80	0.40	0.445	14,667	14,667	A
931 019	25.00	2.00	1.80	0.40	0.491	15,938	15,938	A
931 020	25.00	3.00	3.00	3.00	0.715	21,213	12,213	A
931 021	25.00	2.50	2.50	0.40	0.595	18,453	18,453	A
931 024	25.40	1.20	2.00	0.50	0.306	10,878	10,878	A
931 028	26.40	2.50	3.00	1.50	0.632	21,994	21,994	A
931 031	27.80	1.80	3.00	1.20	0.490	20,011	20,011	A
931 033	32.00	1.80	4.00	3.30	0.544	29,174	29,174	A
931 035	32.00	2.50	2.50	0.40	0.785	41,814	41,814	A
931 036	32.00	2.50	5.50	3.00	0.750	38,675	38,675	S
931 040	37.35	2.50	5.00	2.50	0.901	65,581	65,581	A
931 047	38.10	2.50	2.50	0.40	0.950	73,732	73,732	A
931 049	38.10	3.05	3.00	0.40	1.138	85,604	85,604	A
931 050	40.00	3.00	4.00	1.00	1.168	97,192	97,192	A
931 053	40.00	6.00	2.00	2.00	2.211	161,430	161,430	A
931 058	50.00	1.60	6.00	6.00	0.801	112,095	112,095	A
931 065	50.00	2.00	6.00	6.00	0.994	137,094	137,094	A
931 068	50.00	4.00	6.00	2.00	1.920	245,638	245,638	A
931 077	50.80	1.50	6.00	4.50	0.765	111,130	111,130	S
931 080	50.80	2.00	6.00	4.00	1.011	144,250	144,250	A
931 085	50.80	3.00	4.75	1.60	1.508	208,870	208,870	A
931 127	60.00	2.00	4.00	6.00	1.211	245,136	245,136	A
931 148	76.20	3.00	6.35	3.35	2.313	750,513	750,513	S
931 155	76.00	6.20	16.00	9.80	4.319	1,226,851	1,226,851	S
931 160	100.00	5.00	10.00	7.50	5.047	2,760,404	2,760,404	S
931 170	100.00	6.00	12.00	6.00	5.863	3,114,742	3,114,742	S
ICT 029	100.00	3.20	3.00	4.00	3.342	1,920,446	1,920,446	S
ICT 055	100.00	5.00	3.00	4.00	5.133	2,847,890	2,847,890	S
ICT 068	127.00	6.35	6.35	12.70	8.023	7,052,576	7,052,576	S
ICT 035	145.00	9.50	2.00	5.00	14.003	15,897,979	15,897,979	S
931 200	150.00	3.00	3.00	1.60	4.765	6,324,285	6,324,285	A

**I BEAM**

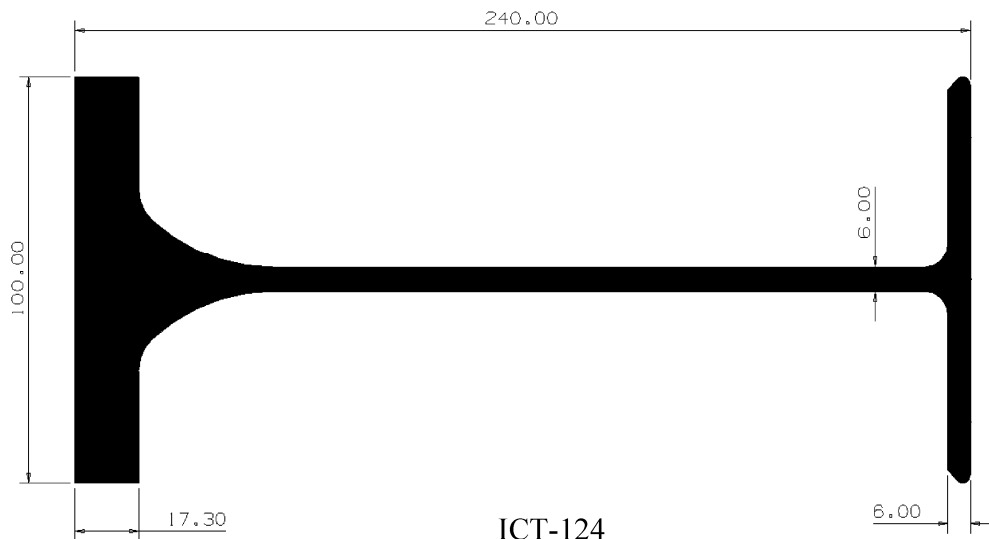
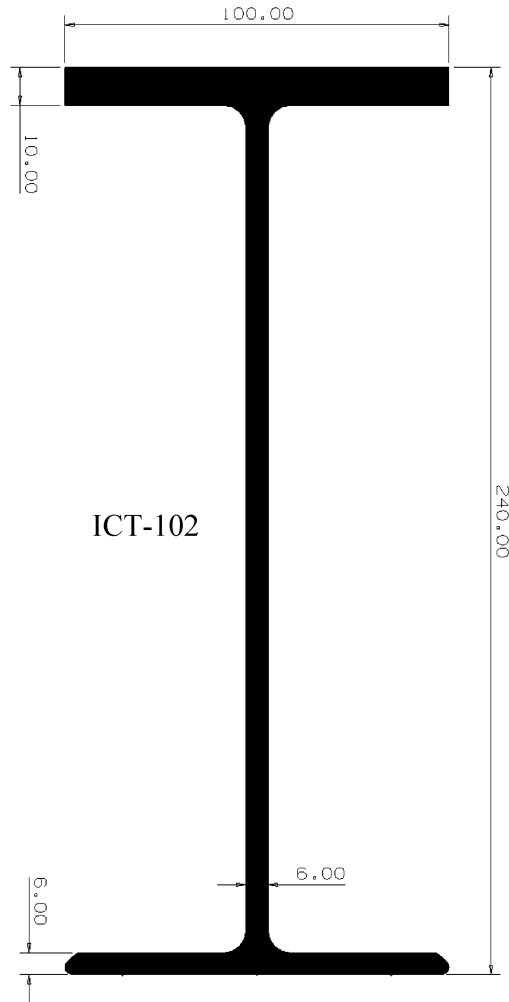
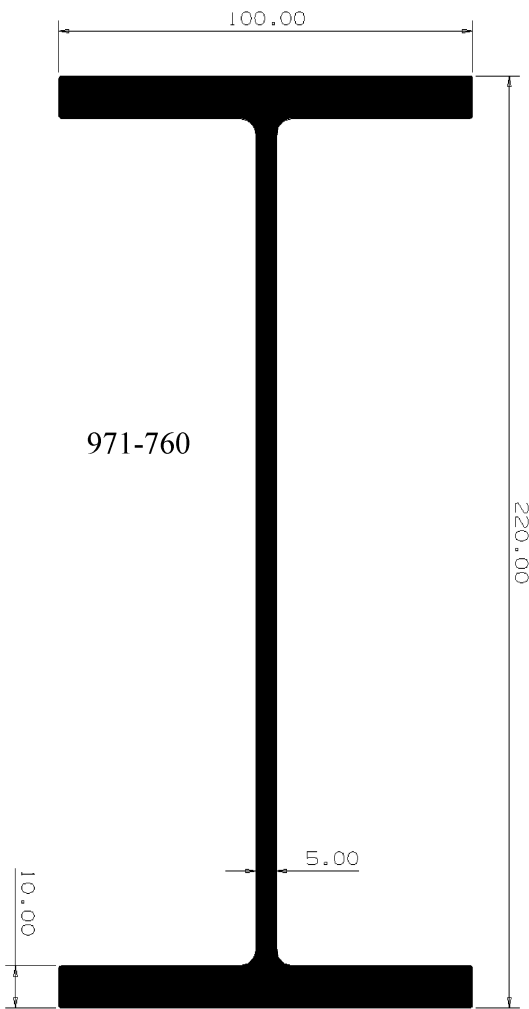
SECTION NUMBER	DESCRIPTION (mm)	MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
971 450	125 X 125 X 9/9	8.786	8,581,277	2,930,622	S
971 770	240 X 110 X 4 X 6 "I" BEAM	6.128	1, 327, 448	22, 392, 971	S
ICT 034	280 X 100 X 5/5	6.507	827,751	28,011,572	S
ICT 040	280 X 100 X 6/7	8.258	1,163,309	36,375,387	S





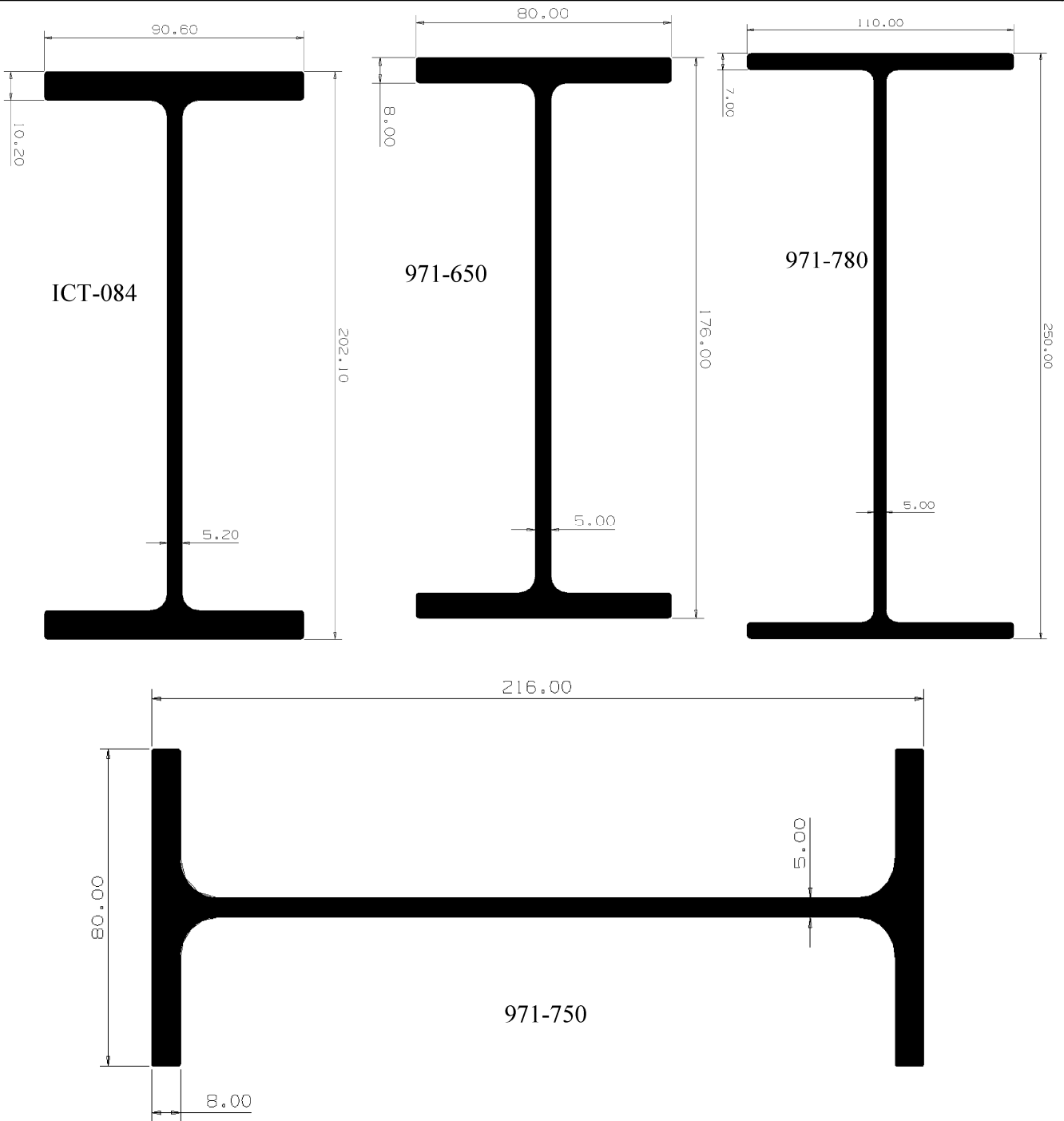
## I BEAM

SECTION NUMBER	DESCRIPTION (mm)	MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
971 760	220 X 100 X 5/10	8.166	1,667,848	25,530,167	S
ICT 102	240 X 100 X 6/6/10	8.031	1,309,588	2,663,170	S
ICT 124	241 X 100 X 6/6/17.3	10.764	32,489,063	S	



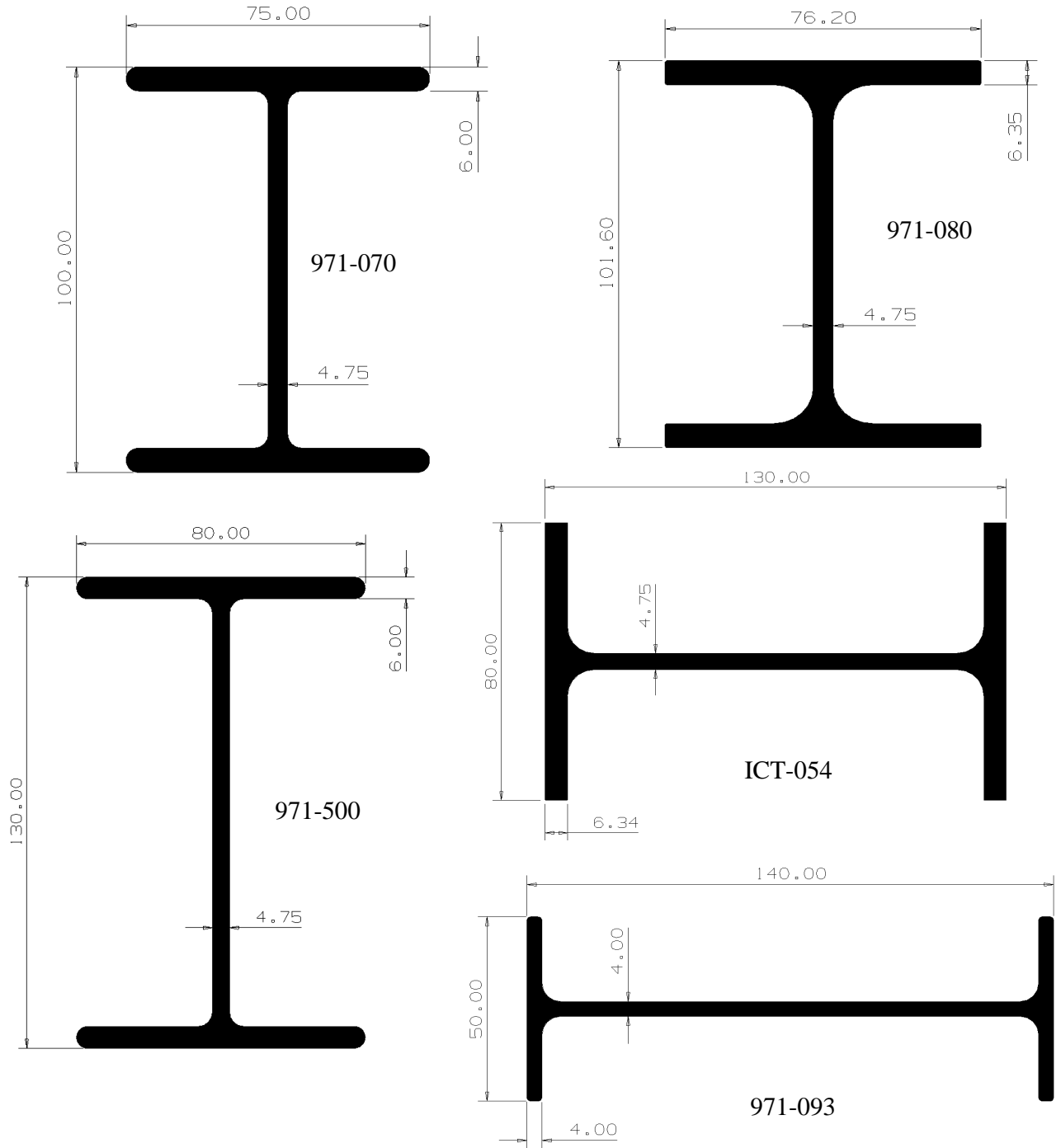
## I BEAM

SECTION NUMBER	DESCRIPTION (mm)	MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
971 650	176 X 80 X 5/8	5.690	681,917	10,866,591	S
ICT 084	202.10 X 90.6 X 5.2/10.2	7.648	1,263,411	19,862,933	S
971 750	216 X 80 X 5/8	6.410	686,292	18,000,781	S
971 780	250 X 110 X 5/7	7.419	1,544,048	28,453,064	S



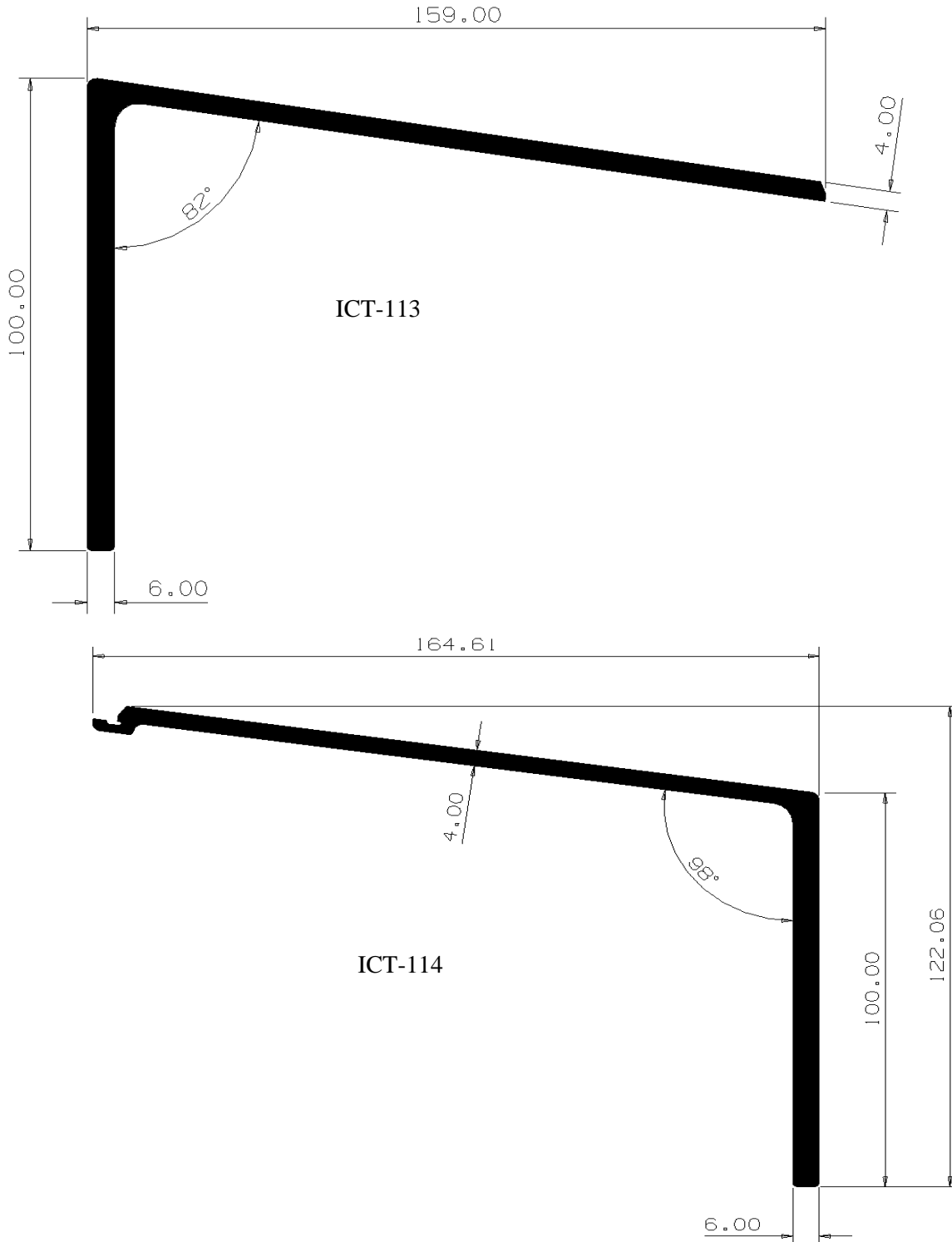
# I BEAM

SECTION NUMBER	DESCRIPTION (mm)	MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
971 070	100 X 75 X 4.75/6.00	3.558	2,245,974	401,807	S
971 080	101.6 X 76.2 X 4.75/6.35	3.976	2,614,403	470,247	S
971 500	130 X 80 X 4.75/6.00	4.116	4,330,384	489,303	S
ICT 054	130 X 80 X 4.75/6.34	4.390	542,949	4,677,476	S
971 093	140 X 50 X 4/4	2.568	83,211	2,699,208	S



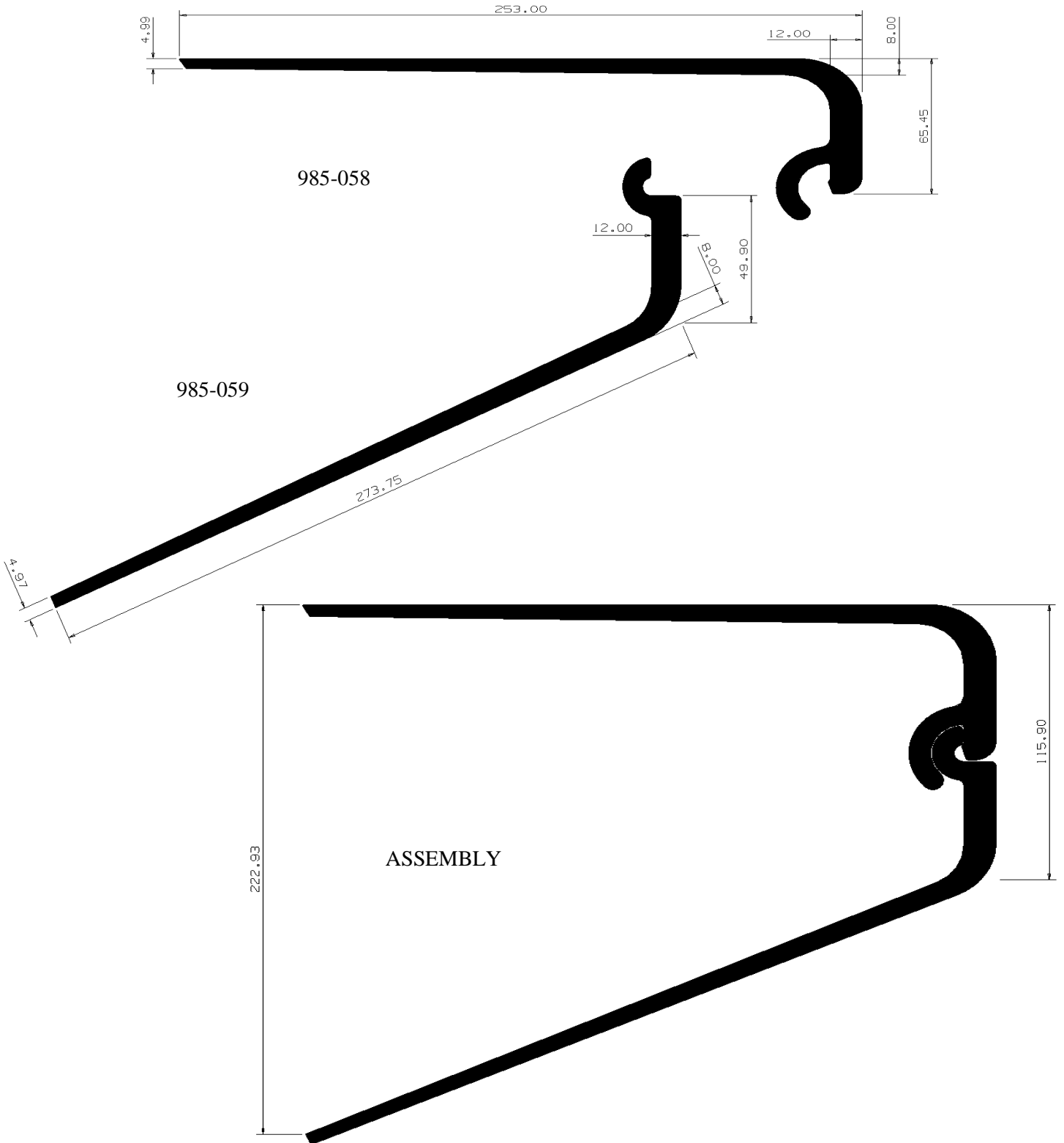
### SPONSON SECTION

SECTION NUMBER	DESCRIPTION (mm)	MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
ICT 113	PART A OF 2 PIECE SECTION	3.310	935,150	3,115,959	S
ICT 114	PART B OF 2 PIECE SECTION	3.373	1,631,104	3,424,947	S



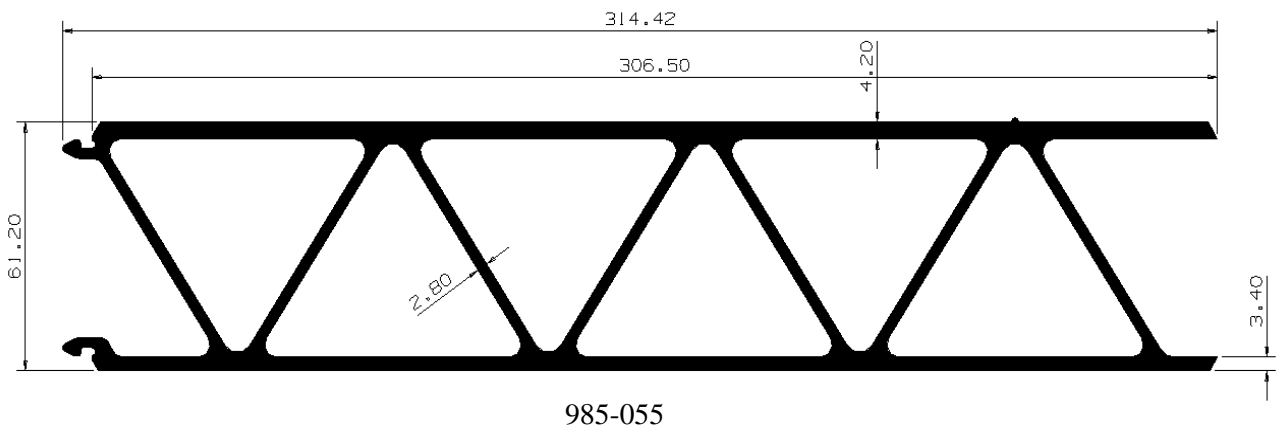
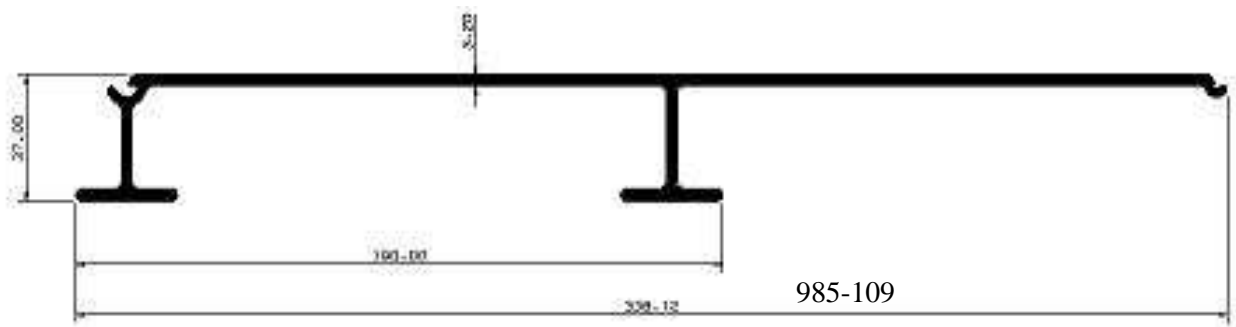
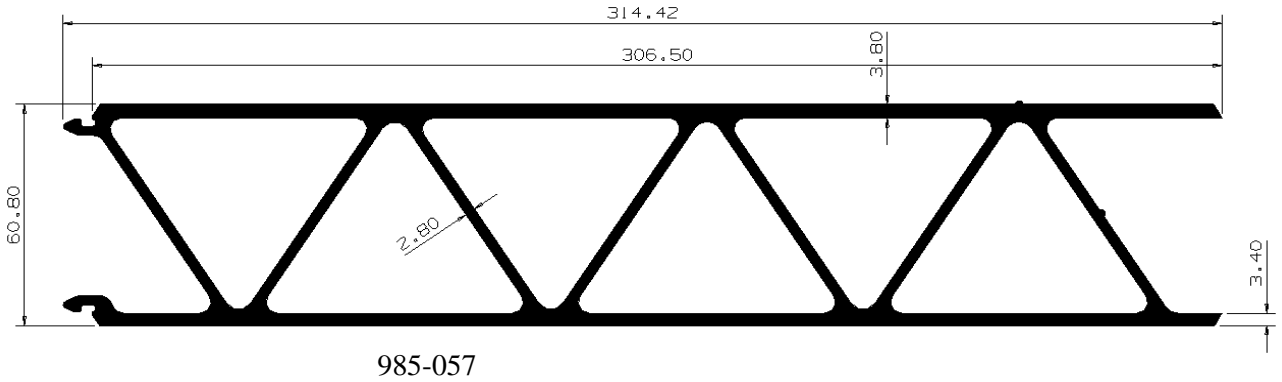
### SPONSON SECTIONS

SECTION NUMBER	DESCRIPTION (mm)	MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
985 058	PART A OF 2 PIECE SECTION	7.104	1,329,870	15,075,032	S
985 059	PART B OF 2 PIECE SECTION	6.806	5,562,350	14,956,231	S



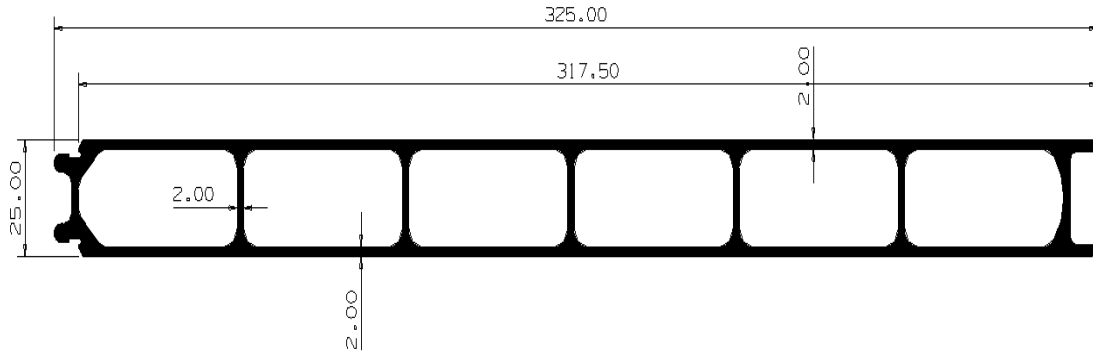
## FLOORING

SECTION NUMBER	DESCRIPTION (mm)	MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
985 057	VEHICLE DECK 306.5 X 60.8	9.938	2,227,914	28,823,878	S
985 055	VEHICLE DECK 306.5 X 61.2	10.261	2,332,803	29,719,735	S
985 109	320MM BOAT DECKING	4.009	245, 851	14, 137, 140	S



**FLOORING**

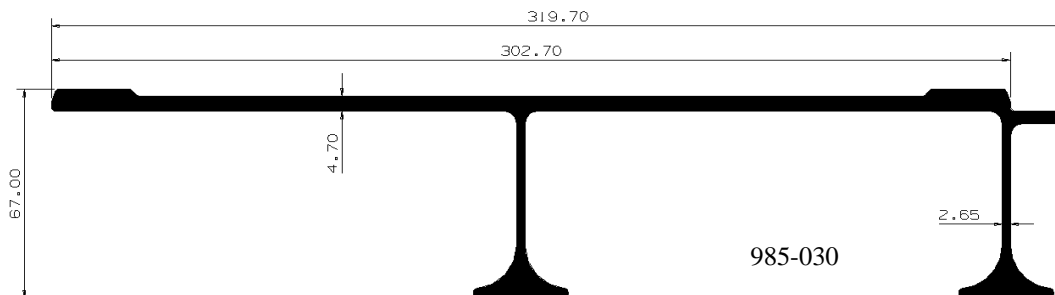
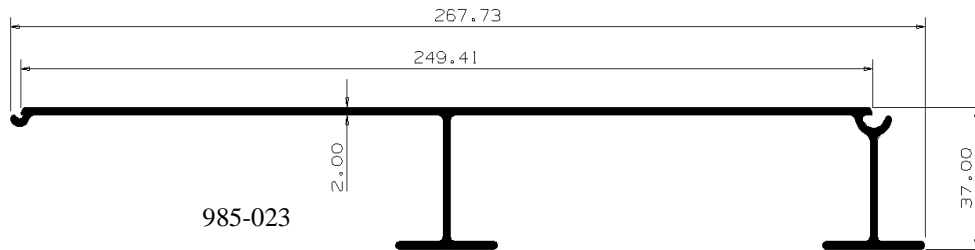
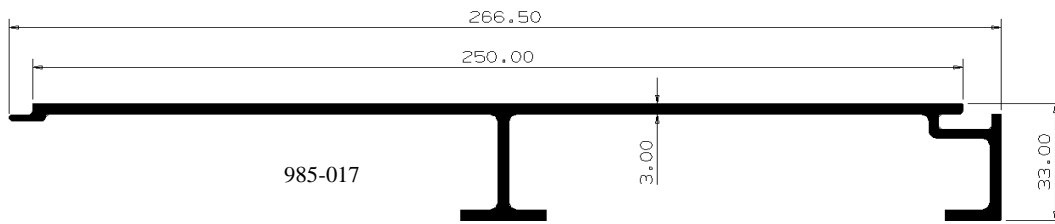
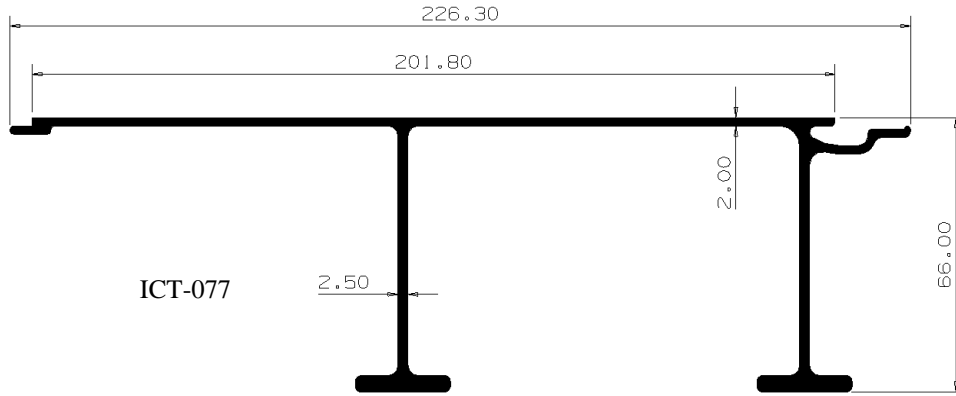
SECTION NUMBER	DESCRIPTION (mm)	MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
ICT 163	LIGHT VEHICLE DECK 317.5 X 25	4.749	192,886	17,022,887	S



ICT-163

**FLOORING**

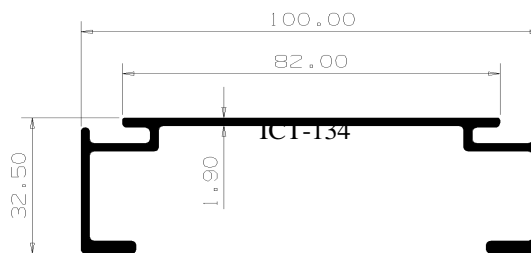
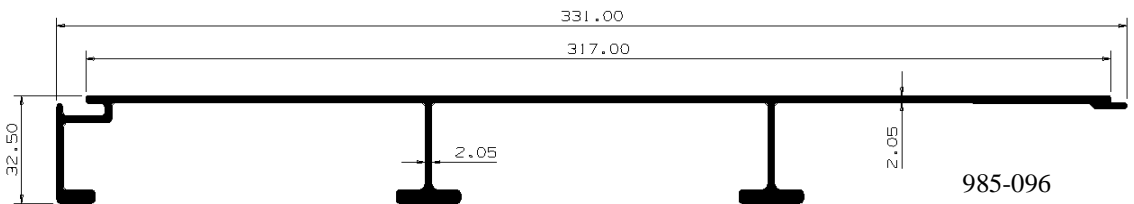
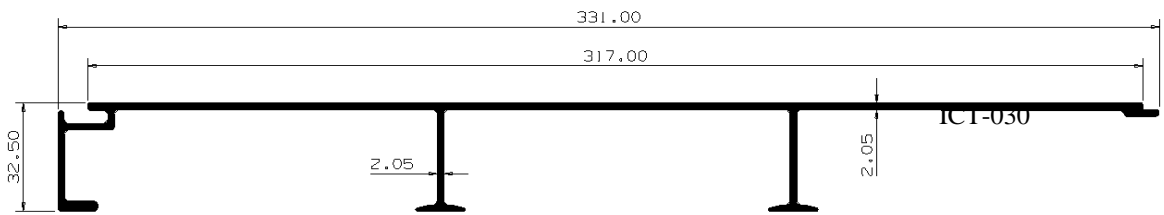
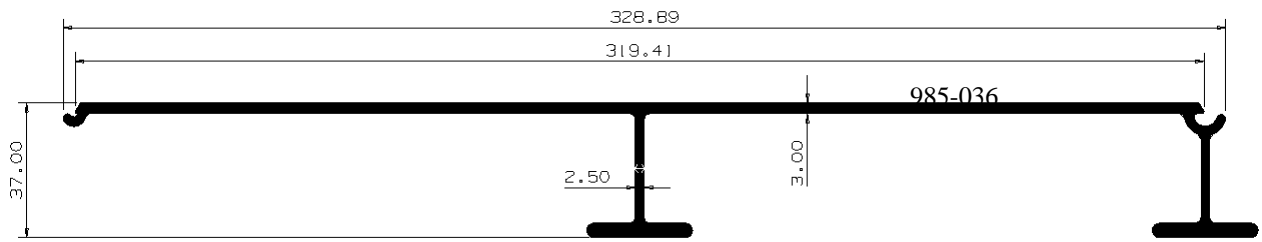
SECTION NUMBER	DESCRIPTION (mm)	MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
ICT 077	FLOORING 201.8 X 66	2.676	663,801	3,804,257	S
985 017	FLOORING 250 X 33	2.977	117,842	6,748,785	S
985 023	FLOORING 250 X 37	2.115	143,976	4,661,438	S
985 030	FLOORING 302.7 X 67	6.142	1,182,141	20,675,191	S





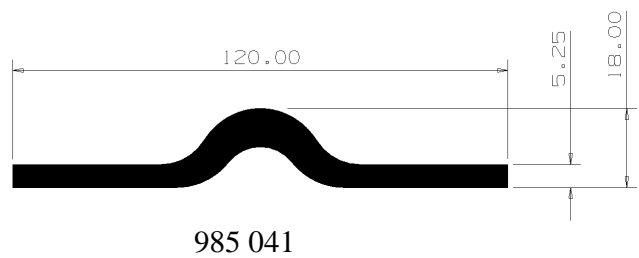
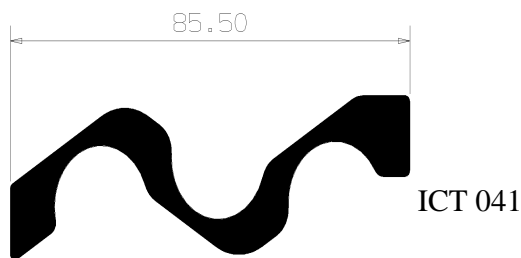
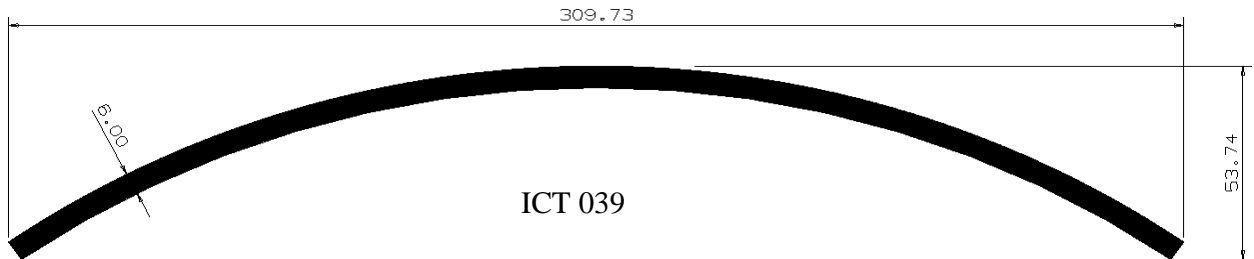
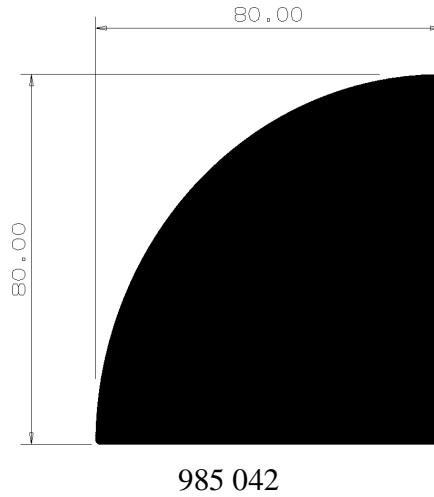
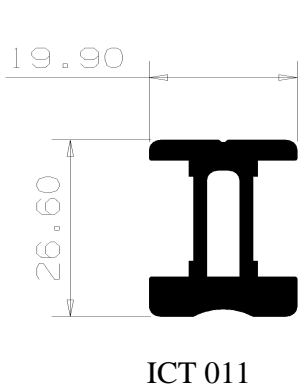
**FLOORING**

SECTION NUMBER	DESCRIPTION (mm)	MASS KG/M	X VALUE mm <sup>4</sup>	Y VALUE mm <sup>4</sup>	APPL
985 036	FLOORING 319 X 37	3.740	237,319	13,275,350	S
ICT 030	FLOORING 317 X 32.5	2.474	96,988	9,140,381	S
985 096	FLOORING 317 X 32.5	2.942	155,338	10,157,728	S
ICT 134	FLOORING/STARTER 80 X 32.5	1.107	55,170	595,670	S



**GENERAL – STRUCTURAL**

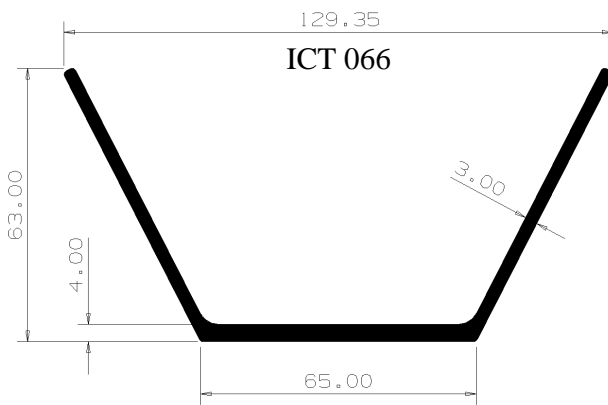
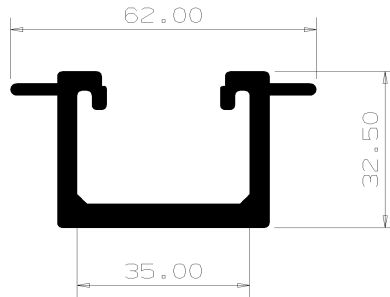
SECTION NUMBER	DESCRIPTION	MASS KG/M	X VALUE MM <sup>4</sup>	Y VALUE MM <sup>4</sup>	APPL
ICT 011	TRACK	0.677	22,732	6,524	S
985 042	TRANSITION JOINT	13.620	2,246,870	2,246,870	S
ICT 039	JOINER -SKIRTING	5.304	414,524	16,107,097	S
ICT 041	LOUVRE BRACKET	1.870	32,539	499,818	S
985 041	HOLD DOWN	2.127	16,268	772,490	S



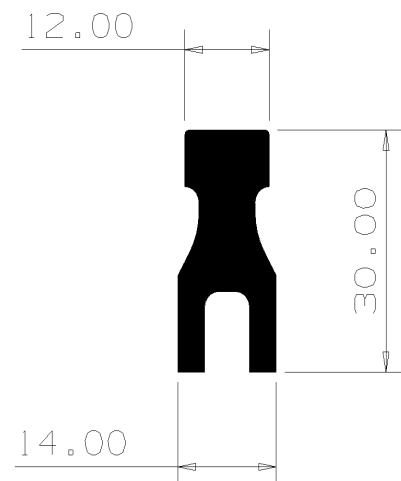
**GENERAL – STRUCTURAL**

SECTION NUMBER	DESCRIPTION	MASS KG/M	X VALUE MM <sup>4</sup>	Y VALUE MM <sup>4</sup>	APPL
ICT 059	SEAT TRACK	1.490	72,816	163,066	S
ICT 066	TOP HAT	1.810	270,601	1,058,940	S
ICT 078	JOINER -SKIRTING	0.803	21,459	4,467	S

ICT 059

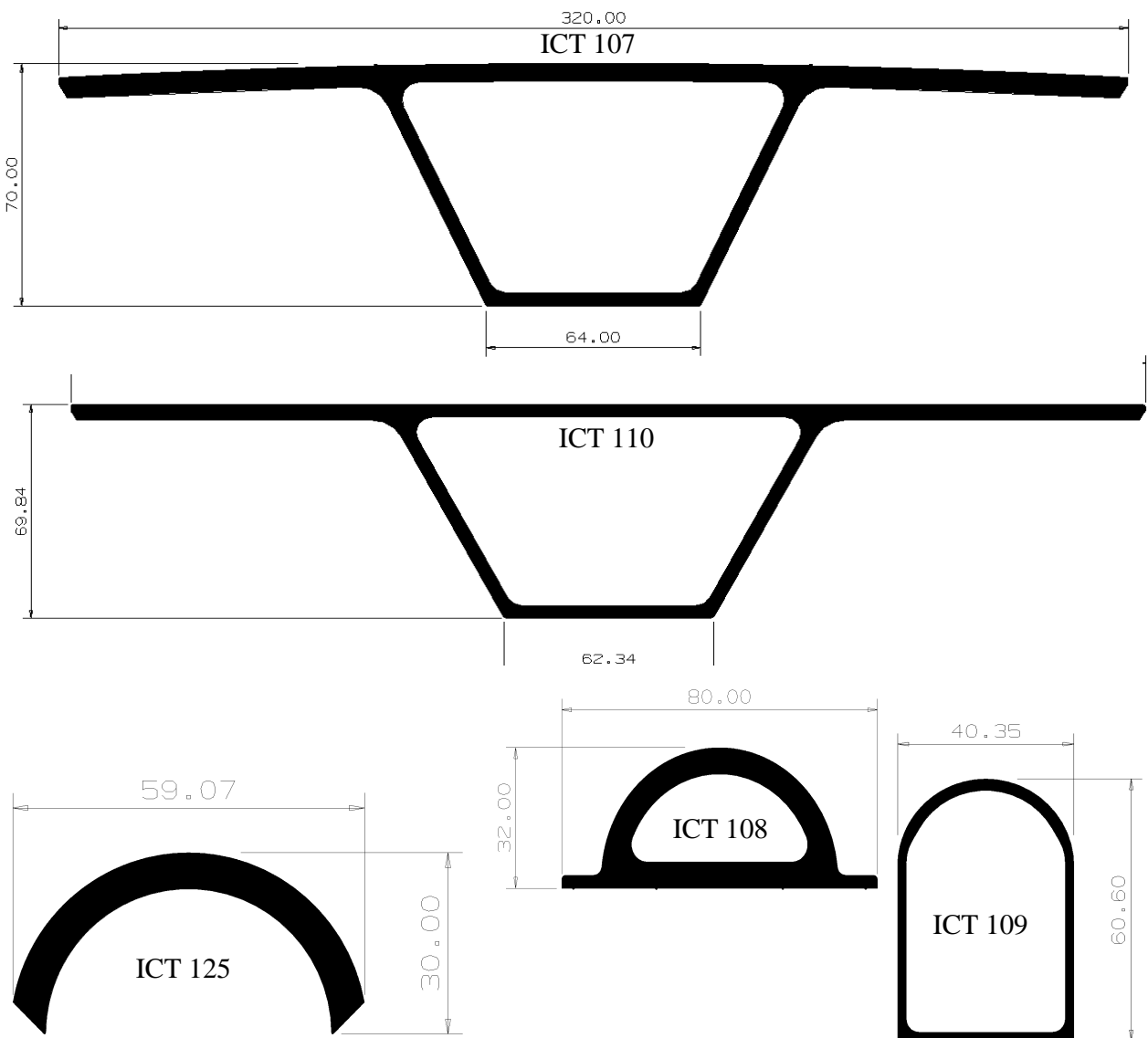


ICT 078



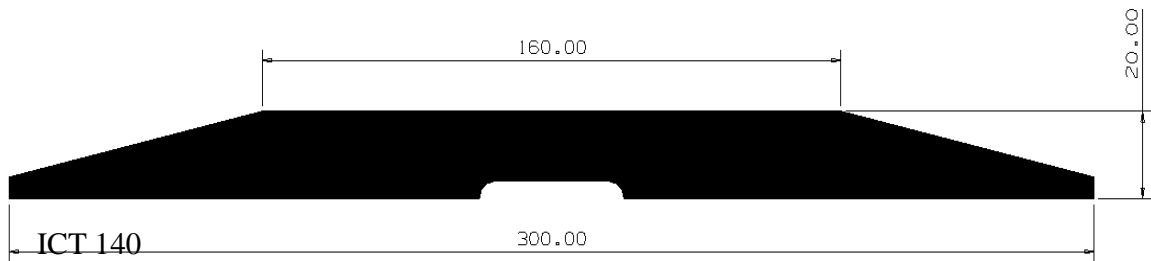
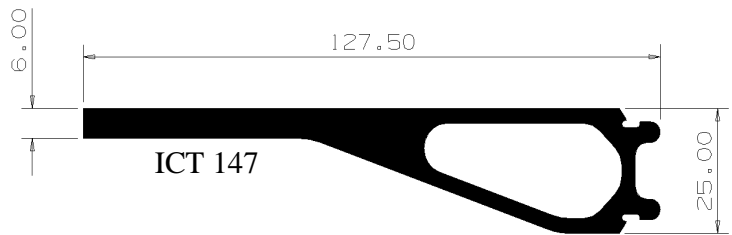
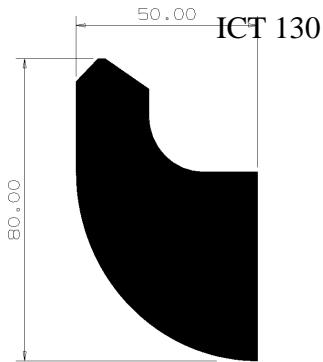
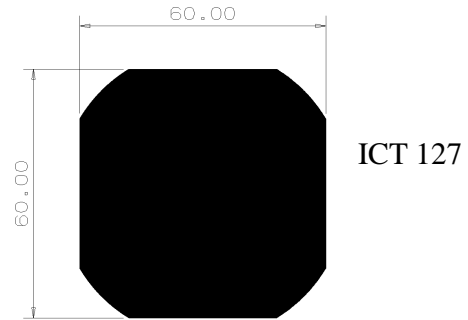
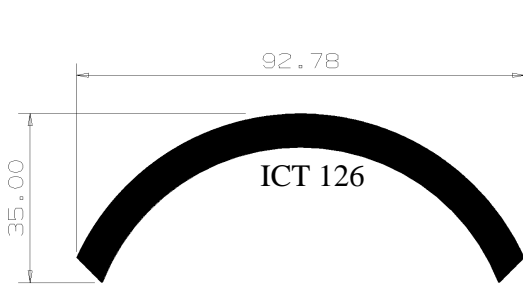
**GENERAL – STRUCTURAL**

SECTION NUMBER	DESCRIPTION	MASS KG/M	X VALUE MM <sup>4</sup>	Y VALUE MM <sup>4</sup>	APPL
ICT 107	CURVED BULK HEAD	7.137	1,352,336	17,447,269	S
ICT 108	CAR TIE DOWN	2.428	97,193	342,251	S
ICT 109	TRIM – JOINER	1.053	184,746	94,425	S
ICT 110	BULK HEAD	6.301	1,351,014	14,855,078	S
ICT 125	1/2 TUBE 30MM	1.296	28,259	163,558	S



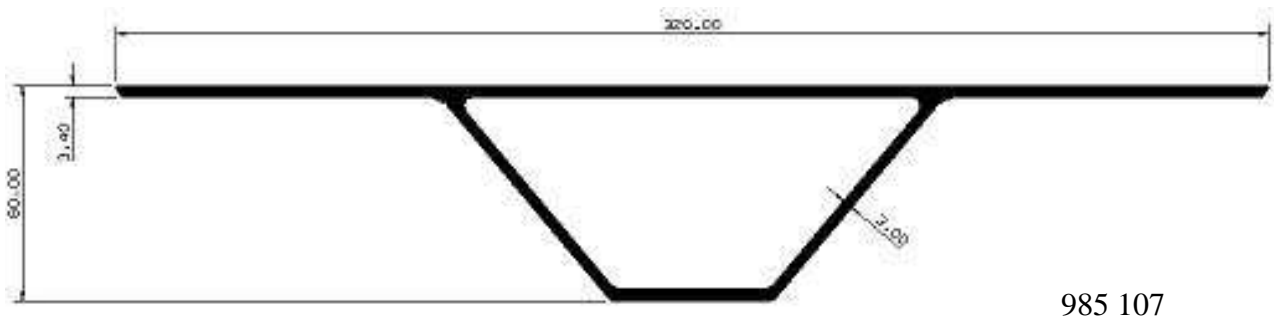
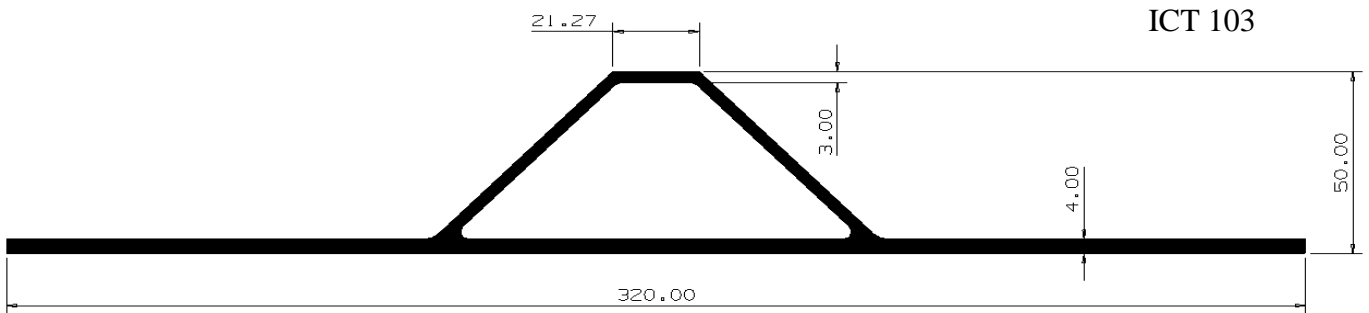
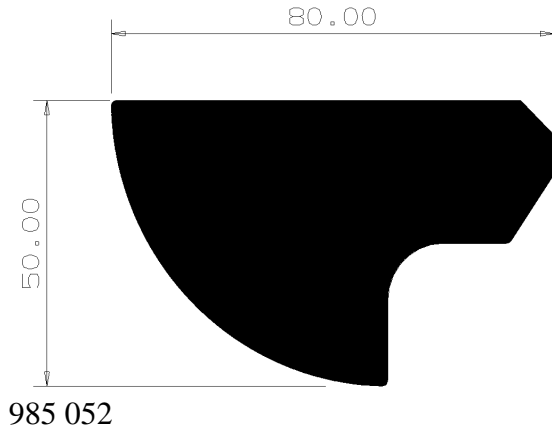
**GENERAL – STRUCTURAL**

SECTION NUMBER	DESCRIPTION	MASS KG/M	X VALUE MM <sup>4</sup>	Y VALUE MM <sup>4</sup>	APPL
ICT 126	1/2 TUBE 51MM	2.109	62,844	609,916	S
ICT 127	SOLID JOINER	9.107	911,940	911,940	S
ICT 130	JOINER	6.899	895,232	512,460	S
ICT 140	JOINER	13.000	147,137	27,848,677	S
ICT 147	25MM DECK GUTTER	2.647	48,445	1,286,410	S



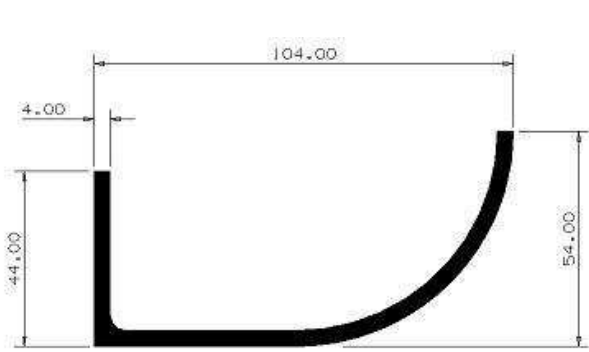
**GENERAL – STRUCTURAL**

SECTION NUMBER	DESCRIPTION	MASS KG/M	X VALUE MM <sup>4</sup>	Y VALUE MM <sup>4</sup>	APPL
985 052	JOINER – POST	7.232	418,844	1,013,677	S
985 107	TUNNEL EXTRUSION	4.485	694, 561	10, 169, 666	S
ICT 103	BULK HEAD	4.667	330,663	11,377,137	S

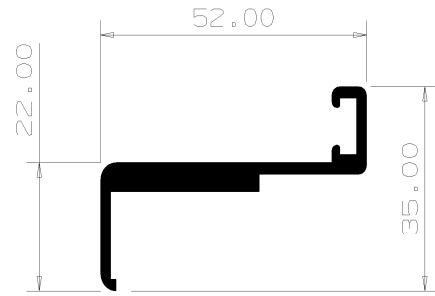


**GENERAL – FIT OUT**

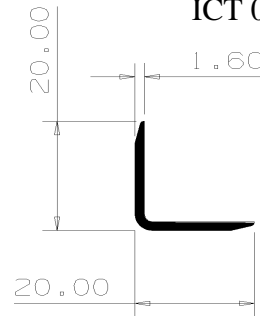
SECTION NUMBER	DESCRIPTION	MASS KG/M	X VALUE MM <sup>4</sup>	Y VALUE MM <sup>4</sup>	APPL
985 080	COVER	1.87	163, 221	979, 020	S
ICT 062	WALL BOARD ANGLE	0.151	1,919	1,919	A
ICT 069	DOOR JAMB	0.744	10,089	84,123	A
ICT 070	DOOR JAMB	1.150	5,611	674,792	A
ICT 071	DOOR CHANNEL	0.404	5,387	35,505	A
ICT 076	CAPING	0.503	1,883	103,674	A
ICT 081	TABLE EDGE – END STRIP	0.278	481	18,683	A



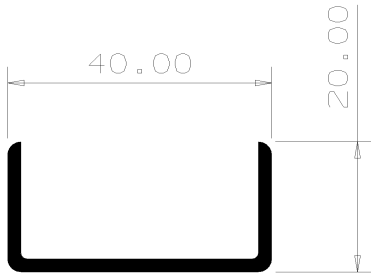
985 080



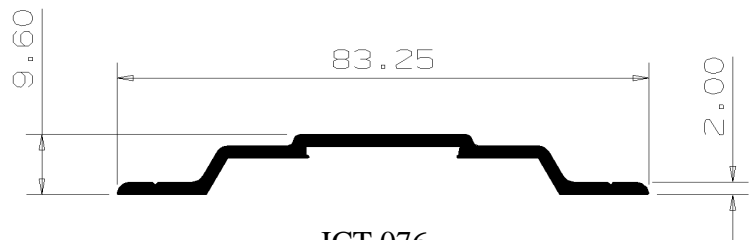
ICT 069



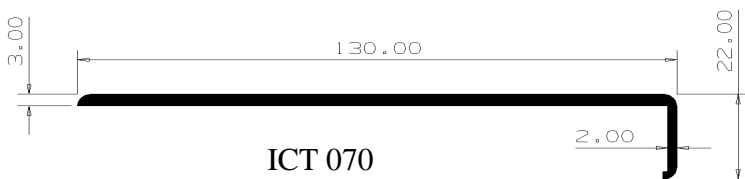
ICT 062



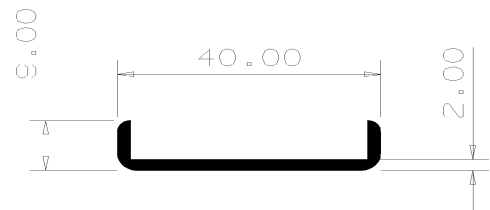
ICT 071



ICT 076



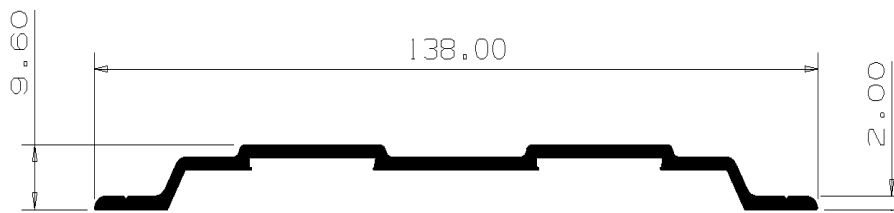
ICT 070



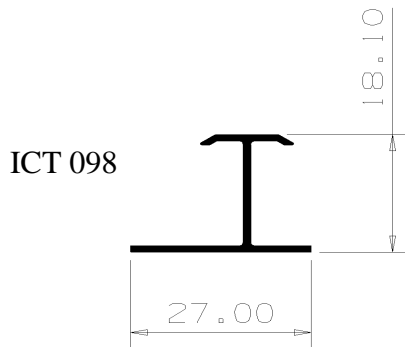
ICT 081

**GENERAL – FIT OUT**

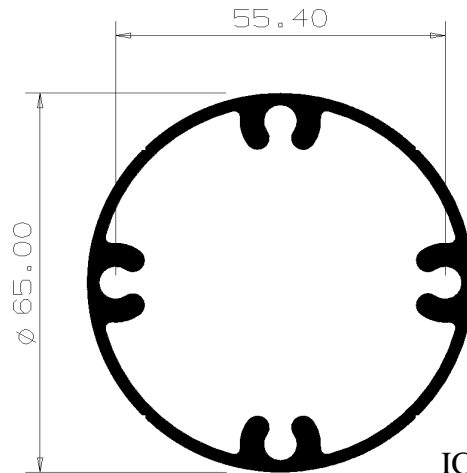
SECTION NUMBER	DESCRIPTION	MASS KG/M	X VALUE MM <sup>4</sup>	Y VALUE MM <sup>4</sup>	APPL
ICT 079	CAPPING	0.820	2,419	481,888	A
ICT 098	WALL BOARD JOINER	0.163	3,131	2,069	A
ICT 100	TABLE LEG	1.722	285,732	285,732	A
ICT 111	DOOR JAMB	0.640	17,107	83,351	A
985 108	COVER	2.017	308, 698	1, 225, 751	S



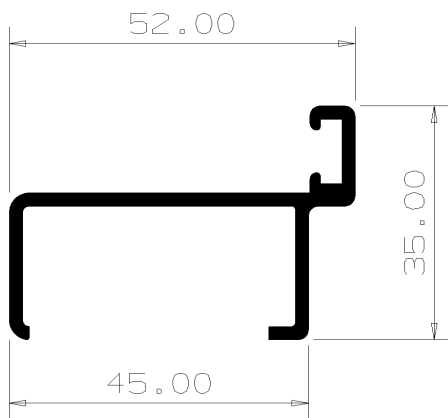
ICT 079



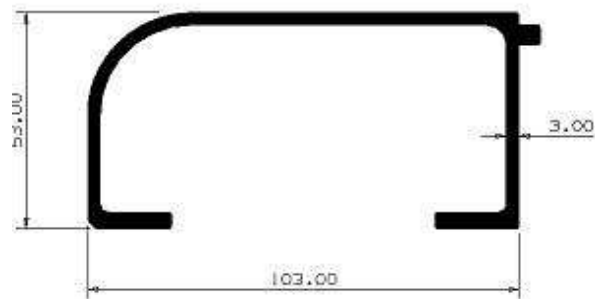
ICT 098



ICT 100



ICT 111

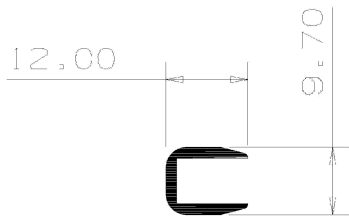


985 108

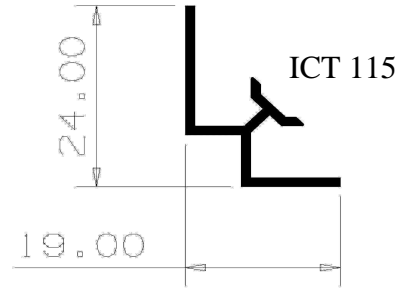


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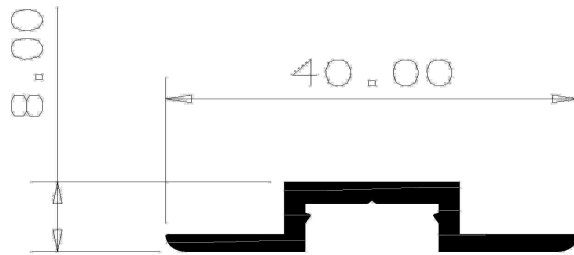
SECTION NUMBER	DESCRIPTION	MASS KG/M	X VALUE MM <sup>4</sup>	Y VALUE MM <sup>4</sup>	APPL
ICT 112	WALL BOARD JOINER	0.111	523	472	A
ICT 115	WALL BOARD JOINER	0.175	2,648	1,801	A
ICT 122	SKIRTING SECTION	0.297	824	11,499	A
983 021	CEILING BEAM	0.435	35,908	19,708	A



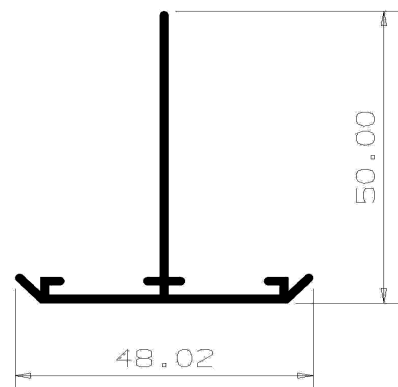
ICT 112



ICT 115



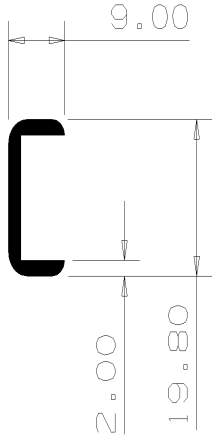
ICT 122



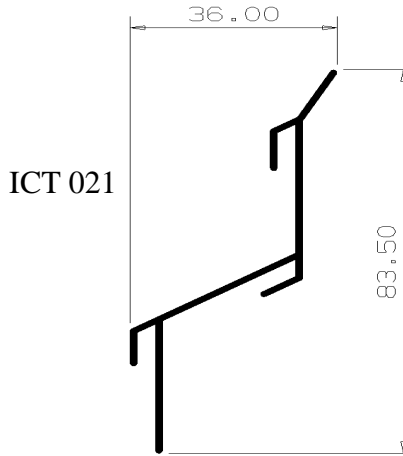
983 021

**GENERAL - FIT OUT**

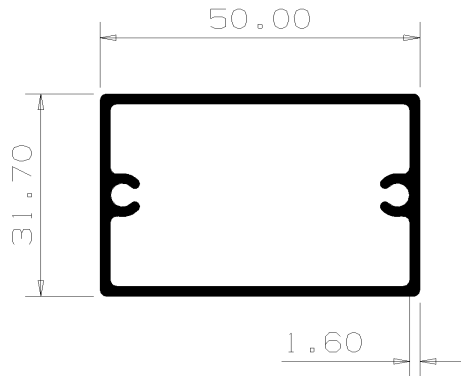
SECTION NUMBER	DESCRIPTION	MASS KG/M	X VALUE MM <sup>4</sup>	Y VALUE MM <sup>4</sup>	APPL
ICT 008	END STRIP/TABLE EDGE	0.168	3,037	384	A
ICT 021	LOUVER	0.441	76,197	21,491	A
ICT 056	POST	0.752	40,725	35,522	A
ICT 057	POST	0.769	42,592	101,636	A
ICT 058	HAND RAIL CAP	1.479	39,473	239,642	A



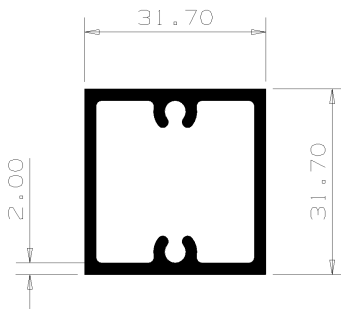
ICT 008



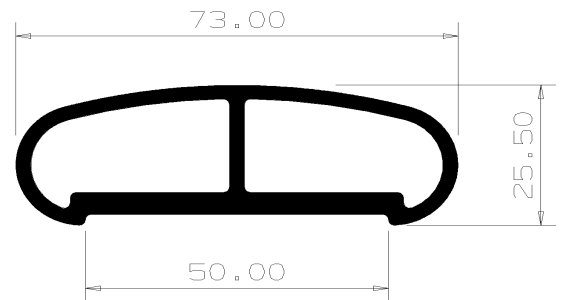
ICT 021



ICT 057



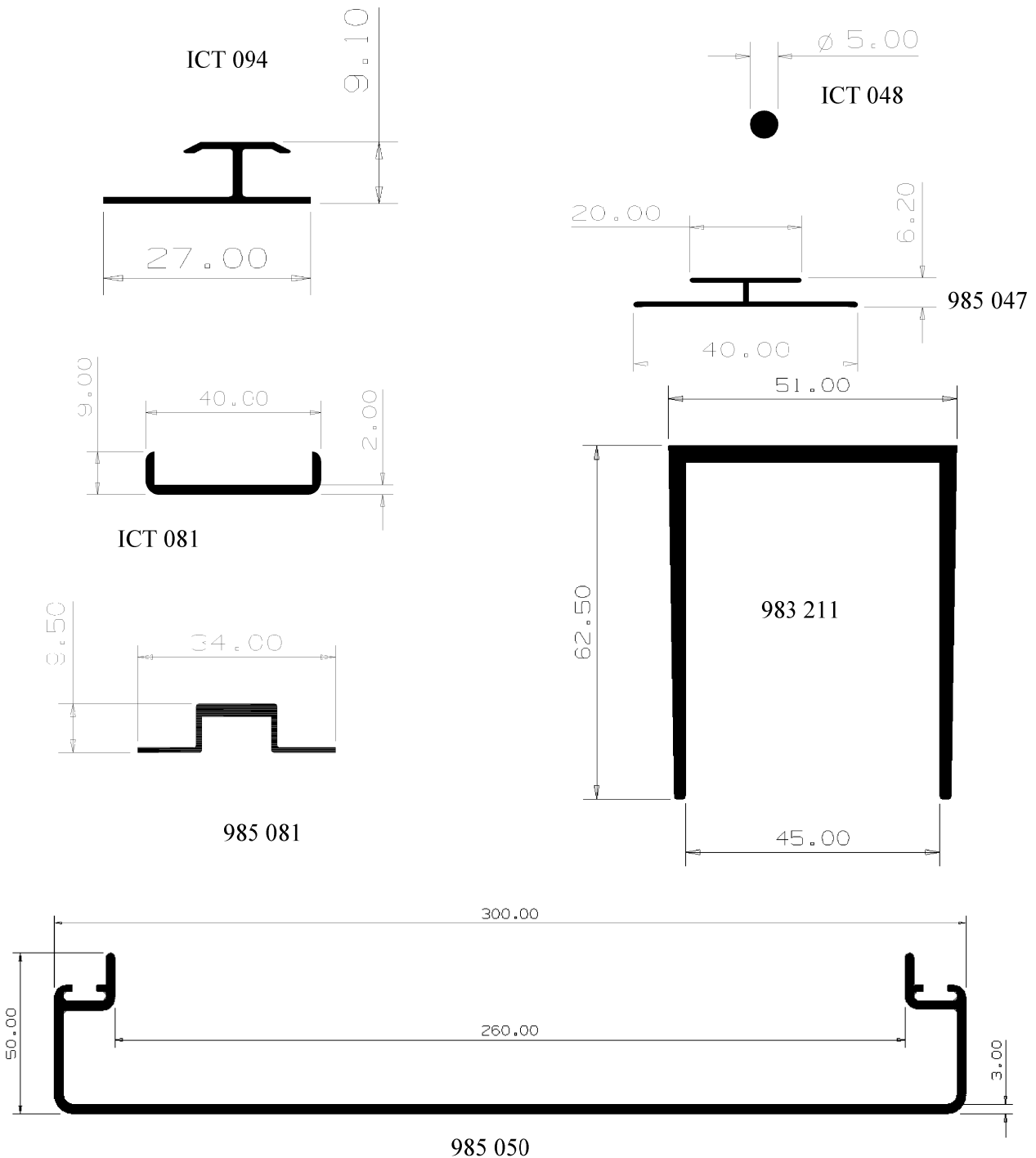
ICT 056



ICT 058

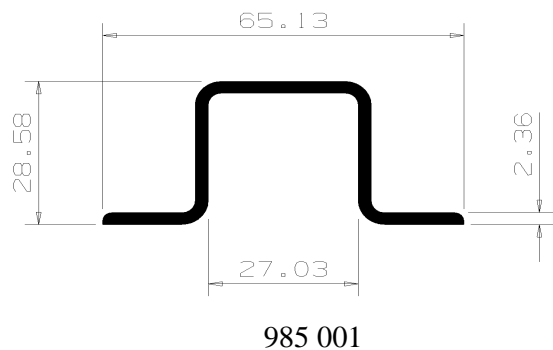
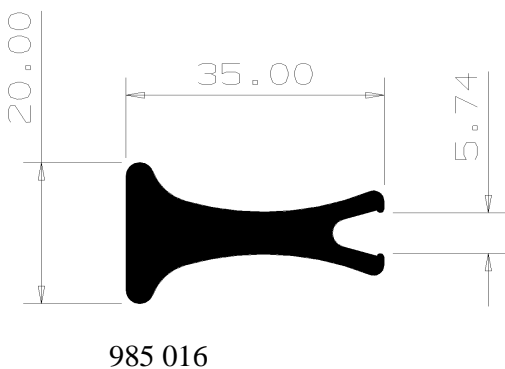
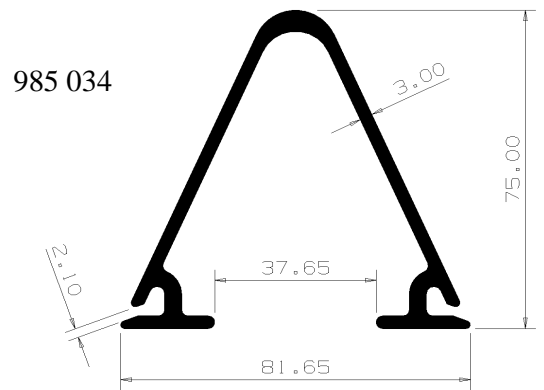
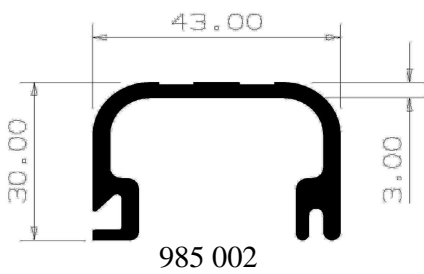
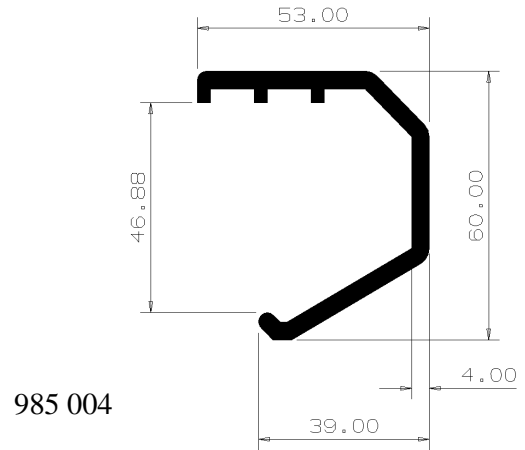
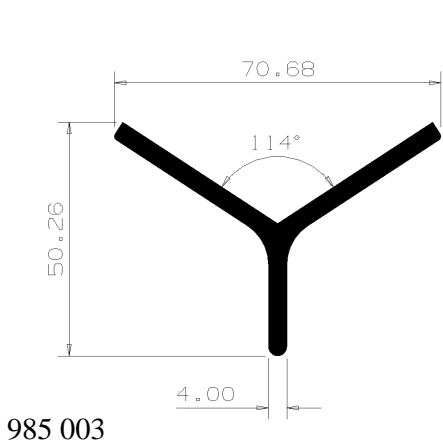
**GENERAL - FIT OUT**

SECTION NUMBER	DESCRIPTION	MASS KG/M	X VALUE MM <sup>4</sup>	Y VALUE MM <sup>4</sup>	APPL
ICT 094	WALL BOARD JOINER	0.133	625	2,028	A
ICT 048	CEILING TEE ROD	0.053	31	31	A
985 050	SIGN CHANNEL	3.525	275,460	14,880,595	A
985 047	WALL BOARD JOINER	0.173	346	6,054	A
985 081	TOP HAT	0.187	880	4,207	A
ICT 081	TABLE EDGE – END STRIP	0.278	481	18,683	A
983 211	EDGING HOLDER	1.211	171,941	199,049	A



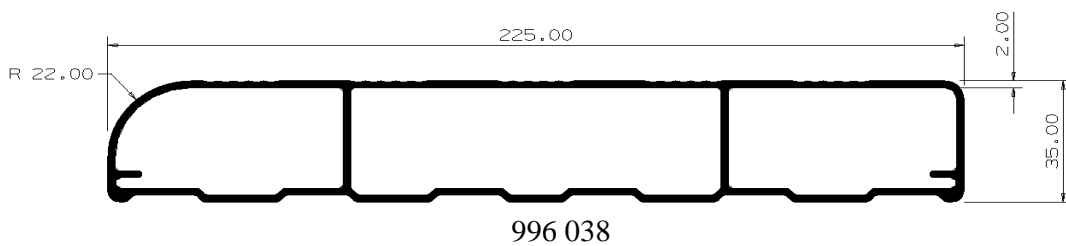
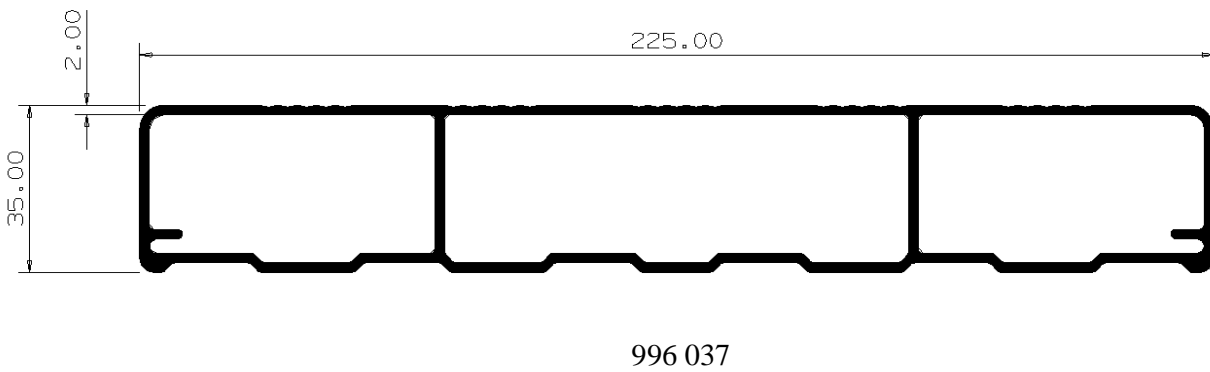
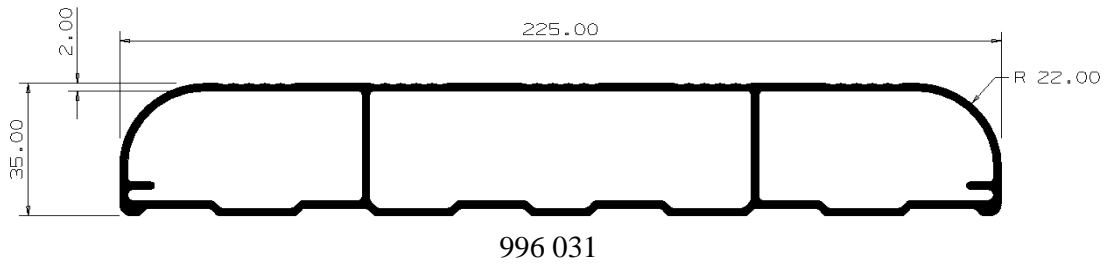
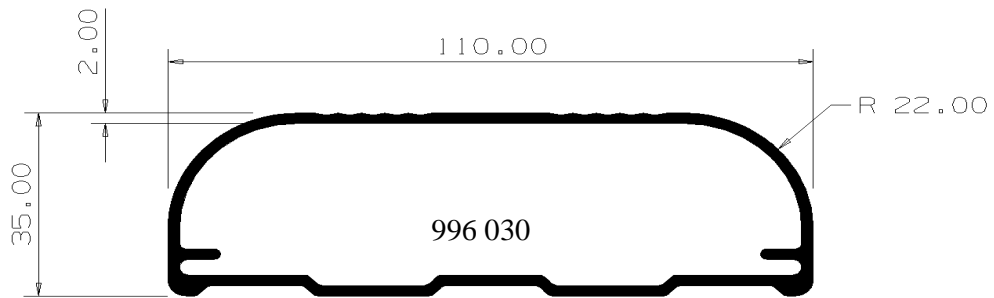
## CHINES, KEELS, GUNNELS AND RIBBING

SECTION NUMBER	DESCRIPTION	MASS KG/M	X VALUE MM <sup>4</sup>	Y VALUE MM <sup>4</sup>	APPL
985 003	CHINE SECTION 70.68 X 50.26	1.178	65,444	131,924	A
985 004	MARINE GUNNEL 53 X 60	1.408	235,544	122,133	A
985 002	MARINE GUNNEL 43 X 30	0.908	32,380	90,186	A
985 034	KEEL 81.6575 X 75	1.940	442,815	435,060	A
985 016	FALSE KEEL 20 X 35	0.813	4,047	33,474	A
985 001	BOAT RIB 65.13 X 28.58	0.710	30,696	76,862	A



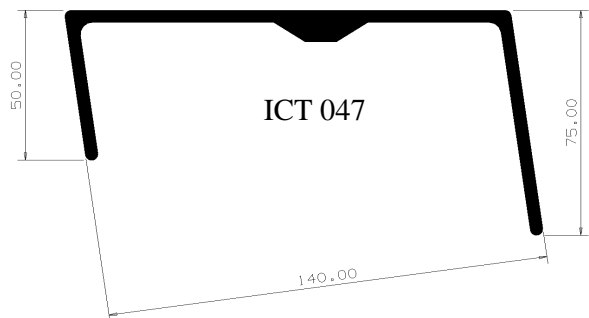
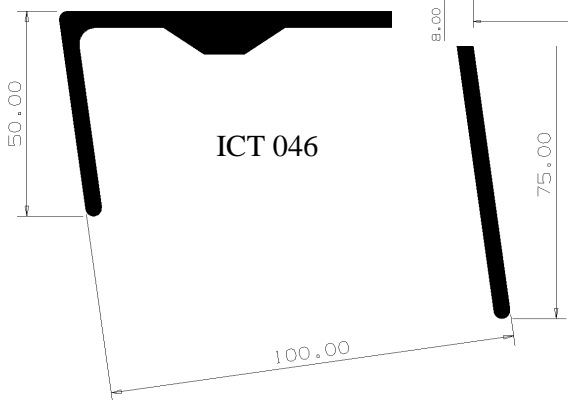
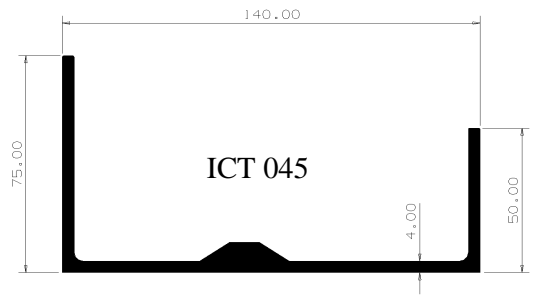
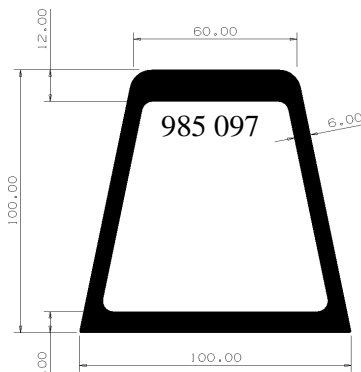
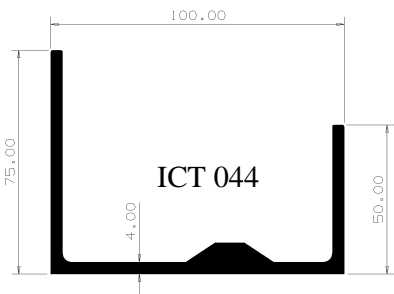
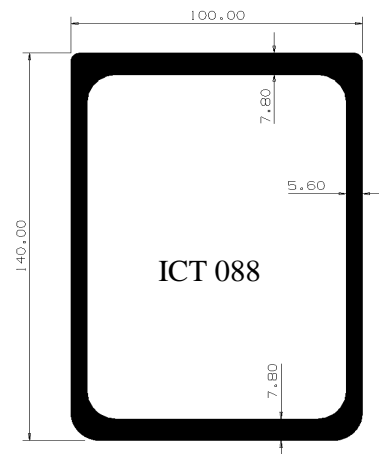
**SEATING SECTIONS**

SECTION NUMBER	DESCRIPTION	MASS KG/M	X VALUE MM <sup>4</sup>	Y VALUE MM <sup>4</sup>	APPL
996 030	SMALL SEAT SLAT	1.532	110,482	789,774	A
996 031	LARGE SEAT SLAT	3.080	236,107	5,601,802	A
996 037	LARGE TABLE SLAT	3.159	248,292	5,990,660	A
996 038	LARGE TABLE SLATE EDGE	3.120	242,285	5,793,758	A



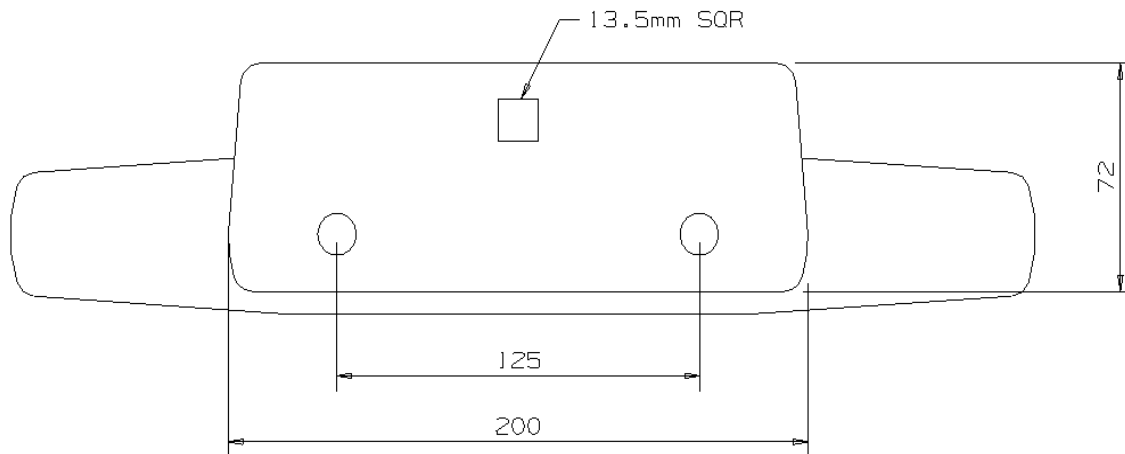
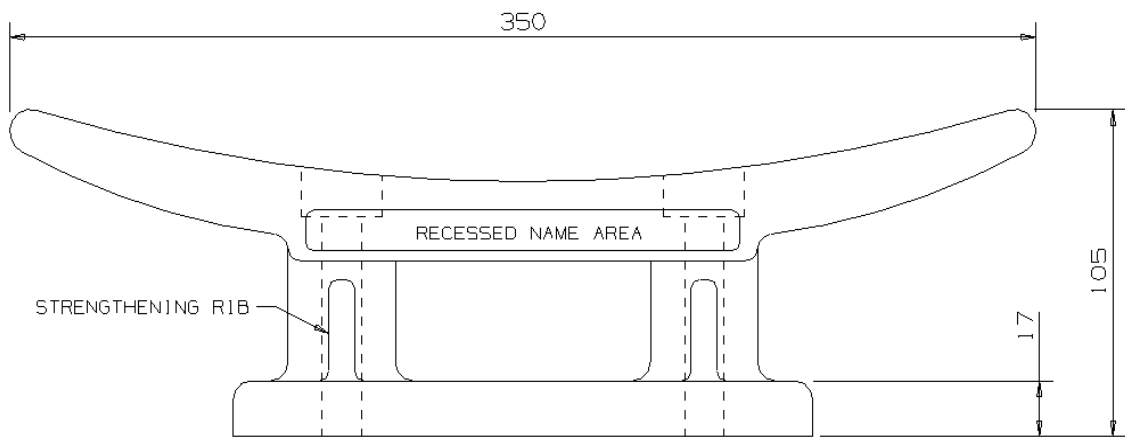
**WINDOW SECTION**

SECTION NUMBER	DESCRIPTION	MASS KG/M	X VALUE MM <sup>4</sup>	Y VALUE MM <sup>4</sup>	APPL
985 083	250 X 100 RHS	14.768	8,612,711	46,648,633	S
ICT 044	TIER 3 HEADER	2.714	418,064	1,429,481	S
ICT 045	TIER 2 HEADER	3.148	452,863	3,056,082	S
ICT 088	WINDOW POST SECTION	8.574	8,784,441	4,705,057	S
ICT 046	TIER 2 SILL	2.733	414,854	1,537,765	S
ICT 047	TIER 2 SILL	3.170	499,356	3,234,866	S
985 097	WINDOW MULLION	6.810	3,618,068	2,273,863	S



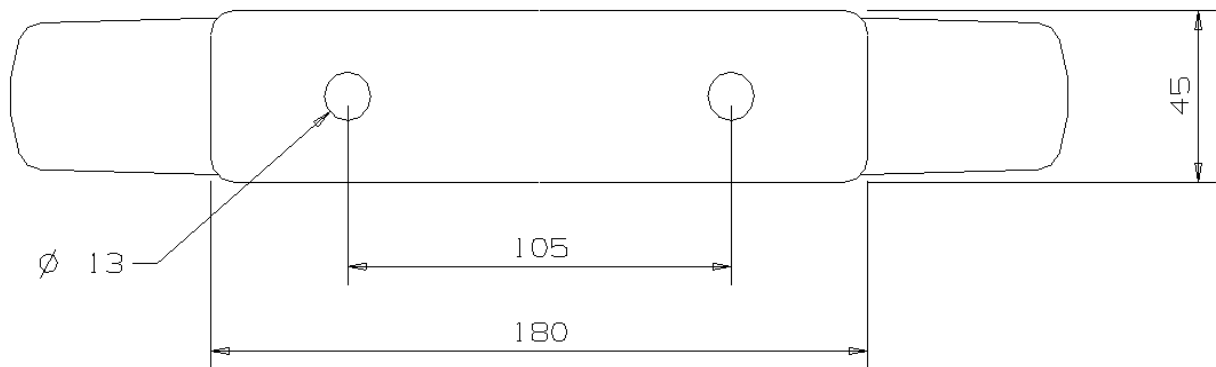
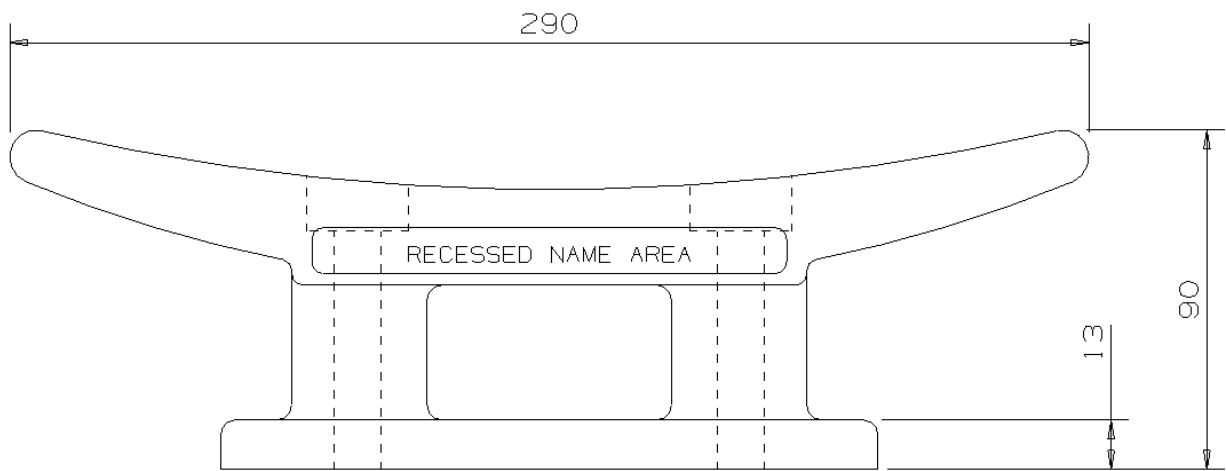
# JETTY CLEATS

## 350MM (13 3/4") CLEAT



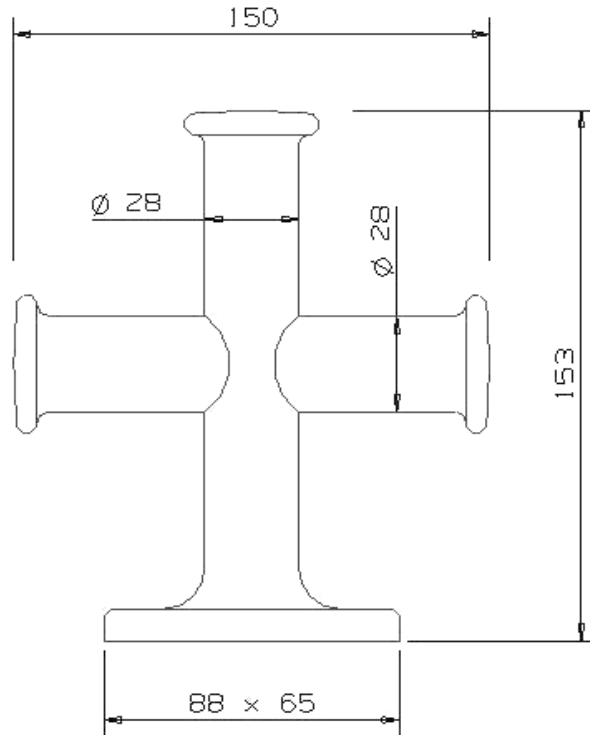
# JETTY CLEATS

## 290MM (11 1/4") CLEAT

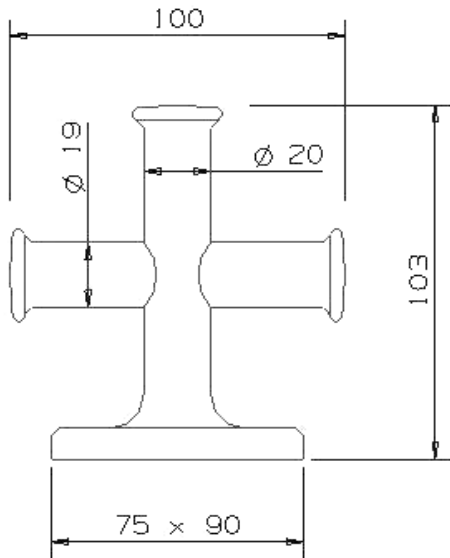




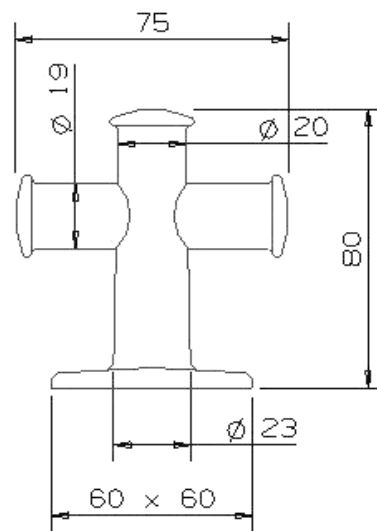
## BOAT CROSS BOLLARDS



150 MM (6") CROSS BOLLARD



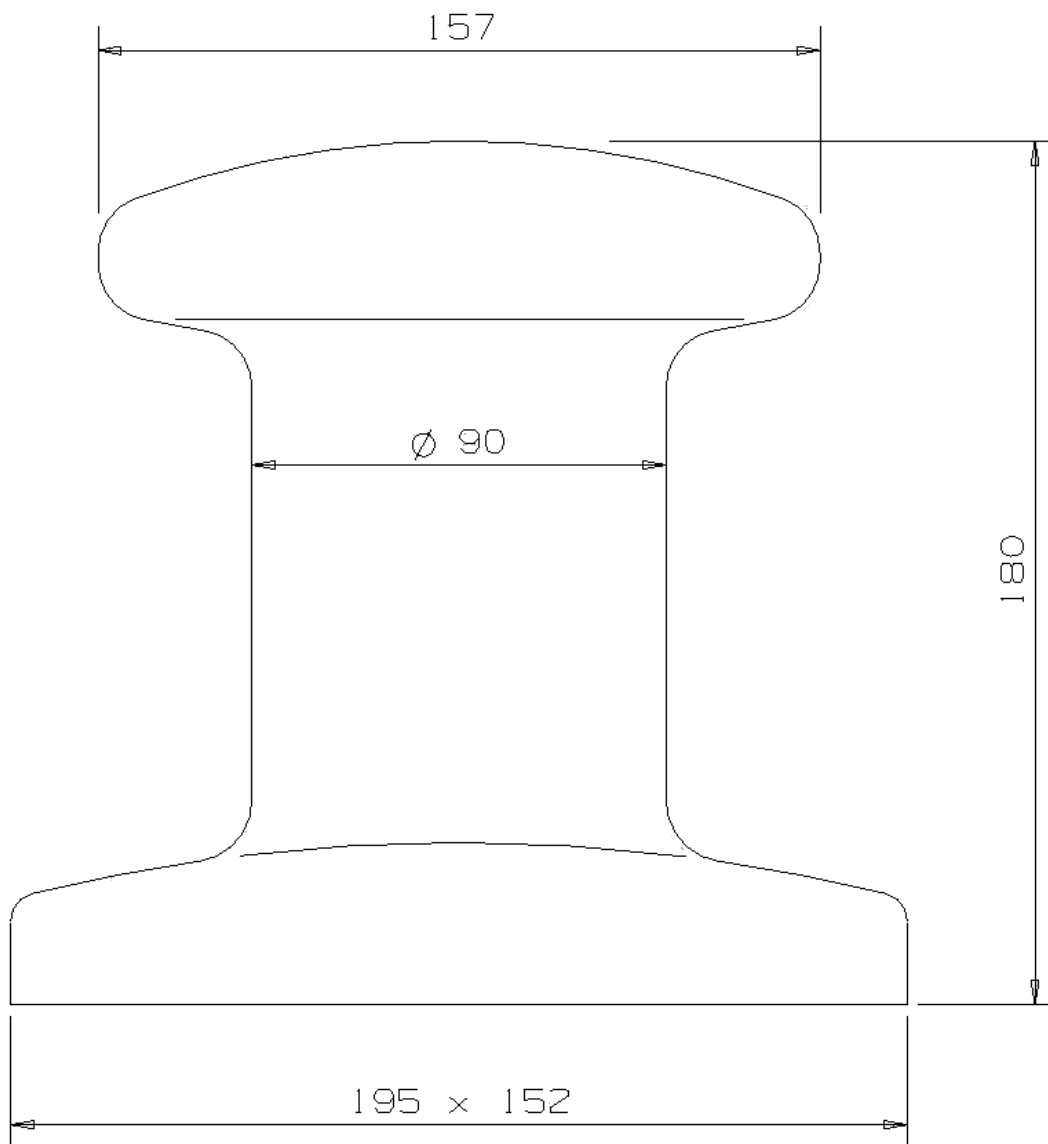
100MM (4") CROSS BOLLARD



75 MM (3") CROSS BOLLARD

# JETTY BOLLARDS

## 90MM (3 1/2") BOLLARD



# G. JAMES EXTRUSION CO PTY. LTD.

G. James Extrusion Co Pty. Ltd. was established in 1981 to service the requirements of G. James Glass & Aluminium. This division has since developed the necessary expertise and infrastructure to become recognised as a reliable supplier to the general extrusion market throughout Australia and the Asia Pacific region.

The investment in facilities is continuous in order to maintain modern and efficient plants to manufacture finished extrusion to the highest quality.

The company was accredited to ISO 9002 Quality Assurance System in 1991 and has since continually sought to improve upon its customer service.

## **Die Design and Manufacturing Facilities**

Extensive use is made of computers and specially written programmes for die design and manufacture and are linked to the Computer Numeric Controlled (CNC) machining centres (2 x vertical & 1 horizontal spindle), spark erosion and wire cutting machines.

## **Press Facilities**

Currently G. James operates four presses: Brisbane – 1 x 1800 metric tonne (178mm container), 1 x 2000 metric tonne (178mm container) and 1 x 2800 metric tonne (228mm/304mm container); Sydney 1 x 3250/3500 metric tonne (228mm/304mm container). The nett extrusion output capacity of these four presses is in excess of 2300 tonnes per month. Recently, an automatic die storage (capacity 16,000 dies) and retrieval system was installed at the Brisbane facility.

Both Brisbane and Sydney plants are DNV certified. We also produce to ABS standards.

## **Surface Finishing**

The anodising plant offers clear anodising, two step electro chemical colouring (light bronze through to black) and new multi-colour system offering a new range of light fast finishes. The 8.5 metre long tanks allow for the majority of customer requirements. This facility also has the capability to provide mechanical and chemical bright-dip polishing.

The horizontal wet paint line applies fluorocarbon paint finish and exterior grade polyester coating to a maximum length of 6.5 metres. The line is approved by PPG Industries, Dulux Orica, Akzo Nobel and Valspar.

The vertical powder coat line is an approved applicator of Dulux Orica and Akzo Nobel high performance and standard grade powders up to lengths of 7 metres.

## **Warehouse, Packing and Despatch**

This division caters for the warehousing and packaging of the finished extrusion to ensure all orders are accurately processed and received in good condition.

The company has embraced the total quality control concept and vigorously ensures that quality is checked through all stages of the production process.

## **Fabrication**

G. James can offer a range of light fabrication from fine tolerance cutting to punching and drilling. This can enable the customer to receive their extrusion ready for assembly.

## **Castings**

G. James Extrusion Co commenced in 1955 as manufacturing engineers and aluminium casters, utilising traditional gravity and sand

casting techniques to produce componentry for the painting, food processing and marine industries.

With the demand and complexity of castings increasing, G. James identified a market in providing more highly specialised, premium quality toolmaking and gravity die castings. As part of this strategy, the company designed, developed and manufactured Australia's first 'tilt' type gravity die casting machine in 1965. As this method ensures consistent quality control, G. James has adopted it as the principal method of casting.

Over the years G. James continued to refine and develop all aspects of production including the installation of task specific robots, both automated and manual edge trimming techniques and special purpose machining centres. These activities saw the company expand, and improve its expertise in the field of die design and casting technology to the point where G. James is a major manufacturer of aluminium castings to original equipment manufacturers throughout the Asia Pacific region.

Today G. James Extrusion Co has developed a proud reputation for providing quality aluminium die castings which demand accuracy and uniformity.

## **Head Office – Brisbane**

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AUSTRALIA

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**Internet:** [www.gjames.com.au](http://www.gjames.com.au)  
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**Facsimile:** +61 3 9219 2079  
**Contact:** Jason Streek  
**Email:** jason\_streek@gjames.com.au

**Perth**  
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Western Australia 6166  
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**Phone:** +61 8 9494 6333  
**Facsimile:** +61 8 9494 6339  
**Contact:** Trent Harris  
**Email:** trent\_harris@gjames.com.au

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