



INDUSTRIAS MAS SALVADO

 **Industrias Mas**

rainwater gutters



Presentation

IMS products are born of more than 55 years of experience in metalworking – manufactured to the highest current standards in design, functionality and quality.

Our company invests significant resources in R&D to offer products that lead the sector's evolution, both technologically and ecologically, easing recycling processes – backed by our ISO 9001-certified quality management system.

Our research and product development department innovates with solutions tailored to market requirements and to our customers' individual specifications – seeking the best answer for every rainwater drainage project.

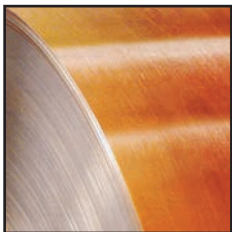
Our team is on hand with technical advice for any enquiry. With **IMS** you get advanced products for rainwater drainage.



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Materials

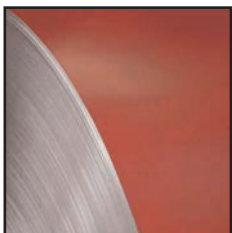


copper

Copper is a noble, exceptionally long-lasting material. Exposed to the elements, it develops a self-renewing patina through a natural chemical reaction – ranging in color from dark brown to sea green – which protects it from further atmospheric attack. Copper and its alloys are recyclable, since their chemical properties don't change over time. For manufacturing gutters, downpipes and accessories, IMS uses semi-hard, phosphorus-deoxidized copper (Cu-DHP) with a purity of 99.9%.

MECHANICAL PROPERTIES

Density 8.9 kg/dm³
Tensile strength R (kg/mm²) 26/32
Melting point 1,083 °C
Thermal expansion 1.65 mm/m at 100 °C
Brinell hardness HB 60/85

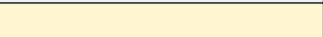
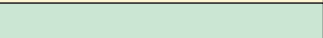
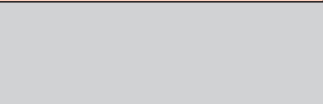
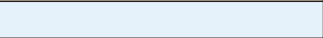


pre-coated steel

The base of IMS's pre-coated steel gutters is hot-dip galvanized rolled steel with a total zinc coating of 275 g/m² on both faces, to EURONORM 142-79. The coating system consists of a dry film of 25 ± 3 microns on the visible face and 17 ± 3 microns on the inner face. The hardness of the protective film corresponds to grade F on the KOH-I-NOOR scale (AICC No. 11). Pigmentation is continuously tested for stability and shows no variation whatsoever – neither on the sun-exposed side nor on the sheltered side: gloss level and shade remain the same in both cases.

Available finishes

			
Brown	Tile Red	Grey-White	Forest Green

	TOP COAT
	PRIMER / BACK COAT
	PHOSPHATING
	HOT-DIP GALVANIZING
	COLD-ROLLED STEEL
	HOT-DIP GALVANIZING
	PHOSPHATING
	PRIMER / BACK COAT
	TOP COAT

quartz - zinc

Quartz-zinc has a satin, almost velvety grey that closely resembles zinc's natural patina. The patina is applied at the factory by bathing the sheet in a solution that alters the metal's crystal structure, giving outstanding corrosion resistance of 50 to 100 years depending on the surrounding atmosphere. It is rolled zinc alloyed with copper and titanium to EN 988.

COMPOSITION

Zinc	Z1, limited Pb and Cd
Copper	0.08–0.2%
Titanium	0.07–0.12%
Aluminum	< 0.015%



zinc - titanium

These newer alloys are made from high-purity, electrolytically refined zinc, to which alloying elements (copper and titanium) are added in controlled amounts to improve its properties.

MAIN FEATURES

Made from high-grade Z1 zinc (99.995% purity) to EN 1179 with additions of titanium, copper and aluminum in the following proportions:

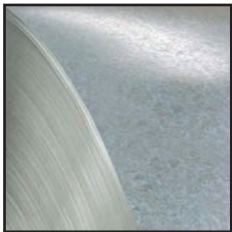
Titanium: min. 0.06% – max. 0.2%
Copper: min. 0.08% – max. 1.0%
Aluminum: max. 0.015%

SPECIFIC PROPERTIES

Thermal expansion	2.2 mm/m at 100 °C
Melting point	419.5 °C

MECHANICAL PROPERTIES

Tensile strength (lengthwise)	> 150 N/mm²
180° bend with no cracking	

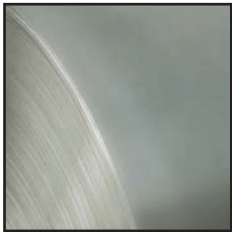


stainless steel

The stainless steel used is AISI 316 2B, from the family of austenitic chromium-nickel steels. This grade resists the precipitation of chromium carbides and the resulting intergranular corrosion, thanks to its high chromium and nickel content in the 0.20%–0.25% range.

MECHANICAL PROPERTIES

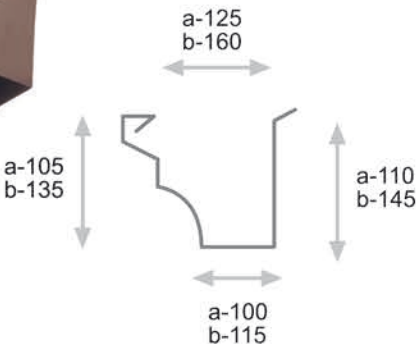
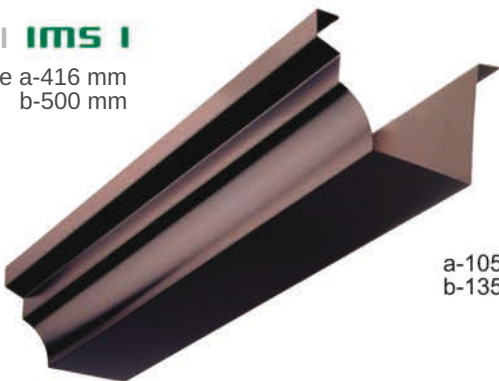
Tensile strength	246 N/mm²
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Design Gutters

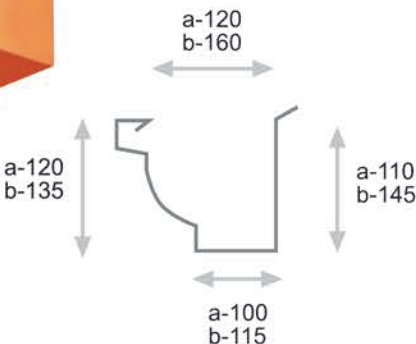
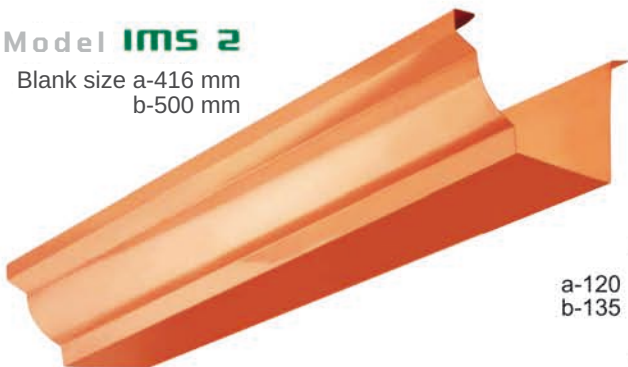
Model **IMS 1**

Blank size a-416 mm
b-500 mm



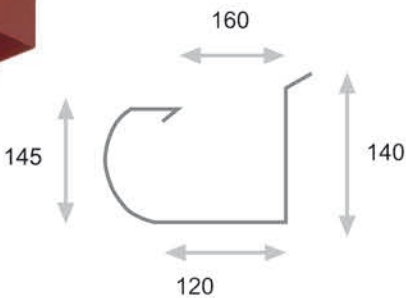
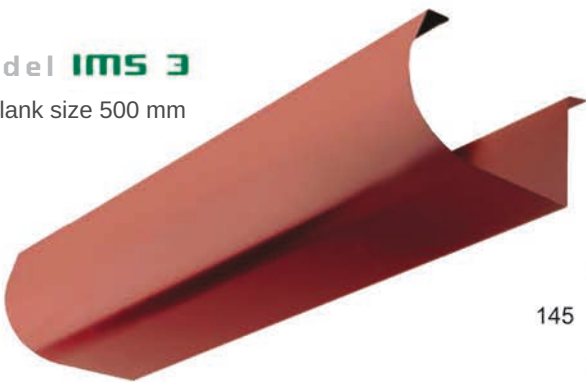
Model **IMS 2**

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b-500 mm



Model **IMS 3**

Blank size 500 mm



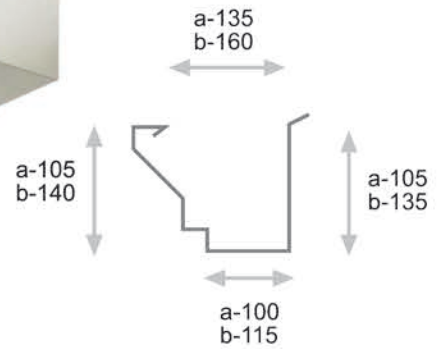
All gutters are available in every material and these colors



Design Gutters

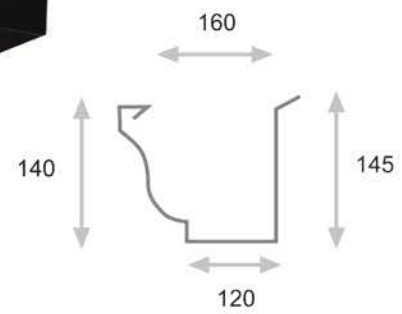
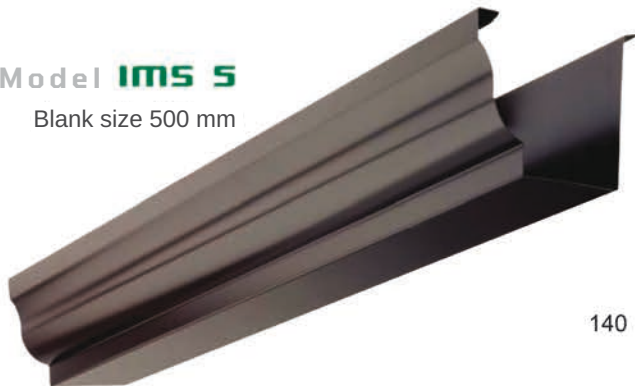
Model **IMS 4**

Blank size a-416 mm
b-500 mm



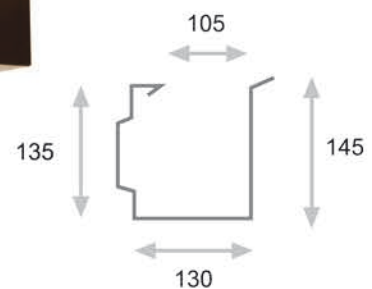
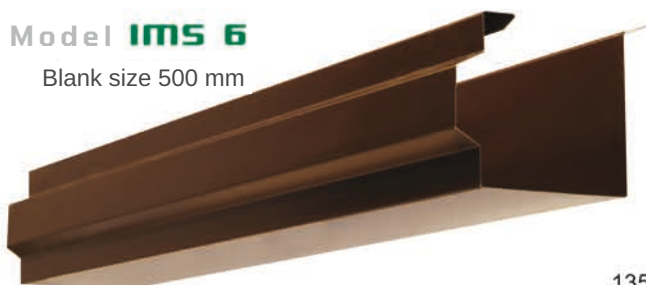
Model **IMS 5**

Blank size 500 mm



Model **IMS 6**

Blank size 500 mm

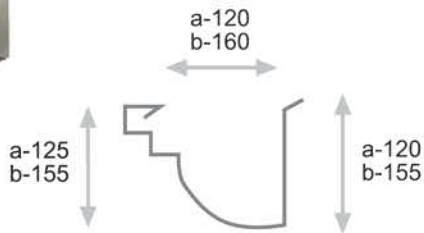


All gutters are available in every material and these colors

Design Gutters

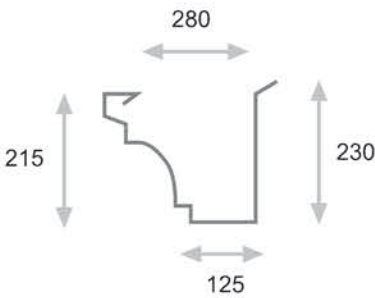
Model **IMS 7**

Blank size a-416 mm
b-500 mm



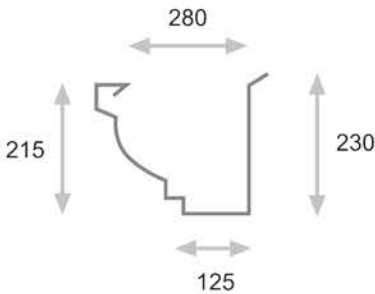
Model **IMS 751**

Blank size 750 mm



Model **IMS 752**

Blank size 750 mm



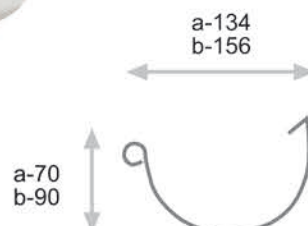
All gutters are available in every material and these colors

Classic Gutters

Model

half-round

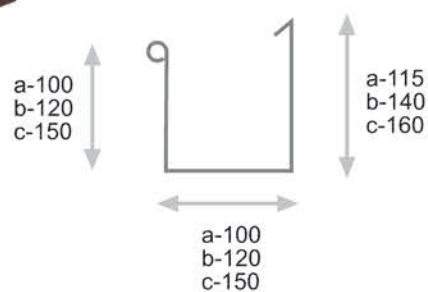
Blank size a-280 mm
b-333 mm



Model

box profile

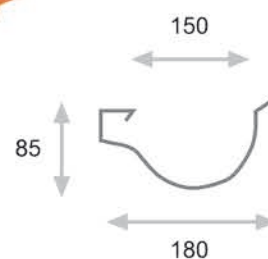
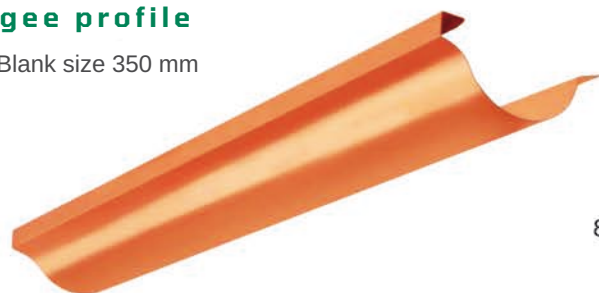
Blank size a-100 × 100 mm
b-120 × 120 mm
c-150 × 150 mm



Model

ogee profile

Blank size 350 mm



All gutters are available in every material and these colors

Quartz-Zinc Gutters



**IMS BACKS A NOBLE, EXPRESSIVE MATERIAL
FOR FORWARD-LOOKING ARCHITECTURE PROJECTS.**

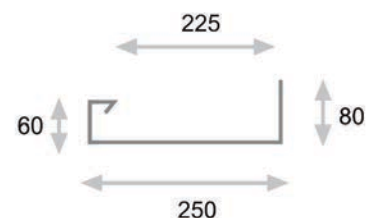
Gutters and finishing profiles for architecture that embraces new design perspectives. The range of profiles – drawn up by architects and planners – invites you to play with combinations and textures: with striking reliefs, minimalist lines or contrasts of light and shadow.

IMS lets you design your own finishing profiles, carrying the building's personality through to the transition between roof and façade. Thanks to our flexible manufacturing system we produce any run length required, however small.

QUARTZ-ZINC

IMS-QZ 101

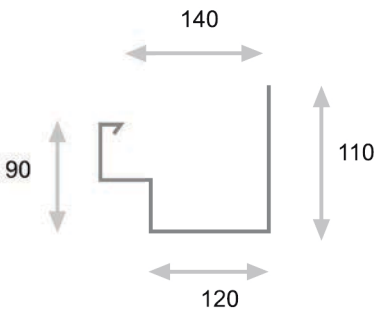
Blank size 500 mm



Quartz-Zinc Gutters

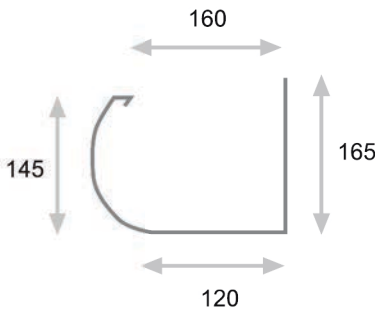
IMS-QZ 102

Blank size 500 mm



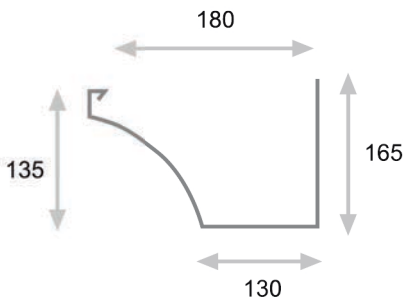
IMS-QZ 103

Blank size 500 mm

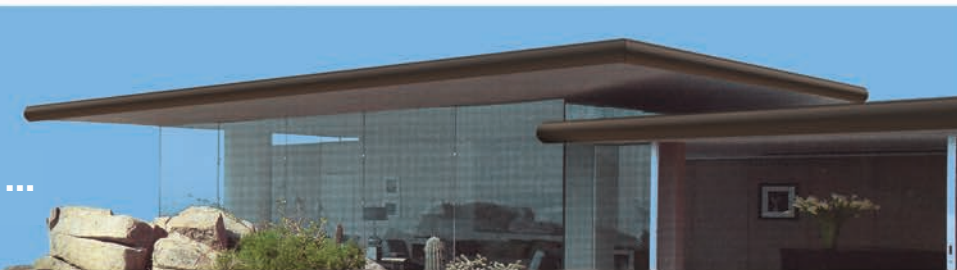


IMS-QZ 104

Blank size 500 mm



A picture is worth
a thousand words ...





FASCIAS: THE DECORATIVE SAFEGUARD

In some cases the gutter doesn't fully hide the concrete fascia – leaving the finish looking visually and technically unfinished. For these cases IMS developed FASCIAS: as a finishing profile they hide and protect the whole concrete fascia, improve the look and reinforce the building's overall visual cohesion.

As with all our products, you can customize the shape of the fascias and choose between different colors and materials.

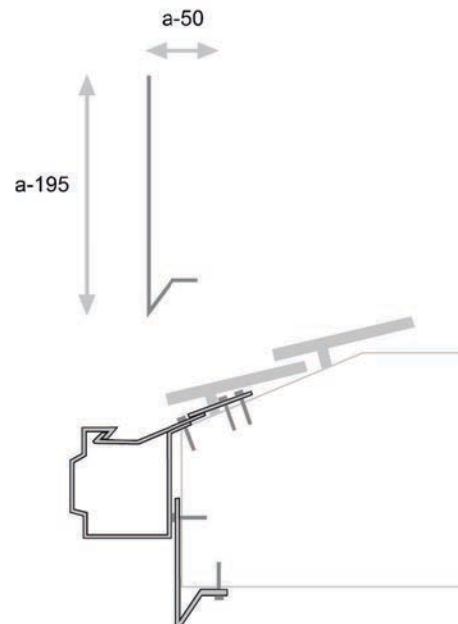
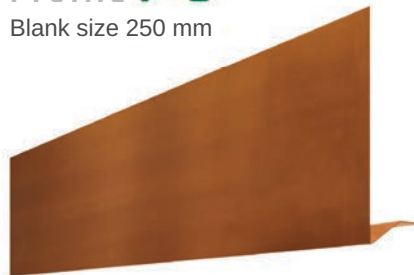
There's a fitting solution for every building – and if in doubt, our team is on hand with technical and design support.

Experience shows fascias extend the working life of the walls they're fitted to, and prevent unsightly damp stains on exterior surfaces.



Profile **F-6**

Blank size 250 mm

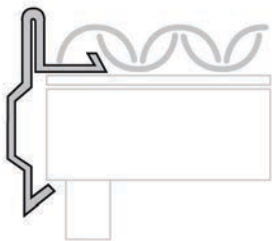
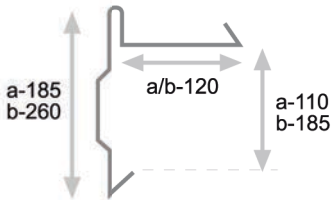
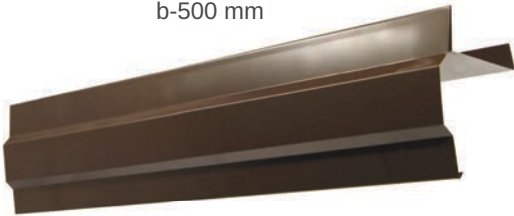


All fascias are available in every material and these colors

Special Profiles

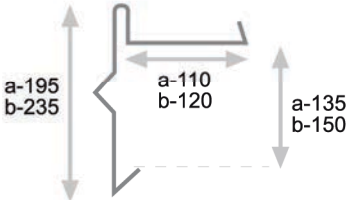
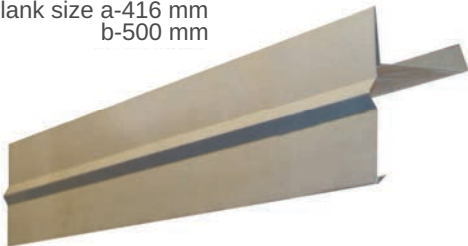
Profile F-1

Blank size a-416 mm
b-500 mm



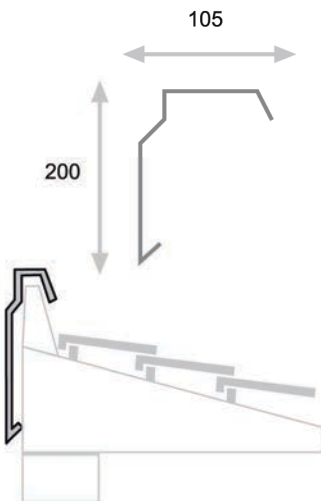
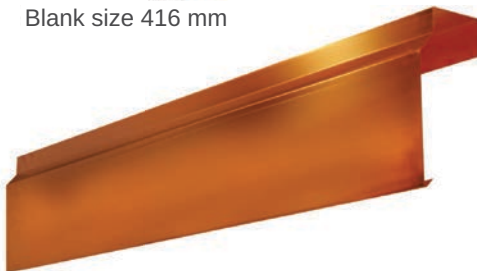
Profile F-2

Blank size a-416 mm
b-500 mm

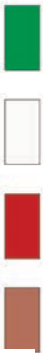


Profile F-3

Blank size 416 mm



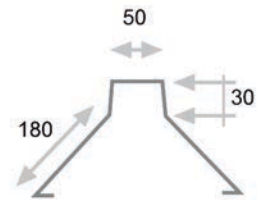
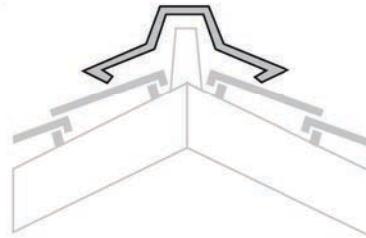
All profiles are available in every material and these colors



Special Profiles

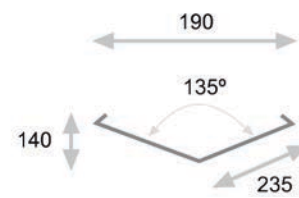
Profile **F-4**

Blank size 500 mm

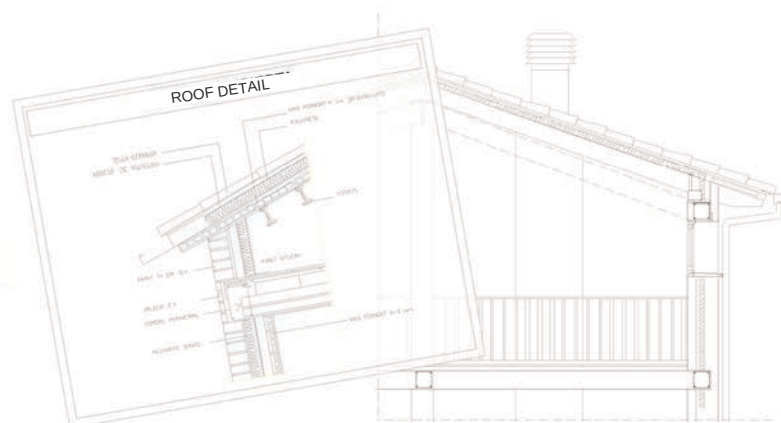


Profile **F-5**

Blank size 500 mm



**You can
design the profile
of your own
gutters and
fascias**



All profiles are available in every material and these colors

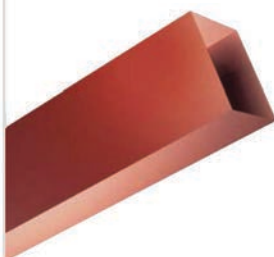
Accessories

Round Downpipes

for rainwater gutters



Square Downpipes



Internal Gutter Brackets

for rainwater gutters



Additional Gutter Brackets

for rainwater gutters



External Gutter Brackets

for rainwater gutters



External Gutter Brackets

for rainwater gutters



Accessories



Pipe Clips

Folded and
Welded Elbows

72° and 90°



Gutter Outlets



Leaf Guard



Funnel Outlets



Inlet Outlets



Accessories

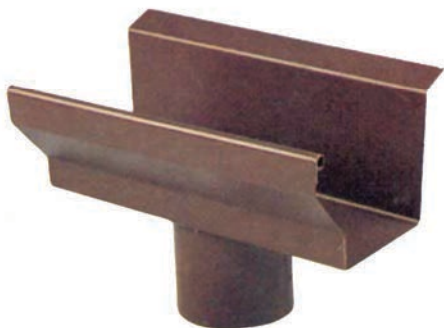
Funnel-Shaped
Branch



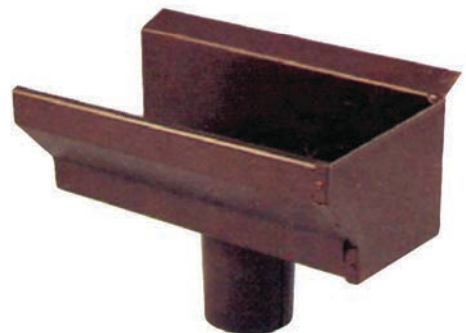
Gutter Angles
External
and Internal



Gutter with
Outlet



Gutter with Outlet
and Outlet Nozzle



Wide Outlet



Crimping Pliers
for
Downpipes



Accessories



Spiral Sleeve



Weather vane

Made of copper and then dipped
in an acid solution to speed up
oxidation



Downpipe Flap

Diverts the first, dirtiest
rainwater away from the
roof.



Gutter Outlet

Gargoyle

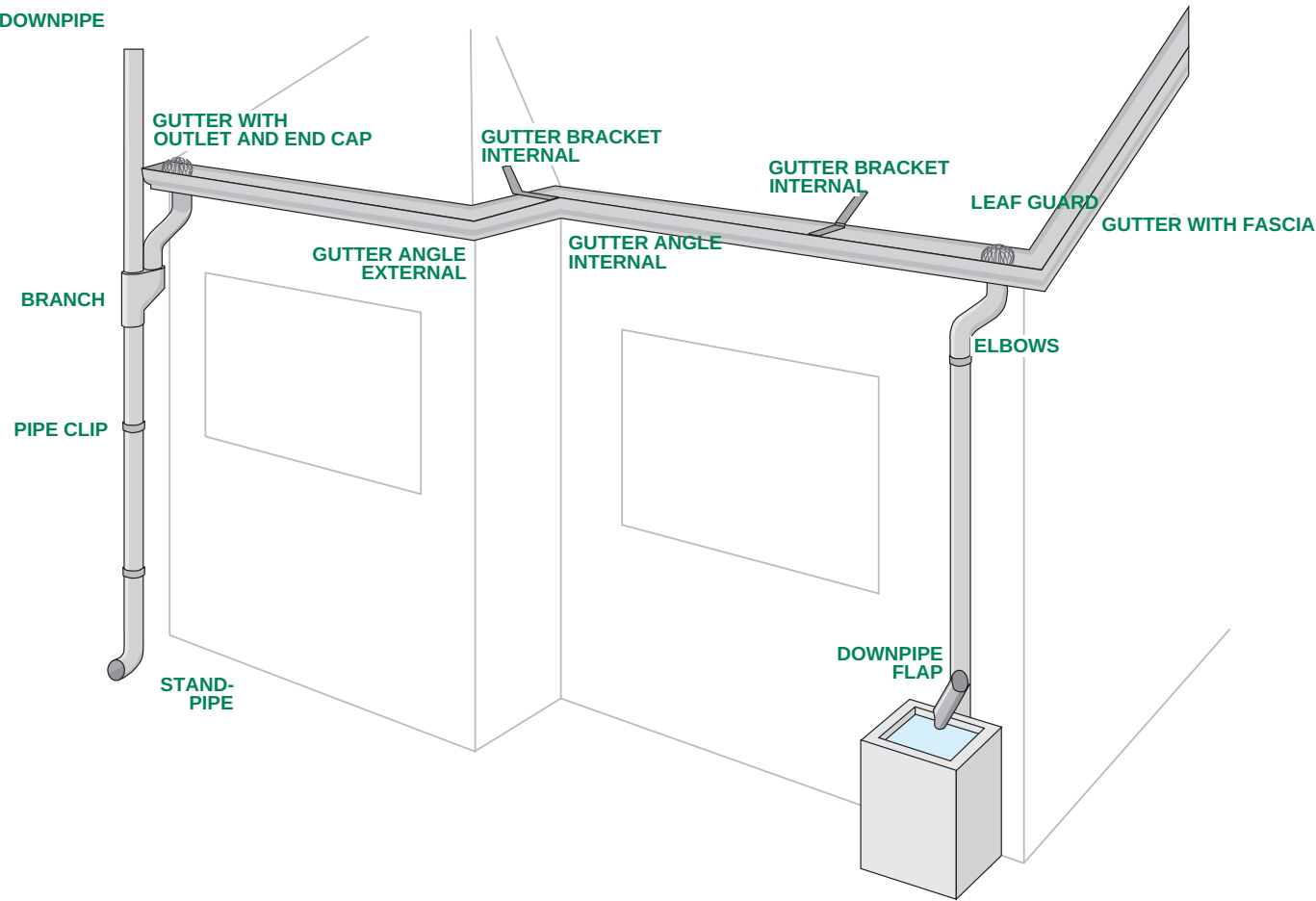
(DRAGON and SNAKE)
Made in Ø 80 and 100 mm.



Wall Rosette



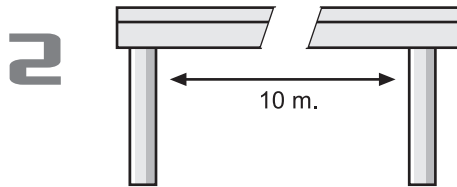
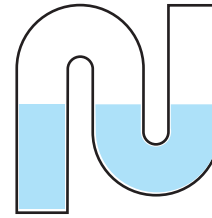
System Overview



Installation

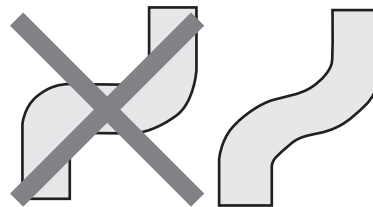
Planning notes for rainwater drainage

- The drainage connection to the sewer system must go through an inspection chamber with a water trap, to keep harmful sewer gases from escaping.

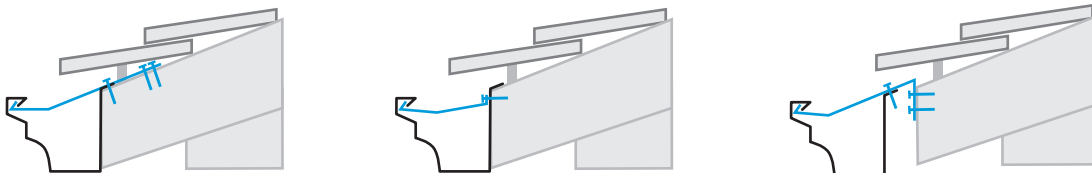


It's advisable to fit one downpipe for every 10 metres of gutter.

- Connecting elbows between downpipe and gutter improve water flow at 72°. 90° elbows can restrict flow and should be avoided where possible.



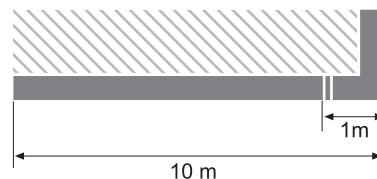
- Various ways of adjusting the gutter brackets.



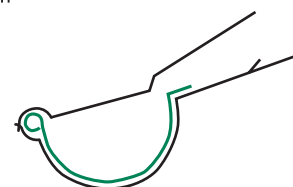
- The following reference table helps size downpipes based on the roof area to be drained.

Ø DOWNPIPE	EFFECTIVE ROOF AREA
80 mm	50 m ²
100 mm	78 m ²
80 × 80 mm	64 m ²
100 × 100 mm	100 m ²

- For copper and quartz-zinc gutters, fit an expansion joint every 10 metres; on gutter angles the expansion joint should sit 1 metre from the corner.



- In areas with heavy snowfall, it's important for the gutter bracket to be ribbed (reinforced) and have a cross-brace at the top, so it doesn't give way under the weight of snow or bend at the front.



Customer Service

Email

comercial@industriasmass.com

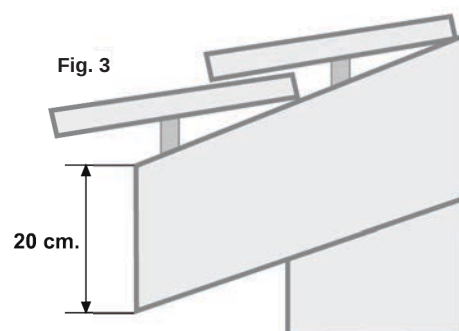
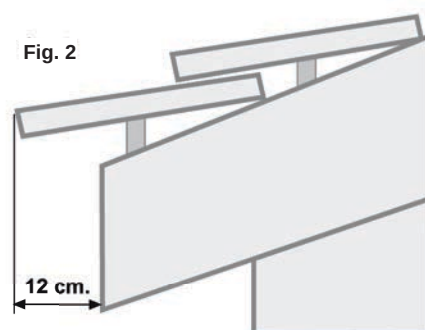
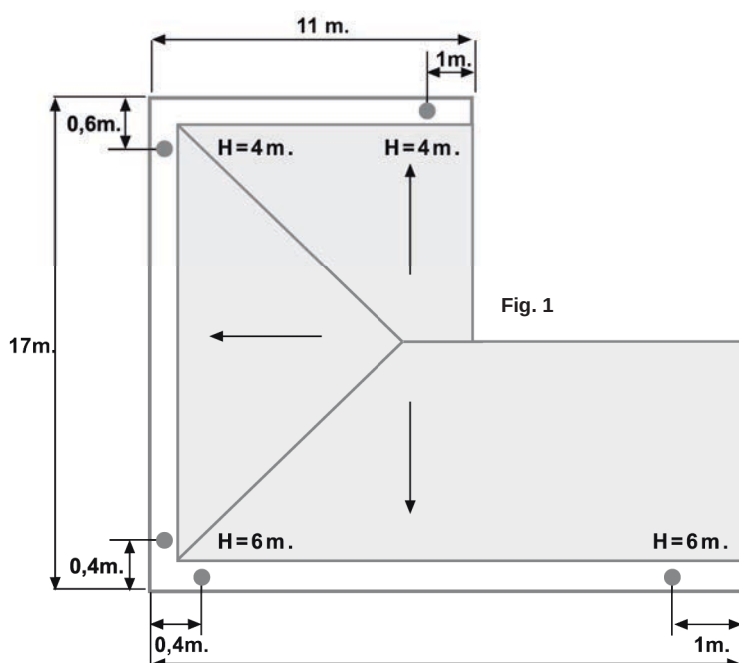
How to Order

It couldn't be easier – we want to make things as simple as possible for our customers. Send us your project plans by email: our technical team will advise you on the material needed and prepare a quote.

To work out and calculate the material we only need a dimensioned sketch of the roof plan showing the downpipe positions and the building height (fig. 1).

For roofs that are already finished, please also give us the tile overhang (fig. 2).

If you'd like to add fascias or side panels, we'll need the height of the ceiling fascia (fig. 3).



Customer Service

Our quotes include

- FULL MATERIALS BREAKDOWN.
- QUANTITY NEEDED FOR EACH PART.
- DETAILED NOTES FOR THE INSTALLER.

Fast Delivery Straight to Site

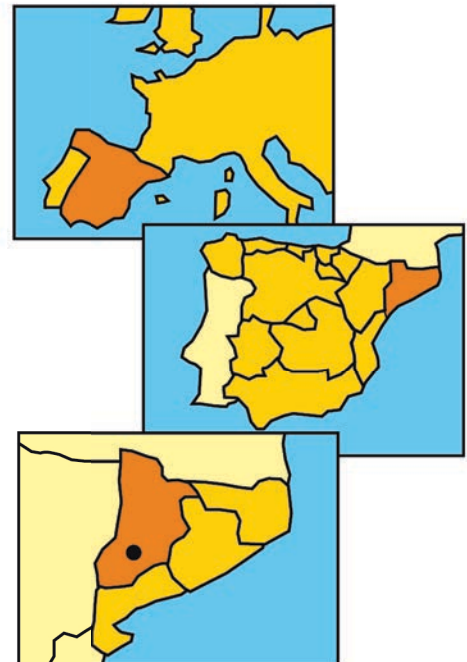
No minimum order quantities – delivery to any site across Spain. Write to us and we'll deliver your order in short order.

Where to Find Us

Industrias Mas Salvadó y Suc. S.L.U.

Carrer Mercuri, 3
25300 Tàrrega (Lleida) · Spain

www.industriasmass.com
comercial@industriasmass.com
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MANUFACTURING RAINWATER GUTTERS AND CHIMNEY CAPS



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