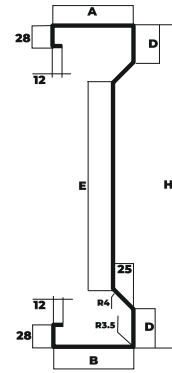




**PRODUCT**

**ZINC-COATED  
SIGMA PLUS  
PROFILE**



Sigma Plus metal profiles are an innovation in the field of metal structures for light industrial halls. Sigma Plus profiles are mainly used for creating columns and complex beams.

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- structural steel elements for civil, industrial and agricultural construction work
- secondary elements of the resistance structures of buildings as roof panels or wall trusses;

TECHNICAL CHARACTERISTICS	Section height	200 - 400 mm
	Thickness	1.5 - 3.5 mm
	Material quality	S350GD+Z275
	Standard cutting lengths	250- 15000 mm * for other lengths please contact BILKA technical dep.

- Sigma Plus ofiles may be pierced according to the drilling plan made by the engineer. Piercing may be carried out on all sides, as well as on the profile feet;
- the profiles may have equal or unequal sides;
- all the connections of the structural elements are with screws, ensuring a quick and easy assembly on site;
- the profiles have resistances higher than the standard Sigma profile, due to the geometric characteristics of the raw section.

Perforation patterns	Perforation type		Available diameter										
	ROUND		5 10 11 12 13 14 15 16 18 20 22										
OVAL		18x14 20x10 25x14 28x14 32x16 35X12 39X19 40X18 40x25 40x26 50x13 50x5											
SQUARE		40x40											
RECTANGULAR		16x24 28.5x18											
MULTIPLE COMBINATIONS													

PROFILE TYPE	Sectional dimensions									
	H (mm)	A=B(mm)	C1 (mm)	C2 (mm)	D (mm)	E (mm)	t (mm)	t <sub>n</sub> (mm)	r (mm)	G(kg/ml)
Σ+200-1.5	200	70	28	12	32.0	91.0	1.46	1.5	3.5	4.93
Σ+200-2	200	70	28	12	32.0	91.0	1.96	2.0	3.5	6.48
Σ+200-2.5	200	70	28	12	32.0	92.0	2.46	2.5	3.5	7.99
Σ+200-3	200	70	28	12	32.0	92.0	2.96	3.0	3.5	9.47
Σ+200-3.5	200	70	28	12	32.0	93.0	3.46	3.5	3.5	10.88
Σ+250-1.5	250	85	28	12	50.0	101.0	1.46	1.5	3.5	5.88
Σ+250-2	250	85	28	12	50.0	101.0	1.96	2.0	3.5	7.74
Σ+250-2.5	250	85	28	12	50.0	102.0	2.46	2.5	3.5	9.58
Σ250-3	250	85	28	12	50.0	102.0	2.96	3.0	3.5	11.35
Σ+250-3.5	250	85	28	12	50.0	102.0	3.46	3.5	3.5	13.08
Σ+300-1.5	300	95	28	12	50.0	151.0	1.46	1.5	3.5	6.70
Σ+300-2	300	95	28	12	50.0	151.0	1.96	2.0	3.5	8.84
Σ+300-2.5	300	95	28	12	50.0	152.0	2.46	2.5	3.5	10.95
Σ+300-3	300	95	28	12	50.0	152.0	2.96	3.0	3.5	13.00
Σ+300-3.5	300	95	28	12	50.0	152.0	3.46	3.5	3.5	15.00
Σ+350-1.5	350	100	28	12	50.0	201.0	1.46	1.5	3.5	7.41
Σ+350-2	350	100	28	12	50.0	201.0	1.96	2.0	3.5	9.78
Σ+350-2.5	350	100	28	12	50.0	202.0	2.46	2.5	3.5	12.13
Σ+350-3	350	100	28	12	50.0	202.0	2.96	3.0	3.5	14.41
Σ+350-3.5	350	100	28	12	50.0	202.0	3.46	3.5	3.5	16.65
Σ+400-1.5	400	100	28	12	50.0	251.0	1.46	1.5	3.5	8.00
Σ+400-2	400	100	28	12	50.0	251.0	1.96	2.0	3.5	10.57
Σ+400-2.5	400	100	28	12	50.0	252.0	2.46	2.5	3.5	13.11
Σ+400-3	400	100	28	12	50.0	252.0	2.96	3.0	3.5	15.59
Σ+400-3.5	400	100	28	12	50.0	252.0	3.46	3.5	3.5	18.02

PROFILE TYPE	Geometric characteristics of the raw section									
	A (mm <sup>2</sup> )	y <sub>c</sub> (mm)	Z <sub>c1</sub> (mm)	Z <sub>c2</sub> (mm)	I <sub>y</sub> (cm <sup>4</sup> )	W <sub>y1</sub> (cm <sup>3</sup> )	W <sub>y2</sub> (cm <sup>3</sup> )	I <sub>z</sub> (cm <sup>4</sup> )	i <sub>y</sub> (cm)	i <sub>z</sub> (cm)
Σ+200-1.5	611.7	29.3	99.3	99.3	369.43	37.22	37.22	30.52	7.69	2.31
Σ+200-2	809.5	29.0	99.0	99.0	486.32	49.12	49.12	39.21	7.67	2.29
Σ+200-2.5	1001.2	28.8	98.8	98.8	601.28	60.89	60.89	49.84	7.64	2.26
Σ+200-3	1189.9	28.6	98.5	98.5	711.69	72.25	72.25	58.92	7.62	2.24
Σ+200-3.5	1370.2	28.5	98.3	98.3	818.10	83.27	83.27	66.32	7.59	2.22
Σ+250-1.5	728.5	31.9	124.3	124.3	693.45	55.81	55.81	58.30	9.65	2.87
Σ+250-2	966.3	31.6	124.0	124.0	916.42	73.90	73.90	77.37	9.63	2.84
Σ+250-2.5	1200.5	31.3	123.8	123.8	1131.53	91.44	91.44	94.15	9.60	2.81
Σ+250-3	1426.7	30.9	123.5	123.5	1340.65	108.56	108.56	110.33	9.58	2.78
Σ+250-3.5	1647.0	30.6	123.3	123.3	1546.64	125.49	125.49	126.12	9.55	2.75
Σ+300-1.5	830.7	34.4	149.3	149.3	1141.25	76.47	76.47	78.86	11.58	3.11
Σ+300-2	1103.5	34.2	149.0	149.0	1506.14	101.08	101.08	104.12	11.55	3.08
Σ+300-2.5	1372.7	33.9	148.8	148.8	1863.21	125.26	125.26	127.98	11.52	3.05
Σ+300-3	1633.9	33.5	148.5	148.5	2212.98	149.02	149.02	149.43	11.49	3.02
Σ+300-3.5	1889.2	33.2	148.3	148.3	2551.36	172.10	172.10	169.34	11.47	2.99
Σ+350-1.5	918.3	35.2	174.3	174.3	1695.47	97.30	97.30	91.34	13.41	3.17
Σ+350-2	1221.1	34.9	174.0	174.0	2238.16	128.63	128.63	120.78	13.38	3.14
Σ+350-2.5	1520.3	34.6	173.8	173.8	2769.14	159.37	159.37	147.63	13.35	3.11
Σ+350-3	1811.5	34.3	173.5	173.5	3291.61	189.72	189.72	172.50	13.32	3.08
Σ+350-3.5	2096.8	34.1	173.3	173.3	3879.42	223.92	223.92	196.47	13.29	3.05
Σ+400-1.5	991.3	34.5	199.3	199.3	2332.19	117.05	117.05	92.16	15.14	3.06
Σ+400-2	1319.1	34.2	199.0	199.0	3081.64	154.86	154.86	121.36	15.11	3.03
Σ+400-2.5	1643.3	33.9	198.8	198.8	3816.32	192.02	192.02	147.32	15.07	2.99
Σ+400-3	1959.5	33.6	198.5	198.5	4535.68	228.50	228.50	173.46	15.04	2.96
Σ+400-3.5	2269.8	33.3	198.3	198.3	5239.14	264.27	264.27	197.46	15.01	2.93

PROFILE TYPE	Resistances according to the raw section	
	Stretching N (kN)	Bending M (kNm)
$\Sigma+200-1.5$	214.11	13.03
$\Sigma+200-2$	283.32	17.19
$\Sigma+200-2.5$	350.43	21.31
$\Sigma+200-3$	416.47	25.29
$\Sigma+200-3.5$	479.56	29.14
$\Sigma+250-1.5$	254.99	19.53
$\Sigma+250-2$	338.20	25.87
$\Sigma+250-2.5$	420.17	32.00
$\Sigma+250-3$	499.35	37.99
$\Sigma+250-3.5$	576.44	43.92
$\Sigma+300-1.5$	290.76	26.76
$\Sigma+300-2$	386.22	35.38
$\Sigma+300-2.5$	480.44	43.84
$\Sigma+300-3$	571.87	52.16
$\Sigma+300-3.5$	661.21	60.23
$\Sigma+350-1.5$	321.42	34.06
$\Sigma+350-2$	427.38	45.02
$\Sigma+350-2.5$	532.10	55.78
$\Sigma+350-3$	634.03	66.40
$\Sigma+350-3.5$	733.87	78.37
$\Sigma+400-1.5$	346.97	40.97
$\Sigma+400-2$	461.68	54.20
$\Sigma+400-2.5$	575.15	67.21
$\Sigma+400-3$	685.83	79.97
$\Sigma+400-3.5$	794.42	92.49