

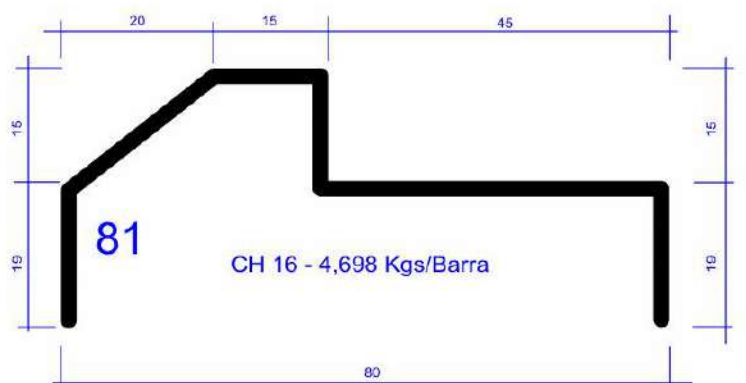
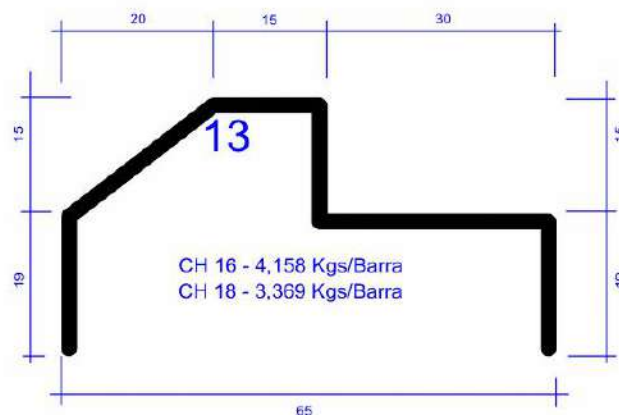
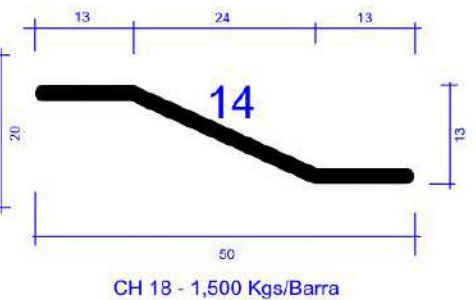
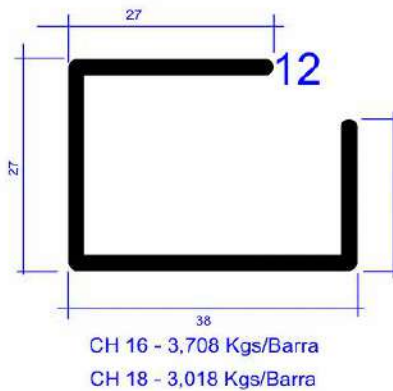
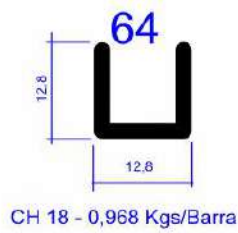
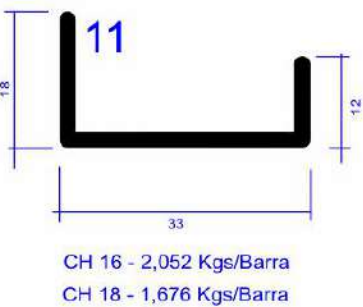
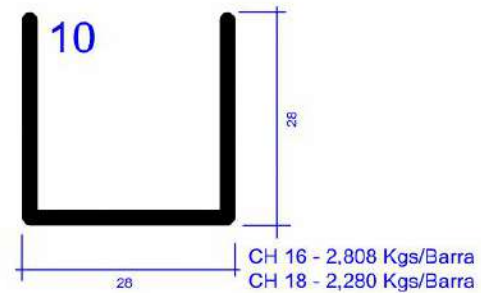
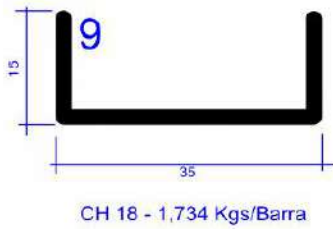
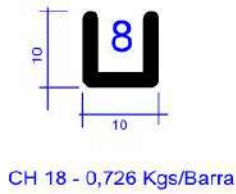
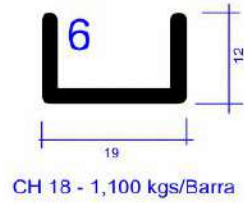
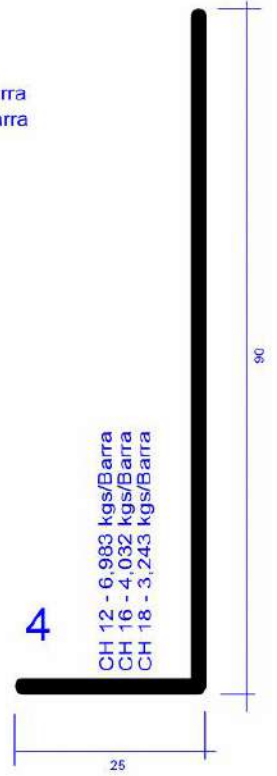
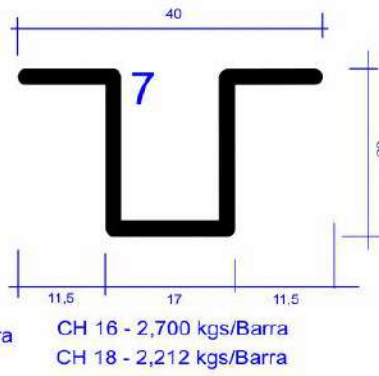
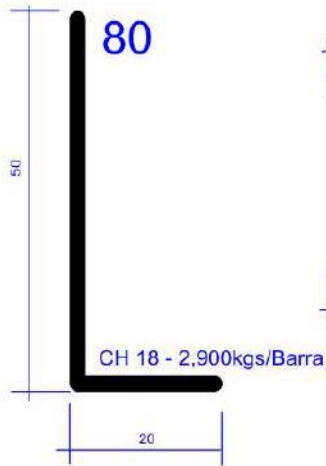
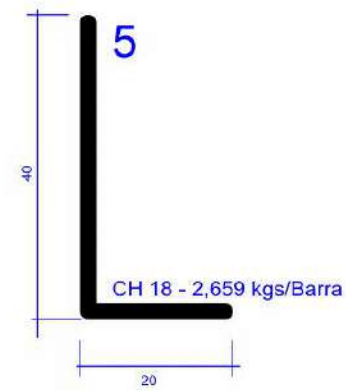
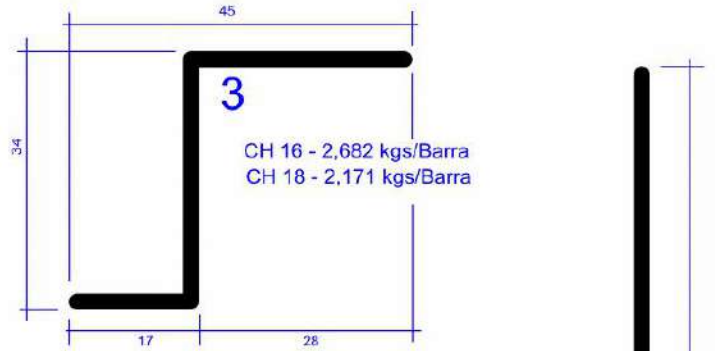
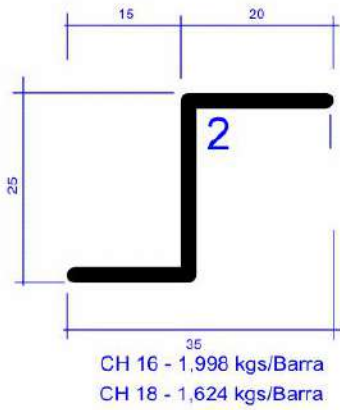
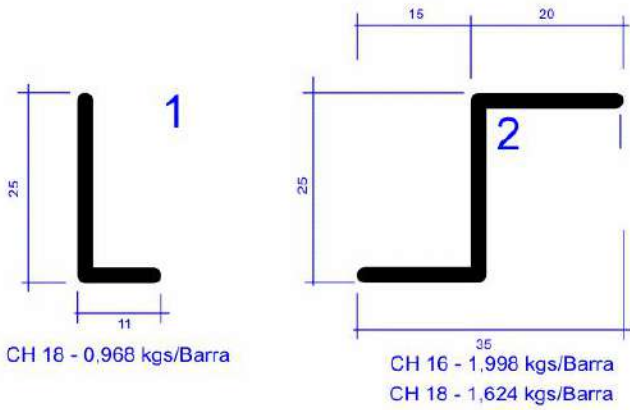
CATÁLOGO DE PRODUTOS

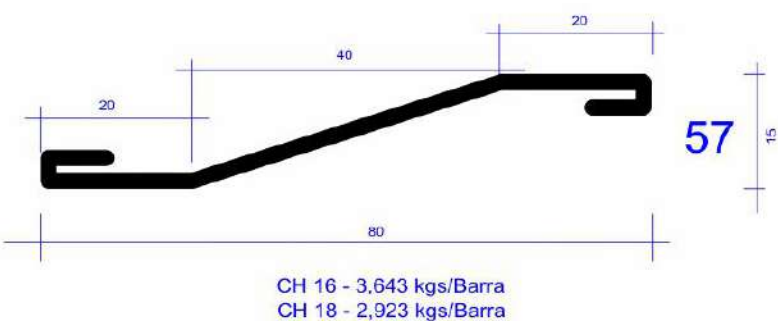
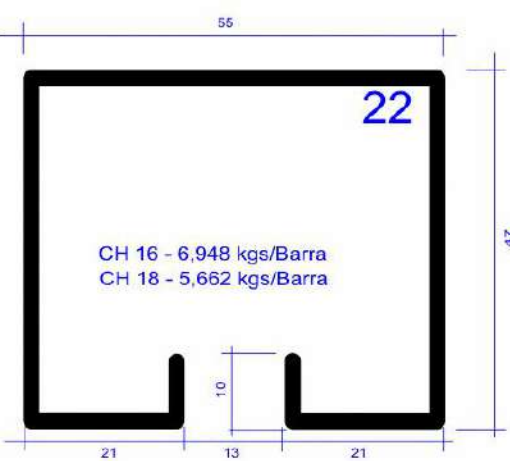
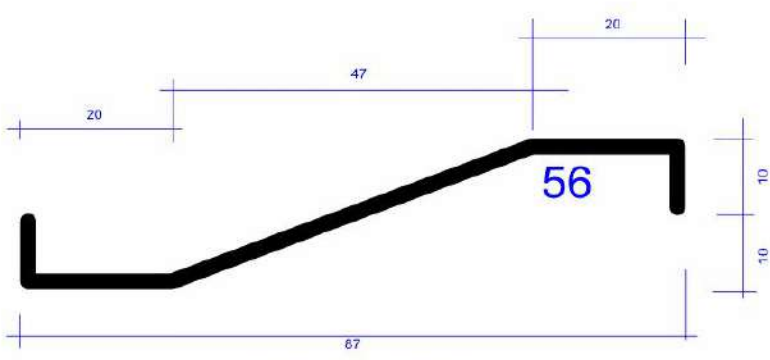
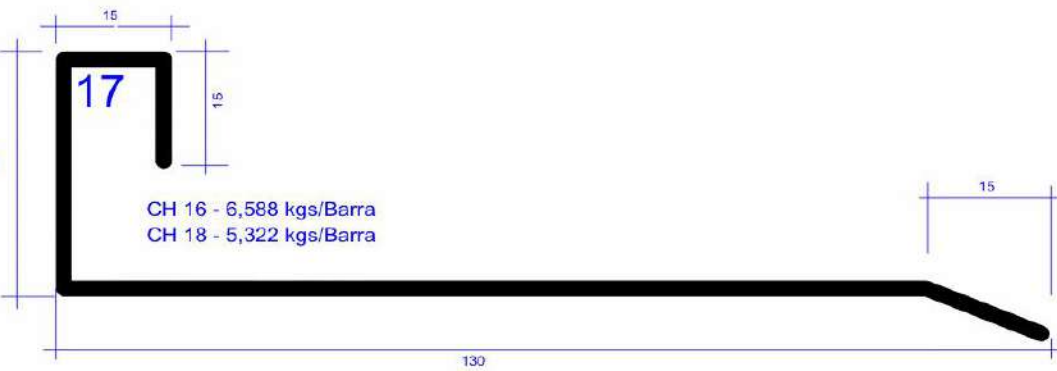
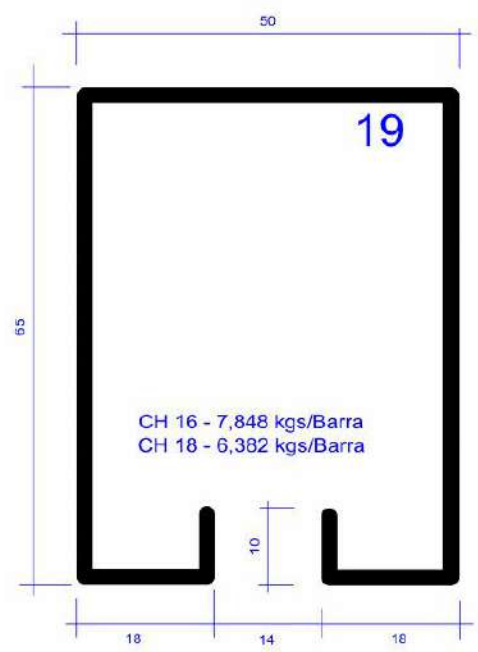
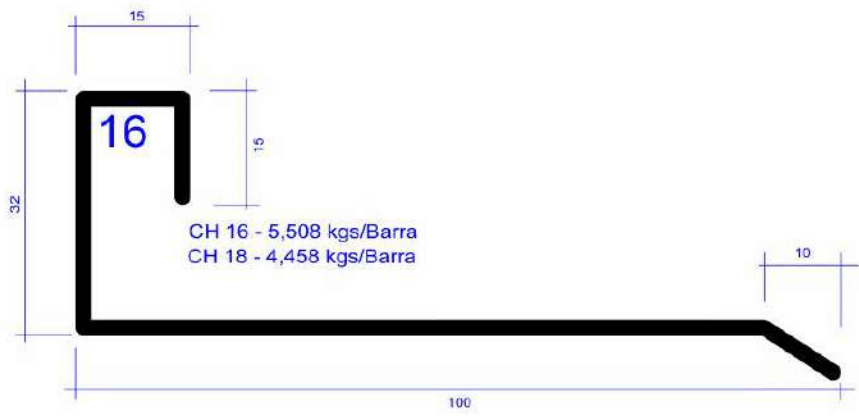
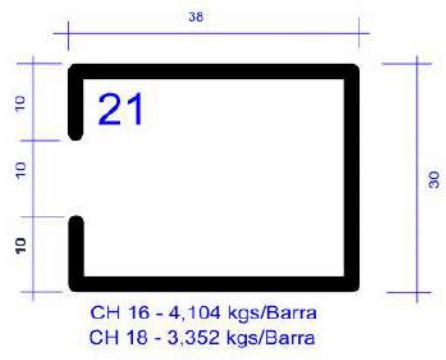
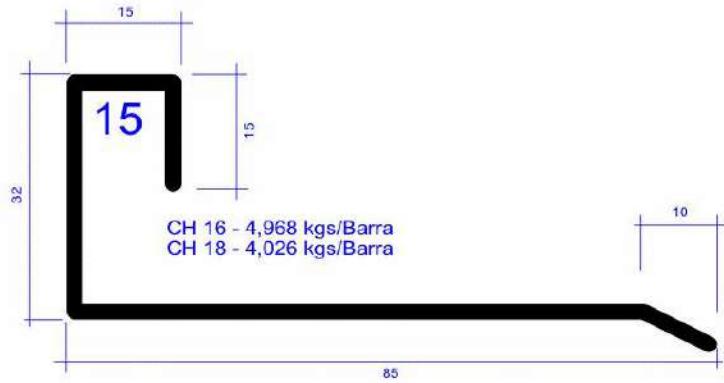


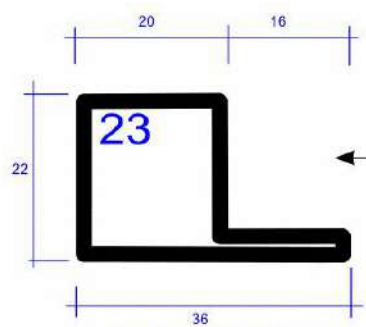
Fone: (45) 2103 2800

Site: www.bortolotto.com.br

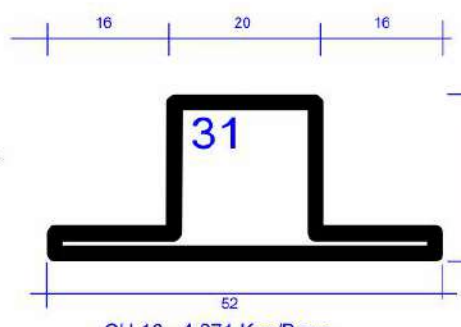
Email: bortolotto@bortolotto.com.br



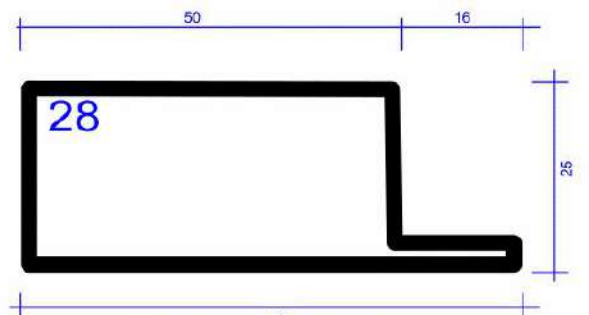




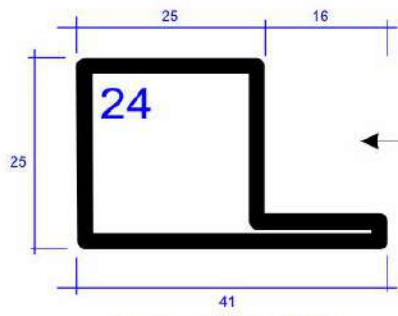
CH 16 - 3,808 Kgs/Barra
CH 18 - 3,107 Kg/Barra



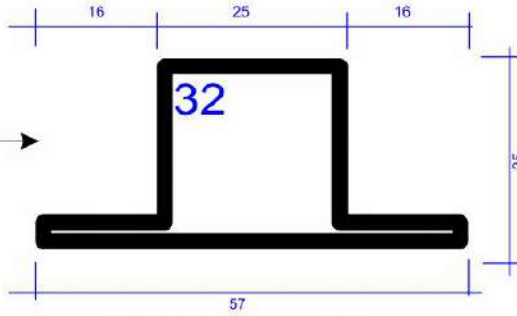
CH 16 - 4,971 Kgs/Barra
CH 18 - 4,037 Kgs/Barra



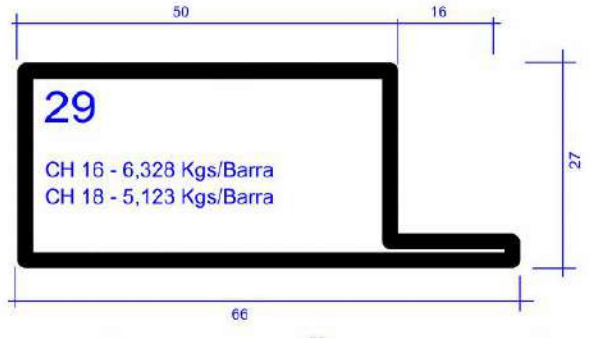
CH 18 - 5,008 Kgs/Barra



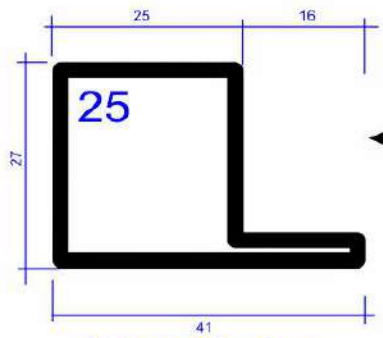
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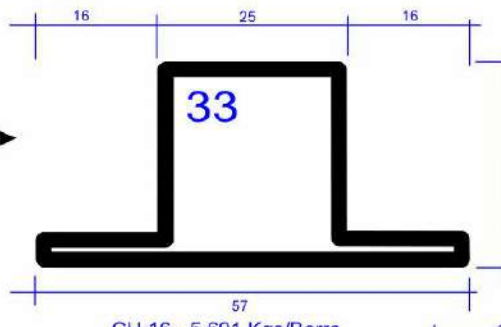
CH 18 - 4,498 Kgs/Barra



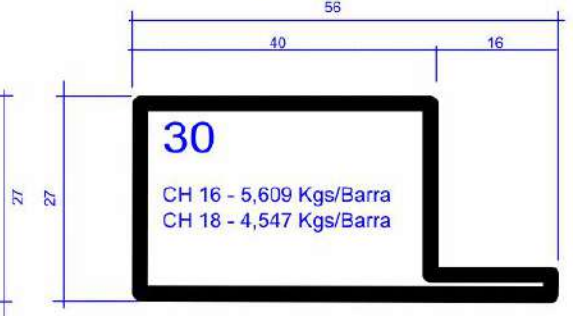
CH 16 - 6,328 Kgs/Barra
CH 18 - 5,123 Kgs/Barra



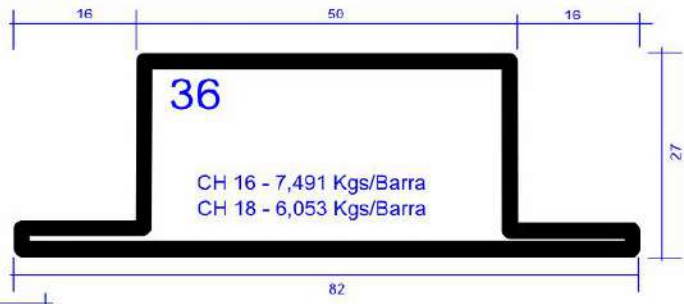
CH 16 - 4,528 Kgs/Barra
CH 18 - 3,683 Kgs/Barra



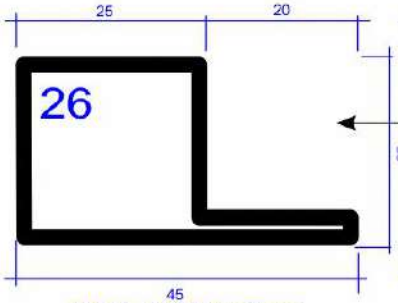
CH 16 - 5,691 Kgs/Barra
CH 18 - 4,613 Kgs/Barra



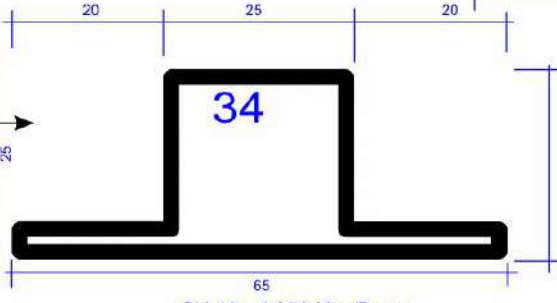
CH 16 - 5,609 Kgs/Barra
CH 18 - 4,547 Kgs/Barra



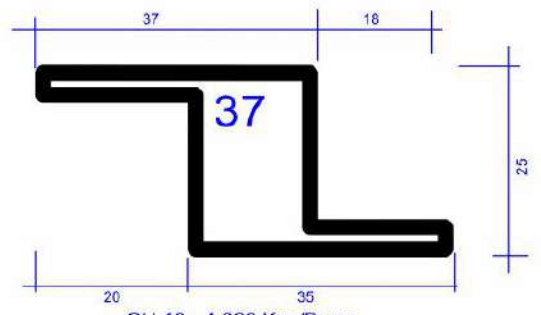
CH 16 - 7,491 Kgs/Barra
CH 18 - 6,053 Kgs/Barra



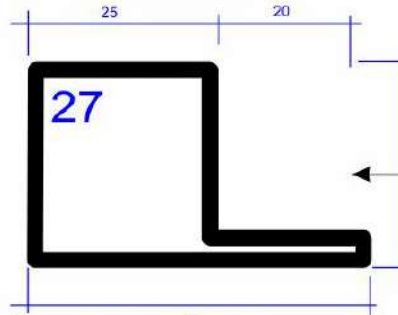
CH 18 - 3,798 Kgs/Barra



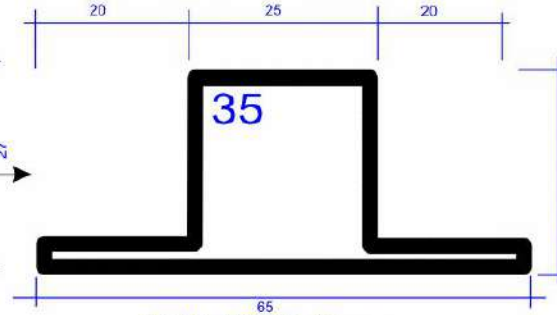
CH 18 - 4,959 Kgs/Barra



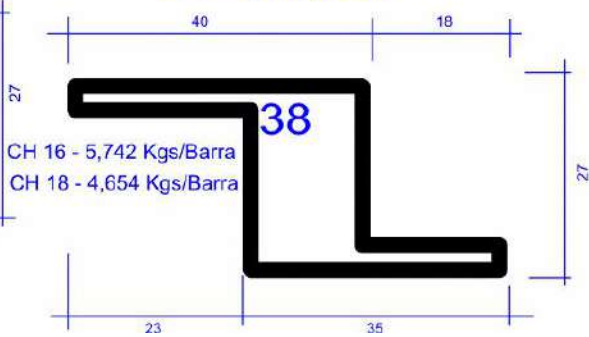
CH 18 - 4,366 Kgs/Barra



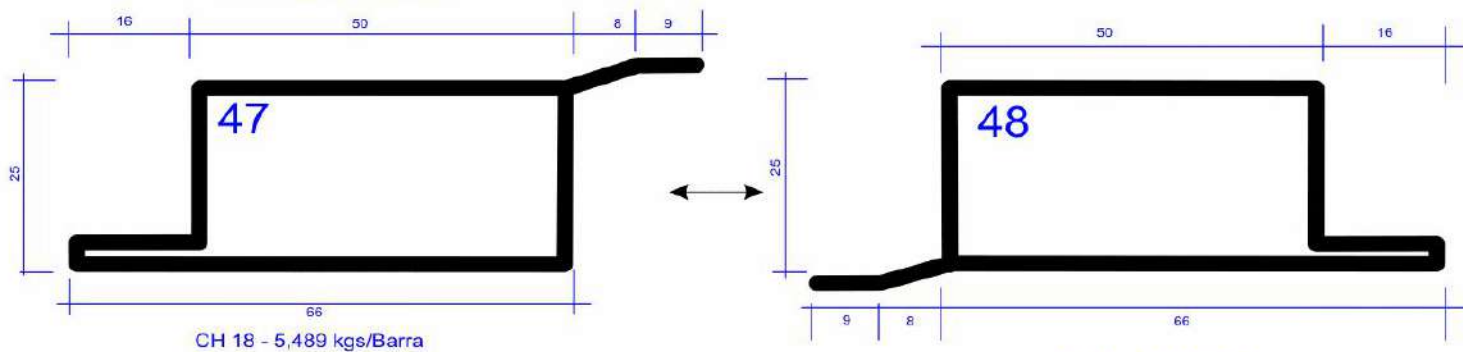
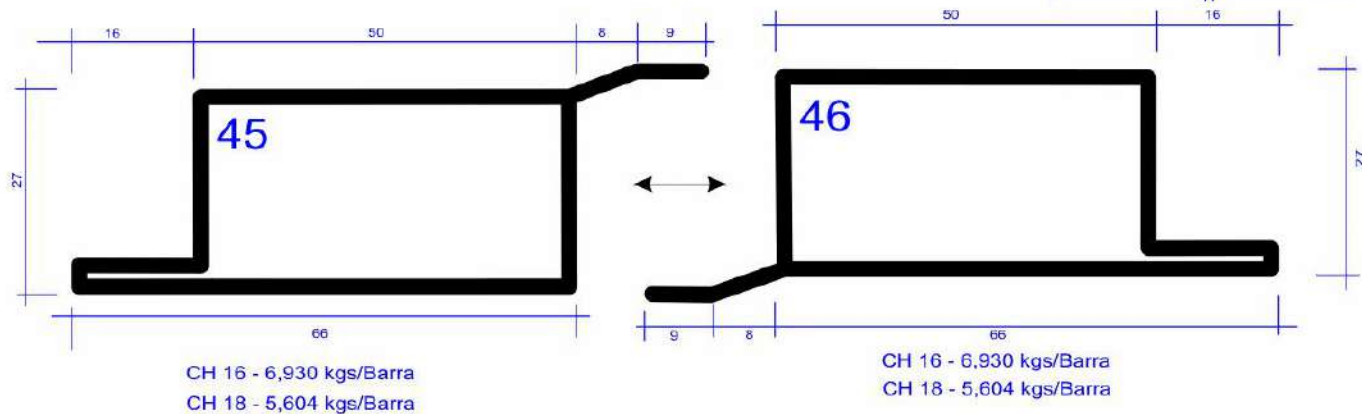
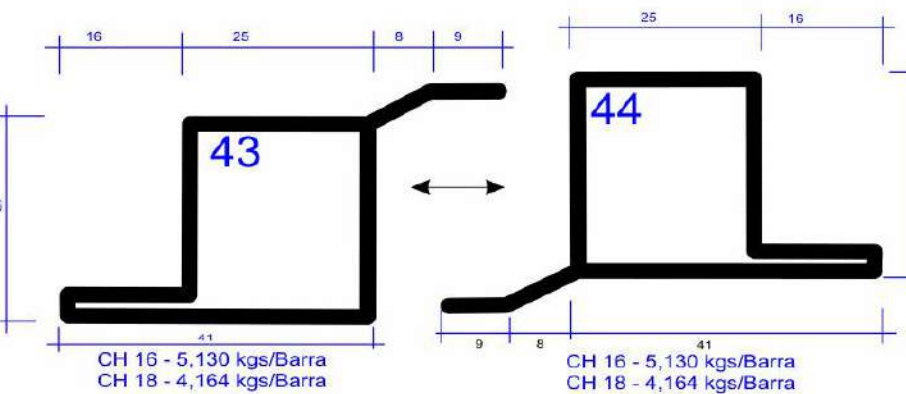
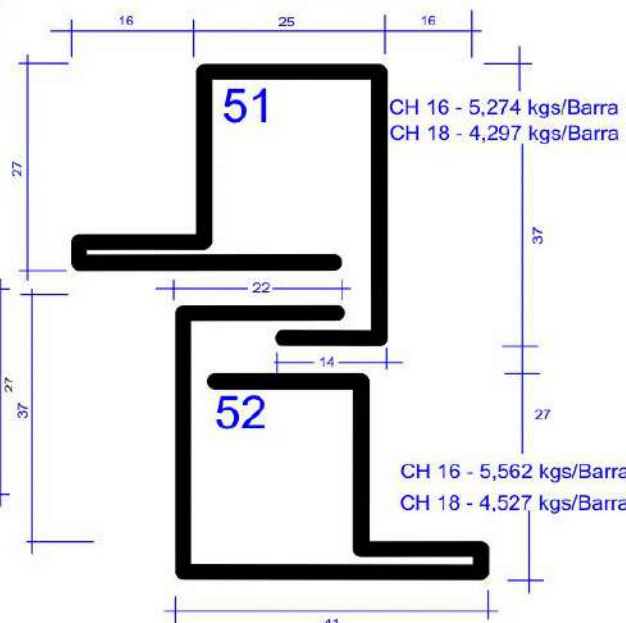
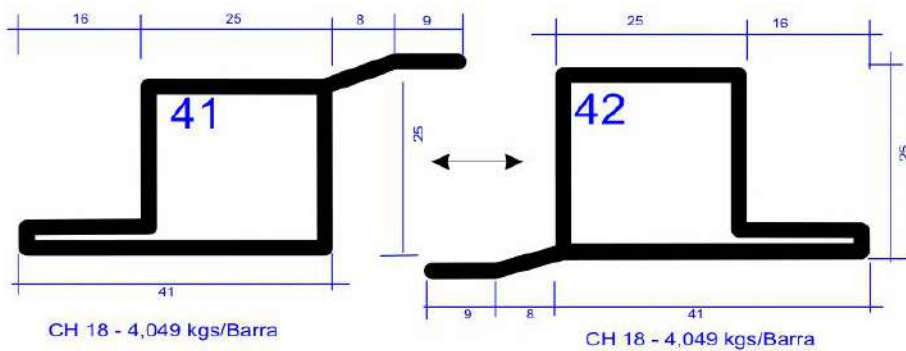
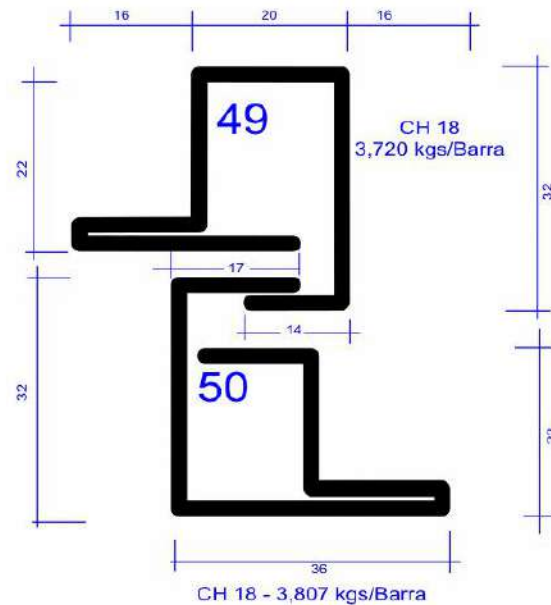
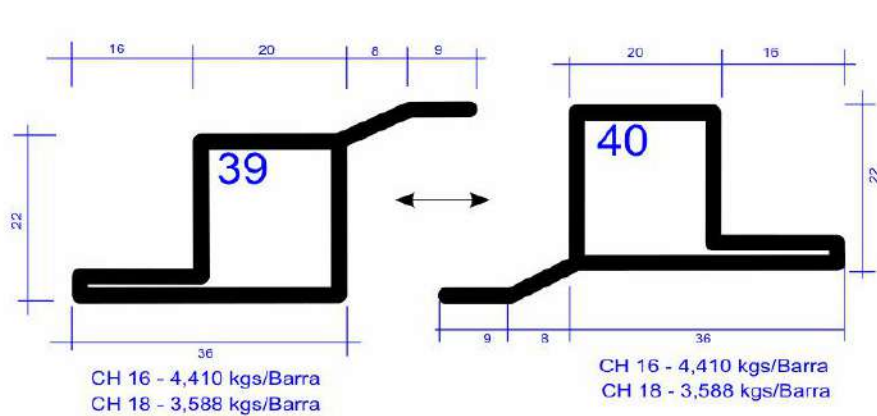
CH 16 - 4,816 Kgs/Barra
CH 18 - 3,913 Kgs/Barra

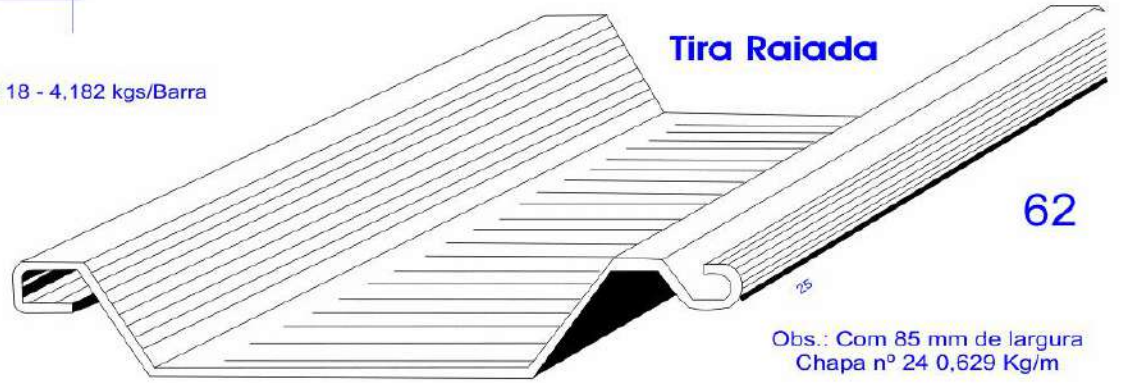
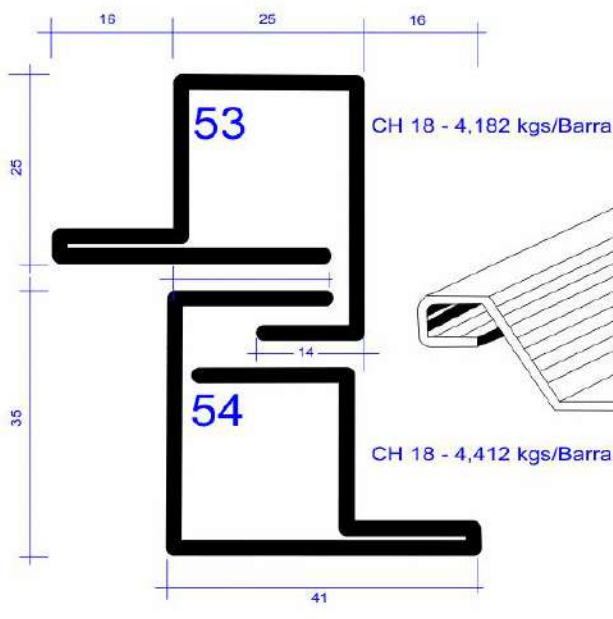


CH 16 - 6,267 Kgs/Barra
CH 18 - 5,074 Kgs/Barra

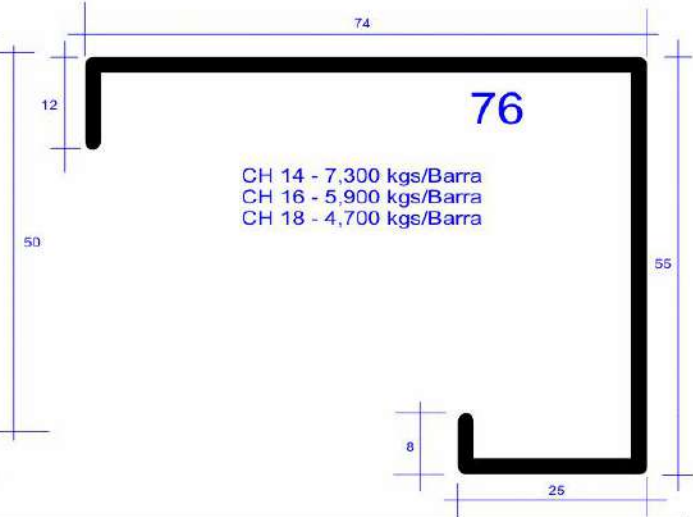
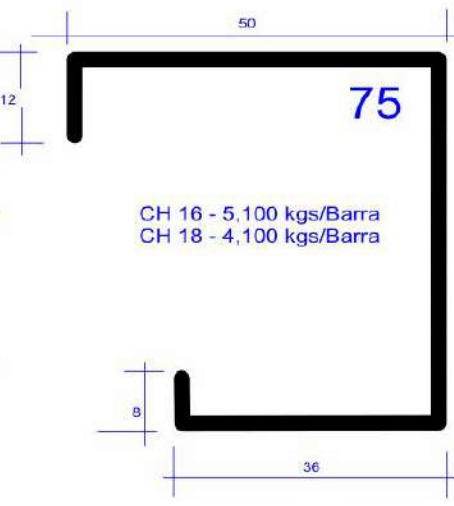
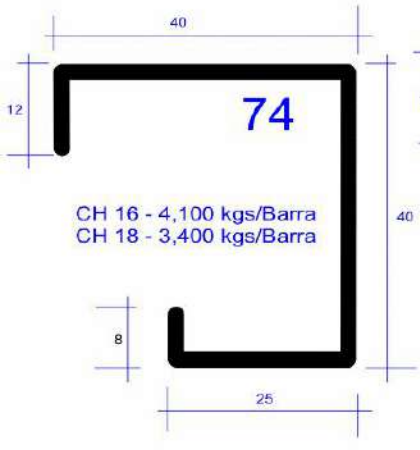
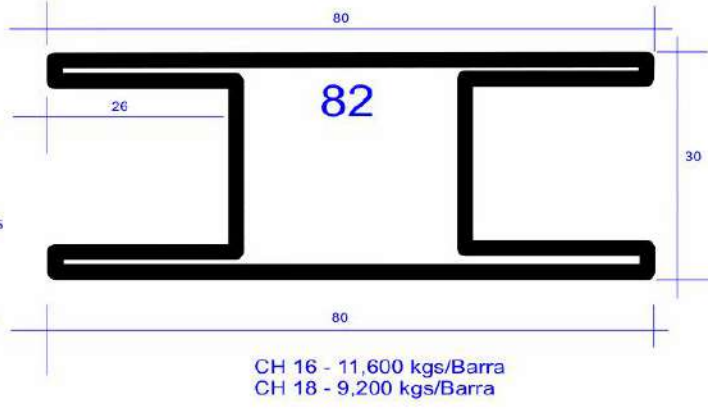
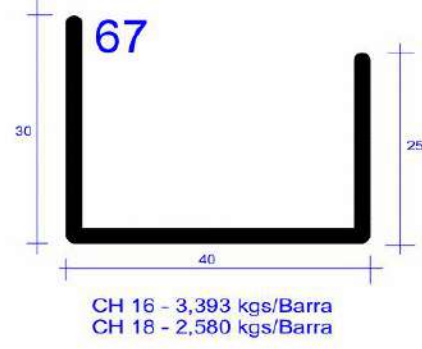
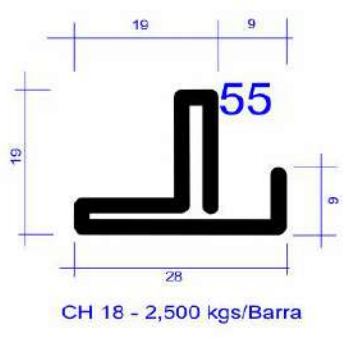


CH 16 - 5,742 Kgs/Barra
CH 18 - 4,654 Kgs/Barra

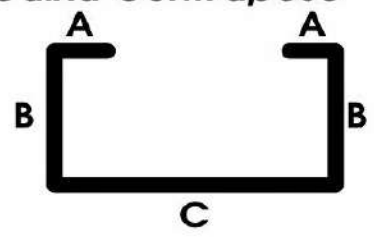




Obs.: Com 85 mm de largura
Chapa nº 24 0,629 Kg/m



Caixa Contrapeso



A	B	C	Espessura	PESO		
				1 mt	2,40 mts	3 mts
1,5 cm	10 cm	15 cm	Ch 18 - 1,20 mm	3,8 Kg	9,2 Kg	11,5 Kg
1,5 cm	15 cm	15 cm	Ch 18 - 1,20 mm	4,8 Kg	11,6 Kg	14,5 Kg
1,5 cm	10 cm	18 cm	Ch 18 - 1,20 mm	4,2 Kg	10,6 Kg	12,5 Kg
1,5 cm	18 cm	18 cm	Ch 18 - 1,20 mm	5,4 Kg	13,0 Kg	16,2 Kg
1,5 cm	10 cm	20 cm	Ch 18 - 1,20 mm	4,3 Kg	10,4 Kg	13,0 Kg
1,5 cm	20 cm	20 cm	Ch 18 - 1,20 mm	6,0 Kg	14,5 Kg	18,1 Kg

Tampa Contrapeso



B	C	Espessura	PESO		
			1 mt	2,40 mts	3 mts
1,5 cm	15 cm	Ch 18 - 1,20 mm	1,9 Kg	41,0 Kg	5,7 Kg
1,5 cm	18 cm	Ch 18 - 1,20 mm	2,0 Kg	43,2 Kg	6,0 Kg
1,5 cm	20 cm	Ch 18 - 1,20 mm	2,1 Kg	46,2 Kg	6,4 Kg

Barra Chata Gerdau															
Bitolas x Peso Linear (Kg/m)															
Espessura	Largura Pol.		3/8	1/2	5/8	3/4	7/8	1"	1.1/4	1.1/2	2"	2.1/2	3"	4"	6"
	Pol.	mm													
1/8	3,18		0,24	0,32	0,40	0,48	0,56	0,63	0,72	0,87	1,27	-	-	-	-
3/16	4,76		-	0,48	0,59	0,71	0,83	0,95	1,19	1,42	1,90	-	-	-	-
1/4	6,35		-	0,59	0,79	0,95	1,11	1,27	1,58	1,90	2,53	3,17	3,80	5,07	7,60
5/16	7,94		-	-	-	-	-	1,58	1,98	2,38	3,17	3,96	4,75	6,33	9,50
3/8	9,53		-	-	-	-	-	1,90	2,38	2,85	3,80	4,75	5,70	7,60	11,40
1/2	12,70		-	-	-	-	-	-	-	3,80	5,06	6,33	7,60	10,13	15,20
5/8	15,88		-	-	-	-	-	-	-	4,75	6,33	7,92	9,50	12,67	19,00
3/4	19,05		-	-	-	-	-	-	-	-	7,60	9,50	11,40	15,19	-
1	25,40		-	-	-	-	-	-	-	-	10,17	12,66	15,19	25,30	30,38

Barra Chata 3.1/2 x 1/2 : 8,85 Kg/mt

Cantoneira Gerdau														
Bitolas x Peso Linear (Kg/m)														
Espessura	Largura Pol.		5/8	3/4	7/8	1"	1.1/4	1.1/2	2"	2.1/2	3"	4"	5"	6"
	Pol.	mm												
Leve	2,50		0,57	0,71	-	-	-	-	-	-	-	-	-	-
1/8	3,18		0,71	0,87	1,04	1,19	1,50	1,83	2,46	-	-	-	-	-
3/16	4,76		-	-	-	1,73	2,20	2,68	3,63	4,57	5,52	-	-	-
1/4	6,35		-	-	-	2,22	2,86	3,48	4,74	6,10	7,29	9,81	-	-
5/16	7,94		-	-	-	-	-	-	5,83	7,44	9,07	12,19	-	-
3/8	9,53		-	-	-	-	-	-	6,99	8,78	10,71	14,57	18,30	22,34
1/2	12,70		-	-	-	-	-	-	-	-	14,00	19,03	24,10	29,34
5/8	15,88		-	-	-	-	-	-	-	-	-	-	-	36,00
3/4	19,05		-	-	-	-	-	-	-	-	-	-	-	42,70

Barra Redonda Gerdau		
Bitola Pol.	mm	Peso Kg / mt
1/4	6,30	0,25
5/16	7,94	0,39
3/8	9,53	0,56
1/2 *	12,70	0,99
9/16	14,29	1,26
5/8 *	15,88	1,56
3/4 *	19,05	2,24
7/8 *	22,23	3,05
1" *	25,40	3,98
1.1/8 *	28,58	5,04
1.1/4 *	31,75	6,22
1.1/2 *	38,10	8,95
1.5/8 *	41,28	10,50
1.3/4 *	44,45	12,18
2" *	50,80	15,91
2.1/8 *	53,98	17,96
2.1/2	63,50	24,86
3" *	76,20	35,79
3.1/2 *	63,50	48,73
4" *	101,60	63,00

* Também em Aço 1045

Barra Redonda Trefilada Gerdau			
Bitola Pol.	Aço	mm	Peso Kg / mt
1/4	1020	6,35	0,25
5/16	1020	7,93	0,39
3/8	1020	9,52	0,56
-	1020/1045	10,00	0,62
7/16	1020	11,11	0,76
1/2	1020/1045	12,70	0,99
9/16	1045	14,28	1,26
-	1020	15,00	1,40
5/8	1020/1045	15,88	1,56
3/4	1020/1045	19,05	2,24
-	1020/1045	20,00	2,47
7/8	1020/1045	22,23	3,04
-	1020/1045	25,00	3,85
1"	1020/1045	25,40	3,98
1.1/8	1020	28,58	5,06
-	1020/1045	30,00	5,55
1.1/4	1020/1045	31,75	6,22
-	1020/1045	35,00	7,55
1.1/2	1020/1045	38,10	8,95
-	1020/1045	40,00	9,00
1.5/8	1045	41,28	10,51
-	1045	42,00	10,70
1.3/4	1045	44,45	12,18
-	1020/1045	45,00	12,33
-	1020/1045	50,00	15,47
2"	1020/1045	50,80	15,91
-	1020/1045	55,00	18,65
-	1020/1045	60,00	22,20
2.1/2	1020/1045	63,50	24,86
-	1020/1045	65,00	26,05
3"	1045	76,20	35,80

Barra Quadrada Gerdau		
Bitola Pol.	mm	Peso Kg / mt
1/4	6,30	0,32
5/16	7,94	0,50
3/8	9,53	0,71
1/2	12,70	1,27
5/8	15,88	1,98
3/4	19,05	2,85
7/8	22,23	3,88
1"	25,40	5,06
1.1/4	31,75	7,91
1.1/2	38,10	11,15
2"	50,80	20,23
2.1/2	63,50	27,75
3"	76,20	45,53

Perfil Tee Gerdau									
Bitolas x Peso Linear (Kg/m)									
Espessura	Largura Pol.		5/8	3/4	7/8	1"	1.1/4	1.1/2	2"
	Pol.	mm							
Leve	2,50		-	0,69	-	-	-	-	-
1/8	3,18		0,71	0,86	0,99	1,18	1,50	1,82	-
3/16	4,76		-	-	-	-	-	-	3,62

Perfil Estrela Gerdau		
Bitola Pol.	mm	Peso Kg / mt
3/8	10,5	0,694
1/2	12,1	0,909

Ferro Tribar Gerdau		
Bitola Pol.	mm	Peso Kg / mt
3/8	10,0	0,51

Barra Quadrada Trefilada Gerdau Aço 1045		
Bitola Pol.	mm	Peso Kg / mt
3/4	19,05	2,85
7/8	22,23	3,88
1"	25,40	5,06

Cantoneira Dobrada Bortolotto		
Bitola Pol.	mm	Peso Kg / mt
1" ch 11	25,00	1,056
1.1/4 ch 11	32,00	1,392
1.1/2 ch 11	38,00	1,680

Barra Sextavada Trefilada 1045 Gerdau		
Bitola Pol.	mm	Peso Kg / mt
1/2	12,70	1,10
5/8	15,88	1,71
3/4	19,05	2,47
7/8	22,23	3,36
1"	25,40	4,39
1.1/8	28,57	5,55
1.1/4	31,75	6,85
1.1/2	38,10	9,87
1.3/4	44,45	13,43
2"	50,80	17,54

Tubos Redondos

Diâmetro	Espeçura	ch 21 0,85 mm	ch 20 0,90 mm	ch 19 1,06 mm	ch 18 1,20 mm	ch 16 1,50 mm	ch 14 2,00 mm	ch 13 2,25 mm	ch 12 2,65 mm	ch 11 3,00 mm	ch 10 3,35 mm
1/2"	-	-	1,570	-	2,140	-	-	-	-	-	-
5/8"	1,900	2,005	2,334	2,616	3,200	-	-	-	-	-	-
3/4"	2,301	2,430	2,834	3,182	3,907	4,614	5,984	6,648	7,674	-	-
7/8"	2,703	2,855	3,334	3,748	4,614	5,984	6,648	7,674	-	-	-
1"	3,105	3,280	3,835	4,314	5,321	6,735	9,009	10,022	11,605	12,071	-
1.1/4"	3,908	4,130	4,835	5,446	6,735	8,149	10,935	12,184	14,143	15,581	-
1.1/2"	-	4,980	5,836	6,578	8,149	-	-	-	-	-	-
42 mm	-	-	-	-	-	-	13,000	-	-	-	-
1.3/4"	-	5,831	6,837	7,711	9,564	12,861	14,345	16,679	-	-	-
1.7/8"	-	6,222	7,303	8,242	10,300	13,500	15,098	17,625	19,797	-	21,933
48 mm	-	-	-	-	-	-	-	17,620	-	-	-
2"	-	6,682	7,837	8,843	10,977	14,787	16,506	19,217	21,210	23,519	-
2.1/2"	-	8,336	9,752	11,107	13,806	18,640	20,828	24,291	27,281	30,814	33,013
3"	-	10,030	11,764	13,372	16,634	22,492	25,150	29,364	33,013	36,109	39,582
3.1/2"	-	-	-	-	15,636	19,462	26,345	29,472	34,438	38,745	42,404
4"	-	-	-	-	17,876	22,217	29,476	33,077	38,800	43,769	48,702
5"	-	-	-	-	-	-	36,992	41,533	48,760	55,045	61,293
6"	-	-	-	-	-	-	47,120	-	-	-	-

Peso por barra 6 metros

Itens em Negrito: Produção normal Outros: Somente sob consulta

Tubos Quadrados

Diâmetro	Espeçura	ch 21 0,85 mm	ch 20 0,90 mm	ch 19 1,06 mm	ch 18 1,20 mm	ch 16 1,50 mm	ch 14 2,00 mm	ch 13 2,25 mm	ch 12 2,65 mm	ch 11 3,00 mm	ch 10 3,35 mm	ch 9 3,75 mm	ch 3/16 4,75 mm
15 X 15 mm	2,301	2,430	2,834	3,182	3,907	-	-	-	-	-	-	-	-
20 X 20 mm	3,105	3,280	3,835	4,314	5,321	6,925	-	-	-	-	-	-	-
25 X 25 mm	3,908	4,130	4,835	5,446	6,735	9,009	10,022	11,605	12,071	-	-	-	-
30 X 30 mm	-	4,980	5,836	6,578	8,149	10,935	12,184	14,143	14,900	-	-	-	-
35 X 35 mm	-	5,831	6,837	7,711	9,564	12,861	14,345	16,679	-	-	-	-	-
38 X 38 mm	-	-	-	-	10,232	13,404	-	-	-	-	-	-	-
40 X 40 mm	-	6,682	7,837	8,843	10,977	14,787	16,506	19,217	21,210	23,519	26,221	-	-
50 X 50 mm	-	8,336	9,752	11,107	13,806	18,640	20,828	24,291	27,281	29,814	33,240	39,582	-
60 X 60 mm	-	10,030	11,764	13,372	16,634	22,492	25,150	29,364	33,013	36,109	40,200	48,531	-
70 X 70 mm	-	-	-	-	15,636	19,462	26,345	29,472	34,438	38,745	42,404	47,277	57,480
80 X 80 mm	-	-	-	-	17,826	22,215	29,474	33,074	38,797	43,766	48,699	54,295	66,429
100 X 100 mm	-	-	-	-	-	-	36,770	41,231	48,320	54,461	60,546	67,432	84,327

Peso por barra 6 metros

Itens em Negrito: Produção normal Outros: Somente sob consulta

Tubos Retangulares

Diâmetro	Espeçura	ch 21 0,85 mm	ch 20 0,90 mm	ch 19 1,06 mm	ch 18 1,20 mm	ch 16 1,50 mm	ch 14 2,00 mm	ch 13 2,25 mm	ch 12 2,65 mm	ch 11 3,00 mm	ch 10 3,35 mm	ch 9 3,75 mm	ch 3/16 4,75 mm
20 X 30 mm	3,908	4,130	4,835	5,446	6,735	9,009	10,022	11,605	-	-	-	-	-
20 X 40 mm	-	4,980	5,836	6,578	8,149	10,935	12,184	14,143	-	-	-	-	-
20 X 50 mm	-	5,831	6,837	7,711	9,564	12,861	14,345	16,679	-	-	-	-	-
30 X 40 mm	-	5,831	6,837	7,711	9,564	12,861	14,345	16,676	18,398	20,372	22,713	-	-
30 X 50 mm	-	6,682	7,837	8,843	10,977	14,787	16,506	19,217	21,210	23,519	26,221	-	-
30 X 70 mm	-	8,336	9,752	11,107	13,806	18,640	20,828	24,291	27,281	29,814	33,240	-	-
30 X 90 mm	-	10,030	11,764	13,372	16,634	22,492	25,150	29,364	33,013	36,109	40,200	-	-
40 X 60 mm	-	8,336	9,752	11,110	13,810	18,640	20,390	23,859	26,855	29,814	33,240	-	-
40 X 80 mm	-	10,030	11,764	13,372	16,634	22,492	25,150	29,364	33,013	36,109	40,200	48,531	-
50 X 70 mm	-	-	-	-	-	16,634	22,492	25,150	29,364	33,013	36,109	40,200	48,531
50 X 80 mm	-	-	-	-	-	17,988	23,837	26,733	31,328	35,310	39,257	43,768	-
40 X 100 mm	-	-	-	-	15,836	19,462	26,345	29,472	34,438	38,745	42,404	47,277	57,480
80 X 120 mm	-	-	-	-	-	-	36,764	41,231	48,319	54,461	60,546	67,432	84,327

Peso por barra 6 metros

Itens em Negrito: Produção normal Outros: Somente sob consulta

Tubos Galvanizados c/ Rosca

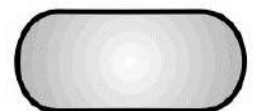
NBR 8261	Espessura	Medidas Aproximadas		Peso 6 mts
		Interno (mm)	Externo (mm)	
1/2"	BWG 14 - 2,00 mm	16,0 mm	21,0 mm	6,65 Kg
3/4"	BWG 13 - 2,25 mm	21,0 mm	26,3 mm	8,34 Kg
1"	BWG 13 - 2,25 mm	28,5 mm	33,5 mm	11,40 Kg
1 1/4"	BWG 13 - 2,25 mm	37,0 mm	42,0 mm	14,70 Kg
1 1/2"	BWG 12 - 2,65 mm	41,0 mm	48,0 mm	19,10 Kg
2"	BWG 12 - 2,65 mm	55,0 mm	60,0 mm	24,40 Kg
2 1/2"	BWG 11 - 3,00 mm	69,0 mm	75,0 mm	34,04 Kg
3"	BWG 11 - 3,00 mm	82,0 mm	88,0 mm	40,90 Kg
4"	BWG 11 - 3,00 mm	107,0 mm	112,0 mm	52,31 Kg
6"	BWG 3/16 - 4,75 mm	151,0 mm	164,0 mm	113,00 Kg

Peso por barra 6 metros

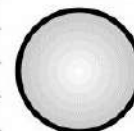
Tubos Oblongos

Diâmetro	Espeçura	ch 18 1,20 mm
20 x 48 mm	6,551	-
25 x 50 mm	7,114	-
29 x 58 mm	7,679	-

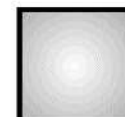
Peso por barra 6 metros



Oblongos



Redondos



Quadrados



Retangulares

Chapa Fina a Frio (FF)

Bitola BWG	mm	Peso Kg / m ²	Tamanho das Chapas			
			(2 x 1) mts	(2 x 1,20) mts	(3 x 1) mts	(3 x 1,20) mts
16	1,50 mm	12,00	24,00 Kg	28,80 Kg	36,00 Kg	43,20 Kg
18	1,25 mm	10,00	20,00 Kg	24,00 Kg	30,00 Kg	36,00 Kg
20	0,90 mm	7,20	14,40 Kg	17,28 Kg	21,60 Kg	25,92 Kg
22	0,75 mm	6,00	12,00 Kg	14,40 Kg	18,00 Kg	21,60 Kg
24	0,60 mm	4,80	-	11,52 Kg	-	17,28 Kg
26	0,45 mm	3,60	-	8,64 Kg	-	12,96 Kg

Chapa Fina Quente (FQ)

Bitola BWG	mm	Peso Kg / m ²	Tamanho das Chapas			
			(2 x 1) mts	(2 x 1,20) mts	(3 x 1) mts	(3 x 1,20) mts
16	1,50 mm	12,00	24,00 kg	28,80 kg	36,00 kg	43,20 kg
14	1,90 mm	15,20	30,40 kg	36,48 kg	45,60 kg	54,72 kg
13	2,25 mm	18,00	-	43,20 kg	54,00 kg	64,80 kg
12	2,65 mm	21,20	42,40 kg	50,88 kg	-	76,32 kg
11	3,00 mm	24,00	-	57,60 kg	72,00 kg	86,40 kg
10	3,35 mm	26,80	-	64,32 kg	-	96,48 kg
9	4,25 mm	30,00	-	72,00 kg	-	108,00 kg
3/16	4,75 mm	38,00	-	91,20 kg	-	136,80 kg

Chapas Grossas

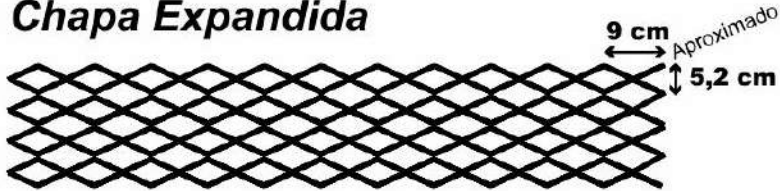
Bitola Pol.	mm	Peso Kg / m ²	Tamanho das Chapas			
			(2 x 1) mts	(2 x 1,20) mts	(3 x 1) mts	(3 x 1,20) mts
1/4	6,35 mm	49,78	-	119,47 kg	-	179,21 kg
5/16	7,94 mm	62,25	-	149,40 kg	-	224,10 kg
3/8	9,52 mm	74,72	-	179,33 kg	-	268,99 kg
1/2	12,70 mm	99,57	-	238,97 kg	-	358,45 kg
5/8	15,87 mm	124,5	-	298,80 kg	-	448,20 kg
3/4	19,05 mm	149,4	-	358,56 kg	-	537,84 kg
7/8	22,22 mm	174,2	-	418,08 kg	-	627,12 kg
1"	25,40 mm	199,1	-	477,84 kg	-	716,76 kg
1.1/4	31,75 mm	248,9	-	597,36 kg	-	896,04 kg
1.1/2	38,10 mm	298,7	-	716,88 kg	-	1075,32 kg
2"	50,80 mm	398,3	-	956,92 kg	-	1433,88 kg

Chapas Galvanizadas

Bitola BWG	mm	Peso Kg / m ²	Tamanho das Chapas			
			(2x1) mts	(2x1,20) mts	(3x1) mts	(3x1,20) mts
14	1,95 mm	15,60	-	37,44 kg	-	56,16 kg
16	1,55 mm	12,40	-	29,76 kg	37,20 kg	44,64 kg
18	1,30 mm	10,40	-	24,96 kg	-	37,44 kg
20	0,95 mm	7,60	-	18,24 kg	-	27,36 kg
22	0,80 mm	6,40	12,80 kg	15,36 kg	-	23,04 kg
24	0,65 mm	5,20	10,40 kg	12,48 kg	-	18,72 kg
26	0,50 mm	4,00	8,00 kg	9,60 kg	12,00 kg	14,40 kg
28	0,43 mm	3,44	6,88 kg	8,26 kg	10,32 kg	12,38 kg
30	0,35 mm	2,80	5,60 kg	-	-	-

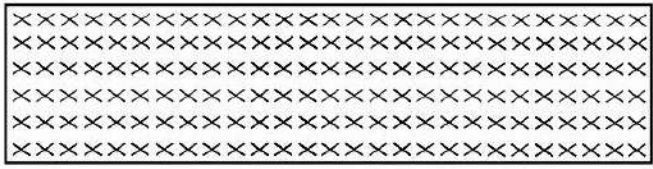
Consulte sobre outros tamanhos de Chapas

Chapa Expandida



Tamanho	Espessura	Peso p/ Chapa	Largura Útil
(2 x 1) mts	1/8 - 3,00 mm	15,00 Kg	1 mt
(2 x 1) mts	3/16 - 4,75 mm	18,00 Kg	1 mt
(2 x 1) mts	1/4 - 6,30 mm	22,00 Kg	1 mt

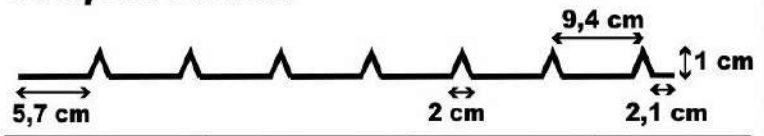
Chapa Anti-Derrapante ("Pé de Galinha")



Tamanho	Espessura	Peso p/ Chapa	Largura Útil
(3,00 x 1,20) mts	1/8 - 3,00 mm	97,00 Kg	1,20 mt
(3,00 x 1,20) mts	3/16 - 4,75 mm	146,00 Kg	1,20 mt

Chapa Frizada

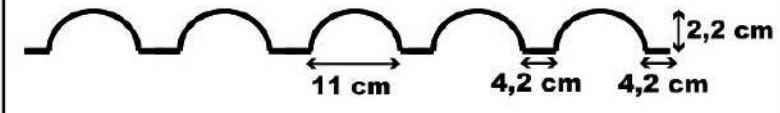
Obs.: 12 frizos por chapa (de 1,14 mts.)



Tamanho	Espessura	Peso p/ Chapa	Largura Útil
(2,00 x 1,14) mts	Ch 22 - 0,75 mm	14,78 Kg	1,10 mts
(2,20 x 1,14) mts	Ch 22 - 0,75 mm	16,26 Kg	1,10 mts
(2,50 x 1,14) mts	Ch 22 - 0,75 mm	18,00 Kg	1,10 mts
(2,00 x 0,95) mts	Ch 22 - 0,75 mm	11,40 Kg	0,92 mts
(2,20 x 0,95) mts	Ch 22 - 0,75 mm	12,55 Kg	0,92 mts
(2,50 x 0,95) mts	Ch 22 - 0,75 mm	16,00 Kg	0,92 mts
(3,00 x 1,14) mts	Ch 22 - 0,75 mm	22,17 Kg	1,10 mts

Chapa Búzio ("Ondulada")

Obs.: 7 ondas por chapa



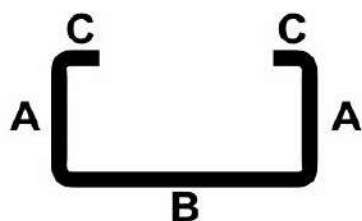
Tamanho	Espessura	Peso p/ Chapa	Largura Útil
(2,00 x 1,11) mts	Ch 22 - 0,75 mm	16,00 Kg	1,06 mts
(2,20 x 1,11) mts	Ch 22 - 0,75 mm	17,60 Kg	1,06 mts
(2,50 x 1,11) mts	Ch 22 - 0,75 mm	20,00 Kg	1,06 mts

Viga "U" Dobrada



Polegadas	DIMENSÕES EXTERNAS			ESPESSURA		PESO	
	A	B	C	BWG	Milímetros	1 mt	6 mts
2"	25 mm	50 mm	25 mm	11	3,00 mm	2,10 kg	12,60 kg
				12	2,65 mm	1,87 kg	11,22 kg
				13	2,25 mm	1,62 kg	9,72 kg
				14	2,00 mm	1,45 kg	8,70 kg
3"	38 mm	75 mm	38 mm	3/16	4,75 mm	5,02 kg	30,10 kg
				11	3,00 mm	3,43 kg	20,56 kg
				12	2,65 mm	3,02 kg	18,11 kg
				13	2,25 mm	2,52 kg	15,12 kg
4"	40 mm	100 mm	40 mm	3/16	4,75 mm	6,12 kg	36,71 kg
				11	3,00 mm	4,12 kg	24,71 kg
				12	2,65 mm	3,62 kg	21,74 kg
				13	2,25 mm	3,08 kg	18,47 kg
4"	50 mm	100 mm	50 mm	3/16	4,75 mm	6,88 kg	41,27 kg
				11	3,00 mm	4,52 kg	27,12 kg
				12	2,65 mm	4,02 kg	24,09 kg
				13	2,25 mm	3,44 kg	20,63 kg
5"	40 mm	125 mm	40 mm	3/16	4,75 mm	7,07 kg	42,41 kg
				11	3,00 mm	4,63 kg	27,79 kg
				12	2,65 mm	4,11 kg	24,67 kg
5"	50 mm	125 mm	50 mm	3/16	4,75 mm	7,83 kg	46,97 kg
				11	3,00 mm	5,22 kg	31,34 kg
				12	2,65 mm	4,59 kg	27,52 kg
6"	50 mm	150 mm	50 mm	3/16	4,75 mm	8,78 kg	52,67 kg
				11	3,00 mm	5,82 kg	34,92 kg
				12	2,65 mm	5,11 kg	30,65 kg

Viga "U" Dobrada "Enrígecida"



POLEGADAS	DIMENSÕES EXTERNAS			ESPESSURA		PESO	
	A	B	C	BWG	Milímetros	1 mt	6 mts
3"	40 mm	75 mm	15 mm	BWG 14	2,00 mm	2,64 Kg	15,8 Kg
3"	40 mm	75 mm	15 mm	BWG 13	2,25 mm	2,93 Kg	17,6 Kg
4"	40 mm	100 mm	15 mm	BWG 14	2,00 mm	3,04 Kg	18,2 Kg
4"	40 mm	100 mm	15 mm	BWG 13	2,25 mm	3,38 Kg	20,3 Kg
4"	40 mm	100 mm	20 mm	BWG 12	2,65 mm	4,21 Kg	25,3 Kg

Viga "U" Dobrada "Encaixe"



POLEGADAS	DIMENSÕES EXTERNAS			ESPESSURA		PESO	
	A	B	C	BWG	Milímetros	1 mt	6 mts
3"	30 mm	68 mm	30 mm	BWG 14	2,00 mm	1,92 Kg	11,5 Kg
3"	30 mm	68 mm	30 mm	BWG 13	2,25 mm	2,10 Kg	12,6 Kg
4"	30 mm	92 mm	30 mm	BWG 14	2,00 mm	2,47 Kg	14,8 Kg
4"	30 mm	92 mm	30 mm	BWG 13	2,25 mm	3,00 Kg	18,0 Kg

Viga "U" de Pára-choque e Dobradiça



Dobradiça

DIMENSÕES EXTERNAS				ESPESSURA		PESO
Tipo	A	B	C	BWG	Milímetros	1,20 mts
Interno	50 mm	50 mm	50 mm	3/16	4,75 mm	6,85 Kg
Externo	60 mm	60 mm	60 mm	3/16	4,75 mm	8,25 Kg

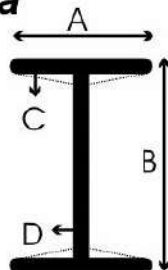


Pára-Choque

Pára-Choque		Comp.	Peso
Enrígecido (15x50x127x50x15) mm ch 3/16		2,40 mts	14,10 Kg
Normal (50x127x50) mm ch 3/16		2,40 mts	18,80 Kg

Viga "I" Laminada

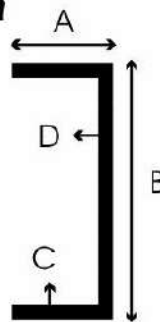
ASTM A36



Bitola	Tipo	Dimensões Externas		Espessura		Peso 6 mts
		A	B	C	D	
3"	Inclinada	59,20 mm	76,20 mm	6,60 mm	4,32 mm	50,70 Kg
4"	Inclinada	67,60 mm	101,60 mm	7,40 mm	4,83 mm	68,40 Kg
5"	Inclinada	76,20 mm	127,00 mm	8,30 mm	5,33 mm	88,80 Kg
6"	Inclinada	84,60 mm	152,40 mm	9,10 mm	5,84 mm	111,00 Kg
8"	Reta (W200 x 26,6)	133,00 mm	207,00 mm	8,40 mm	5,80 mm	159,60 Kg
10"	Reta (W250 x 32,7)	146,00 mm	258,00 mm	9,10 mm	6,10 mm	196,20 Kg
12"	Reta (W310 x 44,5)	166,00 mm	313,00 mm	11,20 mm	6,60 mm	267,00 Kg

Viga "U" Laminada

ASTM A36



Bitola	A	B	C	D	Peso 6 mts
2" ch 14	25,4 mm	50,8 mm	2,0 mm	2,0 mm	9,60 Kg
3" ch 12	38,1 mm	76,2 mm	2,5 mm	2,5 mm	17,64 Kg
4" ch 12	101,6 mm	50,8 mm	2,5 mm	2,5 mm	23,82 Kg
1" x 1/8	12,7 mm	25,4 mm	4,1 mm	3,2 mm	7,20 Kg
2" x 1/8	25,4 mm	50,8 mm	3,2 mm	3,2 mm	14,46 Kg
2" x 3/16	25,4 mm	50,8 mm	4,8 mm	4,8 mm	21,00 Kg
3" 1º Alma	35,8 mm	76,2 mm	6,9 mm	4,3 mm	36,66 Kg
4" 1º Alma	40,1 mm	101,6 mm	7,5 mm	4,6 mm	47,70 Kg
6" 1º Alma	48,8 mm	152,4 mm	8,7 mm	5,1 mm	73,20 Kg

Telhas Zincadas e Aluzinc



Modelos:

Telhas Onduladas



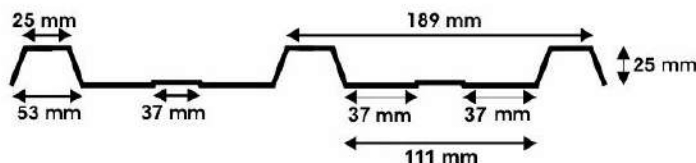
Detalhe das medidas :



Telhas Trapézio



Detalhe das medidas :



Comprimento das Telhas conforme pedido.

Tipo	Largura	Peso por metro Linear		Largura Útil
		0,43 mm	0,50 mm	
Zinco Ondulada	1,08 mts	4,08 Kg	4,67 Kg	0,98 mts
Zinco Trapezoidal	1,04 mts	4,08 Kg	4,67 Kg	0,99 mts
Aluzinc Ondulada	1,10 mts	3,86 Kg	4,20 Kg	0,98 mts
Aluzinc Trapezoidal	1,04 mts	3,86 Kg	4,20 Kg	0,99 mts
Cumeeira de Zinco	0,60 x 1 mt	2,45 Kg	-	0,98 mts
Cumeeira Aluzinc	0,60 x 1 mt	2,32 Kg	-	0,98 mts

Consulte outros Produtos para Cobertura:

- Vigas "U" para Estrutura e Terçamento;
- Parafusos Auto-Brocante para Fixação;
- Ganchos de Fixação Galvanizados;
- Produtos de Vedação;
- Fita Isotel;
- Protetor "Pardal";
- Outros Produtos sob encomenda.



*Serviços Especiais
em Chapas*

Corte / Dobra / Calandra

Telas para Piso Gerdau

Nome	Tipo	Tamanho	Arame	Aço	Malha	Metragem	Peso / Peça
Q138	Painel	(2,45 x 6) mts	4,20 mm	Ca 60	(10x10) cm	14,7 m ²	32,30 Kg
Q138	Rolo	(2,45 x 60) mts	4,20 mm	Ca 60	(10x10) cm	147,0 m ²	323,40 Kg
Q196	Painel	(2,45 x 6) mts	5,00 mm	Ca 60	(10x10) cm	14,7 m ²	45,70 Kg
Q283	Painel	(2,45 x 6) mts	6,00 mm	Ca 60	(10x10) cm	14,7 m ²	65,90 Kg
Q61	Rolo	(2,45 x 120) mts	3,40 mm	Ca 60	(15x15) cm	294 m ²	285,20 Kg
Q92	Rolo	(2,45 x 60) mts	4,20 mm	Ca 60	(15x15) cm	147,0 m ²	21,80 Kg
Malha POP Leve	Painel	(2 x 3) mts	3,40 mm	Ca 60	(20x20) cm	6,0 m ²	4,30 Kg
Malha POP Média	Painel	(2 x 3) mts	3,40 mm	Ca 60	(15x15) cm	6,0 m ²	6,00 Kg
Malha POP Reforçada	Painel	(2 x 3) mts	4,20 mm	Ca 60	(15x15) cm	6,0 m ²	9,00 Kg

Telas para Tubo de Concreto Gerdau

Nome	Tipo	Tamanho	Arame	Aço	Malha	Metragem	Peso / Peça
MF 283	Rolo	(0,975 x 60) mts	(6,00 x 4,20) mm	Ca 60	(10x20) cm	58,5 m ²	165,00 Kg
MF 113	Rolo	(0,975 x 120) mts	(3,80 x 3,40) mm	Ca 60	(10x20) cm	117 m ²	148,60 Kg
MF 138	Rolo	(0,975 x 120) mts	(4,20 x 3,40) mm	Ca 60	(10x20) cm	117 m ²	172,00 Kg
MF 159	Rolo	(0,975 x 120) mts	(4,50 x 3,40) mm	Ca 60	(10x20) cm	117 m ²	191,90 Kg
MF 196	Rolo	(0,975 x 120) mts	(5,00 x 3,40) mm	Ca 60	(10x20) cm	117 m ²	227,00 Kg
MF 246	Rolo	(0,975 x 60) mts	(5,60 x 3,40) mm	Ca 60	(10x20) cm	58,5 m ²	136,90 Kg
PB 138	Rolo	(1,12 x 120) mts	(4,20 x 3,40) mm	Ca 60	(10x20) cm	134,4 m ²	205,60 Kg
PB 196	Rolo	(1,12 x 120) mts	(5,00 x 3,40) mm	Ca 60	(10x20) cm	134,4 m ²	270,10 Kg

Telas para Alambrado Gerdau

Nome	Tipo	Tamanho	Arame	Aço	Malha	Metragem	Peso / Peça
EDG-27	Rolo	(2,00 x 30,0) mts	(2,70 mm)	Galvanizado	(10x5) cm	60,0 m ²	80,71 Kg
EDG-27	Rolo	(2,00 x 25,0) mts	(2,70 mm)	Galvanizado	(15x5) cm	50,0 m ²	60,88 Kg
DG-27	Rolo	(2,00 x 30,0) mts	(2,70 mm)	Galvanizado	(15x5) cm	60,0 m ²	74,40 Kg
HG-27	Rolo	(1,55 x 30,0) mts	(2,70 mm)	Galvanizado	(10x5) cm	46,5 m ²	64,64 Kg
HG-30	Rolo	(1,55 x 30,0) mts	(2,70 mm)	Galvanizado	(15x5) cm	46,5 m ²	71,58 Kg

Vergalhões GG-50 Gerdau

Bitola	Comprimento	Peso por Barra
6.30 mm (1/4)	Barra 12 mts	2,940 kg
8.00 mm (5/16)	Barra 12 mts	4,740 kg
10.00 mm (3/8)	Barra 12 mts	7,404 kg
12.50 mm (1/2)	Barra 12 mts	11,556 kg
16.00 mm (5/8)	Barra 12 mts	18,936 kg
20.00 mm (3/4)	Barra 12 mts	29,592 kg
25.00 mm (1")	Barra 12 mts	46,236 kg

Vergalhões Ca-60 Gerdau

Bitola	Comprimento	Peso
4.20 mm	12 mts / Rolo	1,310 / 180 kg
5.00 mm	12 mts / Rolo	1,850 / 180 Kg
6.00 mm	12 mts / Rolo	2,700 / 180 kg
7.00 mm	Rolo	180 kg
8.00 mm	Rolo	180 kg

O peso dos Rolos é variável



Colunas



Treliças

Arares Galvanizados Gerdau

Bitola	Peso Rolo	Comprimento
BWG 08	+/- 50 kg	9,90 mts/Kg
BWG 10	+/- 50 kg	14,05 mts/Kg
BWG 12	+/- 50 kg	22,22 mts/Kg
BWG 14	+/- 50 kg ou 1 kg	38,47 mts/Kg
BWG 16	+/- 50 kg ou 1 kg	62,50 mts/Kg
BWG 18	+/- 50 kg ou 1 kg	111,11 mts/Kg

Colunas Prontas Gerdau

Veja a Linha Completa na Próxima Página

Treliças Gerdau

Descrição	Comprimento	Bitola
TG8L	10 ou 12 mts	(6x4.2x4.2) mm



Arares para Cerca Gerdau

Nome	Comprimento	Peso	Carga Ruptura
Culturas Aéreas 2.10 mm	500 ou 1000 mts	13,5 / 27 kg	500 kgf
Ovalado 15 x 17	1000 mts	45 kg	700 kgf
Cordoalha Cult. Aéreas 5/32	250 mts	18 kg	1000 kgf
Cordoalha Curral 1/4	250 mts	47 kg	2160 kgf

Arares Recozidos Gerdau

Bitola	Peso Bobina
BWG 12	+/- 50 kg
BWG 14	+/- 50 kg
BWG 16	+/- 50 kg
BWG 18	+/- 36 kg ou 1 kg

Colunas Prontas Gerdaul

Bitola	Estribo	Diâmetro	Comprimento	Peso / Pç
6,30 mm (1/4")	Ca60 4,20 mm	(7 X 14) cm	6 mts	7,22 kg
	Ca60 4,20 mm	(7 x 20) cm	6 mts	7,56 kg
8,00 mm (5/16")	Ca60 4,20 mm	(7 x 14) cm	6 mts	10,81 kg
	Ca60 4,20 mm	(7 x 14) cm	7 mts	12,63 kg
	Ca60 4,20 mm	(7 x 17) cm	6 mts	11,03 kg
	Ca60 4,20 mm	(7 x 17) cm	7 mts	12,87 kg
	Ca60 4,20 mm	(17 x 17) cm	6 mts	11,51 kg
	Ca60 4,20 mm	(17 x 17) cm	7 mts	13,50 kg
	Ca60 4,20 mm	(9 x 14) cm	6 mts	10,90 kg
	Ca60 4,20 mm	(7 x 20) cm	6 mts	11,21 kg
10,00 mm (3/8")	Ca60 4,20 mm	(7 x 14) cm	6 mts	16,13 kg
	Ca60 4,20 mm	(9 x 14) cm	6 mts	16,22 kg
	Ca60 4,20 mm	(9 x 14) cm	7 mts	18,94 kg
	Ca60 4,20 mm	(7 x 17) cm	6 mts	16,28 kg
	Ca60 4,20 mm	(7 x 17) cm	7 mts	19,01 kg
	Ca60 4,20 mm	(7 x 20) cm	6 mts	16,34 kg
	Ca60 4,20 mm	(7 x 27) cm	6 mts	17,10 kg
	Ca60 4,20 mm	(10 x 20) cm	6 mts	16,61 kg



GERDAU



Produtos em Alumínio

Produto	Peso	Embalagem
Baguete "U" 3/8	0,377 grs	10 Peças
Revestimento	-	1 Casal

Acessórios para Ferragens

Abafador de Ruído	Caixa com Mola e sem Mola	Eletrodos Inox / Cromoníq / Limável
Alavanca de Janela	Carretilha de Trilho (Ferro ou Nylon)	Eletrodos Tanque / Corte / Desgaste
Alicate Manual	Catraca para Cerca	Escovas de Aço Rotativa e Manual
Alicate de Solda	Chave de Fenda	Estanho e Estanhador
Anti-Respingo	Clip para Cabo de Aço	Esticador de Cabo de Aço
Arame MIG Cobreado	Cossinete	Fechaduras
Arruela	Conexões Galvanizadas	Fita Isotel
Articulador	Console Reto e Dobrado	Ganchos para Cobertura
Avental	Cordas de Nylon	Garra Negativa
Baguetinho Pontográfico	Corrente Elo curto e longo	Guia "T" para Porta Pontográfica
Barra Roscada	Disco de Corte Ferro / Refratário	Hastes Pontográficas
Broca de Aço Rápido e Vídea	Disco de Desbaste	Luva em Raspa de Couro
Cabo de Aço	Dobradiças Polidas / Especiais	Macho
Cadeado	Eletrodos Comuns E6013 / E7018	Mangote em Raspa de Couro

Martelinho de Cobre	Rebite de Ferro e Alumínio
Mascaras Diversas	Rebolos para Ferro e Vídea
Massa de Calafetar	Rodizios de Janela
Mola e Fita de Aço	Roldanas de Ferro e Nylon
Óculos de Proteção	Sanfona Pontográfica Pronta
Parafusos	Serras Copo / Máquina / Manual
Parafuso Auto-Brocante	Serra Fita PB38
Pino Dobradiça Gonzo	Silicone
Ponta de Lança	Tesoura para Funilaria
Ponteiras de PVC	Tintas Zarcão / Solvente
Porcas	Trenas
Pregos Gerdaul	Trincos
Puxador de Porta e Janela	Veda Calha
Rebitadeira Manual	Vidros de Máscara

Tabela de Conversão Polegadas / Milímetros

	0"	1"	2"	3"	4"	5"	6"	7"	8"	9"	10"
0	0.0	25.4	50.8	76.2	101.6	127.0	152.4	177.8	203.2	228.6	254.0
1/32	0.8	26.2	51.6	77.0	102.4	127.8	153.2	178.6	204.0	229.4	254.8
1/16	1.6	27.0	52.4	77.8	103.2	128.6	154.0	179.4	204.8	230.2	255.6
3/32	2.4	27.8	53.2	78.6	104.0	129.4	154.8	180.2	205.6	231.0	256.4
1/8	3.2	28.6	54.0	79.4	104.8	130.2	155.6	181.0	206.4	231.8	257.2
5/32	4.0	29.4	54.8	80.2	105.6	131.0	156.4	181.8	207.2	232.6	258.0
3/16	4.8	30.2	55.6	81.0	106.4	131.8	157.2	182.6	208.0	233.4	258.8
7/32	5.6	31.0	56.4	81.8	107.2	132.6	158.0	183.4	208.8	234.2	259.6
1/4	6.3	31.7	57.1	82.5	107.9	133.3	158.7	184.1	209.5	234.9	260.3
9/32	7.1	32.5	57.9	83.3	108.7	134.1	159.5	184.9	210.3	235.7	261.1
5/16	7.9	33.3	58.7	84.1	109.5	134.9	160.3	185.7	211.1	236.5	261.9
11/32	8.7	34.1	59.5	84.9	110.3	135.7	161.1	186.5	211.9	237.3	262.7
3/8	9.5	34.9	60.3	85.7	111.1	136.5	161.9	187.3	212.7	238.1	263.5
13/32	10.3	35.7	61.1	86.5	111.9	137.3	162.7	188.1	213.5	238.9	264.3
7/16	11.1	36.5	61.9	87.3	112.7	138.1	163.5	188.9	214.3	239.7	265.1
15/32	11.9	37.3	62.7	88.1	113.5	138.9	164.3	189.7	215.1	240.5	265.9
1/2	12.7	38.1	63.5	88.9	114.3	139.7	165.1	190.5	215.9	241.3	266.7
17/32	13.5	38.9	64.3	89.7	115.1	140.5	165.9	191.3	216.7	242.1	267.5
9/16	14.3	39.7	65.1	90.5	115.9	141.3	166.7	192.1	217.5	242.9	268.3
19/32	15.1	40.5	65.9	91.3	116.7	142.1	167.5	192.9	218.3	243.7	269.1
5/8	15.9	41.3	66.7	92.1	117.5	142.9	168.3	193.7	219.1	244.5	269.9
21/32	16.7	42.1	67.5	92.9	118.3	143.7	169.1	194.5	219.9	245.3	270.7
11/16	17.5	42.9	68.3	93.7	119.1	144.5	169.9	195.3	220.7	246.1	271.5
23/32	18.3	43.7	69.1	94.5	119.9	145.3	170.7	196.1	221.5	246.9	272.3
3/4	19.0	44.4	69.8	95.2	120.6	146.0	171.4	196.8	222.2	247.6	273.0
25/32	19.8	45.2	70.6	96.0	121.4	146.8	172.2	197.6	223.0	248.4	273.8
13/16	20.6	46.0	71.4	96.8	122.2	147.6	173.0	198.4	223.8	249.2	274.6

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FERRO E AÇO

TELHAS TÉRMICAS



Trapézio

Ondulada



***** TELHAS SOB MEDIDA *****

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