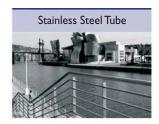


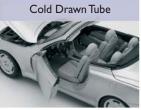


Profile Tube





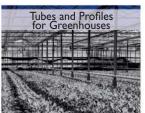


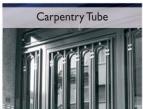




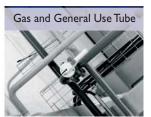
















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Grupo Condesa









Evolution means there is no going back. Progress and a will to succeed urge us to move forward just a little bit more every day. For that reason, Grupo Condesa wishes to share its international growth and convey a new and unified image as the leading company in this sector, with an increasing range of products with better features at the service of our customers.

The parent company of Grupo Condesa was founded in 1954, based on the Spanish company Conducciones y Derivados S.A. Today, this is a solid and expanding Group, the result of a combination of several initiatives based on a number of clear objectives: To become a leading international company through excellence, quality, experience and know-how, to resolve the problems of our customers and in this way, move forward and develop together.

Collaboration and coordination between the different members of the Group generate synergies that allow us to tackle large markets with guarantees and with an excellent capacity to respond to our customers' needs. Thanks to our large international network, we are always very close to our customers, attending to their needs and providing solutions at each moment in time.

Twelve manufacturing companies throughout Europe.

Our sales offices can be found in Spain, France, Portugal, Italy, Germany, United Kingdom, Sweden, Belgium, the Netherlands and Morocco. Agents in Gran Canaria (Spain), Ireland and Switzerland.

The Group is engaged in the manufacture of carbon steel tubes and profiles and stainless steel tubes also offering high value added solutions and products for many of the leading brand names in the most important sectors: automotive, construction, furniture, public works, etc.

General product characteristics

What it consists of

Essentially, profiled tube is a special welded section.

This includes all cold-formed welded sections in which the manufacturing process comprises a large number of shaping stages prior to welding. This differentiates them from tubes as the complexity of the geometries that can be obtained is very high. A much greater definition of folds and radii can be achieved with much more precise tolerances.

The carefully designed geometry of special welded sections can often eliminate subsequent operations that would be necessary when using a commercial welded tube. If in addition we add the possibility of including perforations made to measure during the profiling process itself and cutting to size, on many occasions we can obtain a part that is virtually finished and saves subsequent work and handling.

In order to manufacture these special welded sections, Grupo Condesa not only uses the most modern processes and technologies, but also a qualified and experienced team of specialists equipped with the latest generation of computer technology. This allows us to do more than just supply tubes or sections: We can offer tailor-made solutions for each requirement and if necessary, work together with our customers on the definition of the product to satisfy their needs.

With regard to materials and qualities, this company works both with carbon, black, semi bright, cold or galvanised steels, and stainless steel, atmospheric corrosion resistance steels, etc. It is also possible to work with several grades of steel, including materials with high yield strength, etc.

Two types of product can be distinguished:

COMMERCIAL PROFILES

These are special welded sections and slotted tubes designed by our technical department aimed at a number of different sectors. They can be supplied to any customer as they have been designed and developed internally and the appropriate tools are available for their manufacture.

CUSTOM PROFILES

These are special welded sections designed to respond to the particular requirements of individual customers. Any geometry proposed by the customer can be studied and developed with different kinds of machining and finishes. Our technical team will develop the production process and the tools necessary for their manufacture. Naturally, our team of specialists can also provide the support required to optimise the design of a product and adapt this as far as possible to the requirements. These tailor-made products are supplied only to this particular customer.







General product characteristics

Dimensional tolerances and lengths

Thickness tolerances

THICKNESS MARGINS	GALVANISED S/EN 10143 STEEL < S280 ±	GALVANISED S/EN 10143 STEEL ≥ S280 ±	COLD ROLLED S/EN 10131 ±
≤ 0.40	0.05	0.6	0.04
> 0.40 ≤ 0.60	0.06	0.07	0.05
> 0.60 ≤ 0.80	0.07	0.08	0.06
> 0.80 ≤ 1.00	0.08	0.09	0.07
> 1.00 ≤ 1.20	0.09	0.11	0.08
> 1.20 ≤ 1.60	0.11	0.13	0.1
> 1.60 ≤ 2.00	0.13	0.15	0.12
> 2.00 \le 2.50	0.15	0.18	0.14
> 2.50 ≤ 3.00	0.17	0.2	0.16

THICKNESS MARGINS	HOT ROLLED DEEP DRAWN (DD11-DD14) ±	HOT ROLLED STRUCTURAL ≥ S235 ±
≤ 2.00	0.13	0.17
> 2.00 ≤ 2.50	0.14	0.18
> 2.50 ≤ 3.00	0.15	0.2
> 3.00 \le 4.00	0.17	0.22
> 4.00 \le 5.00	0.18	0.24
> 5.00 \le 6.00	0.2	0.26
> 6.00 ≤ 8.00	0.22	0.29

Hot rolled (width up to 1200 S/EN 10051 ±)



General product characteristics

DIMENSIONAL TOLERANCE TABLE ACCORDING TO EN 10162

Dimension tolerances, between two radius. Measured externally. \pm .

THICKNESS mm	DIMENSION < 40 mm	> 40 ≤ 100	>100 ≤ 200	> 200 ≤ 400	>400
≤ 1.5	0.5	0.5	0.75	1.25	
1.5 ≤ 3	0.75	0.75	1	1.5	1.75
3 ≤ 6	I	I	1.25	1.75	2
<u>6 ≤ 8</u>		1.25	1.5	2	2.5

Wing tolerances, between radius and edge Measured externally. ±

THICKNESS mm	DIMENSION < 40 mm	> 40 ≤ 100	>100 ≤ 150	>150 ≤ 200	>200
≤ 1.5	0.75	0.75			
1.5 ≤ 3	0.8	I	1.25	1.5	
3 ≤ 6	I	1.25	1.5	1.75	2
6 ≤ 8	1.25	1.5	1.75	2	2.25

Angular tolerances ±

LENGTH OF SMALLEST SIDE OF THE ANGLE	TOLERANCE IN °				
≤ 10	3°				
> 10 ≤ 40	I° 45′				
> 40 ≤ 80	1° 15′				
> 80 ≤ 110	0				
> 0	0° 45′				

Length tolerances, mm.

CURRENT LENGTH (6000) OR FIXED (4 to 24 m)	-0 + 50
Exact length < 2000	±Ι
>2000 ≤ 6000	± 2
>6000 ≤ 10000	± 3
>10000 ≤ 15000	± 4
>15000	± 6

Straightness tolerances. 2/1000 (0.2% of total length) .

Torsion tolerances. I $^{\circ}$ \times metre of length.

Minimum internal radius. As reference, we recommend Tolerance $\pm 20\%$

STEELS WITH RE	THICKNESS ≤ 4	4 < THICKNESS ≤ 6	6 < THICKNESS ≤ 8		
≤ S 275	lxe	lxe	1.5xe		
> S 275	lxe	1.5xe	1.5xe		



Product standards and quality certificates



Product standards

Inspection documents based on non-specific inspections according to the EN 10204 standard:

- Conformity declaration with order "type 2.1": Document in which the manufacturer declares that the products supplied comply with the requirements of the order and that test results are not included.
- Test report "type 2.2": Document in which the manufacturer declares that the products supplied comply with the requirements of the order and that test results based on non-specific inspections are included.

Inspection documents based on specific inspections according to the EN 10204 standard:

• Inspection certificate 3.1 "type 3.1": Document issued by the manufacturer in which he declares that the products supplied comply with the requirements of the order and that test results are included.

The test unit and the tests to be conducted are defined in the product specifications, in official regulations and in the corresponding regulations or order.

The document is validated by the representative authorised by the manufacturer, independent of the manufacturing department, for inspection.

The manufacturer shall be allowed to transfer relevant results of tests obtained by specific inspection on products used by him as raw materials to inspection certificate 3.1, provided that these guarantee the traceability of the process and that he can provide the corresponding inspection documents required.

Quality certificates









Product standards and quality certificates

Production of profiled tubes:

Equivalence table

DE	SIGN	OITA	N	ANTIGUAS DESIGNACIONES DE LAS NORMAS NACIONALES										
		ACCORDI		ACCORDINGTO	GERMANY		UNITED KINGDOM		ITALY	BELGIUM	SWEDEN	PORTUGAL	AUSTRIA	NORWAY
EN 1002	5:2:2004	+AI:I		EN 10025:1990	DIN 17 100		BS 4360	UNE 36-080	UNI 7070	NBN A 21-101		NP 1729	M 3116	
\$ 185	1.0035	S 185	1.0035	Fe 310-0	St 33	A-33	-	A 310-0	Fe 320	A 320	13 00-00	Fe 310-0	St 320	-
S 235 JR S 235 JO		S 235 JR S 235 JRG1 S 235 JRG2 S 235 JO	1.0036 1.0038	Fe 360 B Fe 360 BFU Fe 360 BFN Fe 360 C	St 37-2 USt 37-2 RSt 37-2 St 37-3 U	E 24-2 - E 24-3	40 B 40 C	AE 235 B-FU AE 235 B-FN AE 235 C	Fe 360 B Fe 360 C	AE 235-B AE 235-C	13 11-00 13 12-00	Fe 360 B Fe 360 C	USt 360 B RSt 360 B St 360 C St 360 CE	NS 12 120 NS 12 122 NS 12 123 NS 12 124
a S 235 J2		S 235 J2G3 S 235 J2G4		Fe 360 D1 Fe 360 D2	St 37-3 N -	E 24-4	40 D	AE 235 D	Fe 360 D	AE 235-D		Fe 360 D	St 360 D	NS 12 124
S 275 JR S 275 JO		S 275 JR S 275 JO		Fe 430 B Fe 430 C	St 44-2 St 44-3 U	E 28-2 E 28-3	43 B 43 C	AE 275 B AE 275 C	Fe 430 B Fe 430 C	AE 255-B AE 255-C	14 12-00	Fe 430 B Fe 430 C	St 430 B St 430 C St 430 CE	NS 12 142 NS 12 143
a S 275 J2		S 275 J2G3 S 275 J2G4		Fe 430 D1 Fe 430 D2	St 44-3 N -	E 28-4	43 D	AE 275 D	Fe 430 D	AE 255-D	14 14-00 14 14-01	Fe 430 D	St 430 D	NS 12 143
S 355 JR S 355 JO a S 355 J2	1.0553 a	\$ 355 JR \$ 355 JO \$ 355 J2G3 \$ 355 J2G4	1.0553 1.0570	Fe 510 B Fe 510 C Fe 510 D1 Fe 510 D2	- St 52-3U St 52-3N	E 36-2 E 36-3	50 B 50 C 50 D	AE 355 B AE 355 C AE 355 D	Fe 510 B Fe 510 C Fe 510 D	AE 355-B AE 355-C AE 355-D		Fe 510 B Fe 510 C Fe 510 D	St 510 C St 510 D	NS 12 153 NS 12 153
a S 355 K2	a	S 355 K2G3 S 355 K2G4	1.0595	Fe 510 DD1 Fe 510 DD2	-	E 36-4	50 DD			AE 355 DD		Fe 510 DD		
\$450]0	1.0590						50C							
E 295	1.0050	E 295	1.0050	Fe 490-2	St 50-2	A 50-2		A 490	Fe 490	A 490-2	15 50-00 15 50-01	Fe 490-2	St 490	
E 335	1.0060	E 335	1.0060	Fe 590-2	St 60-2	A 60-2		A 590	Fe 590	A 590-2	16 50-00 16 50-01	Fe 590-2	St 590	
E 360	1.0070	E 360	1.0070	Fe 690-2	St 70-2	A 70-2		A 690	Fe 690	A 690-2	16 55-00 16 55-01	Fe 690-2	St 690	

 $^{^{\}mathrm{a}}$ When a product is supplied in N condition, it is necessary to add the indication +N to the designation.

Thickness table with commercial qualities

THICKNESS (mm) / MATERIAL	I	1,2	1,5	2	2,5	3	4	5
BLACK			DDII	DDII	DDII	DDH	DDII	DDH
SEMI BRIGHT			DDII	DDII				
COLD	DC01							
GALVANISED	DX51D	DX51D	DX51D	DX51D	DX51D	DX51D		



Product supply conditions and options



Supply conditions

The normal supply length for these sections is 6,000 mm. However, on request, it is possible to supply sections cut at to a fixed length with different types of finish according to different types of cut (see section "Cutting to size").

Finishes

The materials are supplied from the factory directly from the production line, although it is possible upon request to apply a number of different surface treatments, shot blasting, painting, hot dip galvanising, chrome plating, etc.

It is also possible to supply the sections with several types of machining operations, perforations and even stamped perforations.

Cutting to length

The possible cuts to size are as follows:

- Fusion: This is the most usual type of cut, by means of a fast cross-cutting disc. This cuts by means of fusion and is capable of cutting very high thicknesses. Unless otherwise indicated or requested, this type of cut is used.
- Milling tool: Also called "slow" cutting. This involves cutting with a disc, with the peculiarity that it is a slower and finer chip forming process, producing unbeatable results.
- Die-cut: This cut is cleaner, without burrs, and is made by means of a shear effect produced by the knives of a press-operated die. It requires a specific die for the shape to the cut.



Product supply conditions and options

Packaging and strapping

Standard or tailor-made packages, according to requirements.



The most typical applications are as follows:

- Building
 Form work
 Structures
 Partitions
- Bus and truck bodywork
- Enclosures
- Shelving units
- Furniture
- Metal carpentry and lock making













• Commercial profiled tubes

- Counterweight guides for lifts Welded profile for construction Slotted tube

- Outer frame

• Special profiled tubes

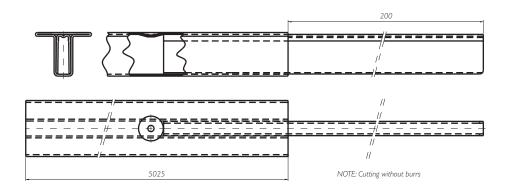
- Form work
 Cladding post
 Furniture
 Modular partitions
 Bus, truck and railway bodywork
- Doorframes

Commercial profiled tubes

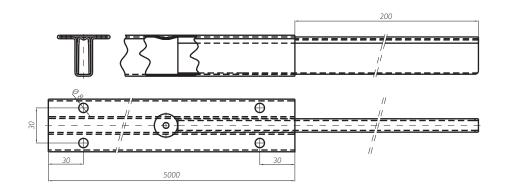
COUNTERWEIGHT GUIDE FOR LIFTS

REFERENCE	THICKNESS (mm)	WEIGHT (kg/m)	MATERIAL	LENGTH (mm)
R6211	1.5	1.730	Pickled	2,500 and
R6211A	1.5	1.730	Pickled	5,000

• R6211



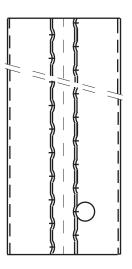
• R6211 A

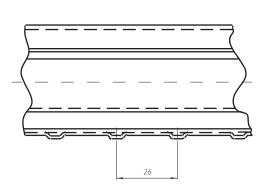


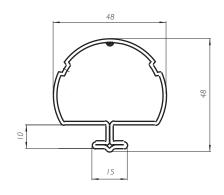


WELDED PROFILE FOR CONSTRUCTION

REFERENCE	THICKNESS mm	WEIGHT kg/m	lyy cm⁴	Wyy cm³	iyy cm	lzz cm⁴	Wzz cm³	izz cm
R7784	1.2	1.733	5.27	2.03	1.55	4.67	1.94	1.46
R7784	1.5	2.131	6.35	2.46	1.53	5.71	2.38	1.46

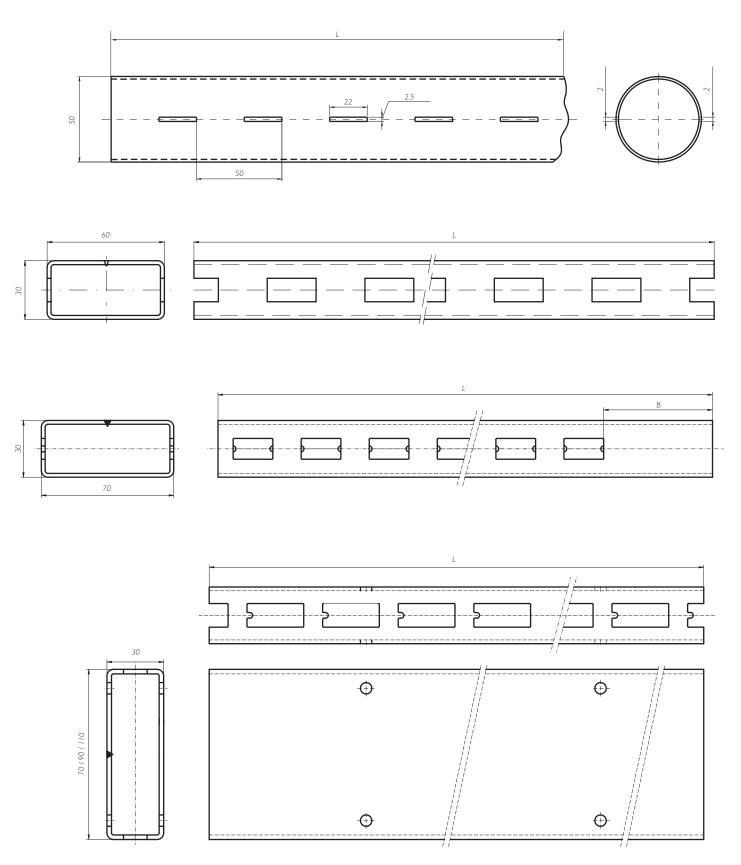






Product range

SLOTTED TUBE

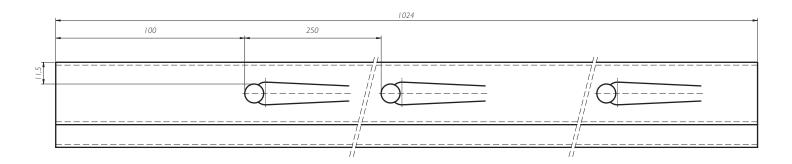


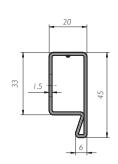
Other tube measurements and/or machining configurations: Consult.

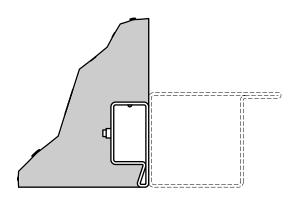


OUTER FRAME

REFERENCE	THICKNESS (mm)	WEIGHT (kg/m)	MATERIAL
R7899	1.5	1.454	Sendzimir Galvanising



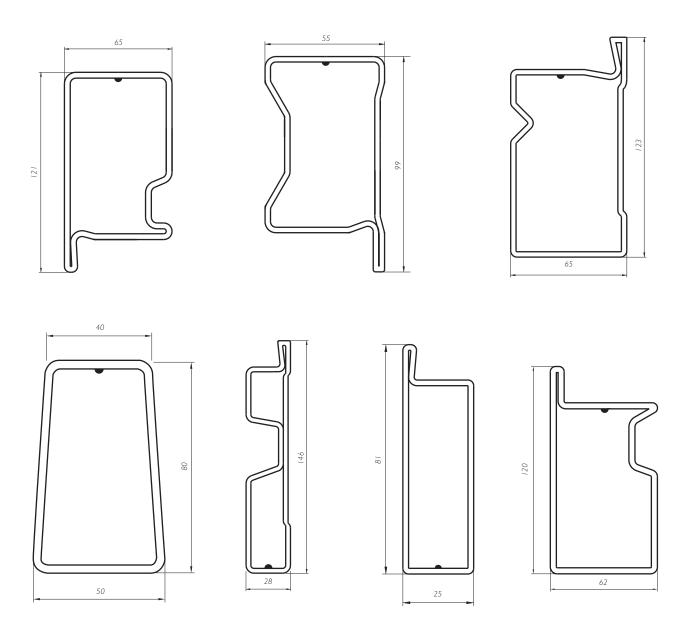




Special profiled tubes

FORM WORK

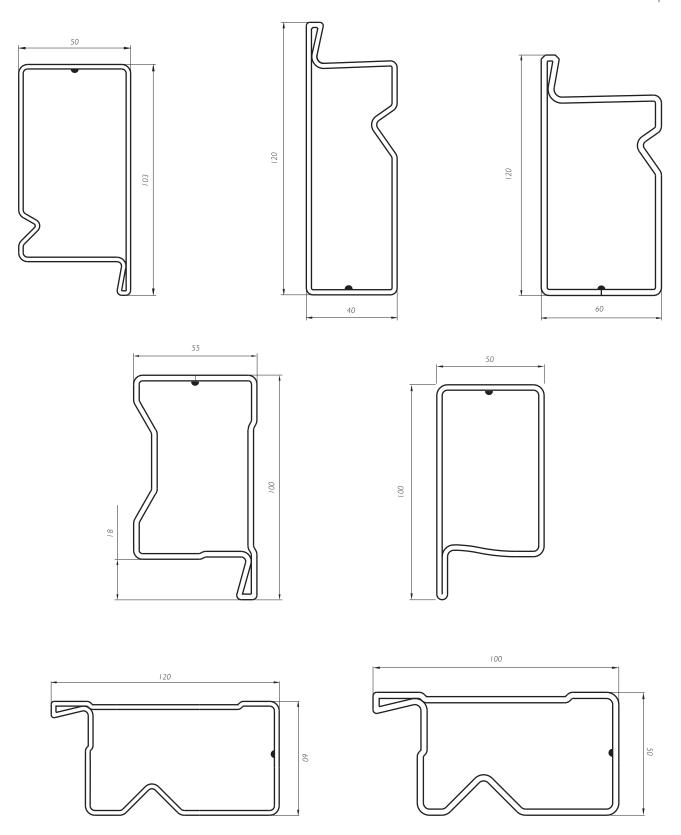
• Form work for wall with wooden panel.





FORM WORK

• Form work for wall with wooden panel.

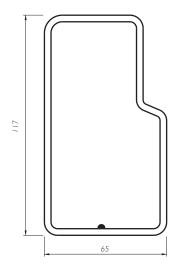


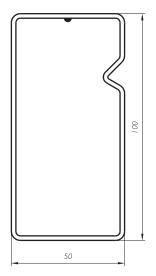


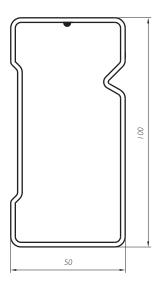
Product range

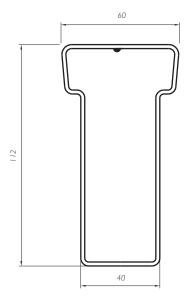
FORM WORK

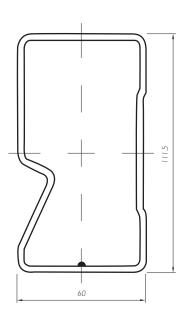
• Form work for wall with wooden panel

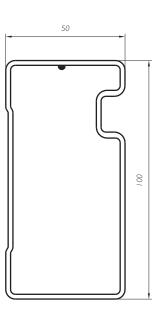








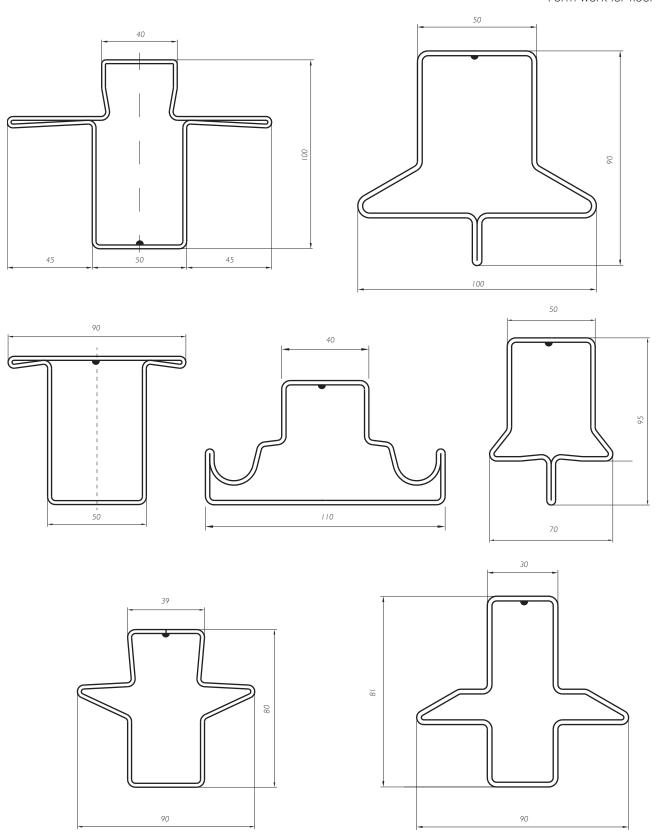






FORM WORK

• Form work for floor

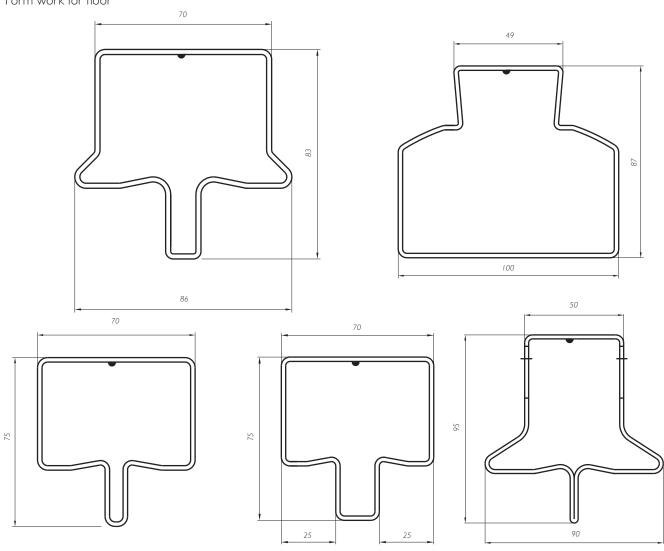




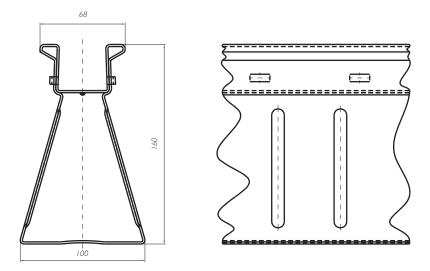
Product range

FORM WORK

• Form work for floor

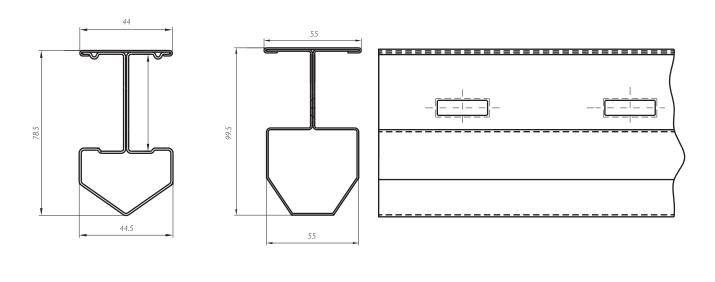


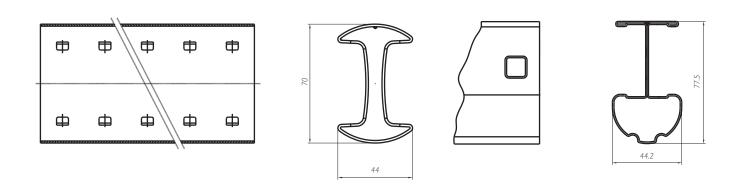
• Form work beams

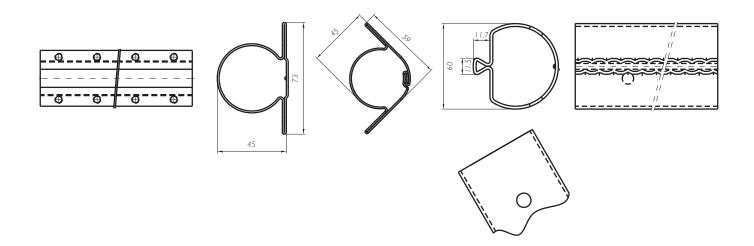




CLADDING POST



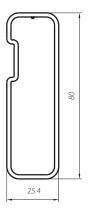


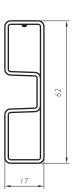




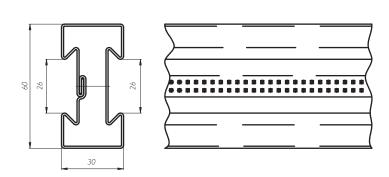
Product range

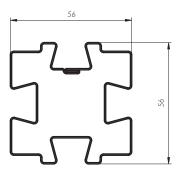
FURNISHINGS





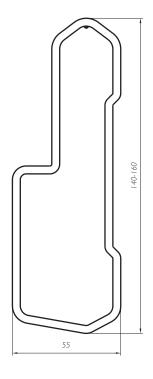
MODULAR PARTITIONS

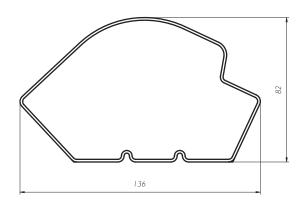




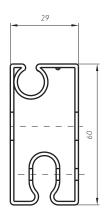


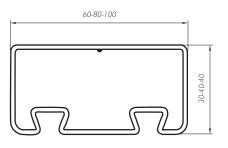
BODYWORK FOR COACHES, TRUCKS AND RAILWAY





DOOR FRAMES











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