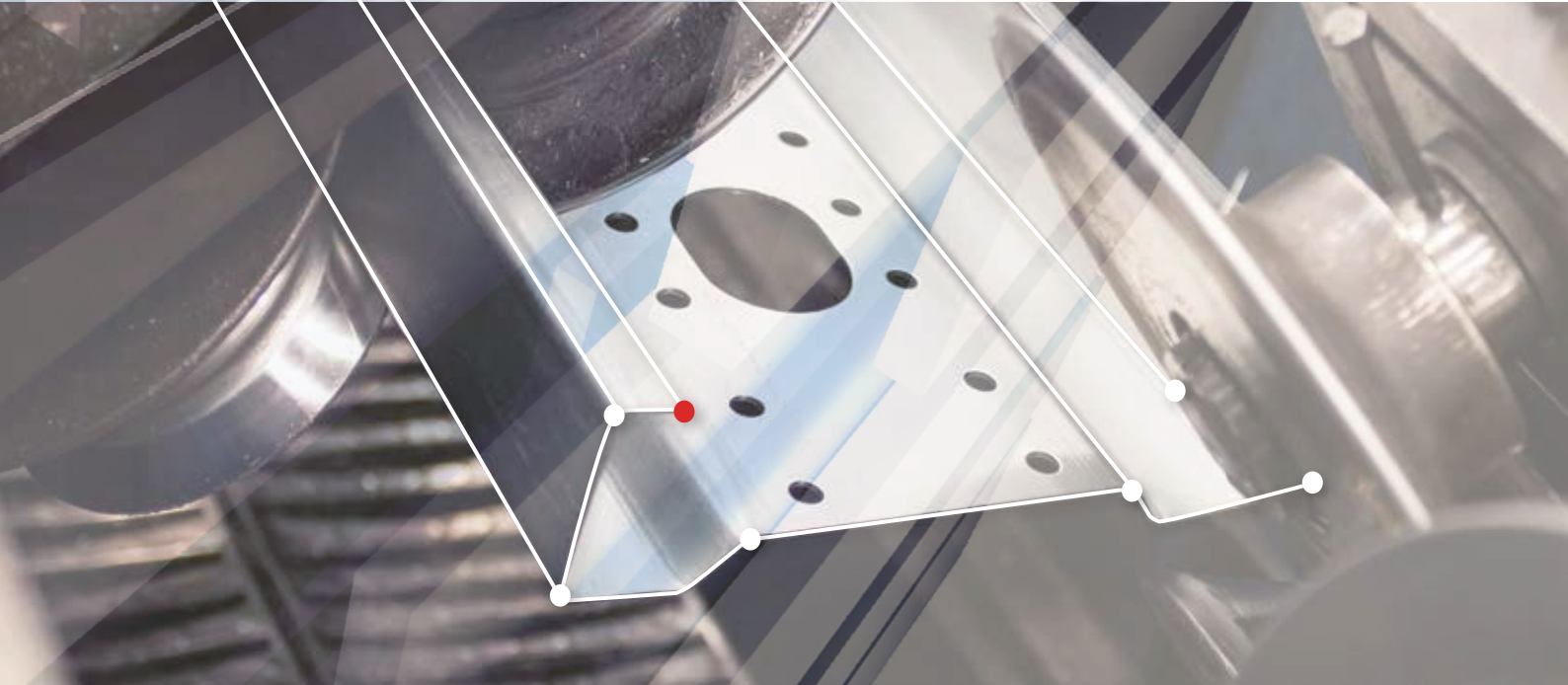


The logo for BRAUSA, featuring the word "BRAUSA" in a bold, red, sans-serif font. The letter "A" is stylized with a blue triangle pointing upwards, partially overlapping the letter.

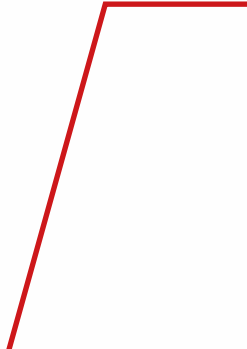
BRAUSA

Serving your ideas.



Solutions

General product
catalogue







A

- Profiles are us
- Production process
- Quality
- Engineering
- Resources
- Materials

01 BRAUSA





Profiles are us



Since 1968, our cold-formed steel profiles have been transforming your ideas into reality.

Fifty years of pioneering in the industry, building up experience and implementing constant improvements in our production processes has allowed us to grow with you.

Focused on service, we meet the most innovative demands with multidisciplinary teams and work processes meticulously designed to meet each need.

Effort, dedication and determination at the service of your projects.

Serving your ideas.

Flexibility
to adapt to your needs.

Experience
after 50 years at your side.

Proximity
in each project.

Guidance
that is bespoke and personalised.

**Professionalism
and a first-class team**
at your service.

A solution for every project

We are your trusted partner.

We offer a wide range of products with a high degree of versatility and we are equipped to develop innovative solutions for your engineering projects with you.

Team

BRAUSA is, first and foremost, a team of professionals that is committed to you and to being by your side throughout the entire process to offer you creative, innovative, cost-effective and, above all, unique solutions.

Innovation

We combine professionalism and technology to be able to transform the most advanced projects into reality.

We continuously invest in the latest production systems in order to develop comprehensive projects.

Capacity

With a production capacity exceeding 20,000 t/year and a product catalogue with more than 2,000 references, BRAUSA is equipped to carry on growing.



Production process

Working with you in each step, in each decision.

We apply our experience, professionalism and technology in implementing a production process especially designed to maximise efficiency: we meticulously analyse each step, we optimise resources and apply quality controls to guarantee the excellence of our products.



Customer requirements



Needs

Commercial and technical agreement



Agreement

Engineering and tool design



Engineering

We analyse every aspect of the order and review the information received; we specify the production needs in order to conduct a thorough manufacturing time and cost study.

We draw up our best offer, including a description of the materials, technical drawings and production and delivery times so that each customer has traceability over their order.

Our engineering team works side by side with you to develop the best solution for your needs. We will develop a new product and create new equipment to produce it.



Prototype and approval



● **Prototype**

We manufacture a prototype to test its functionality, which we review with you before initiating final production.

Manufacture



● **Production**

We coordinate highly qualified staff, machinery, automated processes and control processes as efficiently as possible in order to manufacture your profile.

Quality control



● **Quality**

From the reception of the order to its issue, different controls are conducted in order to meet the requirements of the order and the product specifications.

Packaging and delivery

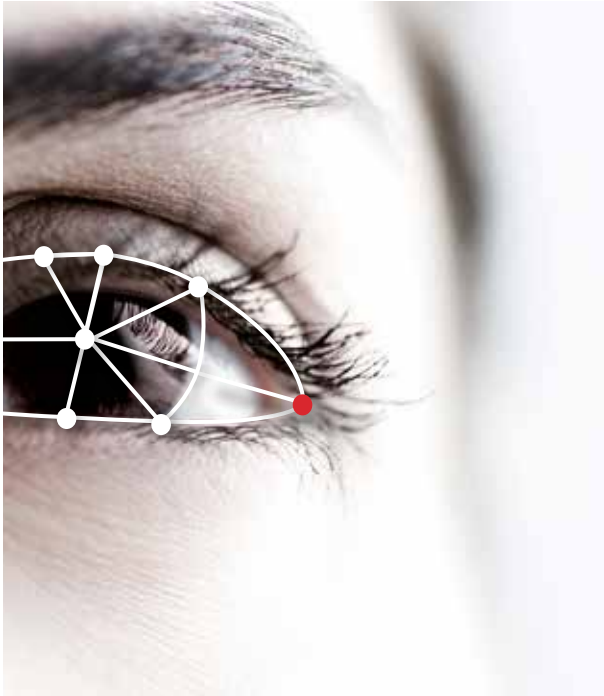


● **Delivery**

Our various packaging systems, together with our delivery control, allow us to ensure the profiles' condition and meet the delivery date.



Quality



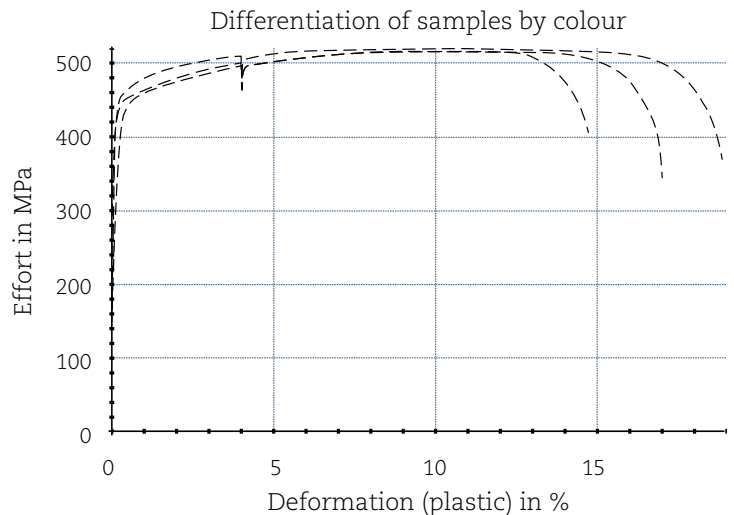
Commitment to the environment

The flexibility, compressive strength, firmness, durability, ductility and toughness of certified structural steel allow us to reduce the thickness of cold-rolled profiles and lower the production cost, thus contributing to our commitment to the environment.

Controls

At BRAUSA, we employ the most stringent controls in our production processes, from the reception of material to the manufacture and monitoring of the final delivery.

Our laboratory's test equipment allows us to conduct in-house checks on the raw material in order to ensure its quality and properties.



Top-quality
steel

Control
of raw
materials

Control
of production
processes

Quality
control of
products

Control
of delivery



Certification

At **BRAUSA**, we are committed to maintaining the Integrated Management System in line with **UNE-EN-ISO-9001:2015** and **UNE-EN-ISO-14001:2015**.

We certify that we comply with factory production control in line with standard **EN1090-1:2009+A1:2011**.

Profiles

From the identification of pieces to the creation of labels bearing the customer's logo, we offer customised marking on each and every profile.

Logistics

Our list of logistics services provides ample coverage for all the needs you may have.

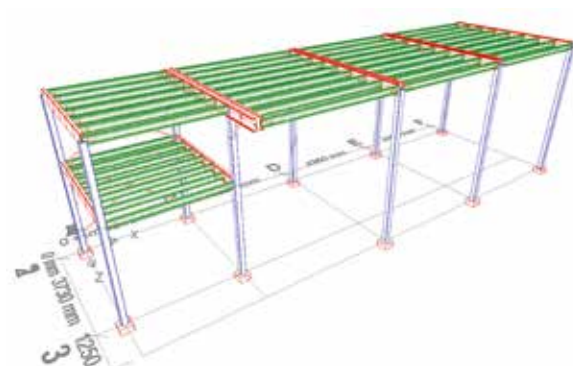
- Packaging and loading
- Pallets and woods treated for exportation
- Container loading
- Possibility of loading in national and international LCL shipments
- Export formalities



Engineering



We have cutting-edge production systems in which we are constantly investing, in search of the finest technology. Our technical and design capacity allows us to develop comprehensive projects and personalised solutions.



Your project is our project

Our vocation? Placing all our experience and guidance at the service of your ideas. Working side by side with engineers, architects, builders and installers, we develop an effective, personalised process, transforming unique solutions into reality to meet the commitments we have made with you. Because we make your project our project.

Profile library

Brausa holds the most extensive catalogue of cold-formed profiles and is found in the most widely used programmes in the structure industry.



Brausoft

Our own software created to provide multiple optimisations in the calculation of profiles:

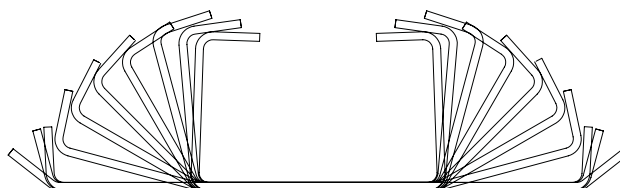
- Optimisation of the purlin according to dimensional, climatic and load characteristics
- Generation of effective mechanical properties for new profiles
- Load table generator
- Adaptation to European regulations

Tool and roller design

BRAUSA develops comprehensive projects from the customer's needs to obtaining the tools required for the realisation thereof.

It stands out for its major technical design capacity in:

- Forming tools applied on the profile lines
- Die cutting tools
- Cutting tools





Resources



The latest production processes in order to meet market demands. The aim is to equip facilities with the latest programming, automation and measurement control resources in order to achieve improvements in resource capacity, production and final product quality.

- **Profiles**

Various lines with a wide range of shapes.

Up to 25 m length and up to 8 mm thickness.

- **Folding**

Folding machines capable of working up to 14 metres in tandem.

Two foldings machines of 450 t and 7 m each folding machine.



- **Punching**

Flexible systems capable of many different types of machining.

- **Machining**

Stamping, cutting, die-cutting, marking, etc.

- **Cutting lines**

Versatility and high levels of flexibility in terms of availability of material.



Materials

We have material in stock of a range of steel grades and thicknesses to meet our customer's delivery requirements, with whom we provide the relevant certification for the material when requested.



Galvanised steel

STANDARD	UNE – EN 10346 Use: certain mechanical resistance and good corrosion resistance Guaranteed proof strength								
Description	Structural sheet steel and spools continuously hot-dip galvanised. Thickness ≤ 4 mm								
Designation	S220GD	S250GD	S280GD	S320GD	S350GD	S550GD			
Proof strength (N/mm ²)	220	250	280	320	350	550			
Tensile strength (N/mm ²)	300	330	360	390	420	560			
Covering	Z (zinc) or ZF (iron-zinc) ... 275 (coating mass g/m ²)								
Coating type	Z100	Z140	Z180	Z200	Z225	Z275	Z350	Z450	Z600
g/m ²	100	140	180	200	225	275	350	450	600
Microns (two sides)	14	20	25	28	32	38	50	64	84
50%	7	10	12.5	14	16	19	25	32	42
Maximum one side (60%)	8.4	12	15	17	19	23	30	38.4	50.4
Minimum one side (40%)	5.6	8	10	11	13	15	20	25.6	33.6

Hot-laminated steel

STANDARD	UNE – EN 10025-2		Use: essentially structural-type steel		
Description	Hot-rolled steel products for structures				
Designation	S 235		S 275		S 355
Proof strength (N/mm ²)	235		275		355
Tensile strength e < 3 (N/mm ²)	360-510		430-580		510-680
Tensile strength e ≥ 3 (N/mm ²)	360-510		410-560		470-630

Hot-laminated steel with high proof strength

STANDARD	UNE – EN 10149			Use: various					
Description	Flat weldable steel products, hot rolled and with high proof strength for cold forming								
Designation	S315MC	S355MC	S420MC	S460MC	S500MC	S550MC	S600MC	S650MC	S700MC
Proof strength (N/mm ²)	315	355	420	460	500	555	600	650	700
Tensile strength (N/mm ²)	390-510	430-550	480-620	520-670	550-700	600-760	650-820	700-880	750-950
Composition	MC: fine grain composition, which increases the proof strength								



Salt spray test



Hot-dip galvanized (20 μm) after six weeks.



Post-galvanized (85 μm) after 12 weeks.



Magnelis (20 μm) after 34 weeks.

Samples after salt spray test.
ArcelorMittal Global R&D

Steel with zinc-magnesium alloy coating

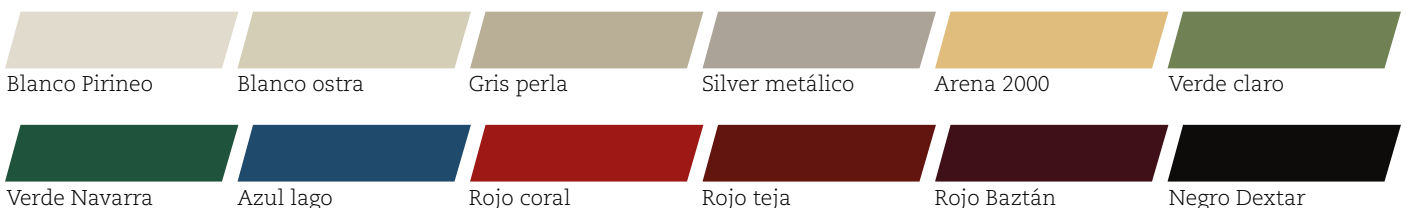
Maximum protection for steel against corrosion in highly aggressive environments. The zinc-magnesium metal coating gives the steel exceptional surface protection, with corrosion resistance greater than that of other metal coatings. Automatic repair of the cut edges, where corrosion usually starts, makes this coating an optimal, unprecedented solution. This coating provides structures a more uniform, lighter coating and a longer useful life. Designed for all kinds of exterior work, especially when exposed to corrosion, whether environmental, saline, in alkaline environments, with chloride, ammonia, or due to extreme weather.

Steel with zinc-magnesium alloy coating

STANDARD	UNE – EN 10346						Use: certain mechanical resistance and good corrosion resistance
Description	Structural sheet steel and spools continuously hot-dip galvanized. Thickness ≤ 4 mm						
Designation	S220GD	S250GD	S280GD	S320GD	S350GD	S390GD AM FCE	
Proof strength (N/mm ²)	220	250	280	320	350	390	
Tensile strength (N/mm ²)	300	330	360	390	420	460	
Covering	ZM (zinc-magnesium) ... 250 (coating mass g/m ²)						
Coating type	ZM90	ZM120	ZM175	ZM195	ZM250	ZM310	ZM430
Microns (two sides)	7	9	13	16	19	24	35

Pre-lacquered steel

Pre-lacquered steel is comprised of various layers that give the steel its aesthetic and functional characteristics. These layers are as follows: base metal, metal coating, pre-treatment, primer and final coating, on both the upper and lower sides.

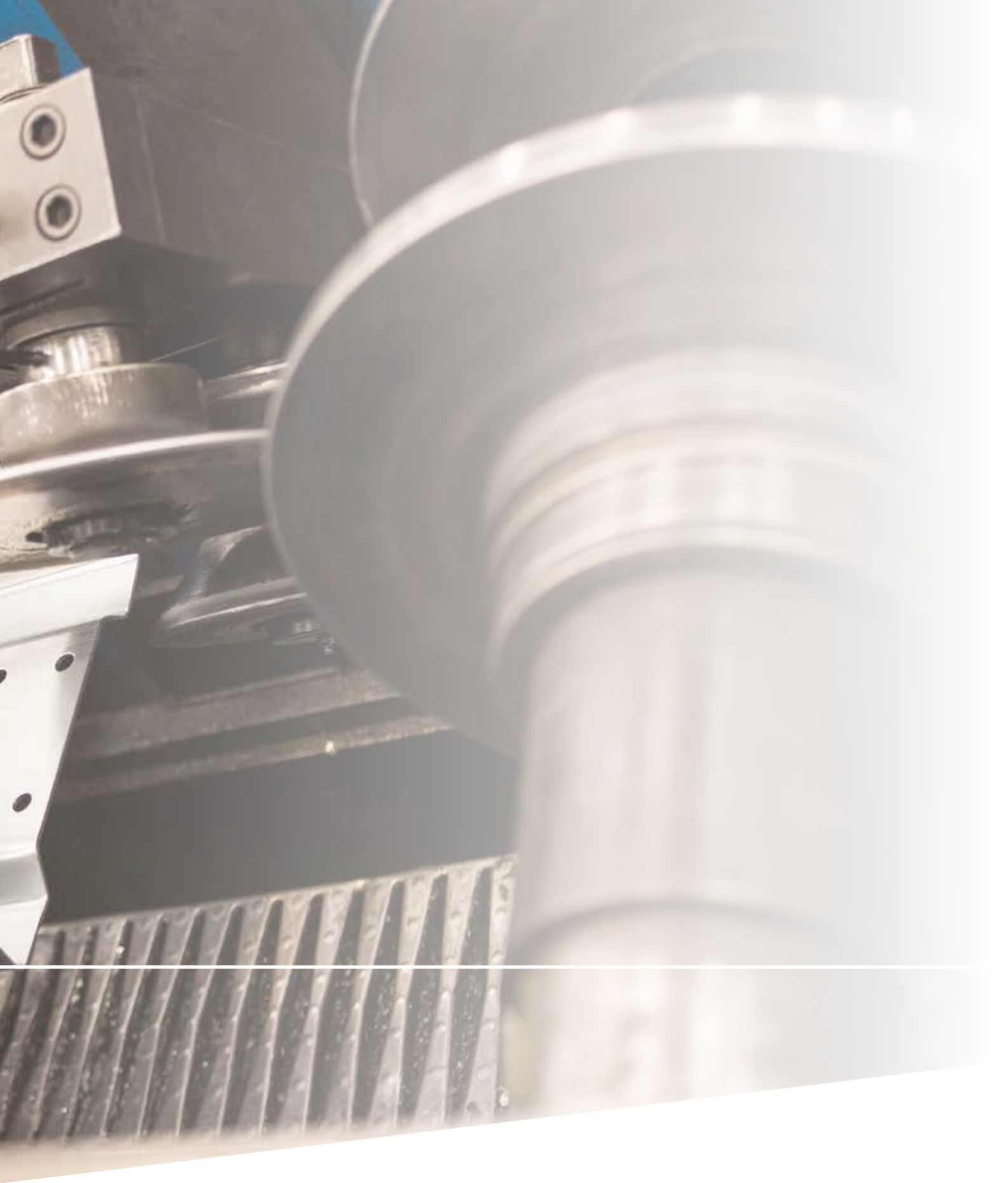




- CEBRAU profile
- ZETAVOR profile
- ZETABRAU profile
- SIGMABRAU profile
 - Cebrau SEMIPLUS
 - Cebrau PLUS
 - Sigmabrau SEMIPLUS
 - Sigmabrau PLUS
- PUNTAL profile
- CARRIL profile
- OMEGA SILO profile
- SOPORTE profile
- U profile
- OMEGA profile
- L profile
- C profile
- Trapezoidal sheet metal 30/209
- Trapezoidal sheet metal 20/130
- Microperforated sheet metal
- Other profiles manufactured

02

Steel profiles





Steel profiles

BASIC MECHANICAL CHARACTERISTICS														REFERENCE
H [mm]	e [mm]	b [mm]	c [mm]	p [kg/m]	A [cm ²]	Y _G [mm]	I _y [cm ⁴]	W _{y top} [cm ³]	I _z [cm ⁴]	W _{z top} [cm ³]	I _t [cm ⁴]	I _w [cm ⁴]		
100	2	50	21	3.485	4.59	18.1	72.74	14.55	17.58	5.68	.06	465.65	100 × 2	
100	2.5	50	21	4.357	5.71	17.8	89.55	17.91	21.41	6.92	.12	558.52	100 × 2.5	
100	3	50	21	5.228	6.81	17.6	105.68	21.14	24.99	8.08	.20	641.99	100 × 3	
125	2	50	21	3.878	5.08	16.3	122.62	19.62	19.02	5.82	.07	701.81	125 × 2	
125	2.5	50	21	4.847	6.32	16.1	151.33	24.21	23.17	7.09	.13	844.46	125 × 2.5	
125	3	50	21	5.817	7.55	15.9	179.03	28.64	27.06	8.28	.22	973.77	125 × 3	
150	2	50	21	4.270	5.57	14.9	188.37	25.12	20.21	5.92	.07	1,004.76	150 × 2	
150	2.5	50	21	5.338	6.94	14.7	232.87	31.05	24.63	7.22	.14	1,211.73	150 × 2.5	
150	3	50	21	6.406	8.29	14.4	275.97	36.80	28.76	8.44	.24	1,400.47	150 × 3	
175	2	50	21	4.663	6.06	13.7	271.50	31.03	21.21	6.00	.08	1,378.82	175 × 2	
175	2.5	50	21	5.829	7.55	13.5	336.08	38.41	25.84	7.32	.15	1,665.61	175 × 2.5	
175	3	50	21	6.994	9.03	13.3	398.81	45.58	30.18	8.56	.26	1,928.27	175 × 3	
200	2	75	21	5.856	7.53	21.5	469.62	46.96	57.89	11.02	.10	4,664.15	200 × 2	
200	2.5	75	21	7.300	9.40	21.3	582.85	58.29	71.14	13.55	.19	5,688.75	200 × 2.5	
200	3	75	21	8.784	11.25	21.0	693.46	69.35	83.80	15.96	.33	6,650.64	200 × 3	
200	4	75	21	11.712	14.89	20.6	906.91	90.69	107.39	20.48	.78	8,394.88	200 × 4	
225	2	75	21	6.249	8.02	20.2	617.93	54.93	60.02	11.15	.10	6,012.12	225 × 2	
225	2.5	75	21	7.811	10.01	20.0	767.48	68.22	73.75	13.70	.20	7,340.07	225 × 2.5	
225	3	75	21	9.373	11.99	19.7	913.79	81.23	86.87	16.15	.35	8,589.66	225 × 3	
225	4	75	21	12.497	15.88	19.3	1,196.84	106.39	111.33	20.72	.83	10,864.06	225 × 4	
250	2	75	21	6.641	8.51	19.0	791.29	63.30	61.90	11.25	.11	7,569.31	250 × 2	
250	2.5	75	21	8.301	10.63	18.8	983.39	78.67	76.06	13.84	.21	9,248.45	250 × 2.5	
250	3	75	21	9.962	12.73	18.6	1,171.58	93.73	89.59	16.31	.37	10,831.44	250 × 3	
250	4	75	21	13.282	16.87	18.2	1,536.38	122.91	114.82	20.93	.88	13,721.06	250 × 4	
275	2	75	21	7.034	9.00	18.0	991.23	72.09	63.57	11.34	.12	9,342.87	275 × 2	
275	2.5	75	21	8.792	11.24	17.8	1,232.51	89.64	78.12	13.95	.23	11,422.68	275 × 2.5	
275	3	75	21	10.550	13.47	17.6	1,469.15	106.85	92.01	16.44	.39	13,386.31	275 × 3	
275	4	75	21	14.067	17.86	17.2	1,928.64	140.27	117.92	21.11	.93	16,979.09	275 × 4	
300	2	75	21	7.426	9.49	17.0	1,219.29	81.29	65.08	11.42	.12	11,339.13	300 × 2	
300	2.5	75	21	9.283	11.86	16.8	1,516.77	101.12	79.96	14.05	.24	13,870.51	300 × 2.5	
300	3	75	21	11.139	14.21	16.7	1,808.81	120.59	94.18	16.56	.41	16,263.38	300 × 3	
300	4	75	21	14.852	18.85	16.3	2,376.72	158.45	120.69	21.26	.99	20,649.81	300 × 4	
325	2.5	75	21	9.773	12.47	16.0	1,838.08	113.11	81.62	14.13	.25	16,598.84	325 × 2.5	
325	3	75	21	11.728	14.95	15.8	2,192.87	134.95	96.14	16.66	.44	19,470.75	325 × 3	
325	4	75	21	15.637	19.84	15.4	2,883.70	177.46	123.19	21.40	1.04	24,743.53	325 × 4	
350	2.5	75	21	10.264	13.09	15.3	2,198.37	125.62	83.13	14.21	.26	19,613.79	350 × 2.5	
350	3	75	21	12.317	15.69	15.1	2,623.64	149.92	97.91	16.75	.46	23,015.62	350 × 3	
350	4	75	21	16.422	20.83	14.7	3,452.68	197.30	125.45	21.52	1.09	29,269.42	350 × 4	
375	2.5	75	21	10.755	13.70	14.6	2,599.55	138.64	84.50	14.28	.28	22,920.85	375 × 2.5	
375	3	75	21	12.905	16.43	14.4	3,103.43	165.52	99.52	16.83	.48	26,904.41	375 × 3	
375	4	75	21	17.207	21.82	14.0	4,086.75	217.96	127.51	21.62	1.14	34,235.64	375 × 4	
400	3	75	21	13.494	17.17	13.8	3,634.56	181.73	101.00	16.91	.50	31,142.89	400 × 3	
400	4	75	21	17.992	22.81	13.4	4,789.01	239.45	129.39	21.72	1.19	39,649.50	400 × 4	

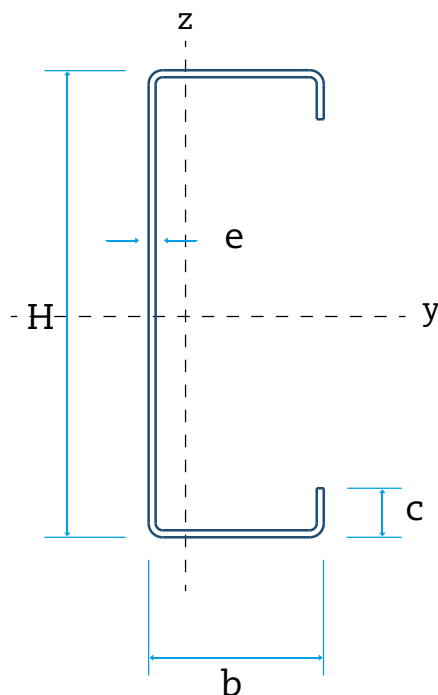
H Total profile height
e Profile thickness
b Flange width
c Tab width
p Profile weight per linear metre
A Profile crude section
Y_G Position of the centre of gravity, G, with respect to the web midpoint
I_y Crude section moment of inertia with respect to the principal y-y axis
W_y Crude section resistant module with respect to the y-y axis
I_z Crude section moment of inertia with respect to the principal z-z axis
W_z Crude section resistant module with respect to the z-z axis
I_t Crude section moment of inertia to torsion
I_w Crude section warp module

[mm ²]	[mm ⁴]	[mm ³]	[mm ⁴]	[mm ⁴]	[mm ⁴]	[mm ⁴]
× 10 ²	× 10 ⁴	× 10 ³	× 10 ⁴	× 10 ⁴	× 10 ⁴	× 10 ⁶

* For further effective mechanical characteristics, please contact BRAUSA.

Proof strength
used 250 N/mm²

REFERENCE	EUROCODE CHARACTERISTICS		
	A _{eff.} [cm ²]	I _{eff.y} [cm ⁴]	W _{eff.y top} [cm ³]
100 × 2	4.27	72.74	14.55
100 × 2.5	5.62	89.55	17.91
100 × 3	6.81	105.68	21.14
125 × 2	4.37	122.62	19.62
125 × 2.5	5.83	151.33	24.21
125 × 3	7.34	179.03	28.64
150 × 2	4.44	188.37	25.12
150 × 2.5	5.97	232.87	31.05
150 × 3	7.58	275.97	36.80
175 × 2	4.48	271.06	31.01
175 × 2.5	6.07	336.08	38.41
175 × 3	7.76	398.81	45.58
200 × 2	5.06	448.64	46.21
200 × 2.5	7.02	566.73	57.71
200 × 3	9.12	682.48	68.95
200 × 4	13.65	906.91	90.69
225 × 2	5.05	588.86	53.95
225 × 2.5	7.04	744.38	67.45
225 × 3	9.18	897.07	80.67
225 × 4	13.85	1194.32	106.30
250 × 2	5.04	742.24	62.07
250 × 2.5	7.04	951.76	77.68
250 × 3	9.21	1147.66	92.97
250 × 4	13.99	1,529.78	122.70
275 × 2	5.03	912.39	70.54
275 × 2.5	7.04	1,190.70	88.39
275 × 3	9.24	1,436.45	105.88
275 × 4	14.10	1,916.64	139.91
300 × 2	5.01	1,101.75	79.34
300 × 2.5	7.04	1,454.46	99.57
300 × 3	9.26	1,765.67	119.37
300 × 4	14.19	2,357.87	157.92
325 × 2.5	7.03	1,733.38	111.15
325 × 3	9.27	2,137.53	133.47
325 × 4	14.25	2,856.46	176.73
350 × 2.5	7.02	2,039.51	123.15
350 × 3	9.27	2,554.25	148.16
350 × 4	14.31	3,415.41	196.35
375 × 2.5	7.01	2,373.24	135.56
375 × 3	9.27	2,977.31	163.22
375 × 4	14.35	4,037.73	216.77
400 × 3	9.27	3,435.47	178.78
400 × 4	14.39	4,726.40	238.00
	[mm ²]	[mm ⁴]	[mm ³]
	× 10 ²	× 10 ⁴	× 10 ³



Manufacturing possibilities
H: 80 to 450 mm
e: 1.5 to 4 mm
b standard: 50 or 75 mm
b special: 60/70/80/85 mm

A_{eff.} Profile cross section under uniform compression

I_{eff.y} Cross section moment of inertia under bending with respect to the y-y axis

W_{eff.y} Cross section resistant module under bending with respect to the y-y axis



Steel profiles

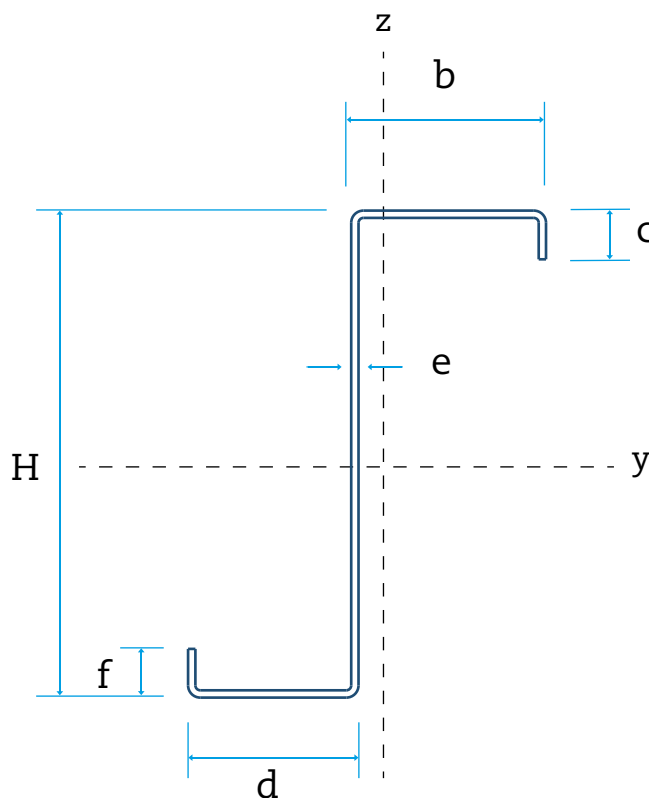
BASIC MECHANICAL CHARACTERISTICS															REFERENCE
H [mm]	e [mm]	b _{sup} [mm]	c _{sup} [mm]	b _{inf} [mm]	c _{inf} [mm]	p [kg/m]	A [cm ²]	Y _G [mm]	I _y [cm ⁴]	I _z [cm ⁴]	W _y [cm ³]	I _t [cm ⁴]	I _w [cm ⁶]		
100	2	55	21	48	17	3.485	4.57	-2.9	73.22	33.36	14.08	.06	550.63	100 × 2	
100	2.5	55	21	48	17	4.357	5.68	-2.9	90.13	40.55	17.33	.11	662.06	100 × 2.5	
100	3	55	21	48	17	5.228	6.78	-2.9	106.35	47.23	20.44	.20	762.85	100 × 3	
125	2	55	21	48	17	3.878	5.06	-2.6	123.08	33.40	18.98	.06	886.76	125 × 2	
125	2.5	55	21	48	17	4.847	6.30	-2.6	151.89	40.60	23.42	.13	1,068.98	125 × 2.5	
125	3	55	21	48	17	5.817	7.52	-2.6	179.67	47.29	27.70	.22	1,234.93	125 × 3	
150	2	55	21	48	17	4.270	5.55	-2.4	188.74	33.43	24.32	.07	1,314.65	150 × 2	
150	2.5	55	21	48	17	5.338	6.91	-2.4	233.32	40.64	30.05	.14	1,587.44	150 × 2.5	
150	3	55	21	48	17	6.406	8.26	-2.4	276.47	47.35	35.61	.24	1,836.98	150 × 3	
175	2	55	21	48	17	4.663	6.04	-2.2	271.73	33.46	30.07	.08	1,836.54	175 × 2	
175	2.5	55	21	48	17	5.829	7.53	-2.2	336.34	40.67	37.22	.15	2,220.19	175 × 2.5	
175	3	55	21	48	17	6.994	9.00	-2.2	399.07	47.39	44.15	.26	2,572.17	175 × 3	
200	2	80	21	70	21	5.856	7.53	-2.4	469.12	93.10	45.73	.10	6,299.67	200 × 2	
200	2.5	80	21	70	21	7.320	9.40	-2.4	582.22	114.19	56.76	.19	7,689.39	200 × 2.5	
200	3	80	21	70	21	8.784	11.25	-2.4	692.70	134.25	67.52	.33	8,996.25	200 × 3	
200	4	80	21	70	21	11.712	14.89	-2.4	905.90	171.40	88.29	.78	11,372.06	200 × 4	
225	2	80	21	70	21	6.249	8.02	-2.3	617.34	93.12	53.58	.10	8,169.15	225 × 2	
225	2.5	80	21	70	21	7.811	10.01	-2.3	766.73	114.22	66.54	.20	9,978.30	225 × 2.5	
225	3	80	21	70	21	9.373	11.99	-2.3	912.89	134.30	79.22	.35	11,682.43	225 × 3	
225	4	80	21	70	21	12.497	15.88	-2.2	1,195.63	171.46	103.74	.83	14,788.61	225 × 4	
250	2	80	21	70	21	6.641	8.51	-2.1	790.60	93.15	61.83	.11	10,305.58	250 × 2	
250	2.5	80	21	70	21	8.301	10.63	-2.1	982.52	114.26	76.84	.21	12,594.74	250 × 2.5	
250	3	80	21	70	21	9.962	12.73	-2.1	1,170.53	134.34	91.54	.37	14,753.77	250 × 3	
250	4	80	21	70	21	13.282	16.87	-2.1	1,534.97	171.52	120.03	.88	18,697.06	250 × 4	
275	2	80	21	70	21	7.034	9.00	-2.0	990.44	93.17	70.51	.12	12,711.91	275 × 2	
275	2.5	80	21	70	21	8.792	11.24	-2.0	1,231.52	114.29	87.66	.23	15,542.27	275 × 2.5	
275	3	80	21	70	21	10.550	13.47	-2.0	1,467.95	134.38	104.49	.39	18,214.44	275 × 3	
275	4	80	21	70	21	14.067	17.86	-2.0	1,927.03	171.58	137.15	.93	23,102.65	275 × 4	
300	2	80	21	70	21	7.426	9.49	-1.9	1,218.39	93.19	79.59	.12	15,390.42	300 × 2	
300	2.5	80	21	70	21	9.283	11.86	-1.9	1,515.64	114.31	99.01	.24	18,823.70	300 × 2.5	
300	3	80	21	70	21	11.139	14.21	-1.9	1,807.45	134.41	118.06	.41	22,067.70	300 × 3	
300	4	80	21	70	21	14.852	18.85	-1.9	2,374.90	171.63	155.11	.99	28,009.48	300 × 4	
325	2.5	80	21	70	21	9.773	12.47	-1.8	1,836.82	114.34	110.87	.25	22,441.24	325 × 2.5	
325	3	80	21	70	21	11.728	14.95	-1.8	2,191.35	134.44	132.26	.44	26,316.13	325 × 3	
325	4	80	21	70	21	15.637	19.84	-1.8	2,881.66	171.67	173.90	1.04	33,420.77	325 × 4	
350	2.5	80	21	70	21	10.264	13.09	-1.7	2,196.97	114.36	123.24	.26	26,396.68	350 × 2.5	
350	3	80	21	70	21	12.317	15.69	-1.7	2,621.96	134.47	147.07	.46	30,961.82	350 × 3	
350	4	80	21	70	21	16.422	20.83	-1.7	3,450.42	171.72	193.53	1.09	39,339.12	350 × 4	
375	2.5	80	21	70	21	10.755	13.70	-1.7	2,598.02	114.38	136.13	.28	30,691.47	375 × 2.5	
375	3	80	21	70	21	12.905	16.43	-1.6	3,101.59	134.49	162.51	.48	36,006.44	375 × 3	
375	4	80	21	70	21	17.207	21.82	-1.6	4,084.28	171.76	213.99	1.14	45,766.62	375 × 4	
400	3	80	21	70	21	13.494	17.17	-1.6	3,632.55	134.52	178.57	.50	41,451.37	400 × 3	
400	4	80	21	70	21	17.992	22.81	-1.6	4,786.31	171.80	235.27	1.19	52,704.97	400 × 4	
							[mm ²] × 10 ²		[mm ⁴] × 10 ⁴	[mm ⁴] × 10 ⁴	[mm ³] × 10 ³	[mm ⁴] × 10 ⁴	[mm ⁶] × 10 ⁶		

- H Total profile height
- e Profile thickness
- b Flange width
- c Tab width
- b Profile weight per linear metre
- c Profile crude section
- P_G Position of the centre of gravity, G, with respect to the web midpoint
- A_y Crude section moment of inertia with respect to the principal y-y axis
- y_y Crude section resistant module with respect to the y-y axis
- Z_z Crude section moment of inertia with respect to the principal z-z axis
- i_z Crude section resistant module with respect to the z-z axis
- I_t Crude section moment of inertia to torsion
- I_s Position of the shear load centre, S, with respect to the web midpoint
- I_s Position of the shear load centre, S, with respect to the web midpoint

* For further effective mechanical characteristics, please contact BRAUSA.

Proof strength
used 250 N/mm²

REFERENCE	EUROCODE CHARACTERISTICS		
	A _{eff.} [cm ²]	I _{eff.y} [cm ⁴]	W _{eff.y} [cm ³]
100 × 2	4.24	73.11	14.03
100 × 2.5	5.60	90.13	17.33
100 × 3	6.78	106.35	20.44
125 × 2	4.30	122.30	18.76
125 × 2.5	5.81	151.89	23.42
125 × 3	7.31	179.67	27.70
150 × 2	4.34	186.80	23.88
150 × 2.5	5.94	233.32	30.05
150 × 3	7.56	276.47	35.61
175 × 2	4.36	268.07	29.40
175 × 2.5	6.03	335.92	37.10
175 × 3	7.73	399.07	44.15
200 × 2	5.02	445.16	42.26
200 × 2.5	6.97	562.59	53.94
200 × 3	9.07	678.00	65.48
200 × 4	13.58	901.92	87.90
225 × 2	5.01	581.54	48.89
225 × 2.5	6.98	739.17	63.03
225 × 3	9.12	891.43	76.55
225 × 4	13.78	1187.93	102.98
250 × 2	5.00	729.75	54.40
250 × 2.5	6.99	945.39	72.60
250 × 3	9.15	1,140.73	88.19
250 × 4	13.92	1,521.89	118.75
275 × 2	4.98	896.28	59.90
275 × 2.5	6.99	1,183.06	82.64
275 × 3	9.18	1,428.13	100.42
275 × 4	14.03	1,907.10	135.30
300 × 2	4.97	1,081.39	65.41
300 × 2.5	6.98	1,432.73	90.66
300 × 3	9.19	1,755.83	113.22
300 × 4	14.12	2,346.53	152.64
325 × 2.5	6.97	1,706.38	98.43
325 × 3	9.20	2,126.06	126.61
325 × 4	14.18	2,843.20	170.76
350 × 2.5	6.97	2,006.47	106.23
350 × 3	9.21	2,521.73	138.63
350 × 4	14.24	3,400.08	189.67
375 × 2.5	6.95	2,333.35	114.04
375 × 3	9.21	2,936.50	148.96
375 × 4	14.28	4,020.19	209.37
400 × 3	9.21	3,386.67	159.33
400 × 4	14.32	4,706.55	229.87
	[mm ²]	[mm ⁴]	[mm ³]
	× 10 ²	× 10 ⁴	× 10 ³



Manufacturing possibilities

H: 100 to 450 mm

e: 1.5 to 4 mm

b standard: 55 or 80 mm

d standard: 48 or 70 mm

A_{eff.} Profile cross section under uniform compression

I_{eff.y} Cross section moment of inertia under bending with respect to the y-y axis

W_{eff.y} Cross section resistant module under bending with respect to the y-y axis

Parametric verification of the purlins used in the roof and facade enclosures. Analysis in line with European standard Eurocode-3 Part 1-3 EN 1993-1-3 "Design of steel structures. Supplementary rules for cold formed thin gauge members and sheeting" (version 2006).



Steel profiles

BASIC MECHANICAL CHARACTERISTICS											REFERENCE
H [mm]	e [mm]	b [mm]	c [mm]	p [kg/m]	A [cm ²]	I _y [cm ⁴]	I _z [cm ⁴]	W _y [cm ³]	I _t [cm ⁴]	I _w [cm ⁶]	
150	2	70	20	5.071	6.31	232.76	82.79	31.03	.08	2,965.98	150 × 2
150	2.5	70	20	6.339	7.87	288.13	101.29	38.42	.16	3,605.27	150 × 2.5
150	3	70	20	7.607	9.41	341.92	118.77	45.59	.27	4,200.34	150 × 3
175	2	70	20	5.464	6.80	331.55	82.79	37.89	.09	4,184.97	175 × 2
175	2.5	70	20	6.830	8.49	410.91	101.29	46.96	.17	5,093.26	175 × 2.5
175	3	70	20	8.195	10.15	488.21	118.78	55.80	.30	5,941.26	175 × 3
200	2	70	20	5.856	7.29	451.59	82.79	45.16	.09	5,639.10	200 × 2
200	2.5	70	20	7.320	9.10	560.22	101.29	56.02	.18	6,869.13	200 × 2.5
200	3	70	20	8.784	10.89	666.22	118.78	66.62	.32	8,020.02	200 × 3
200	4	70	20	11.712	14.41	870.48	150.85	87.05	.75	10,095.25	200 × 4
225	2	70	20	6.249	7.78	594.42	82.79	52.84	.10	7,332.82	225 × 2
225	2.5	70	20	7.811	9.72	737.96	101.30	65.60	.20	8,938.33	225 × 2.5
225	3	70	20	9.373	11.63	878.27	118.79	78.07	.34	10,442.97	225 × 3
225	4	70	20	12.497	15.40	1149.32	150.87	102.16	.81	13163.05	225 × 4
250	2	70	20	6.641	8.27	761.57	82.79	60.93	.11	9269.52	250 × 2
250	2.5	70	20	8.301	10.33	946.08	101.30	75.69	.21	11,304.97	250 × 2.5
250	3	70	20	9.932	12.37	1126.68	118.80	90.13	.36	13,214.91	250 × 3
250	4	70	20	12.282	16.39	1476.30	150.88	118.10	.86	16,674.53	250 × 4
275	2	70	20	7.034	8.76	954.56	82.80	69.42	.11	11,451.83	275 × 2
275	2.5	70	20	8.792	10.95	1,186.48	101.30	86.29	.22	13,972.26	275 × 2.5
275	3	70	20	10.550	13.11	1,413.75	118.80	102.82	.38	16,339.60	275 × 3
275	4	70	20	14.067	17.38	1,854.51	150.89	134.87	.91	20,634.36	275 × 4
300	2	70	20	7.426	9.25	1,174.93	82.80	78.33	.12	13,881.84	300 × 2
300	2.5	70	20	9.283	11.56	1,461.08	101.30	97.41	.23	16,942.73	300 × 2.5
300	3	70	20	11.139	13.85	1,741.80	118.81	116.12	.40	19,819.96	300 × 3
300	4	70	20	14.852	18.37	2,287.06	150.91	152.47	.96	25,046.21	300 × 4
325	2.5	70	20	9.773	12.18	1,771.83	101.31	109.04	.25	20,218.38	325 × 2.5
325	3	70	20	11.728	14.59	2,113.14	118.81	130.04	.43	23,658.33	325 × 3
325	4	70	20	15.637	19.36	2,777.02	150.92	170.89	1.01	29,913.02	325 × 4
350	2.5	70	20	10.264	12.79	2,120.62	101.31	121.18	.26	23,800.84	350 × 2.5
350	3	70	20	12.317	15.33	2,530.08	118.82	144.58	.45	27,856.60	350 × 3
350	4	70	20	16.422	20.35	3,327.49	150.93	190.14	1.06	35,237.13	350 × 4
375	2.5	70	20	10.755	13.41	2,509.39	101.31	133.83	.27	27,691.44	375 × 2.5
375	3	70	20	12.905	16.07	2,994.93	118.82	159.73	.47	32,416.32	375 × 3
375	4	70	20	17.207	21.34	3,941.57	150.94	210.22	1.12	41,020.46	375 × 4
400	3	70	20	13.494	16.81	3,510.02	118.83	175.50	.49	37,338.74	400 × 3
400	4	70	20	17.992	22.33	4,622.36	150.96	231.12	1.17	47,264.59	400 × 4

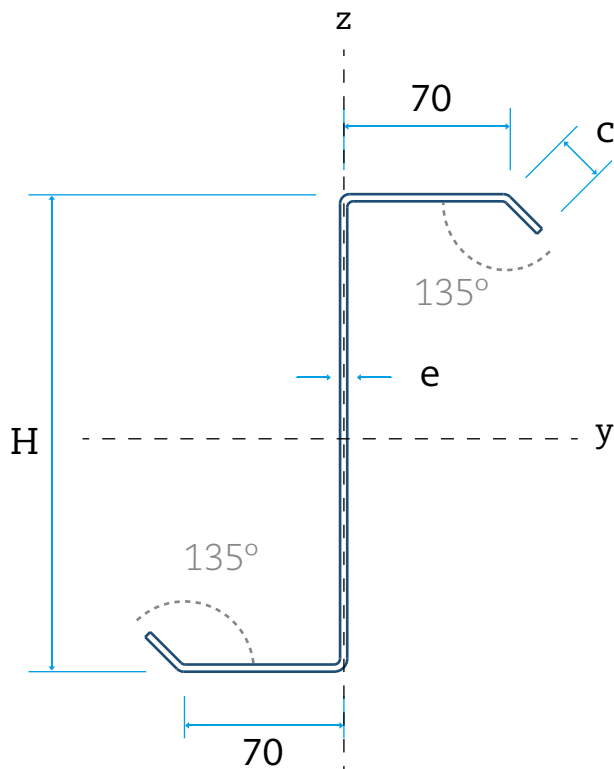
- H Total profile height
- e Profile thickness
- b Flange width
- c Tab width
- p Profile weight per linear metre
- A Profile crude section
- I_y Crude section moment of inertia with respect to the principal y-y axis
- I_z Crude section moment of inertia with respect to the principal z-z axis
- W_z Crude section resistant module with respect to the z-z axis
- I_t Crude section moment of inertia in torsion
- I_w Crude section warp module

[mm ²] × 10 ²	[mm ²] × 10 ⁴	[mm ⁴] × 10 ⁴	[mm ³] × 10 ³	[mm ⁴] × 10 ⁴	[mm ⁶] × 10 ⁶
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* For further effective mechanical characteristics, please contact BRAUSA.

Proof strength
used 250 N/mm²

REFERENCE	EUROCODE CHARACTERISTICS		
	A _{eff.} [cm ²]	I _{eff.y} [cm ⁴]	W _{eff.y} [cm ³]
150 × 2	4.62	217.58	27.77
150 × 2.5	6.41	275.19	35.60
150 × 3	8.31	331.57	43.32
175 × 2	4.62	308.80	33.76
175 × 2.5	6.46	391.06	43.32
175 × 3	8.42	471.77	52.75
200 × 2	4.61	419.41	40.11
200 × 2.5	6.48	531.61	51.49
200 × 3	8.50	641.94	62.74
200 × 4	12.87	856.33	84.77
225 × 2	4.60	548.69	46.48
225 × 2.5	6.49	698.64	60.12
225 × 3	8.55	844.23	73.29
225 × 4	13.05	1,127.87	99.12
250 × 2	4.59	688.35	51.63
250 × 2.5	6.49	893.95	69.22
250 × 3	8.58	1,080.85	84.41
250 × 4	13.19	1,445.71	114.25
275 × 2	4.57	845.29	56.77
275 × 2.5	6.49	1,119.36	78.79
275 × 3	8.60	1,353.98	96.09
275 × 4	13.30	1,812.82	130.14
300 × 2	4.55	1,019.75	61.92
300 × 2.5	6.48	1,358.30	86.64
300 × 3	8.61	1,665.84	108.35
300 × 4	13.38	2,232.15	146.81
325 × 2.5	6.47	1618.06	93.98
325 × 3	8.62	2018.63	121.18
325 × 4	13.44	2706.71	164.25
350 × 2.5	6.46	1,903.02	101.35
350 × 3	8.62	2,400.49	133.15
350 × 4	13.50	3,239.46	182.47
375 × 2.5	6.45	2,213.51	108.74
375 × 3	8.62	2,796.37	142.99
375 × 4	13.54	3,833.42	201.48
400 × 3	8.61	3,226.25	152.87
400 × 4	13.57	4,491.57	221.27
	[mm ²] × 10 ²	[mm ⁴] × 10 ⁴	[mm ³] × 10 ³



Manufacturing possibilities

H: 150 to 450 mm

e: 1.5 to 4 mm

A_{eff.} Profile cross section under uniform compression

I_{eff.y} Cross section moment of inertia under bending with respect to the y-y axis

W_{eff.y} Cross section resistant module under bending with respect to the y-y axis

Parametric verification of the purlins used in the roof and facade enclosures. Analysis in line with European standard Eurocode-3 Part 1-3 EN 1993-1-3 "Design of steel structures. Supplementary rules for cold formed thin gauge members and sheeting" (version 2006).



Steel profiles

SIGMA50

SIGMA80

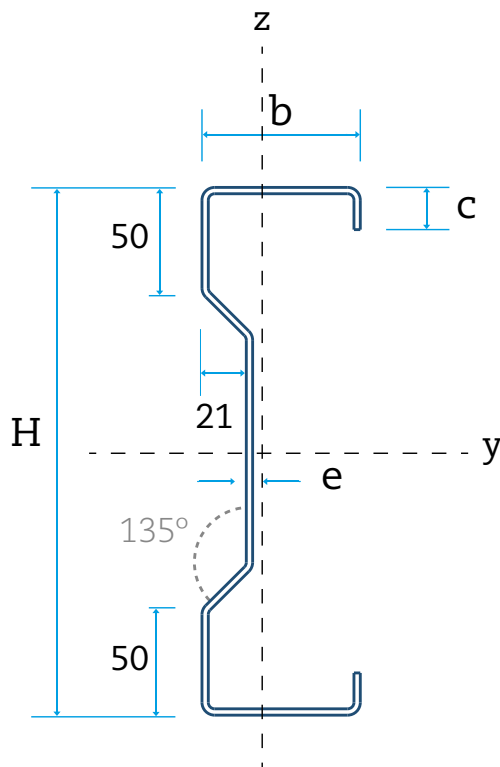
BASIC MECHANICAL CHARACTERISTICS														REFERENCE
H [mm]	e [mm]	b [mm]	c [mm]	d [mm]	p [kg/m]	A [cm ²]	Y _G [mm]	I _y [cm ⁴]	W _y [cm ³]	I _z [cm ⁴]	I _t [cm ⁴]	I _w [cm ⁴]		
200	2	50	25	50	5.322	7.05	-3.1	388.70	38.87	20.23	.09	2,391.04	200 × 2	
200	2.5	50	25	50	6.653	8.80	-3.2	481.89	48.19	24.68	.18	2,902.49	200 × 2.5	
200	3	50	25	50	7.983	10.53	-3.4	572.71	57.27	28.86	.31	3,376.95	200 × 3	
225	2	50	25	50	5.715	7.54	-2.9	518.49	46.09	20.27	.10	3,076.02	225 × 2	
225	2.5	50	25	50	7.144	9.41	-3.0	643.34	57.19	24.74	.19	3,736.72	225 × 2.5	
225	3	50	25	50	8.572	11.27	-3.2	765.24	68.02	28.95	.33	4,350.70	225 × 3	
250	2	50	25	50	6.107	8.03	-2.7	671.83	53.75	20.31	.10	3,825.52	250 × 2	
250	2.5	50	25	50	7.634	10.03	-2.8	834.21	66.74	24.80	.20	4,648.98	250 × 2.5	
250	3	50	25	50	9.161	12.01	-3.0	992.99	79.44	29.02	.35	5,414.89	250 × 3	
275	2	50	25	50	6.500	8.52	-2.5	850.25	61.84	20.35	.11	4,635.72	275 × 2	
275	2.5	50	25	50	8.125	10.64	-2.7	1,056.40	76.83	24.85	.21	5,634.68	275 × 2.5	
275	3	50	25	50	9.750	12.75	-2.8	1,258.25	91.51	29.09	.37	6,564.21	275 × 3	
300	2	50	25	50	6.892	9.01	-2.4	1,055.30	70.35	20.38	.12	5,504.75	300 × 2	
300	2.5	50	25	50	8.615	11.26	-2.5	1,311.86	87.46	24.89	.23	6,691.60	300 × 2.5	
300	3	50	25	50	10.338	13.49	-2.7	1,563.34	104.22	29.15	.39	7,796.14	300 × 3	
300	4	50	25	50	13.471	17.88	-2.9	2,051.23	136.75	36.95	.93	9,770.05	300 × 4	
325	3	50	25	50	14.230	14.23	-2.5	1,910.57	117.57	29.21	.42	9,109.64	325 × 3	
325	4	50	25	50	18.870	18.87	-2.8	2,509.19	154.41	37.04	.99	11,416.62	325 × 4	
350	3	50	25	50	14.970	14.97	-2.4	2,302.26	131.56	29.26	.44	10,504.44	350 × 3	
350	4	50	25	50	19.860	19.86	-2.6	3,026.13	172.92	37.13	1.04	13,164.62	350 × 4	
375	3	50	25	50	15.710	15.71	-2.3	2,740.71	146.17	29.30	.46	11,980.73	375 × 3	
375	4	50	25	50	20.850	20.85	-2.5	3,605.14	192.27	37.20	1.09	15,014.48	375 × 4	
400	3	50	25	50	16.450	16.45	-2.2	3,228.25	161.41	29.35	.48	13,538.91	400 × 3	
400	4	50	25	50	21.840	21.84	-2.4	4,249.32	212.47	37.28	1.14	16,966.89	400 × 4	
200	2	80	20	50	6.249	8.03	5.6	492.24	49.22	57.38	.10	5,810.19	200 × 2	
200	2.5	80	20	50	7.811	10.03	5.4	611.11	61.11	70.50	.20	7,103.91	200 × 2.5	
200	3	80	20	50	9.373	12.01	5.2	727.32	72.73	83.02	.35	8,325.73	200 × 3	
225	2	80	20	50	6.641	8.52	5.3	648.87	57.68	57.53	.11	7,546.59	225 × 2	
225	2.5	80	20	50	8.301	10.64	5.1	806.16	71.66	70.67	.21	9,234.82	225 × 2.5	
225	3	80	20	50	9.962	12.75	4.9	960.17	85.35	83.21	.37	10,832.36	225 × 3	
250	2	80	20	50	7.034	9.01	5.0	832.11	66.57	57.66	.12	9,490.67	250 × 2	
250	2.5	80	20	50	8.792	11.26	4.8	1,034.47	82.76	70.82	.23	11,620.37	250 × 2.5	
250	3	80	20	50	10.550	13.49	4.6	1,232.86	98.63	83.38	.39	13,638.25	250 × 3	
275	2	80	20	50	7.426	9.50	4.7	1,043.51	75.89	57.77	.12	11,635.91	275 × 2	
275	2.5	80	20	50	9.283	11.87	4.5	1,297.96	94.40	70.96	.24	14,252.48	275 × 2.5	
275	3	80	20	50	11.139	14.23	4.4	1,547.70	112.56	83.54	.42	16,733.81	275 × 3	
300	2	80	20	50	7.819	9.99	4.5	1,284.59	85.64	57.88	.13	13,978.21	300 × 2	
300	2.5	80	20	50	9.773	12.49	4.3	1,598.54	106.57	71.08	.25	17,126.12	300 × 2.5	
300	3	80	20	50	11.728	14.97	4.2	1,906.98	127.13	83.68	.44	20,113.09	300 × 3	
300	4	80	20	50	15.355	19.86	3.8	2,507.46	167.16	107.13	1.04	25,621.82	300 × 4	
325	3	80	20	50	12.317	15.71	4.0	2,313.03	142.34	83.81	.46	23,772.19	325 × 3	
325	4	80	20	50	16.140	20.85	3.6	3,043.82	187.31	107.28	1.09	30,294.26	325 × 4	
350	3	80	20	50	12.905	16.45	3.8	2,768.17	158.18	83.92	.48	27,708.47	350 × 3	
350	4	80	20	50	16.925	21.84	3.5	3,645.34	208.31	107.42	1.14	35,319.84	350 × 4	
375	3	80	20	50	13.494	17.19	3.6	3,274.69	174.65	84.03	.50	31,920.11	375 × 3	
375	4	80	20	50	14.710	22.83	3.3	4,315.12	230.14	107.55	1.19	40,696.21	375 × 4	
400	3	80	20	50	14.083	17.93	3.5	3,834.92	191.75	84.13	.52	36,405.79	400 × 3	
400	4	80	20	50	18.495	23.82	3.2	5,056.25	252.81	107.66	1.25	46,421.67	400 × 4	

- H Total profile height
- e Profile thickness
- b Flange width
- c Tab width
- d Profile track
- p Profile weight per linear metre
- A Profile crude section
- Y_G Position of the centre of gravity, G, with respect to the web midpoint
- I_y Crude section moment of inertia with respect to the principal y-y axis
- W_y Crude section resistant module with respect to the y-y axis
- I_z Crude section moment of inertia with respect to the principal z-z axis
- I_t Crude section resistant module with respect to the z-z axis
- I_w Crude section moment of inertia in torsion

[mm²] × 10² [mm⁴] × 10⁴ [mm³] × 10³ [mm⁴] × 10⁴ [mm⁴] × 10⁴ [mm⁴] × 10⁵

Proof strength
used 250 N/mm²

REFERENCE	EUROCODE CHARACTERISTICS		
	A _{eff.} [cm ²]	I _{eff.y} [cm ⁴]	W _{eff.y} [cm ³]
200 × 2	7.05	388.04	38.59
200 × 2.5	8.80	481.89	48.19
200 × 3	10.53	572.71	57.27
225 × 2	7.42	518.49	46.09
225 × 2.5	9.41	643.34	57.19
225 × 3	11.27	765.24	68.02
250 × 2	7.54	670.38	53.57
250 × 2.5	9.78	834.21	66.74
250 × 3	12.01	992.99	79.44
275 × 2	7.61	846.79	61.45
275 × 2.5	9.96	1,056.40	76.83
275 × 3	12.33	1,258.25	91.51
300 × 2	7.65	1,049.22	69.73
300 × 2.5	10.08	1,311.86	87.46
300 × 3	12.54	1,563.34	104.22
300 × 4	17.64	2,051.23	136.75
325 × 3	12.69	1,910.57	117.57
325 × 4	18.00	2,509.19	154.41
350 × 3	12.80	2,302.26	131.56
350 × 4	18.27	3,026.13	172.92
375 × 3	12.89	2,740.71	146.17
375 × 4	18.49	3,605.14	192.27
400 × 3	12.97	3,228.25	161.41
400 × 4	18.66	4,249.32	212.47
200 × 2	7.32	457.79	43.80
200 × 2.5	9.48	585.47	57.03
200 × 3	11.56	706.34	69.37
225 × 2	7.66	602.65	51.30
225 × 2.5	10.05	770.58	66.67
225 × 3	12.24	930.32	81.13
250 × 2	7.76	771.83	59.14
250 × 2.5	10.38	986.94	76.81
250 × 3	12.94	1,192.18	93.51
275 × 2	7.81	966.94	67.37
275 × 2.5	10.51	1,236.37	87.44
275 × 3	13.22	1,494.12	106.47
300 × 2	7.84	1,189.41	76.00
300 × 2.5	10.59	1,520.67	98.57
300 × 3	13.39	1,838.33	120.04
300 × 4	19.19	2,460.97	162.32
325 × 3	13.50	2,227.03	134.19
325 × 4	19.50	2,983.28	181.53
350 × 3	13.57	2,662.43	148.93
350 × 4	19.73	3,568.52	201.54
375 × 3	13.63	3,146.75	164.27
375 × 4	19.90	4,219.68	222.34
400 × 3	13.66	3,682.22	180.19
400 × 4	20.03	4,939.75	243.93
	[mm ²]	[mm ⁴]	[mm ³]
	× 10 ²	× 10 ⁴	× 10 ³



Manufacturing possibilities

H: 200 to 450 mm

e: 1.5 to 4 mm

b standard: 50 or 80 mm

b special: 60/70/75/85

A_{eff.} Profile cross section under uniform compression

I_{eff.y} Cross section moment of inertia under bending with respect to the y-y axis

W_{eff.y} Cross section resistant module under bending with respect to the y-y axis

* For further effective mechanical characteristics, please contact BRAUSA.

Parametric verification of the purlins used in the roof and facade enclosures. Analysis in line with European standard Eurocode-3 Part 1-3 EN 1993-1-3 "Design of steel structures. Supplementary rules for cold formed thin gauge members and sheeting" (version 2006).



Cebrau SEMIPLUS

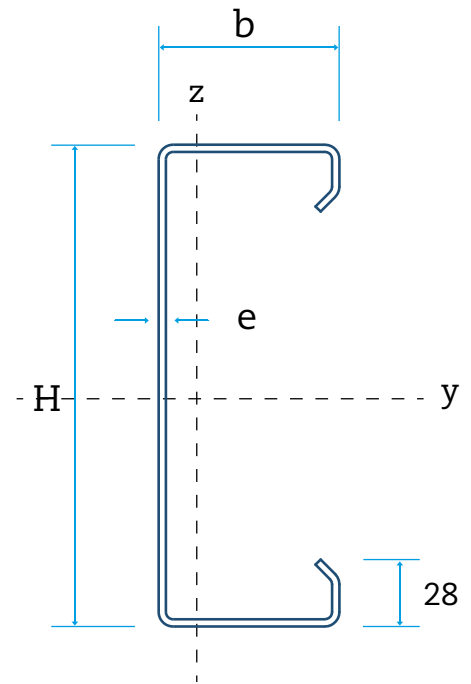
Manufacturing possibilities

H: 200 mm - 400 mm

e: 1.5 / 2 / 2.5 / 3 / 3.5 / 4 mm

b: 75 / 80 / 85 / 90*

* (A = 90 only for $H \leq 350$ mm and 3 mm thickness)



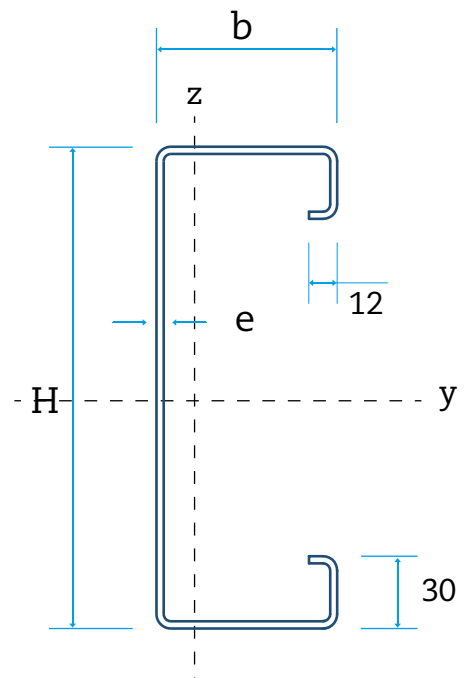
Cebrau PLUS

Manufacturing possibilities

H: 200 mm - 350 mm

e: 1.5 / 2 / 2.5 / 3 mm

b: 75 / 80 / 85 / 90 mm



Sigmabrau SEMIPLUS

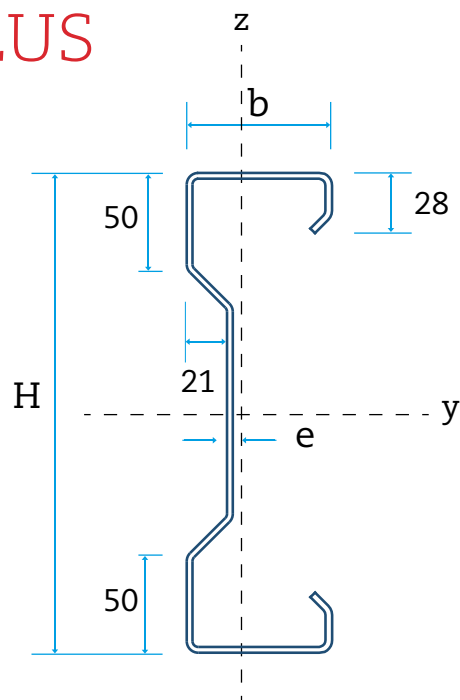
Manufacturing possibilities

H: 200 mm - 400 mm

e: 1.5 / 2 / 2.5 / 3 / 3.5 / 4 mm

b: 75 / 80 / 85 / 90*

* (A = 90 only for H ≤ 350 mm and 3 mm thickness)



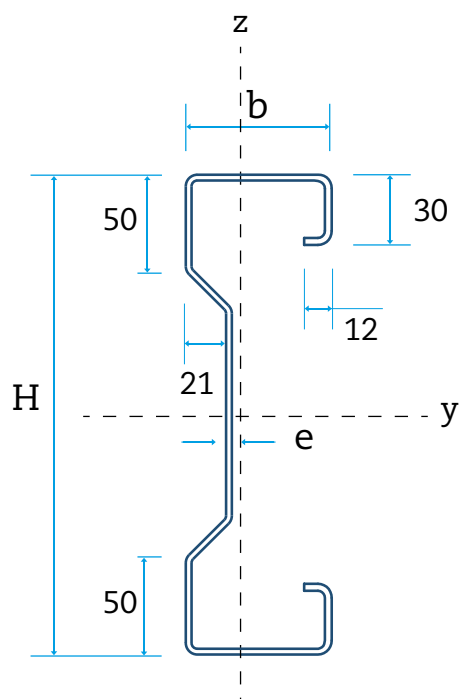
Sigmabrau PLUS

Manufacturing possibilities

H: 200 mm - 350 mm

e: 1.5 / 2 / 2.5 / 3 mm

b: 75 / 80 / 85 / 90 mm

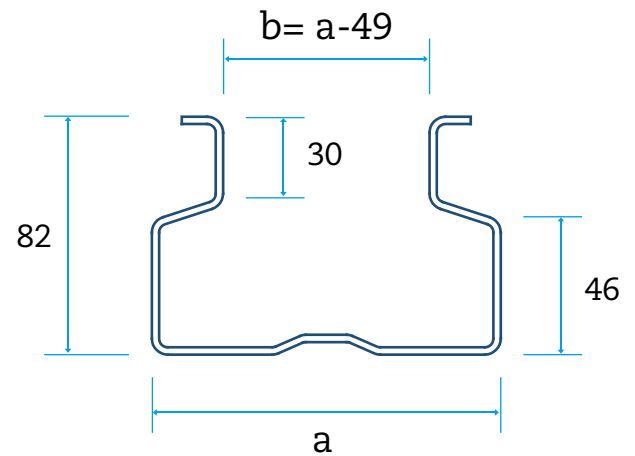




PUNTAL profile

Manufacturing possibilities

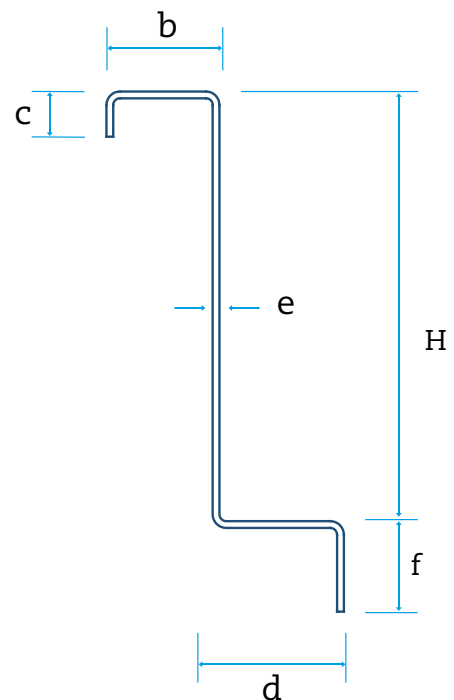
a: 100 / 120 / 140 / 160 mm
e: 1.8 / 2 / 2.5 / 3 mm



SHUTTLE profile

Manufacturing possibilities

H: 130 mm - 190 mm
b: 50 mm - 60 mm
c: 12 mm - 20 mm
d: 50 mm - 70 mm
f: 25 mm - 50 mm
e: 2 / 2.5 / 3 mm

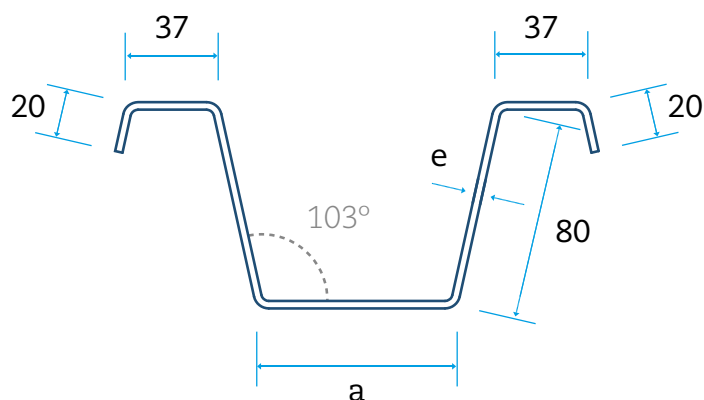


OMEGA SILO profile

Manufacturing possibilities

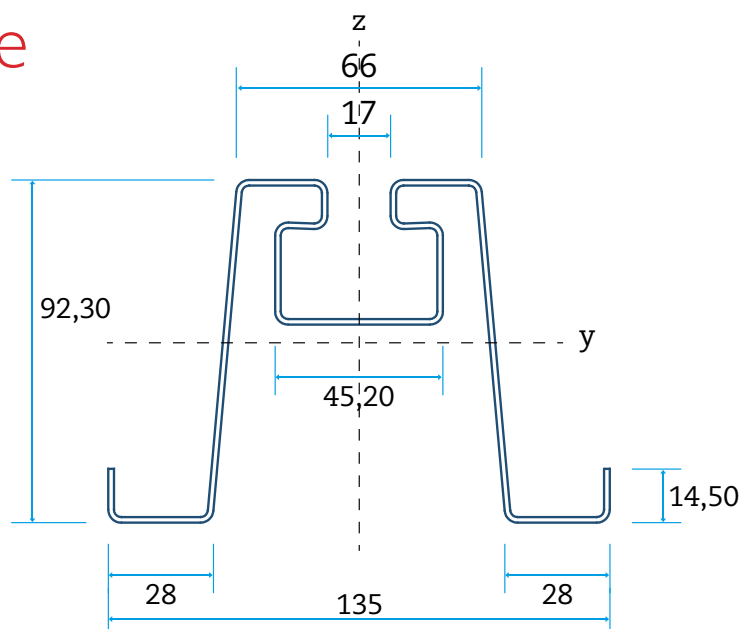
a: 80 mm - 150 mm

e: 2 / 2.5 / 3 mm



SOPORTE profile

Thick-ness (mm)	Weight (kg/ml)	I _y (cm ⁴)	I _z (cm ⁴)
1.5	4.90	65.22	83.99
1.6	5.20	69.17	89.38
1.8	5.82	76.93	100.08

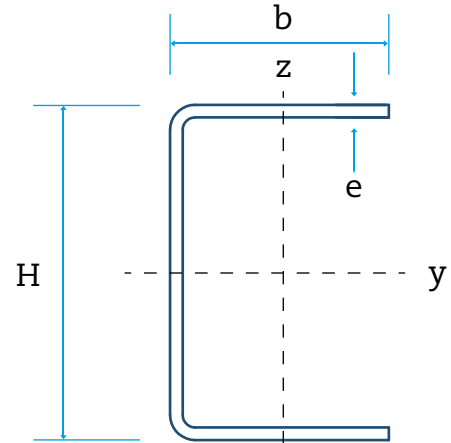




U profile

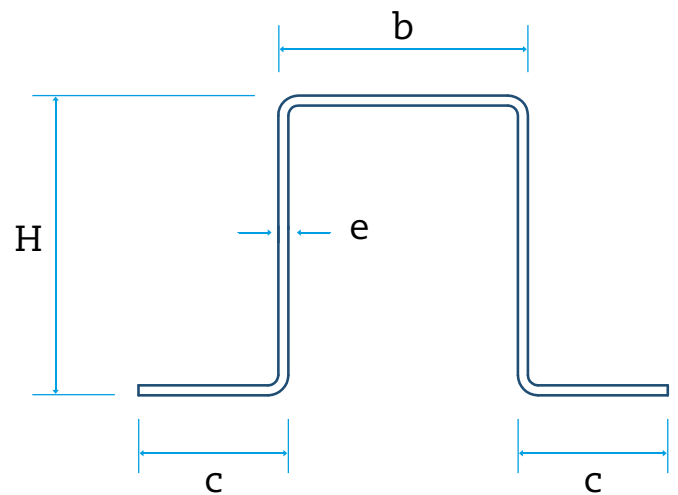
Dimension	Minimum (mm)	Maximum (mm)
H	30	300
b	20	100
e	1.5	8

For selections not included in this table, please consult manufacturing possibilities.



OMEGA profile

H (mm)	b min. (mm)	C (mm)	e (mm)
30	30	15 to 35	1.5 to 3
40	40	15 to 35	1.5 to 3
50	40	15 to 35	1.5 to 3
60	40	15 to 35	1.5 to 3
80	50	15 to 35	1.5 to 3
100	50	15 to 35	1.5 to 3

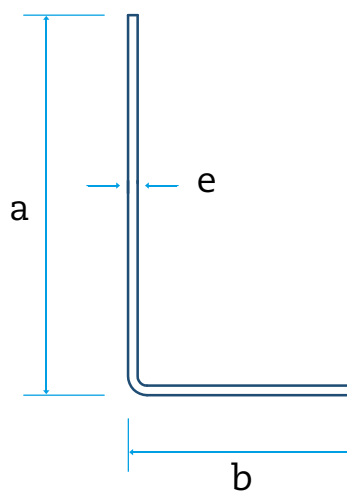


L profile

Dimensional table Angular profile

Dimension	Minimum (mm)	Maximum (mm)
A	30	150
B	30	150
e	1.5	8

For selections not included in this table, please consult manufacturing possibilities.

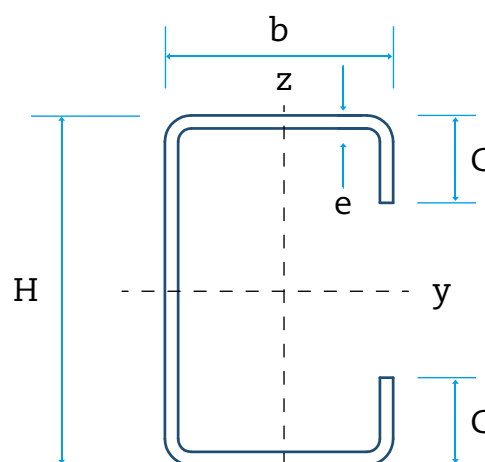


C profile

Dimensional table Profile C

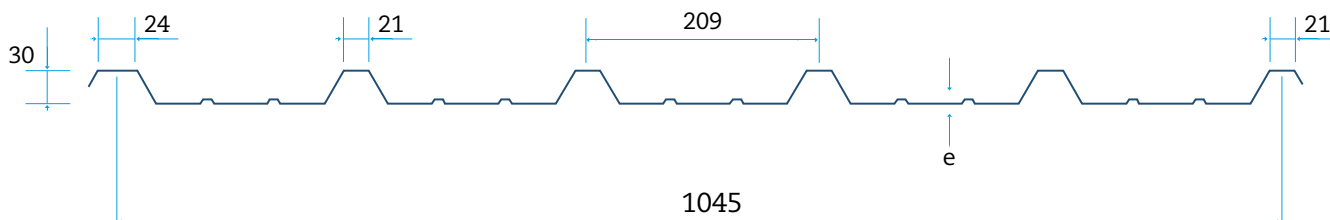
Dimension	Minimum (mm)	Maximum (mm)
H	40	450
b	25	85
C	12	30
e	1.2	4

For selections not included in this table, please consult manufacturing possibilities.





Trapezoidal sheet metal 30/209

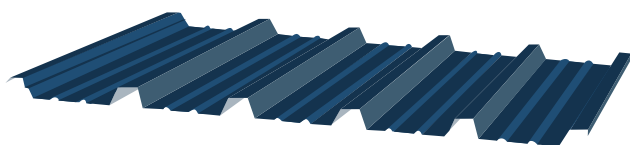


Cut to size in galvanised steel, pre-lacquered steel or stainless steel.

Manufacturing possibilities:
width 836 mm, 1045 mm and 1254 mm

Static characteristics

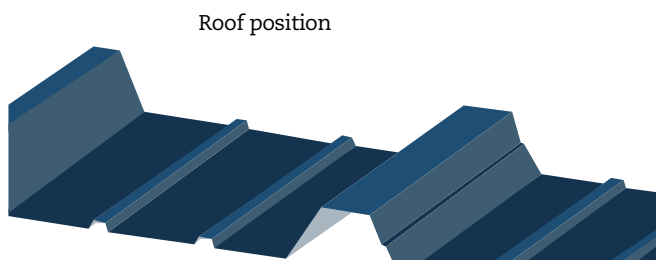
Thickness mm	Weight kg/m ²	Section cm ² /m	Inertia cm ⁴ /m	Resistant module cm ³ /m
0.5	4.70	5.98	6.73	2.92
0.6	5.64	7.17	8.39	3.66
0.7	6.58	8.37	10.03	4.39
0.8	7.52	9.96	11.61	5.08
1.00	9.40	11.96	14.57	6.34
1.2	11.28	15.00	19.27	7.90



Cut to size in galvanised steel, pre-lacquered steel or stainless steel.

Manufacturing possibilities:
width 836 mm, 1045 mm and 1254 mm

Trapezoidal sheet metal assembly



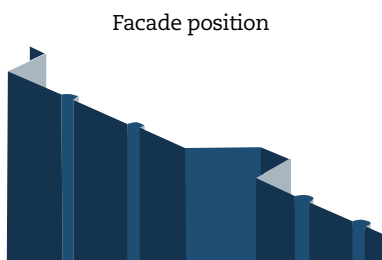
Roof position

Utilisation tables

Loads in kg/m² uniformly distributed for an arrow of $F L/200$ with a maximum of 1,600 kg/cm²

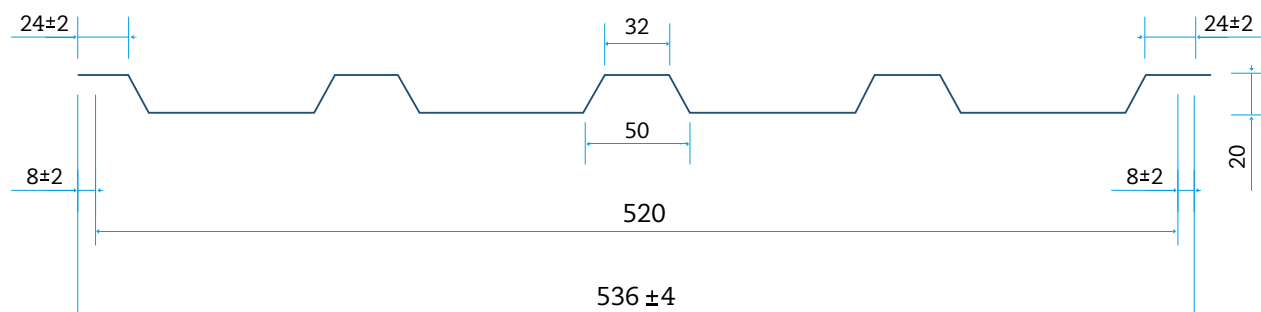
LIGHTS IN METRES FOR TWO SUPPORTS					
Thickness mm	1	1.5	2	2.5	3
0.5	374	161	68	35	20
0.6	469	200	85	43	25
0.7	562	240	101	52	30
0.8	650	277	117	60	35
1	812	348	147	75	44
1.2	1,011	437	184	94	55

LIGHTS IN METRES FOR THREE SUPPORTS					
Thickness mm	1	1.5	2	2.5	3
0.5	371	166	94	60	42
0.6	469	208	112	75	52
0.7	562	250	141	90	62
0.8	650	289	163	104	72
1	812	361	203	130	90
1.2	1,011	449	253	162	112



Facade position

Trapezoidal sheet metal 20/130



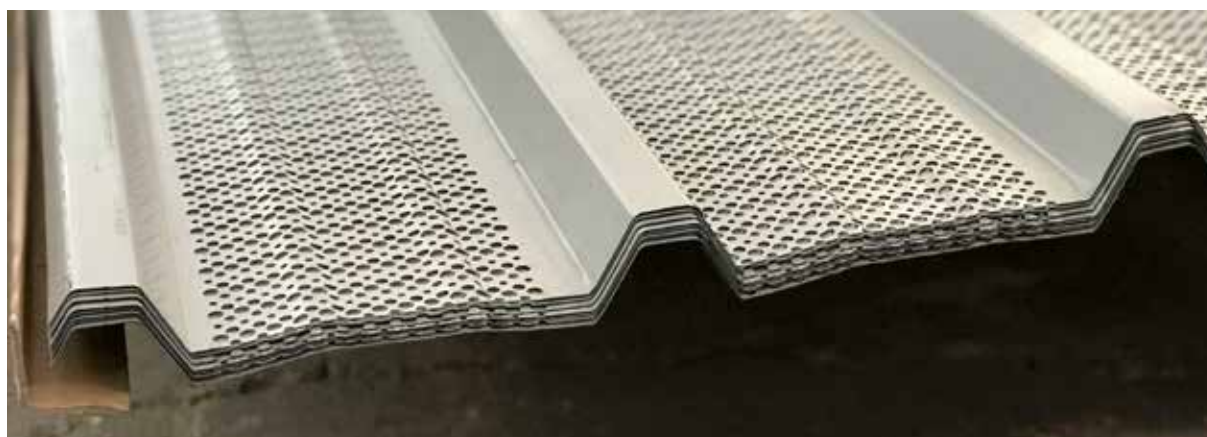
Cut to size in galvanised steel, pre-lacquered steel or stainless steel.

Manufacturing possibilities:

width 536 mm, 666 mm and 796 mm

Microperforated sheet metal

Microperforated trapezoidal sheet metal offers various options for covering facades and interiors. Its use is mainly intended for acoustic control.



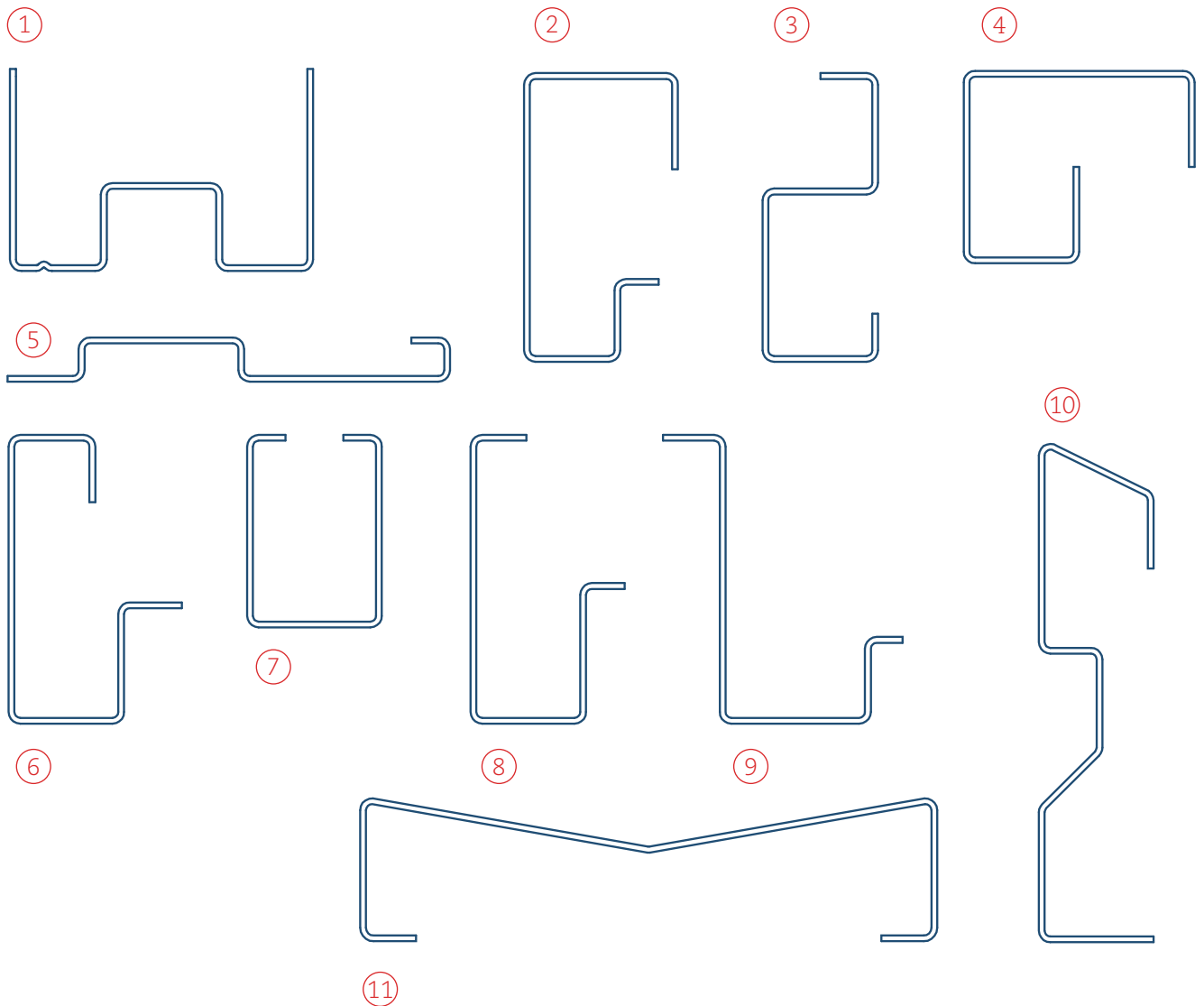
Consult perforation configuration.

Materials: galvanised and pre-lacquered



Other profiles manufactured

At BRAUSA, we help you design your own steel profile:



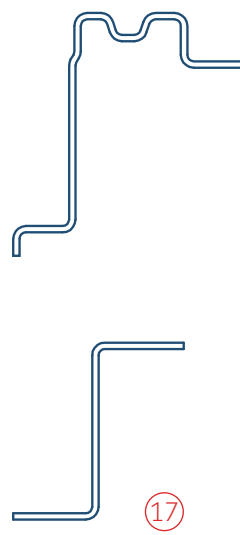
12



13



14



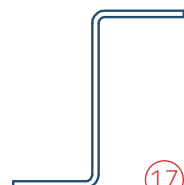
15



16



17



18



19

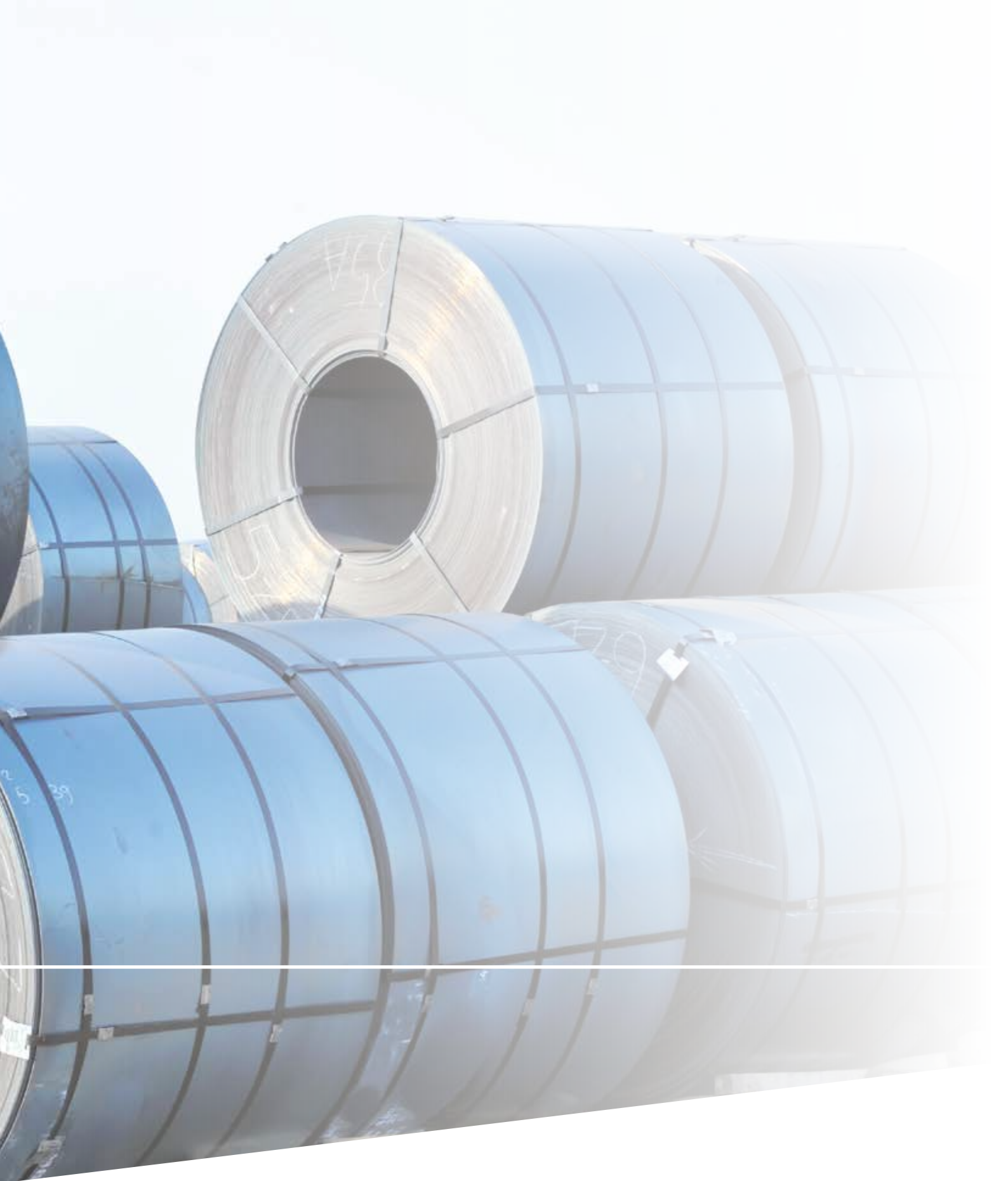


20



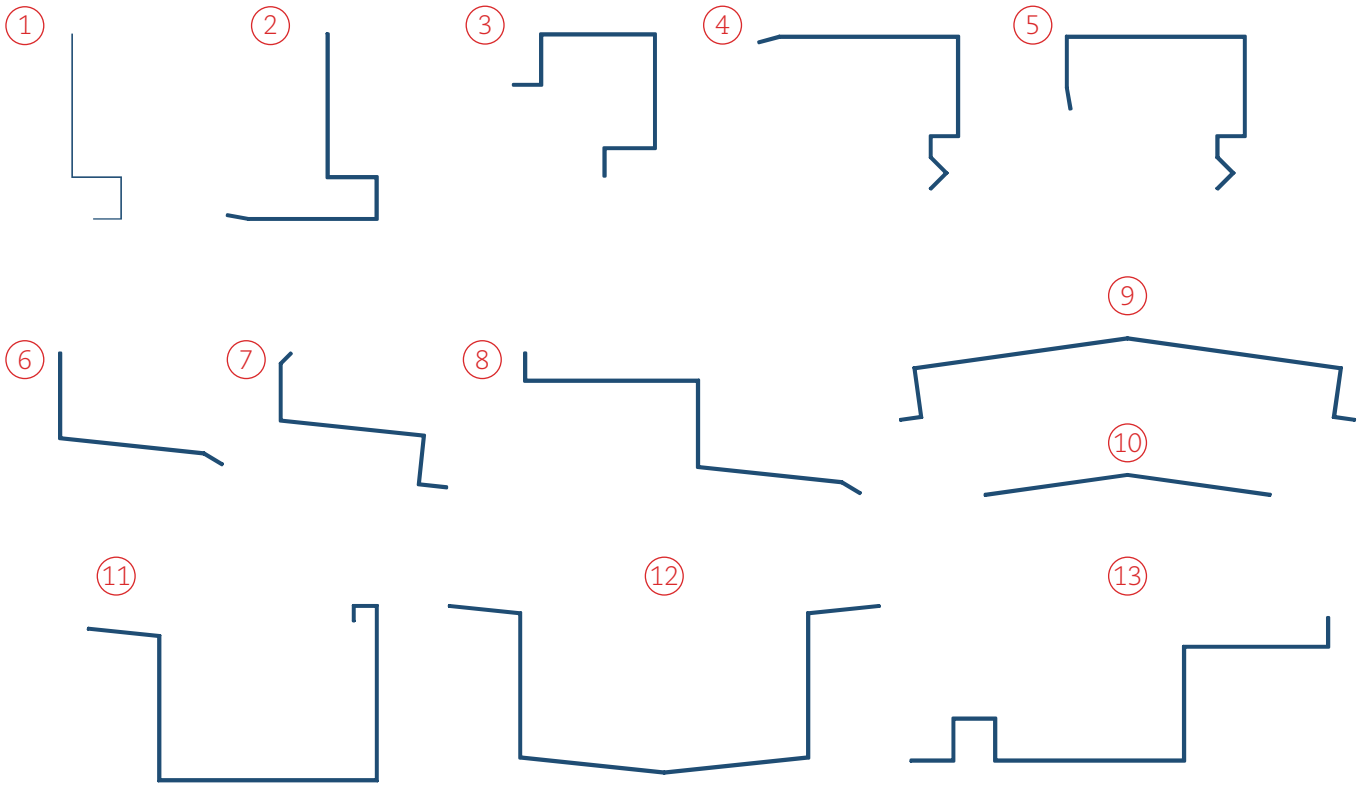
- Finishes
- Joint elements
- Joint covers
- Translucent plates
- Watertight seal
- Other services

03 Accessories





Cladding

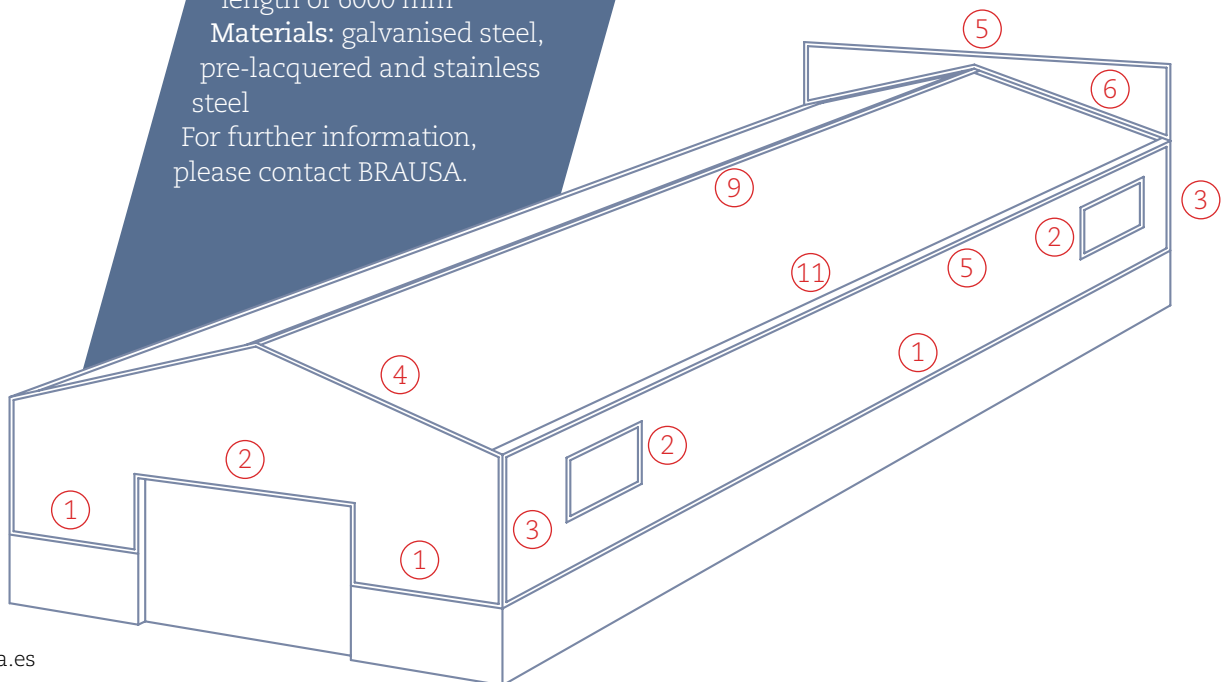


We have profiles and finishes that are adapted to the different kinds of couplings and joints.

Characteristics: maximum length of 6000 mm

Materials: galvanised steel, pre-lacquered and stainless steel

For further information, please contact BRAUSA.

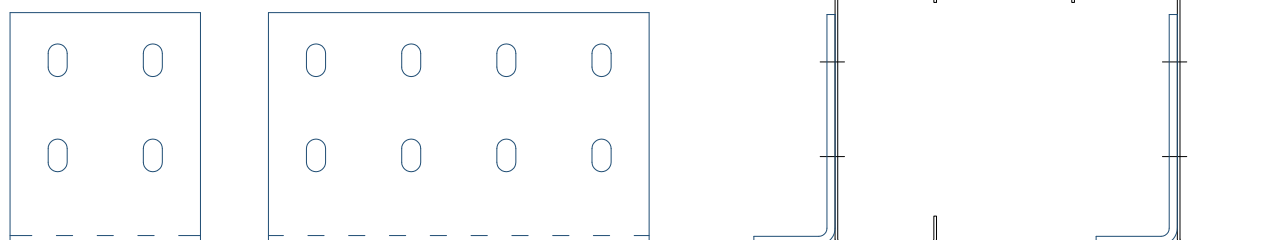


Joint elements

Brausa offers the option of manufacturing all kinds of joints according to the customer's design:

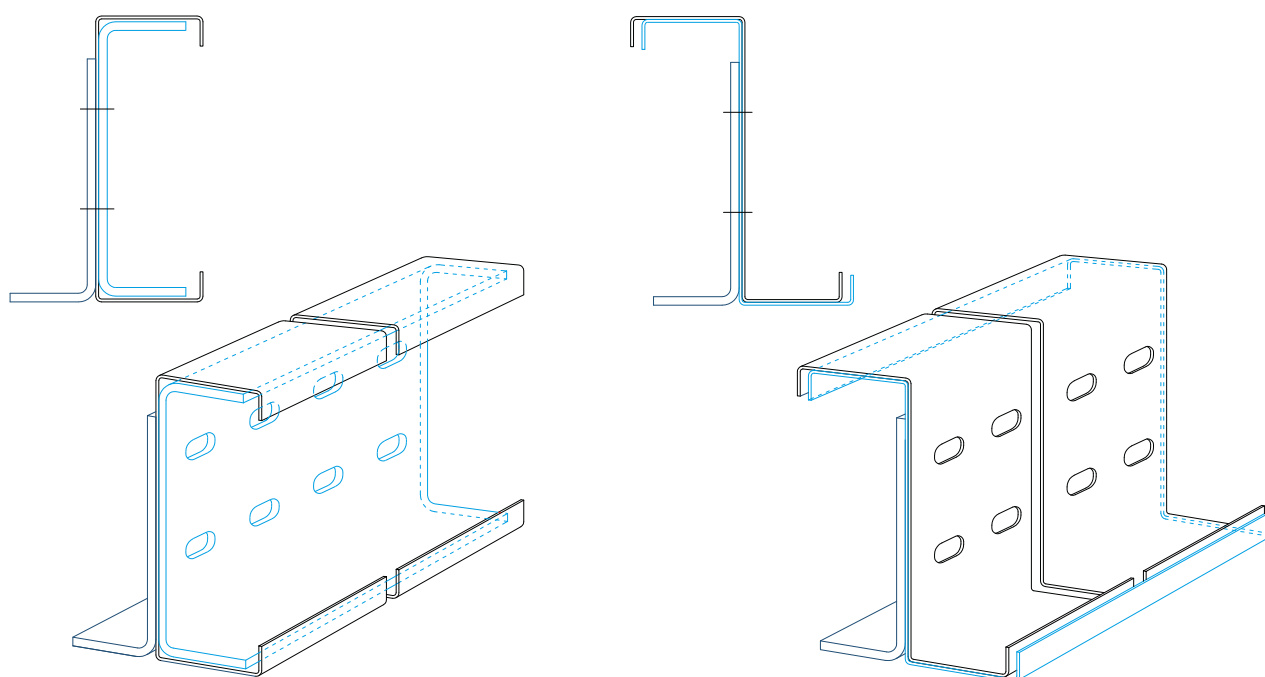
Cleats

Connect the purlin to the support beam.



Joint covers

Connect the two purlins to provide a continuous profile.





Translucent polycarbonate

Translucent geometry for overlap with the metal profile “Trapezoidal sheet metal 30/209”, manufactured by extrusion with polycarbonate granules protected on one or two sides from ultraviolet rays by coextrusion of UV absorbers, which guarantees resistance against ageing and maintains all its characteristics over time.



GENERAL CHARACTERISTICS	
Weight	1.5 kg/m ²
Average thickness	1 mm
LIGHT TRANSMISSION	
Transparent	88%
Opal	51%

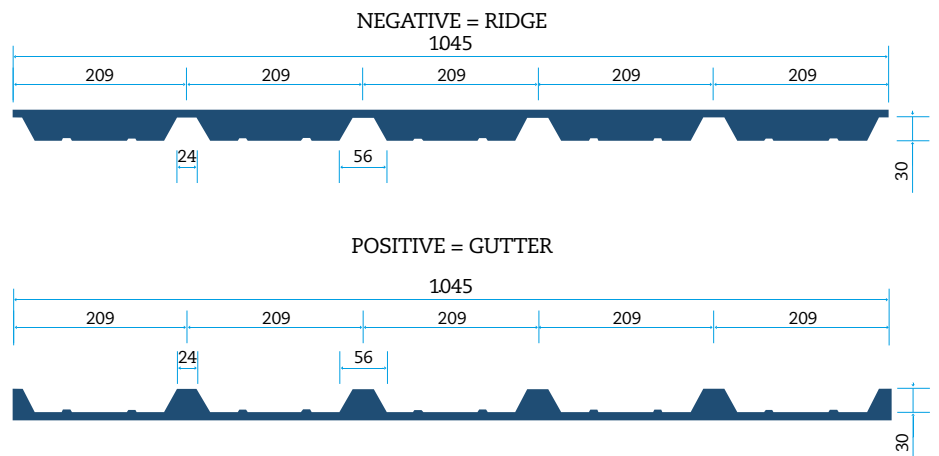
Possibility of cutting to length.
Standard length: 6,000 mm

Benefits

- Great light diffusion
- Long useful life
- Easy installation
- Good fire behaviour properties Class BS2 DO
- High mechanical resistance
- High chemical resistance
- High impact resistance
- Thermostability
- Lower rate of yellowing over time

Polyethylene seal

Trapezoidal watertight seal manufactured with cross-linked polyethylene foam with a density of 25 kg/m³ to prevent the entry of dirt, animals, water and air in joints between corrugated sheet metal model 30/209 and finishes.



Other services

Laser



Punching



Folding



Galvanised





04

Applications





Railway transport



Steel framing



Logistics facilities

Providing concrete solutions to real needs. This is our commitment to every single customer putting their trust in us. Engineers, architects, builders and installers will find in BRAUSA the optimal experience, professionalism and technology so as to achieve creative, innovative, effective and personalised solutions.



Industrial vehicles





BRAUSA
Serving your ideas.



Metal construction



Solar installations



Modular construction



Serving your ideas.

**Cold-formed
steel profiles**

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