

Pductal
preinsulated aluminium ducts system





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scacciapensieri

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Specialising in just one sector for more than 40 years – air distribution in air conditioning systems.

We have been operating in the air distribution and air conditioning system for three generations, ever since Alberto Griggio first began constructing sheet metal air ducts in a tiny workshop in 1950. In the 70's the growth of the business gradually required the construction of a modern factory and the employment of more than 100 workers.

The P3 company was founded in 1989 and is now controlled by the Griggio Family.

P3 is located just off the Milano-Venezia Motorway in the suburb of Ronchi di Villafranca, 10 km from the city of Padova.

Outdoor area is approximately 15,500 sq m; the roofed area covers about 6,500 sq m.

All P3 construction guarantees quality.

Since 1996 P3 has been certified according to the UNI EN ISO 9000 quality system.

The P3 laboratories and technical staff are constantly involved in new product research and development: one important example is the new **Hydrotec** technology.

P3 manufactures its own sandwich panels, which are always strictly checked to guarantee longer-lasting quality.

P3 now offers three main lines of product: P3ductal, P3isomac and P3airways.



P3ductal

preinsulated aluminium duct system.



P3isomac

machinery panelling system.



P3airways

flexible ducts, grilles; diffusers and A/C accessories.



The patented Hydrotec technology.

In line to national and international directives for the protection of ozone layer which has already prohibited the use cfc gas, P3 has anticipated the time which will proibith also the use of hcfc gas, introducing the new range of PIRAL HD HYDROTEC panels.

The polyurethane insulation material inside the panels is foamed by the exclusive P3 patented chemical reaction between isocyanurate and water as blowing agent; this is the result of a patented technology for which P3 has got the exclusivity.

The insulation material inside the panels, foams using the exclusive patented chemical reaction between isocyanurate and water.

Thanks to this technology, PIRAL HD HYDROTEC panels are harmless for the ozone layer (ODP=0 Ozone Depletion Potential) and greenhouse effect (GWP=0,0001 Global Warming Potential).



P3ductal is the system for construction of preinsulated aluminium ducts.

The system's technical, construction and economic features meet every expectation of all those who want to design or install modern air distribution systems.

The P3ductal system consists of: **Materials:** sandwich panels with external aluminium sheet covering a closed cell insulating material; **Equipment:** specifically designed for all phases of construction and installation; **Know-how:** technical and commercial support for consultants and contractors.

Insulation: continuous and constant in all points in the duct. The special closed cell bio-compatible insulating materials ensure low thermal conductivity and limit the risk of condensation.

Duration: the outer aluminium coating coupled with the insulating material provides sturdiness, rigidity and good resistance to corrosion, erosion and deformation even in special applications.



Hygiene and air quality: the use of aluminium for the internal surfaces of the ducts ensures hygiene and cleanliness.

The problem of ageing of the insulation and consequent release of particles is non-existent.

Safety: P3ductal is certified by the most important international organisations.

Airtight seal: P3ductal ducts ensure an airtight seal approximately four times higher than that of traditional ducts, improving system efficiency and reducing operating costs.

Friction loss: the low number of flanges and limited surface roughness keep linear friction losses at very low levels thereby reducing operating costs.

Construction method: P3 organize meetings and training courses for consultants and contractors. The courses give the theoretical and practical knowledge necessary for optimum usage of the products.

Consultant support: in order to make the consultant's job easier, P3 has developed a computer program for easy, fast and precise duct design.

Energy saving: perfect thermal insulation and optimum airtight seal allow for maximum exploitation of air handling unit capacity, increasing efficiency and reducing operating costs.

Easy design and budgeting: specific exclusive software developed by P3 considerably reduces the time required for designing or estimating a ductwork while ensuring high calculation accuracy at the same time.

Competitiveness: the entire P3ductal system offers indisputable advantages compared to traditional systems. Modifications or enlargements of existing systems are particularly easy and can be done on site.





code 15HP21

panel [choice]

Code 15HP21 Piral Hd Hydrotec Panel.



Polyurethane foam panel with $52 \pm 2 \text{ Kg/m}^3$ density, 20 mm thickness, coated on both sides with 80-micron thick aluminium foil.

The aluminium foil is embossed on both sides and coupled with a 2 g/m^2 layer of corrosion-resistant polyester paint. This panel is especially suited for use in air-conditioning and heating system installations.



code 15HL21

Code 15HL21 Piral HD Hydrotec Smooth Panel.



Polyurethane foam panel with $52 \pm 2 \text{ Kg/m}^3$ density, 20 mm thickness, coated with 80-micron thick aluminium foil. The aluminium foil is embossed on one side and smooth on the other and coupled with a 2 g/m^2 layer of corrosion-resistant polyester paint.

This panel is especially suited for use in air-conditioning and heating system installations where strict hygiene standards are required.



code 15HE21

Code 15HE21 Piral HD Hydrotec Panel Coupled W/Polyester Film.



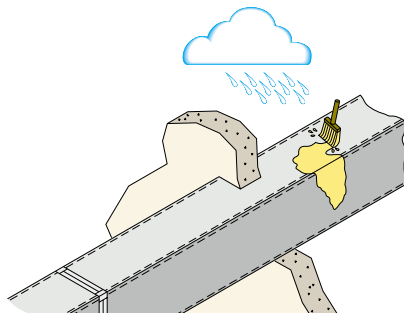
Polyurethane foam panel with $52 \pm 2 \text{ Kg/m}^3$ density, 20 mm thickness, coated on both sides with 80-micron thick aluminium foil.

The aluminium foil is embossed on both sides and coupled with a 13-micron thick corrosion-resistant polyester layer. This panel is especially suited for use in air-conditioning and heating system ducting in particularly aggressive atmospheres (cheese seasoning rooms, salty air, swimming pools, etc.)





code 15HS31 - 21GS01



code 15HS31 - 21GS01



code 15HP31

Code 15HS31 Piral Hd Hydrotec Outsider Panel.



Polyurethane foam panel with $48 \pm 2 \text{ Kg/m}^3$ density, 30 mm thickness, coated with 200-micron thick aluminium on one side and 80-micron on the other. The aluminium foil is embossed on both sides and coupled with a 2 g/m^2 layer of corrosion-resistant polyester paint.

The combination of the panel's overall thickness (30 mm), the Gum Skin waterproof coating and the 200 micron thickness of the external aluminium coating, gives the panel an extraordinary rigidity and that special mechanical resistance against accidental damages (perforations) which makes the panels suitable for outdoor installations.

Code 21GS01 Gum Skin Waterproof Coating.

Gum Skin is a rubbery waterproofing agent with elastomeric properties, UV radiation resistance and excellent freezing/thawing performance. The special fungicide, bactericide and internal-action plasticization agents added ensure that the product remains unaltered over the years even in conditions of average industrial pollution. Gum Skin is supplied ready to use. Mix and apply by brush or roller directly onto exposed external ducts previously cleaned. Distribute the product evenly over the tape and flanging to a thickness of $0.6 \div 1.0 \text{ mm}$. Yield: $500 \div 800 \text{ cc/m}^2$. Application and cross-linking temperature: from $+5$ to $+35 \text{ C}^\circ$.

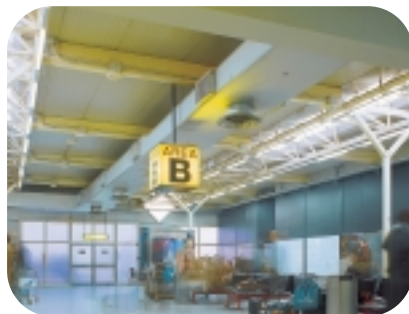
Standard colour: white; other colours available on request. Packaging: 15 litre drum.

Code 15HP31 Piral Hd Hydrotec Big Size Panel.



Polyurethane foam panel with $48 \pm 2 \text{ Kg/m}^3$ density, 30 mm thickness, coated with 80-micron thick aluminium foil. The aluminium foil is embossed on both sides and coupled with a 2 g/m^2 layer of corrosion-resistant polyester paint. The panel's overall thickness (30 mm), gives to the panel an extraordinary rigidity which makes the panels suitable for the construction of big size ducts reducing the number of reinforcements needed.





code 14PR01



The polyurethane insulation material inside the panels is foamed by water through the exclusive patented chemical reaction. The polyurethane insulation material inside the panels is foamed by the exclusive P3 patented chemical reaction between isocyanurate and water.

Piral HD Hydrotec panels are harmless for the ozone layer (ODP=0) and greenhouse effect (GWP=0,0001).

Code 14PR01 Piralyte Panel CFC-Free 20 mm.

Phenolic resin foam panel with $60 \pm 2 \text{ kg/m}^3$ density, 20 mm thickness, orange-pink colour, coated with 80-micron thick aluminium foil embossed on both sides. This panel is especially suited for use in ducts where special fire performances and flue gas emission characteristics are required.

Code 15HG21 Piral HD Hydrotec Panel.

Polyurethane foam panel with $48 \pm 2 \text{ Kg/m}^3$ density, 20 mm thickness, coated on both sides with 60-micron thick aluminium foil. The aluminium foil is embossed on both sides and coupled with a 2 g/m² layer of corrosion-resistant polyester paint. This panel is especially suited for construction of medium/small size ducts.

Code 32SC02 Sturdy Cardboard Packaging.

Standard package plus sturdy cardboard box for every panel package.

Code	Dimensions		Technical data			
	b x h	Thickness	Density	Aluminium Thickness	Conductivity at 10 °C	Rigidity class*
15HP21	400 x 120cm	2 cm	$52 \pm 2 \text{ [kg/m}^3\text{]}$	80/80 µm	0,024 [W/(m°C)]	200.000
15HL21	400 x 120cm	2 cm	$52 \pm 2 \text{ [kg/m}^3\text{]}$	80/80 µm	0,024 [W/(m°C)]	200.000
15HE21	400 x 120cm	2 cm	$52 \pm 2 \text{ [kg/m}^3\text{]}$	80/80 µm	0,024 [W/(m°C)]	200.000
15HP31	400 x 120cm	3 cm	$48 \pm 2 \text{ [kg/m}^3\text{]}$	80/80 µm	0,024 [W/(m°C)]	300.000
15HS31	400 x 120cm	3 cm	$48 \pm 2 \text{ [kg/m}^3\text{]}$	200/80 µm	0,024 [W/(m°C)]	900.000
14PR01	400 x 120cm	2 cm	$60 \pm 2 \text{ [kg/m}^3\text{]}$	80/80 µm	0,031 [W/(m°C)]	150.000
15HG21	400 x 120cm	2 cm	$48 \pm 2 \text{ [kg/m}^3\text{]}$	60/60 µm	0,024 [W/(m°C)]	100.000

* Verify the need of reinforcements. See table at page 31



Plotting [ducts fittings]

Code 22TV01 Folding Work Table.

This sturdy work table built in painted steel with varnished plywood work surfaces is 4 meters long and composed of 2 meter folding semi-tables that permit easy transport even at the work site.



The supplied matting for the work table permits pass-through cuts to be made with the jack planes without moving the panel.

The support brackets applied to the table's legs permit the handy storage of both the 4 and the 1.2 meter rulers.

Code 22TV02 Spare Matting.

This is the green "miniature-golf"-type polypropylene matting for the (22TV01) work table.



Code 22MT01 Nylon Marking Pencil.

Code 22MR01 Folding Ruler in Stiff Plastic.

Code 22MR02 Tape-Measure 5 m Length.

Code 22SQ07 700 mm Square in Aluminium.

Code 22SQ12 1200 mm Square in Aluminium.

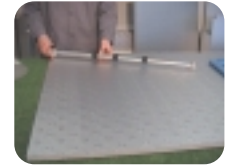
Code 22DM01 P3Ductal Template.

Aluminium template suitable for the plotting of internal radii of ducts fittings by indicating the centre of external curvature radius to be drawn by telescopic compass.





Code 22CM04 Telescopic Compass.



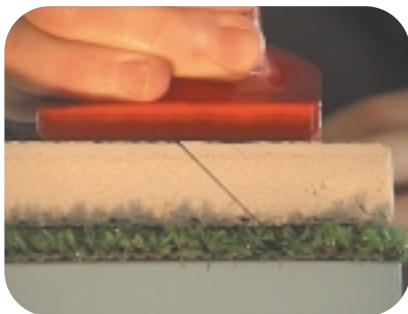
Aluminium compass made of three sliding elements which permit to plot radii from 12 to 130 cm. The cursor has a marking tip which prevents damage to the panel coating.



Code 22GN01 Stainless Steel Goniometer.

This handy chromium-plated stainless steel goniometer is indispensable in the plotting of the correct angles.





Cutting [ducts fittings]

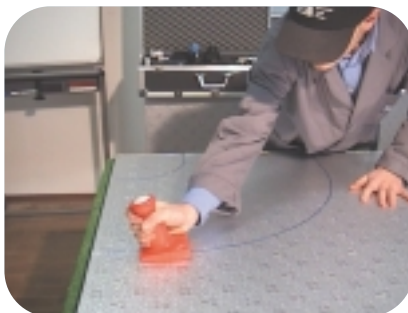
Code 22PL01 45° Left Jack Plane mod. 98.

Code 22PL02 45° Right Jack Plane mod. 98.

Code 22PL03 90° Straight Jack Plane mod. 98.

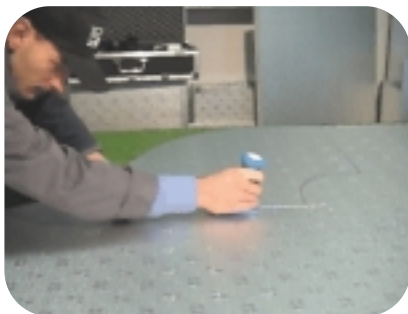
These jack planes have an appropriate internal lodge in which you can find 5 blades together with one hexagonal wrench.

They are supplied in different colours according to the angle blade. Different blade lengths permit the cutting of both 20 and 30 mm panels.



These comfortable jack planes in painted cast aluminium have a special ergonomic shape that permits cuts to be followed with speed and precision.





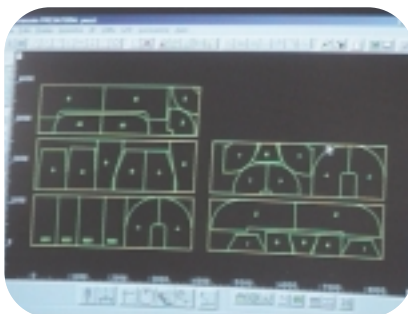
Code 22PL04 20 mm Jack Plane Spare Blades.

Code 22PL05 30 mm Jack Plane Spare Blades.

Code 22PT01 Computerized Cut System Machine (CAM).

Special numeric control machine for the automatic cutting of ducts fittings.

Optimised panel cutting (nesting) permits significant waste reduction.



Using specific tools, the machine can cut the panels to any angle.

Please contact P3 for further information.





Code **22VL05** P3ductal Tool Box Mod. 98.

This is a high quality tool box with an aluminium frame, sturdy toggle closing and lock (with 2 keys) and comfortable transport handle.

The tool box is equipped with a tray of the tools.

Tool Box Contents (22VL05).

Q.ty	Code	Description
n. 1	22BR04	"T" Hexagonal Wrench No. 3
n. 1	22CM04	Telescopic Compass
n. 1	22CT01	Cutter
n. 1	22CT02	Hack-Saw
n. 1	22LB01	File W/Abrasive Surface
n. 1	22ML01	Special Anti-Rebound Hammer
n. 2	22MR01	Folding Ruler in Stiff Plastic
n. 1	22MR02	Tape-Measure 5 m Length
n. 4	22MT01	Nylon Marking Pencil
n. 1	22PC46	Double 45° Blade-Holder Cartridge for 30 mm Thickness
n. 1	22PD01	Tool-slide
n. 1	22PD46	Double 45° Blade-Holder Cartridge

Q.ty	Code	Description
n. 1	22PL01	45° Left Jack Plane mod. 98
n. 1	22PL02	45° Right Jack Plane mod. 98
n. 1	22PL03	90° Straight Jack Plane mod. 98
n. 5	22PL04	20 mm Jack Plane Spare Blades
n. 5	22PL05	30 mm Jack Plane Spare Blades
n. 1	22PN01	Straight Pliers for Invisible Flange Joint
n. 1	22PN02	90° Pliers for Invisible Flange Joint
n. 2	22SG01	Adjustable Tape Marker
n. 5	22SL01	Soft Spatula
n. 2	22SL02	Stiff Spatula
n. 2	22SM01	Manual Glue Spreader
n. 1	22SZ01	Panel Brush





Cutting [straight ducts]

Code 22ST12 1200 mm Length Aluminium Ruler.

Code 22ST40 4000 mm Length Aluminium Ruler.

This ruler is built entirely in aluminium.

The locking system at the ends of the ruler permits an easy and fast locking of the panel to the work table (22TV01).

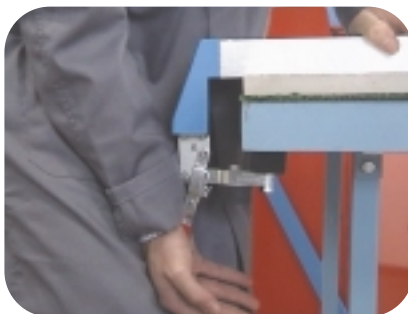
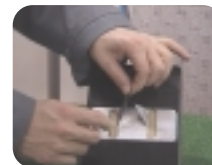
The ruler serves as a guide for the jack planes and permits to make precise and straight cuts. The rulers have two rubber support feet of different height for alternate use in the locking of both the 20 and the 30 mm panels.



Code 22PD01 Tool-slide.

This comfortable and handy double-blade jack plane is supplied in painted cast aluminium.

The correct blade length permits V cuts in the panels without marking the inferior aluminium foil.



Thanks to its weight and ample lateral base, this double-blade jack plane is particularly easy to manoeuvre and is used supported by the rulers, while the slotted holes at the sides permit rapid blade replacement.





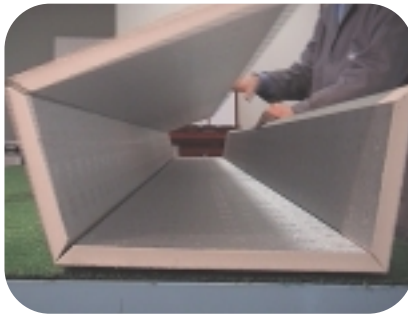
Code 22PD46 Double 45° Blade-Holder Cartridge.

It permits double 45° inclined V cuts to manufacture rectangular section ducts.

Code 22PC46 Double 45° Blade-Holder Cartridge for 30 mm Thickness.

Code 22BR04 "T" Hexagonal Wrench No. 3.

To permit an easy replacement, positioning and adjustment of the blades.





Code 22LN10 Automatic Straight Cut Machine mod.98.

This is an automatic panel cutting machine that permits 45°, 90° or double 45° inclined cuts to be made on both 20 mm and 30 mm thick panels. A duct 4 meters long and ready for gluing can be made trough just one single passage.

The machine is built in aluminium and painted steel and equipped with 1 entry roller and 1 exit roller. The lifting and lowering system of the rulers permits a swift switch from 20 mm to 30 mm thick panels and the jack plane locking system permits rapid positioning to the desired measurements. This machine is built according to the 89/392 CEE directive and further amendments.

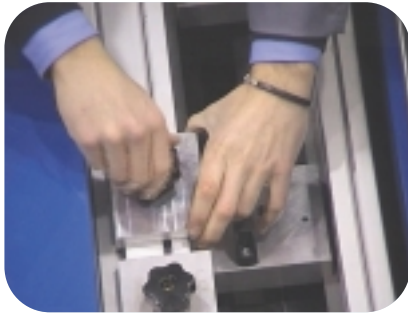


Standard Equipment.

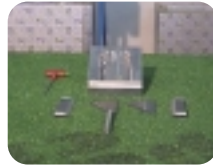
Each machine is provided with the following tools:

N°	Description	Function
5	Double 45° blade holder	"V" cut
1	Double 45° blade holder with 90° seat	"V" and straight cut
8	Blades	Cut
1	Prism for the align of blades	Blades mounting and aligning on blade holders
1	Wrench 13 mm	Roller bench connection to the machine
1	Wrench 14 mm	Roller bench height regulation (on the feet)
1	Wrench 17 mm	Machine height regulation (on the feet)
1	Grinder tool	Grinding of blades
1	Hexagonal wrench 3 mm.	Blades fastening on blade holders
1	Hexagonal wrench 4 mm.	Machine set up
1	Hexagonal wrench 5 mm.	Roller bench set up
1	Hexagonal wrench 6 mm.	Machine set up



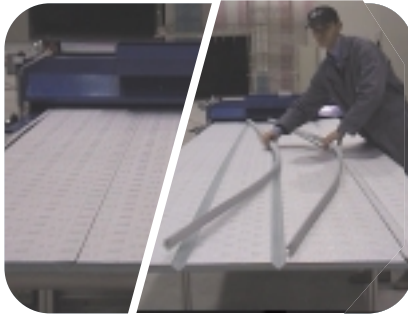


Code 22LN04 Universal Jack Plane for Automatic Straight Cut Machine mod 98.



It permits 45°, 90° or 45° inclined cuts.

Code 22LN07 Spare Blades for Automatic Straight Cut Machine.





Bending [ducts fittings]

Code 22PG01 Bending Machine mod. 97.

This painted steel bending machine is suitable for easy and precise panel bending.

An eccentric cam lever system facilitates the bending of both 20 mm and 30 mm thick panels up to 1200 mm wide with any curvature angle.

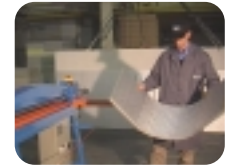
Its compact dimensions and weight facilitate transport.

The grid created by the positioning of the logo becomes a handy point of reference for the subsequent plotting and bending operations.

This extra touch makes your work easier... to be precise.



Code 22CL04 Electric Plate Bending Roll mod. 98.



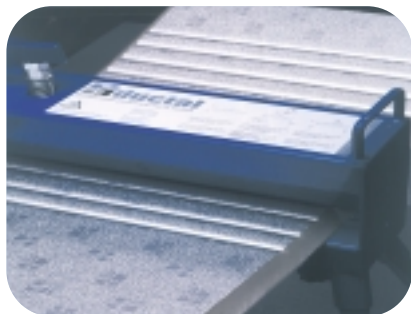
This completely automatic bending roll comes complete with a solid base and a reference square for rapid and perfectly uniform, circular bending.

Thanks to the toothed roller, this machine ensures that the ribs in the panel are all perfectly equidistant.

Panels of up to a maximum width of 1200 mm and minimum radii of curvature can be bent.

This machine is built in compliance with 89/392 CEE standards and relevant amendments.

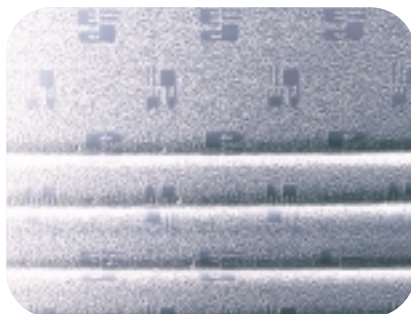




Code 22PD16 Double 15° Blade-Holder Cartridge.



It permits to obtain 30° external angles in the panels.



Code 22PD23 Double 22.5° Blade-Holder Cartridge.

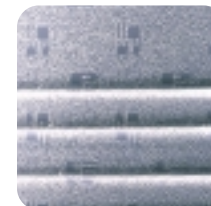
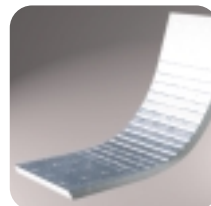


It permits to obtain 45° external angles in the panels.



The P3 logo... to be precise.

The grid created by the positioning of the logo becomes a handy point of reference for the subsequent plotting and bending operations.



This extra touch makes your work easier... to be precise.





Gluing [straight ducts and fittings]

Code 22LB01 File W/Abrasive Surface.

Gum pad W/Abrasive Surface.

Code 22SZ01 Panel Brush.

Used to brush away the dust from panels after cutting.



Code 22SM01 Manual Glue Spreader.

With 250 gr. tank and interchangeable brush.

Code 22SM02 Spare Brush for Manual Glue Spreader.

Code 22SP01 Pneumatic Glue Spreader mod. 98.

This 98 Model glue spreader is indispensable for the application of "PAINT" (21CL01 or 21CL02) glue. The large capacity tank easily stores a 15 kg tin of glue.

The wide filling hole facilitates glue loading and is equipped with an anti-spray closing system.

The glue spreader is supplied with a hand pump which permits to pressurize the tank whenever a compressor is not available or whenever electric energy is not supplied. The safety valve eliminates the risk of overpressure. The glue spreader supplies the desired quantity of glue when the gun trigger is pressed. Big size brush facilitates the glue distribution on the panels.





Code 22SP02 Spare Gun for Pneumatic Glue Spreader mod. 98.

Gun made of thermoplastic, shockproof and athermic material. The gun's essential feature is that it requires virtually no maintenance. The pressure seal is guaranteed by a liner-free mechanical closing.

Code 22SP03 Spare Flexible Hose for Pneumatic Glue Spreader mod. 98.

This flexible tube permits to connect the pneumatic glue spreader to the gun and comes complete with swivel connections to keep the hose from tangling, and two springs at each end of the hose to prevent crushing. This flexible hose is supplied together with the pneumatic glue spreader or as a spare part.



Code 22SP04 Spare Brush Pipe Support for Pneumatic Glue Spreader mod. 98.

Shaped threaded steel pipe ready to insert in the gun (22SP02) and carry the panel brush (22SP05).

Code 22SP05 Spare Brush for Pneumatic Glue Spreader mod. 98.

Code 21CL00 Solvent for "PAINT" Glue.

This is a special mixture of solvents for maximum 10-15% dilution with "PAINT" glues when required. Ideal for the cleaning of tools and spreading machine brushes dirty with glue, this solvent is supplied in ready-to-use form.



Code 21CL01 "PAINT" Glue 5 Kg (Product Subject to Expiration).

Code 21CL02 "PAINT" Glue 15 Kg (Product Subject to Expiration).

This special glue has been specifically formulated to obtain perfect adhesion on P3ductal panels foam. The product is supplied ready-to-use. Always make sure to provide adequate ventilation.

Code	Item	Application	Application temperature (°C)	Drying Time*	Suited for...
21CL01	"PAINT" Glue 5 kg	by brush	+10 °C / +50 °C	15/ 30 min.	panels
21CL02	"PAINT" Glue 15 kg	by brush	+10 °C / +50 °C	15/ 30 min.	panels

* Time calculated under standard weather conditions at 20 °C and 50% HR





Closing [straight ducts]

Code 22SL02 Stiff Spatula.

Code 22SG01 Adjustable Tape Marker.

Code 21NS01 75 mm Aluminium Tape (50 m Roll).

Code 21NS02 75 mm P3ductal Aluminium Tape (50 m Roll).

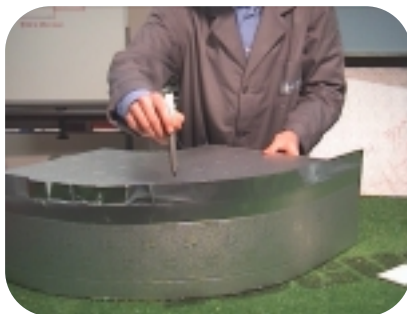
Self-adhesive aluminium tape to use in the construction of the ducts. Applied at the corners, it improves the finish and contributes to the creation of the vapour barrier. The silicone paper tape backing permits easy roll unrolling and facilitates application. The tape must be applied at a temperature of from + 10 - + 40°C. Adhesive layer thickness is 0.07 mm. Work temperature is from - 40 °C to + 65 °C.



Code 22SL01 Soft Spatula.

Supplied in plastic and used to spread out the aluminium tape. When used during the taping phase, it guarantees a perfect adhesion on the surface.





Code 22CT01 Cutter.

With retractable blade and lock device, this cutter is useful for cutting the aluminium tape.

Code 22LM01 Cutter Spare Blades.

Code 22TN01 Section Bar Cutting Machine.

This machine with sturdy, handy structure is especially indicated for the cutting of aluminium or plastic section bars. Equipped with universal motor and manifold with drive shaft mounted on ball bearings to offer the following advantages:

- Increased cutting capacity
- Greater power to prevent blade stopping during cutting, breakage of teeth and/or damage to workpiece. This machine is also equipped with trigger switch and lock button.

Maximum section cut capacity:

- 90° cut : 96 x 170 mm
- 45° cut: 96 x 116 mm
- 90° cut w/45° blade: 62.5 x 170 mm
- 45° cut w/45° blade: 62.5 x 95 mm
- upper layer cut max depth.: 67 mm.





Code 21CL06 Ultra-Rapid Glue 50 gr. (Product Subject to Expiration).

Code 21CL07 Ultra-Rapid Glue 500 gr. (Product Subject to Expiration).

This medium-viscosity “super-glue” is used to glue aluminium section bars to the panels in just a few seconds, and is extremely useful in the work site where it permits the section to be connected in very short times, even at low temperatures.

Code 21CL08 “Profiles” Glue 500 gr. (Product Subject to Expiration).

This medium-viscosity adhesive has been formulated for the gluing of aluminium and Polymer section bars. This adhesive can be used in the gluing of straight ducts without requiring pressing at the end of the operation.



Code	Item	Application	Application temperature (°C)	Drying Time*	Suited for...
21CL06	Ultra-Rapid Glue 50 gr. Direct by bottle		-20 °C / +50 °C	5 min.	aluminium section bars
21CL07	Ultra-Rapid Glue 500 gr. Direct by bottle		-20 °C / +50 °C	5 min.	aluminium section bars
21CL08	“Profiles” Glue 500 gr. Direct by bottle		+5 °C / +50 °C	2-3 hours	panels alu/pvc sect. bars

* Time calculated under standard weather conditions at 20 °C and 50% RH.

Code 22ML01 Special Anti-Rebound Hammer.





Code 21SL01 Sealant Aluminium Colour (Product Subject to Expiration).

Single-component silicone sealant with acetic reaction applied in a semi-dense paste that in just a few hours transforms into a rubbery, elastic substance that resists atmospheric agents and high and low temperatures alike.

The special "aluminium" colour and technical characteristics make this material ideal for use in P3ductal duct construction.

Code 21SL02 Special Sealant, Sanitary Use, White Colour (Product Subject to Expiration).

Single-component rapid-polymerisation silicone sealant that contains an efficient fungicide that prevent mildew formation.

This product is indicated in the construction of ducts that convey particularly humid air.

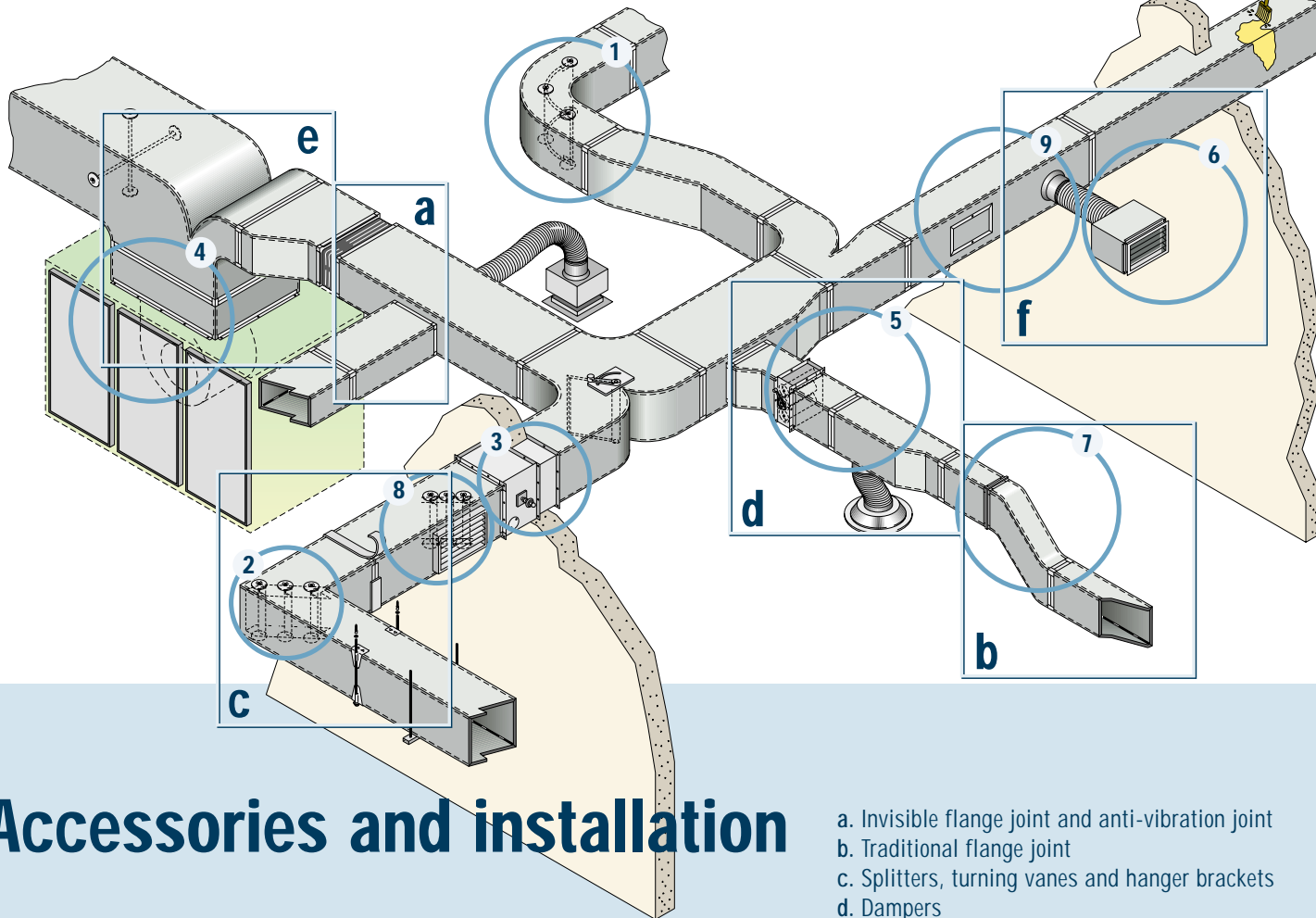
Code 22PS05 Silicone Rifle.

Special rifle used for sealant silicone application.

Indispensable for the sealing of ducts even 4 meters long.

Code 22PS06 Silicone Rifle Tip.

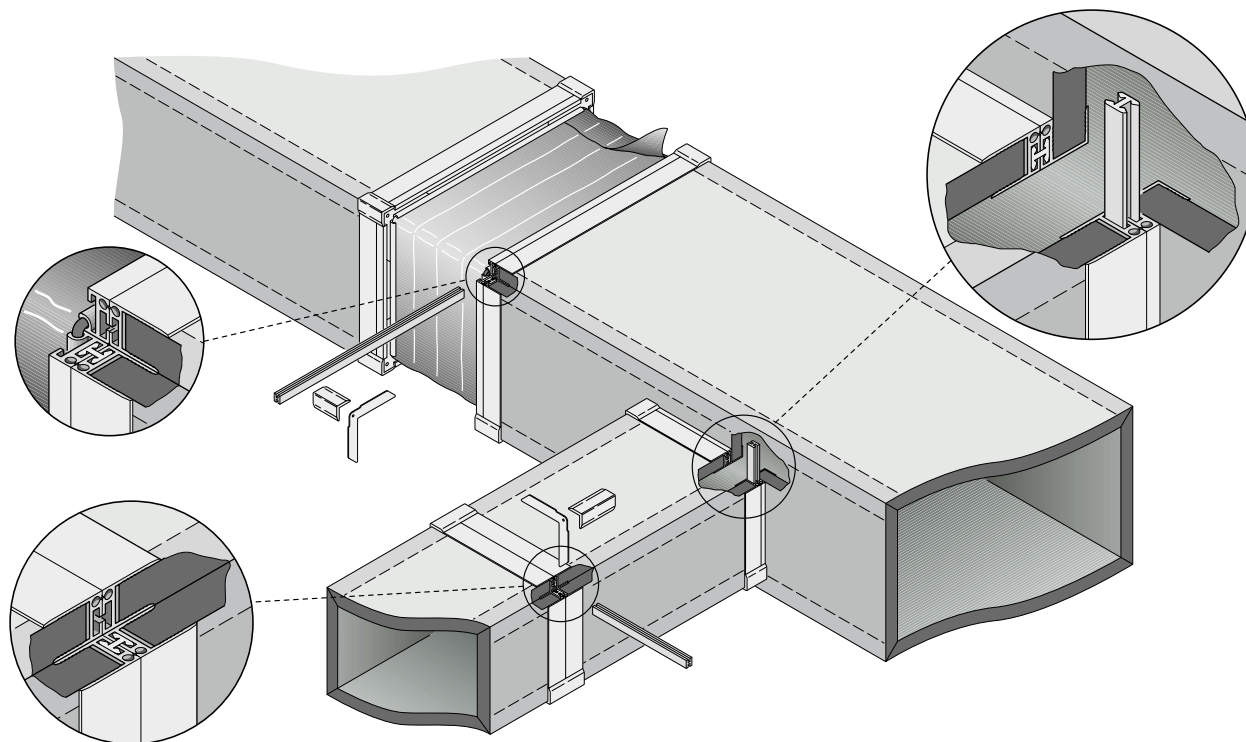




Accessories and installation

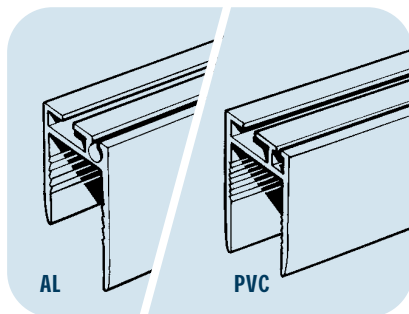
- a. Invisible flange joint and anti-vibration joint
- b. Traditional flange joint
- c. Splitters, turning vanes and hanger brackets
- d. Dampers
- e. AHU connection and reinforcements
- f. Grilles and access doors





**Invisible flange joint
and anti-vibration joint.**





Invisible flange joint in aluminium and Polymer

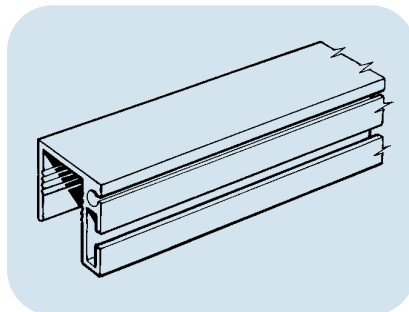
Code 21FN01 Invisible Flange Joint in Aluminium 20 mm.

Code 21FN06 Invisible Flange Joint in Aluminium 30 mm.

Code 21FN02 Invisible Flange Joint in Polymer 20 mm.

Code 21FN09 Invisible Flange Joint in Polymer 30 mm.

This special patented section bar permits ducts to be joined with extremely low leakage. The panels are joined in their width sections through the "H"-type bayonet structure without using any gaskets at all. The absence of any external protuberances is particularly appreciated in exposed duct installations. This section bar is equipped with holes for the use of the special 22PN01/02 pliers that facilitates bayonet insertion. The bars are supplied in 4 meter lengths.

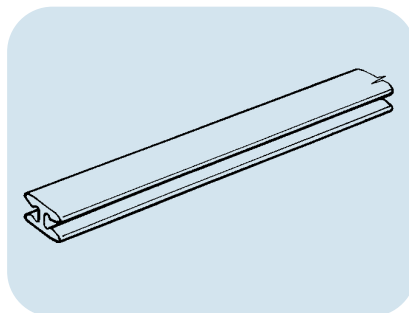


Tee connector flange joint

Code 21FN03 Tee Connector Flange Joint in Aluminium 20 mm.

Code 21FN07 Tee Connector Flange Joint in Aluminium 30 mm.

This patented section bar permits the flanging of one duct into the side of another. Ideal for the creation of take-offs and tap-ins and connection into the plenum chamber. This section bar permits quick flanging without the use of glues or gaskets with only aluminium inside and outside the duct. By working exclusively from the outside, take-offs and tap-ins of lengths up to 4 meters can be connected. The absence of any external protuberances is particularly appreciated in exposed duct installations. This section bar is equipped with holes for the use of the special 22PN01/02 pliers that facilitates bayonet insertion. This section bar is built in natural UNI 6060 aluminium alloy and supplied in 4 meter bars.



H Bayonet in Polymer

Code 21FN04 H Bayonet in Polymer.

Built entirely in shock-resistant Polymer, this piece permits "invisible flanges" to be connected. The special "H" design reduces attrition points and the special self-lubricating material permits easy insertion in the flange. This bayonet eliminates the need for every other type of gasket to create an exceptional seal and is no longer visible after insertion. Supplied in 2 meter rods.



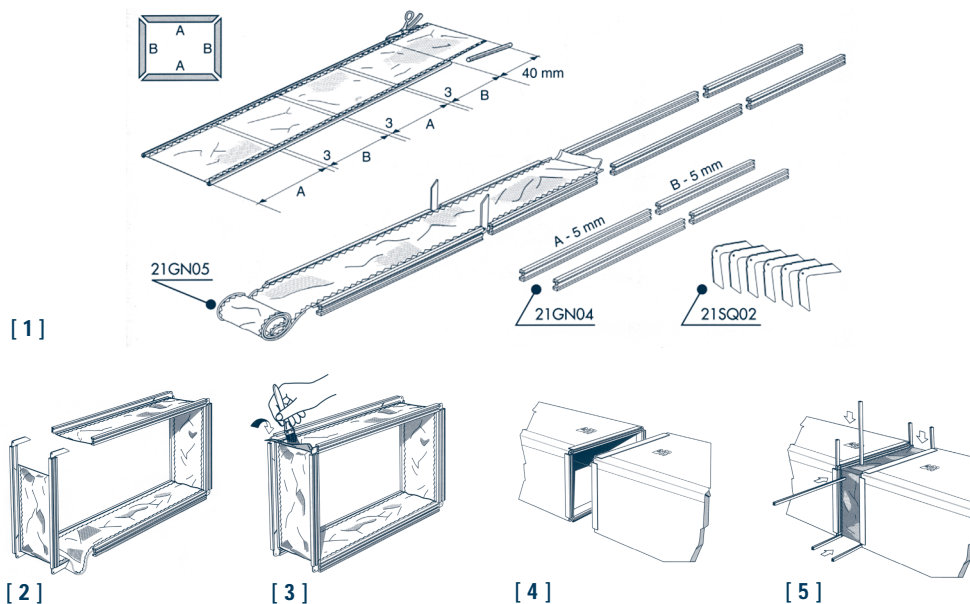


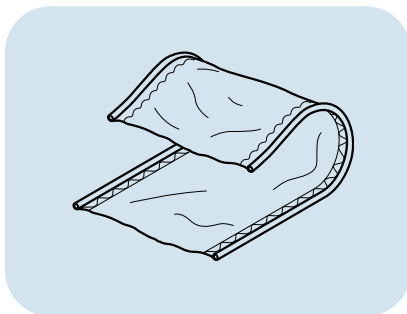
Code 21FN08 Covering Angle in Polymer 30 mm.

This covering angle aesthetically completes the “invisible” flanging and the take-off and tap-in flanging systems. When fit into the appropriate cavities, this piece prevents the bayonets mounted in vertical position from exiting due to vibration. Once inserted, this angle provides the flange with the perfect aesthetic finish.

Code 21GN04 Section Bar Supporting Anti-Vibration Sheet.

This patented section bar permits to build the anti-vibration joints in combination with the anti-vibration sheet (21GN05) and the zinc-coated steel angle brackets (21SQ01). The section bar can be used for the connection of both 20 mm and 30 mm P3ductal invisible flanges through the bayonet (21FN04). Built in UNI 6060 aluminium alloy.

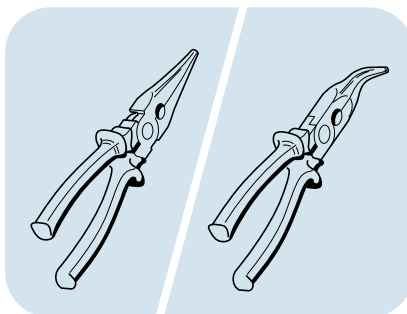




Anti-vibration sheet

Code 21GN05 Anti-Vibration Sheet H= 100mm (25 m Roll).

PVC-coated polyester sheet with rubberised edges for the creation of anti-vibration joints with a perfect seal in combination with the sheet support section bar.

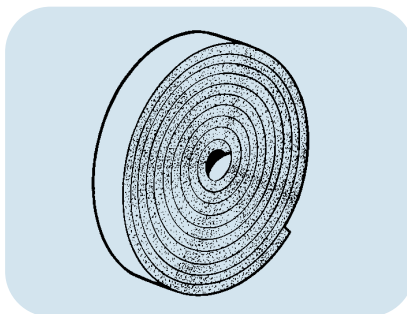


Pliers for invisible flange joint

Code 22PN01 Straight Pliers for Invisible Flange Joint .

Code 22PN02 90° Pliers for Invisible Flange Joint.

Used for the alignment and assembly of invisible flanges.



Thermal insulating tape for joints

Code 21FS03 Thermal Insulating Tape for Joints.

Anti-condensation strip for joints in closed-cell cross-linked polyethylene foam coupled on one side with embossed aluminium, width: 100 mm, length: 30 mm, 12 mm thick.



[1]



[2]

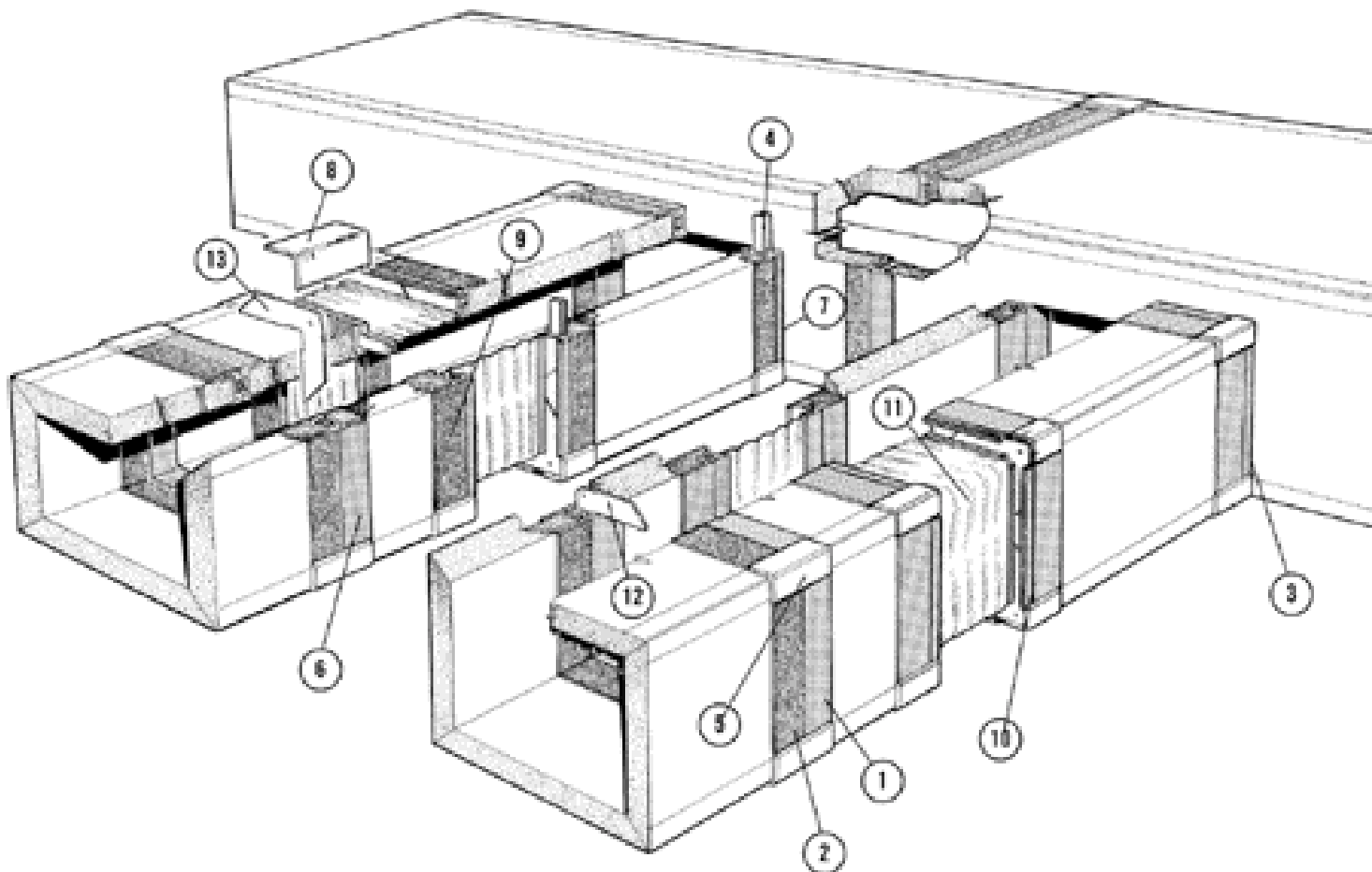


[3]



[4]





Invisible flanging system.

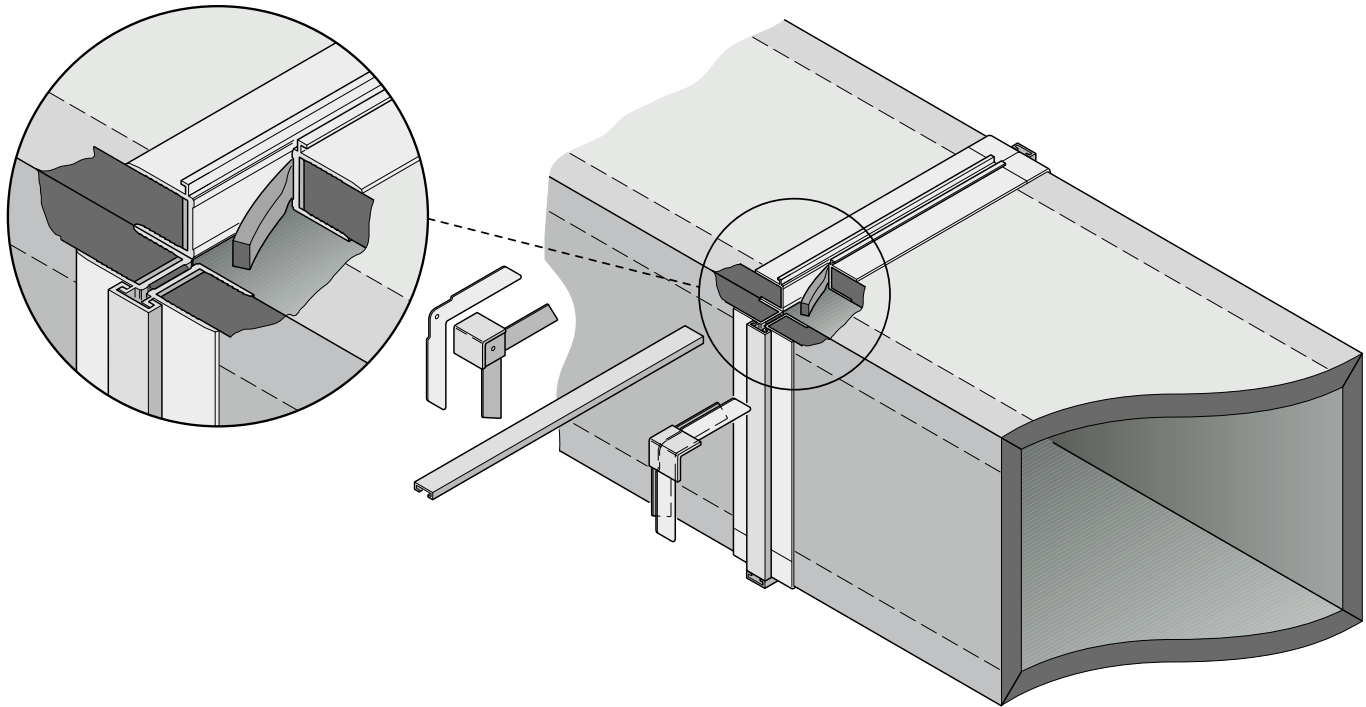
- 1. **21FN01** Invisible Flange Joint in Aluminium 20mm
- 2. **21FN02** Invisible Flange Joint in Polymer 20mm
- 3. **21FN03** Tee Connector Flange Joint in Aluminium 20mm
- 4. **21FN04** H Bayonet in Polymer
- 5. **21FN05** Covering Angle in Polymer 20mm

- 6. **21FN06** Invisible Flange Joint in Aluminium 30mm
- 7. **21FN07** Tee Connector Flange Joint in Aluminium 30mm
- 8. **21FN08** Covering Angle in Polymer 30mm
- 9. **21FN09** Invisible Flange Joint in Polymer 30mm
- 10. **21GN04** Section Bar Supporting Anti-Vibration Sheet

- 11. **21GN05** Anti-Vibration Sheet H = 100mm
- 12. **21SQ01** Zinc-Coated Steel Angle Bracket 20 mm
- 13. **21SQ02** Zinc-Coated Steel Angle Bracket 30 mm

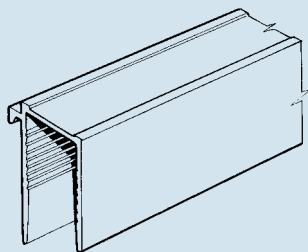
 Aluminium
  PVC





Traditional flange joint.



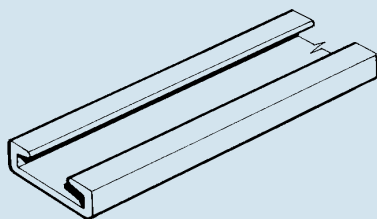


Traditional flange joint

Code 21FT01 Traditional Flange Joint in Aluminium 20 mm.

**Code 21FT02 Traditional Flange Joint in Polymer 20 mm
(Only Made-to-Order Request).**

This flange is used to join two ducts through the insertion of the aluminium bayonet (21FT03). The bayonet is inserted from outside and permits easy disassembly whenever required.

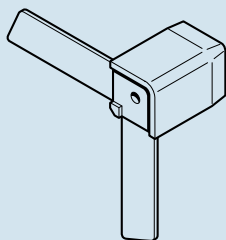


Bayonet

Code 21FT03 Bayonet in Aluminium.

Code 21FT04 Bayonet in Polymer (Only Made-to-Order Request).

This bayonet is used to connect traditional flanges. It is important to remember that the appropriate self-adhesive gasket (21GR01) must be inserted first in order to ensure sufficient air seal. Bayonets mounted vertically must be cut to the side's external measurement, while those mounted horizontally must be cut to the side's external measurement plus 30 mm in order to prevent the slipping of vertical bayonets due to vibration.

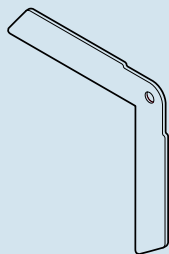


**Reinforcement angles in
polyamide-fibre glass**

Code 21FT05 Reinforcement Angles in Polyamide-Fibre Glass.

These reinforcement angles are indispensable when using traditional flanges. When positioned in the corners of the duct when the section bars are inserted, they reinforce the duct corner and improve external appearance. They can also be used with other sections and even paired with the 21SQ01 "Zinc-coated steel angle bracket". The special hole permits the use of the (21RF03) self-threading screws.



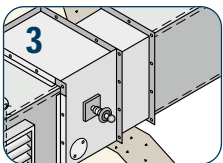
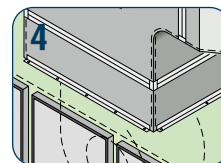
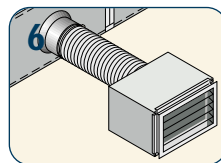
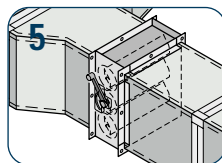
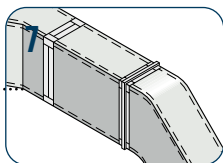


Zinc-coated steel angle bracket

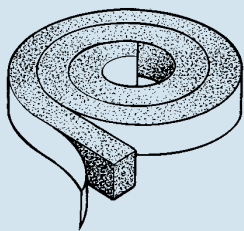
Code 21SQ01 Zinc-Coated Steel Angle Bracket 20 mm.

Code 21SQ02 Zinc-Coated Steel Angle Bracket 30 mm.

This 1.5 mm thick zinc-coated steel angle bracket guarantees adequate reinforcement for ducts subjected to pressure. The special shape permits the easy insertion of the (21FN05) covering angles.



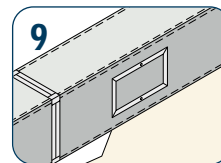
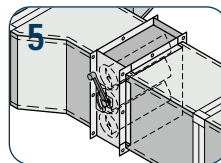
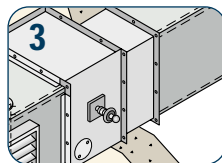
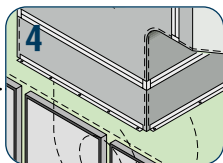
The 4 mm hole drilled at the top permits the assembly of accessories such as dampers and anti-vibration joints, etc. with the appropriate (21RF03) self threading screws.



Self-adhesive duct gaskets

Code 21GR01 Self-Adhesive Duct Gaskets.

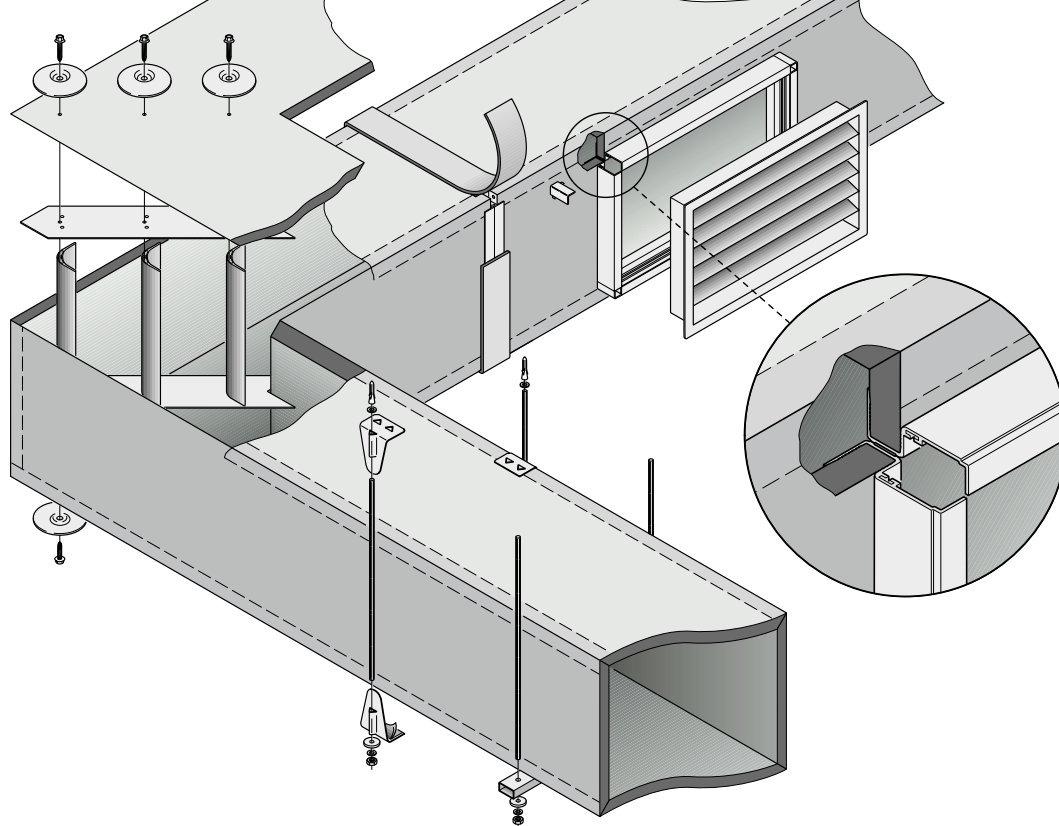
This is a light grey, self-adhesive polyurethane foam gasket that has been treated with an acrylic resin-based mixture that can withstand compression of up to 92% of its volume with subsequent elastic rebound to initial size.



With excellent resistance to soluble salts and UV radiation, incorruptible and non-toxic, this gasket must be applied when compressed and is particularly indicated for the reduction of air leakage from the joints between ducts, and in the installation of dampers and anti-vibration joints, etc.

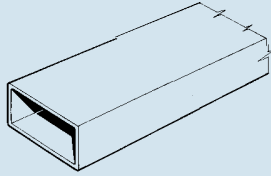
Width: 15 mm; thickness: 10 mm.





**Splitters, turning vanes
and hanger brackets.**





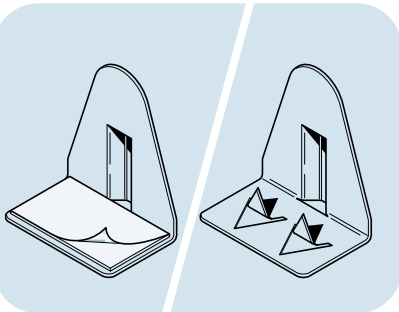
Saddle section bar in aluminium

Code 21PR05 Saddle Section Bar in Aluminium 20 mm.

This rectangular aluminium tube is used to create transversal supports in ducts, dampers, mixing boxes, diffusers, cooling/heating coils and humidifiers etc.

This tube can be mounted vertically (with a 20 mm base) or horizontally (with 40 mm base) depending upon the weight of the structure in order to prevent the bending of the support.

This section bar is built in natural UNI 6060 aluminium alloy and supplied in 4 meter rods.



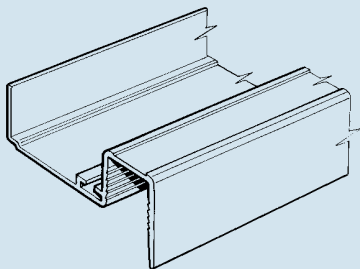
Self-adhesive and hooked hanger brackets

Code 21SS01 Self-Adhesive Hanger Bracket.

Code 21SS05 Hooked Hanger Bracket.

This 1.5 mm zinc-coated bracket is used for rapid duct support and hanging.

These brackets are equipped with a slot for the insertion of the threaded bar; it can be used for the hanging of max. 600 mm wide ducts, and are always paired one across from the other.



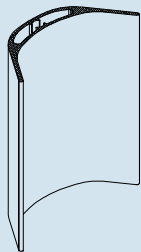
"S" section bar in aluminium

Code 21PR06 "S" Section Bar in Aluminium 20 mm.

The insertion of grilles equipped with volume dampers directly in the duct becomes particularly easy with the use of the "S" section bar. Normally cut to 90° and the exact dimensions of the grille, this section bar is mounted on the perimeter of the hole to create a tap-in collar, in this way preventing the thickness of the grille and the damper from penetrating inside the duct and reducing the air passage cross-section.

The corners are covered by applying the appropriate covering angles (21FN05) cut to the correct size. This section bar is built in natural UNI 6060 aluminium and supplied in 4 meter rods.



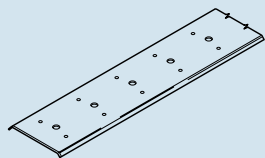


Turning vanes in aluminium

Code 21CP03 Turning Vanes in Aluminium.

This turning vane in UNI 6060 aluminium has a special wing profile that reduces the friction losses caused by turbulence in the various branches, such as right-angle corners and diverging junctions, etc. The wing section must be cut to the desired size and then the turning vanes must be fastened on the appropriate fastening guide.

The turning vane pack created in this way must then be inserted in the duct exclusively at a 45° angle with regard to the air flow direction.

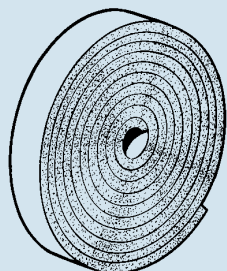


Flat guide for turning vanes fastening

Code 21CP04 Flat Guide for Turning Vane Fastening (Length 2 m).

Pre-drilled aluminium strip for the correct positioning of wing-section turning vanes.

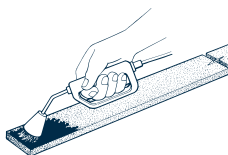
Supplied in 2 meter strips.



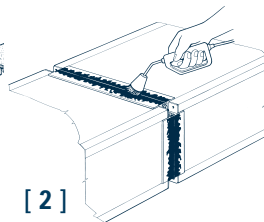
Thermal insulating tape for joints

Code 21FS03 Thermal Insulating Tape for Joints.

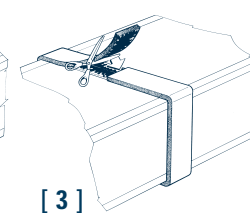
Anti-condensation strip for joints in closed-cell cross-linked polyethylene foam coupled on one side with embossed aluminium, width: 100 mm, length: 30 mm. thickness: 12 mm.



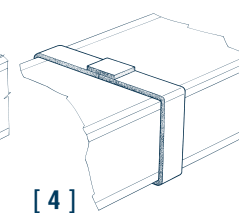
[1]



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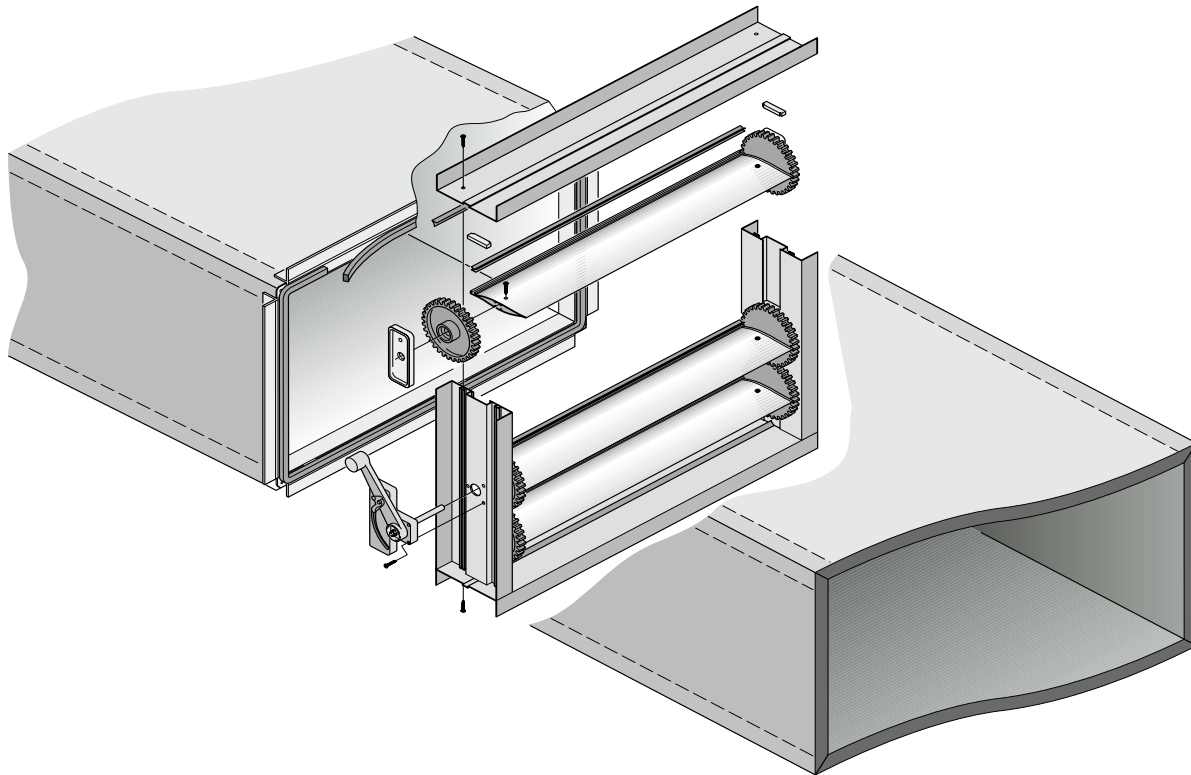


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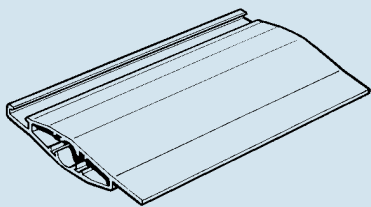
[4]





Dampers.

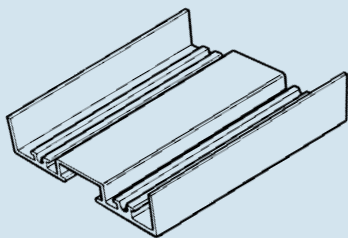




**Double vane section bar
for modular damper**

Code 21SR01 Double Vane Section Bar for Modular Damper.

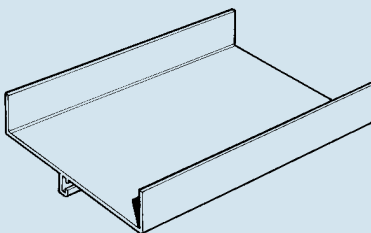
This section bar in natural UNI 6060 aluminium alloy is used to create volume dampers and supplied in 3 meter rods.



**Omega vane section bar
for modular damper**

Code 21SR02 Omega Vane Section Bar for Modular Damper.

This section bar in natural UNI 6060 aluminium alloy is used to create the frame that houses the gears (21SR04) in volume dampers and is supplied in 3 meter rods.

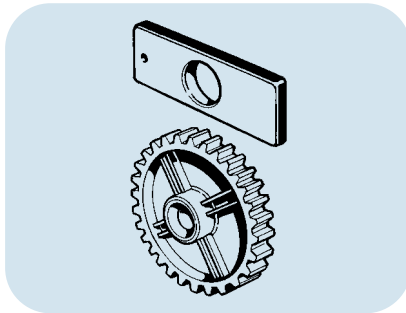


**"C" section bar
for modular damper**

Code 21SR03 "C" Section Bar for Modular Damper.

This section bar in natural UNI 6060 aluminium alloy is used to create the frame in volume dampers and supplied in 3 meter rods.



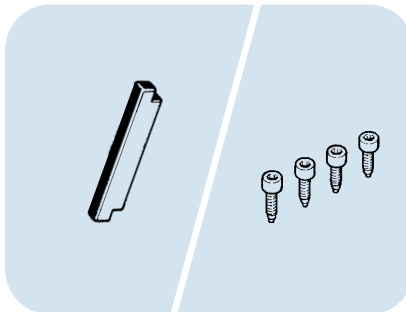


Gear for modular damper

Code 21SR04 Gear for Modular Damper.

Complete w/gear support.

This gear is used for manufacturing volume dampers.

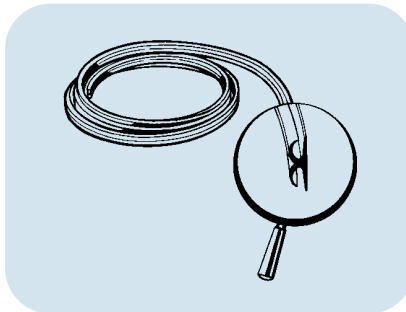


Gear shims for modular dampers
Screws for modular damper

Code 21SR05 Gear Shims for Modular Damper.

This gear is used for manufacturing volume dampers.

Code 21SR08 Screws for Modular Damper.

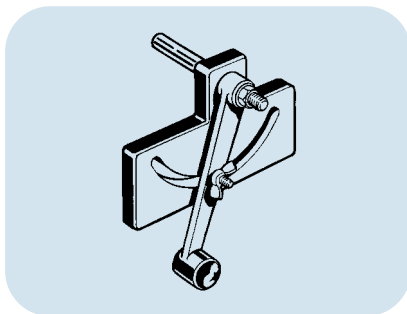


Gasket for modular damper

Code 21SR06 Gasket for Modular Damper.

This gasket is used for manufacturing volume dampers .

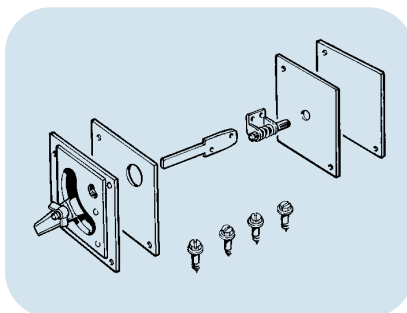




Drive for modular damper

Code 21SR07 Drive for Modular Damper.

This drive is used for manufacturing volume dampers.



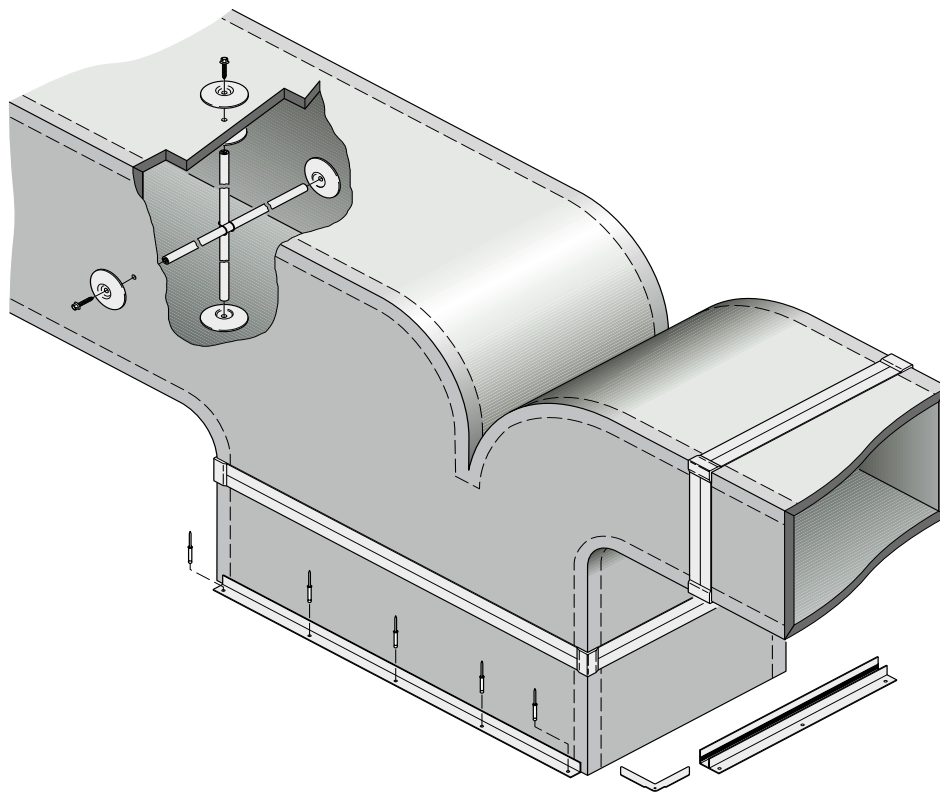
Damper quadrant set - big size

Code 21CS10 Damper Quadrant Set – Big Size.

This quadrant set solves calibration and balancing problems in the distribution network branches thanks to the possibility of locking the damper in any partialization position required.

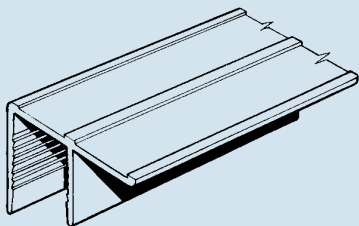
These quadrant sets permit the construction of dampers directly in the P3ductal ducts, and are provided complete with: 21CS01 Panel-Type Damper Quadrant with Counter-Plate; 21CS02 Pre-Drilled Assembly Plate with Counter-Plate; 21CS03 Lock Pin with Spring; 21CS04 Damper Movement Quadrant Pin; 21CS05 Damper Quadrant Set Lock Screws.





**AHU connection
and reinforcements.**



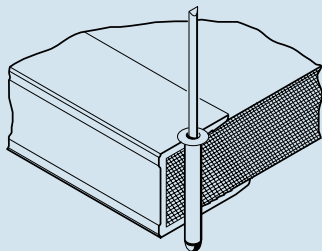
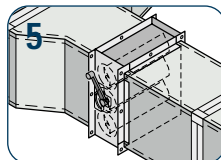
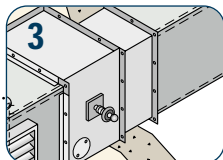


"F" section bar in aluminium

Code 21PR03 "F" Section Bar in Aluminium 20 mm.

Code 21PR07 "F" Section Bar in Aluminium 30 mm.

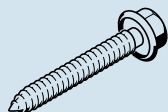
Thanks to the wide external "F"-shaped wing, this section bar permits all accessories with fastening frames higher than 20 mm to be fastened to the ducts (example: fire dampers). This section bar is also used to fasten the duct to a wall for the purpose of creating an external air intake or outlet and also to fasten the duct to an air handling unit, and can be used with the gasket (21GR01) to prevent air leakage. Built in natural UNI 6060 aluminium alloy, this section bar is supplied in 4 meter rods.



Special aluminium rivets

Code 21RV01 Special Aluminium Rivets 3.8 x 30 mm.

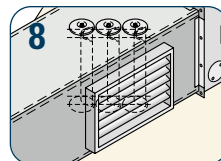
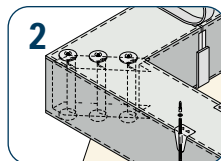
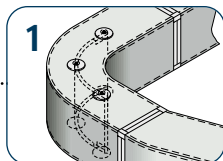
The 30 mm length permits to create fastening to the panels through the section bars.

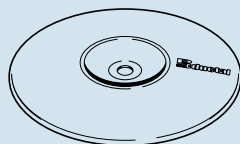


Zinc-plated self-threading screws

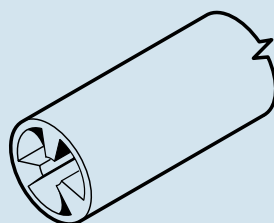
Code 21RF03 Zinc-plated Self-Threading Screws.

These hexagon head self-threading screws with a washer beneath the head are used to fasten reinforcement section bars, wing-profile turning vanes and splitters in elbows, etc., and can also be used with the steel angle brackets (21SQ01) provided pre-drilled for the fastening of accessories such as anti-vibration joints, dampers etc.



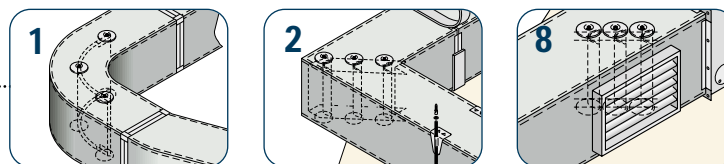


Aluminium shaped disk



Reinforcement section bar in aluminium

Code 21RF01 Aluminium Shaped Disk.



This aluminium disk has been expressly designed to distribute the pressure created at the centre over a wider surface to prevent damage to the panel, and is used in the assembly of the reinforcement section bars, splitters, turning vanes, and every time that the surface subjected to stress must be increased. Disk diameter is 100 mm; hole diameter is 10 mm.

Code 21RF02 Reinforcement Section Bar in Aluminium.

This is a special high stiffness aluminium alloy reinforcement section bar with three internal sections that in addition to granting exceptional resistance to bending permits the fastening of the (21RF03) self-threading screws. The pressure that this bar and the screw exert on the panel is distributed over a wide area by the (21RF01) shaped disk.

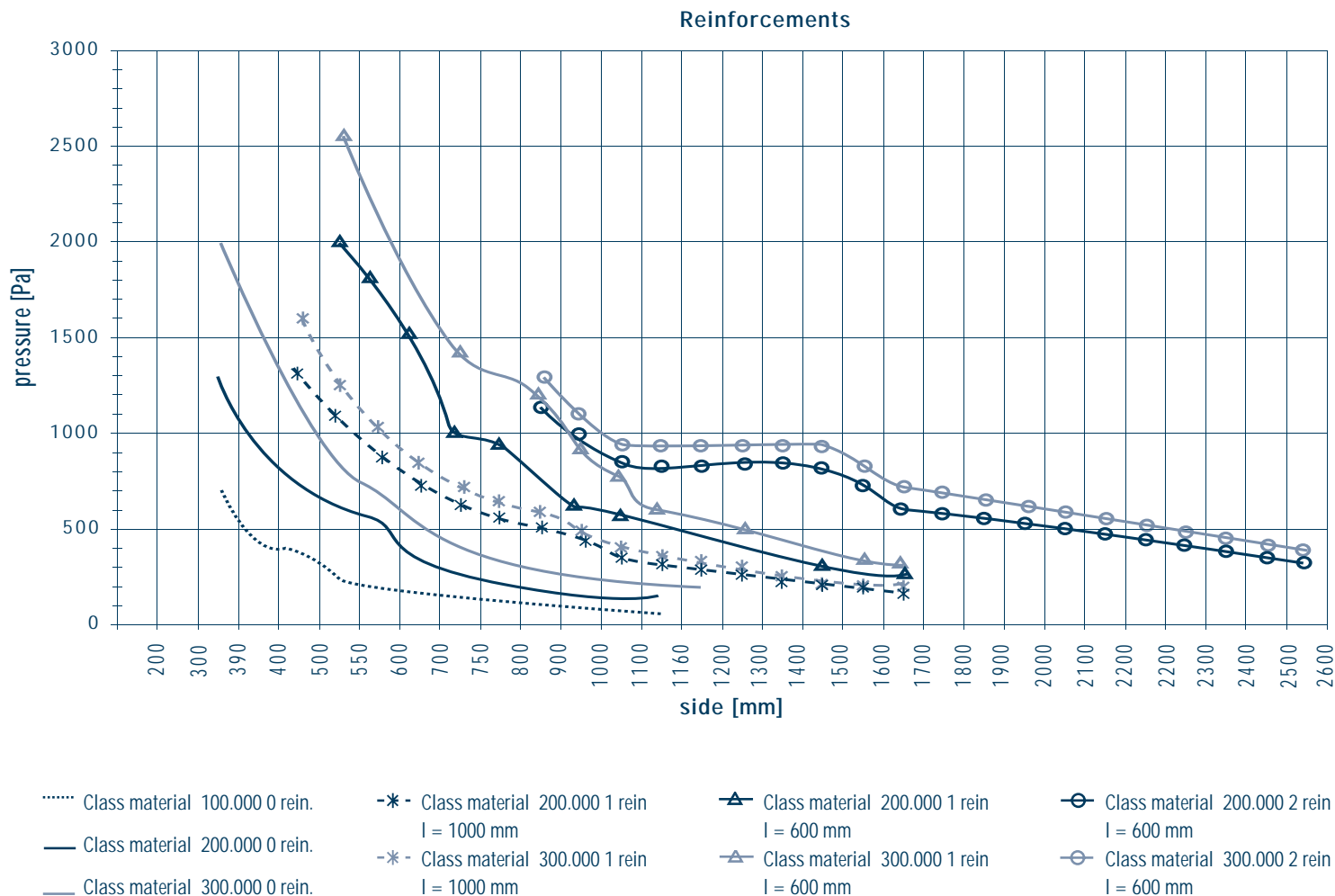
This type of mechanical fastening provides the maximum guarantee of duration and reliability. When inserted as prescribed by P3ductal specifications, duct systems with remarkable resistance to both positive and negative pressures can be created. This section bar is built in natural UNI 6060 aluminium alloy and supplied in 4 meter rods.

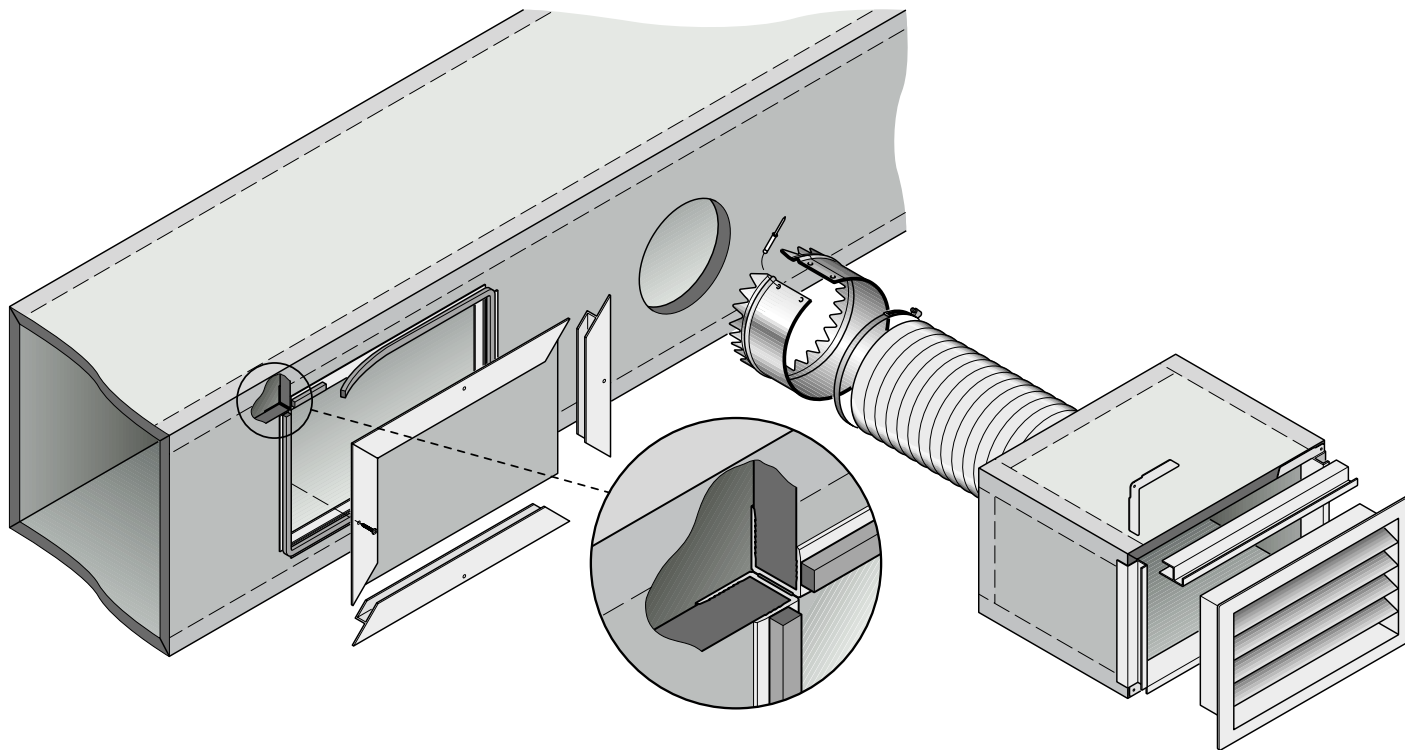


Reinforcement selection table.

Maximum duct working pressure varies depending on the type of panel utilized (Rigidity class) and the number of reinforcements inserted.

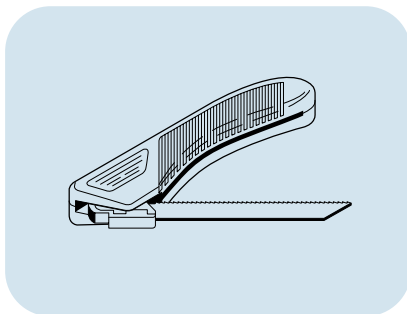
Please contact P3 for further information.





Grilles and access doors.

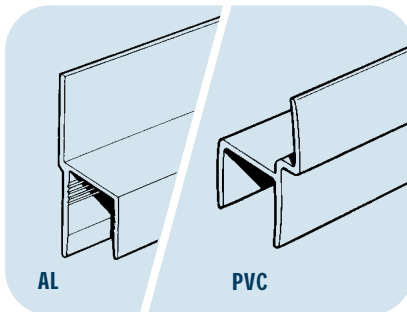




Hack saw

Code 22CT02 Hack Saw.

For use with diffusers. With jack-knife blade to make tap-in collar holes in ducts.

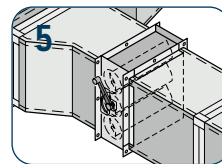
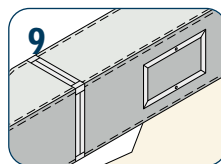
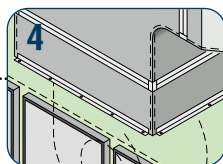


Chair section bar

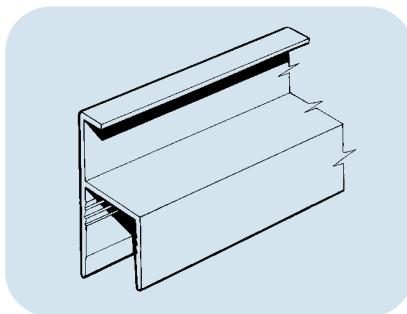
Code 21PR02 "Chair" Section Bar in Aluminium 20 mm.

Code 21PR12 "Chair" Section Bar in Polymer 20 mm.

This section bar is also used to fasten ducts to air handling units and in the assembly of linear diffusers. Together with the "U" section bar (21PR01), this section bar is used to build access doors, insert post-heating coils, and humidifiers, etc.



This section bar can also be used with the gasket (21GR01) for the prevention of air leakage and is built in natural UNI 6060 aluminium alloy. This section bar is supplied in 4 meter rods.

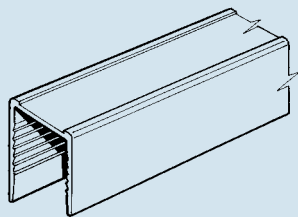


Grille section bar

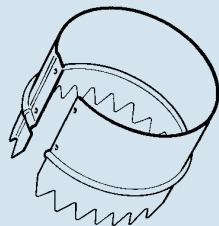
Code 21PR04 Grille Section Bar 20 mm.

This section bar permits the installation of grilles in walls and ceilings and is equipped with a double wing, the external and smaller of the two is completely covered by the grille frame to permit fastening with exposed screws. The wall finishing (in masonry, plasterboard, partition walls, etc.) can be inserted in the space between the two wings. This section bar is built in natural UNI 6060 aluminium alloy and supplied in 4 meter rods.





"U" section bar

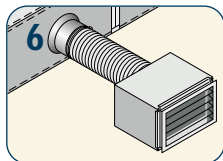
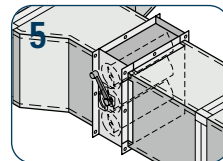
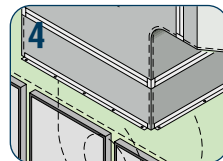
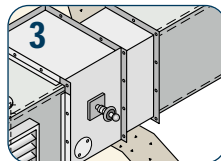
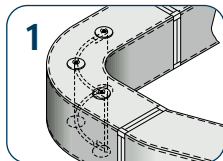


Aluminium Tap-In collars

Code 21PR01 "U" Section Bar in Aluminium 20 mm.

Code 21PR11 "U" Section Bar in Polymer 20 mm.

This is an extremely versatile aluminium section with two wings of different lengths for easier insertion in the panels. When applied to the ends of the ducts, it permits fastening of anti-vibration joints, volume



dampers, and connection to sheet metal ducts. This "U" section bar can be used with the (21GR01) gasket to prevent air leakage and with the (21SQ01) angle brackets in the corners. This section bar is supplied in 4 meter rods. and is available in a range of different colours upon request.

Code 21CR10 Aluminium Tap-In Collars Diameter 100 mm.

Code 21CR15 Aluminium Tap-In Collars Diameter 150 mm.

Code 21CR20 Aluminium Tap-In Collars Diameter 200 mm.

Code 21CR25 Aluminium Tap-In Collars Diameter 250 mm.

Code 21CR30 Aluminium Tap-In Collars Diameter 300 mm.

Code 21CR35 Aluminium Tap-In Collars Diameter 350 mm.

These aluminium Tap-In collars are used to fasten the circular diffusers and flexible ducts in the ducts. Contact is made with the edges, while fastening takes place by bending the tangs with your fingers. These Tap-In collars are supplied open and pre-drilled for precision adaptation to the rated diameters of the circular diffusers, dampers and flexible ducts. The standard useful height is 100 mm for all diameters, but collars of any diameter can be supplied upon request.





scaccia pensieri

With starter kit you can start to work right away.





Scacciapensieri is the P3 introduction to all the P3ductal potential for small contractors.

Scacciapensieri permits even installers who have never used the system before to work without problems with all the advantages of the revolutionary preinsulated aluminium duct system.

The Scacciapensieri Starter Kit opens new work opportunities thanks to its easy use and keeps all worries at bay to let you do everything by yourself without the help of anyone else.

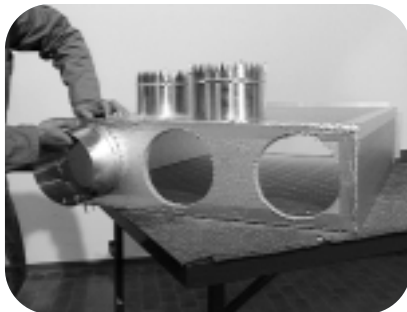
Code 21SK01 Starter kit.

The Scacciapensieri starter kit for the construction of 4 – 5 diffuser plenum contains:

Equipment

- Code 22PL02 45° Right Jack Plane mod. 98 (optional left).
- Code 22PL03 90° Straight Jack Plane mod. 98.
- Code 22SG01 Adjustable Tape Marker.
- Code 22SL01 Soft Spatula.
- Code 22SL02 Stiff Spatula.
- Code 22SM01 Manual Glue Spreader.
- Code 22SQ12 1200 mm Square in Aluminium.

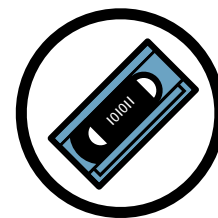




Materials

- Code 15HP21 Piral HD Hydrotec Panel. Dimensions: 1.200 x 1.200 x 20 x 10 pz. (14,4 m²).
- Code 21CL05 "PAINT" Glue 1 kg (Product Subject to Expiration).
- Code 21FT05 Reinforcement Angles in Polyamide-Fibre Glass.
- Code 21GR01 Self-Adhesive Duct Gaskets.
- Code 21NS02 75 mm P3ductal Aluminium Tape (50 m Roll).
- Code 21PR03 "F" Section Bar in Aluminium 20 mm .
- Code 21SL01 Sealant Aluminium Colour (Product Subject to Expiration).
- Code 21SS01 Self-Adhesive Hanger Bracket.

The Starter kit also includes a videocassette with instructions for quick and easy duct construction.



Order guide for 20 mm panels.

Which accessories and how many to order to make the ducts.

P3ductal constructions standards foresee that each accessory material necessary for making ducts must be used in a certain percentage with respect to the square meters of panels employed. The percentages given below refer to **100 m² of panels (20 mm thick)**.

Code	Description	UM	Necess. q.ty	Real qty *	Pag.
21FN01	Invisible Flange Joint in Aluminium 20 mm	m	66,5	80	20
21FN03	Tee Connector Flange Joint in Aluminium 20 mm	m	2	40	20
21FN04	H Bayonet in Polymer	m	33	50	20
21FN05	Covering Angle in Polymer 20 mm	n°	69	250	21
21SQ01	Zinc-Coated Steel Angle Bracket 20 mm	n°	138	500	25
21CL01	"PAINT" Glue 5 Kg (Product Subject to Expiration)	kg	8,3	10	15
21CL06	Ultra-Rapid Glue 50 gr. (Product Subject to Expiration)	n°	0,5	1	17
21CL08	"Profiles" Glue 500 gr. (Product Subject to Expiration)	n°	0,5	1	17
21NS02	75 mm P3ductal Aluminium Tape (50m Roll)	n°	4,7	16	16
21SL01	Sealant Aluminium Colour (Product subject to expiration)	n°	8,5	24	17
21PR01	"U" Section Bar in Aluminium 20 mm	m	13,5	40	33
21PR02	"Chair" Section Bar in Aluminium 20 mm	m	3,2	40	32
21PR03	"F" Section Bar in Aluminium 20 mm	m	6	40	30
21PR04	Grille Section Bar 20 mm	m	4	40	33
21RF01	Aluminium Shaped Disk	n°	36	100	31
21RF02	Reinforcement Section Bar in Aluminium	m	12	44	31
21RF03	Zinc-plated Self-Threading Screws 6,3 x 45 mm	n°	18	200	30
21SS05	Hooked Hanger Bracket	n°	15	100	26

* Round off quantities to the nearest whole pack and check the contents with the price list in force.



Basic equipment.

Code	Description	Q.ty	Pag.
22VL05	P3ductal Tool Box mod. 98.	1	10
22TV01	Folding Work Table W/Special Matting.	1	8
22ST12	1200 mm Length Aluminium Ruler.	1	11
22ST40	4000 mm Length Aluminium Ruler.	1	11
22SQ07	700 mm Square in Aluminium.	1	8
22SQ12	1200 mm Square in Aluminium.	1	8
22PG01	Bending Machine mod. 97.	1	13
22SP01	Pneumatic Glue Spreader mod. 98.	1	14



Order guide for 30 mm panels.

Which accessories and how many to order to make the ducts.

P3ductal constructions standards foresee that each accessory material necessary for making ducts must be used in a certain percentage with respect to the square meters of panels employed. The percentages given below refer to **100 m² of panels (30 mm thick)**.

Code	Description	UM	Necess. q.ty	Real qty *	Pag.
21GS01	Gum Skin Waterproof Coating	lt	65	75	6
21FN06	Invisible Flange Joint in Aluminium 30 mm	m	66,5	80	30
21FN07	Tee Connector Flange Joint in Aluminium 30 mm	m	2	40	20
21FN04	H Bayonet in Polymer	m	33	50	20
21FN08	Covering Angle in Polymer 30 mm	n°	69	250	21
21S002	Zinc-Coated Steel Angle Bracket 30 mm	n°	138	250	25
21CL01	"PAINT" Glue 5 Kg (Product Subject to Expiration)	kg	8,3	10	15
21CL06	Ultra-Rapid Glue 50 gr. (Product Subject to Expiration)	n°	0,5	1	17
21CL08	"Profiles" Glue 500 gr. (Product Subject to Expiration)	n°	0,5	1	17
21NS02	75 mm P3ductal Aluminium Tape (50 m Roll)	n°	4,7	16	16
21SL01	Sealant Aluminium Colour (Product subject to expiration)	n°	8,5	24	17
21PR07	"F" Section Bar in Aluminium 30 mm	m	6	40	30
21RF01	Aluminium Shaped Disk	n°	36	100	31
21RF02	Reinforcement Section Bar in Aluminium	m	12	44	31
21RF03	Zinc-plated Self-Threading Screws 6,3 x 45 mm	n°	18	200	30
21SS05	Hooked Hanger Bracket	n°	15	100	26



Professional equipment.

Code	Description	Real q.ty	Pag.
22VL05	P3ductal Tool Box mod. 98.	1	10
22TV01	Folding Work Table W/Special Matting.	1	8
22ST12	1200 mm Length Aluminium Ruler.	1	11
22ST40	4000 mm Length Aluminium Ruler.	1	11
22SQ07	700 mm Square in Aluminium.	1	8
22SQ12	1200 mm Square in Aluminium.	1	8
22CL04	Electric Plate Bending Roll mod. 98	1	13
22SP01	Pneumatic Glue Spreader mod. 98.	1	14
22LN01	Automatic Straight Cut Machine mod. 98	1	12



40 foot container capacity.

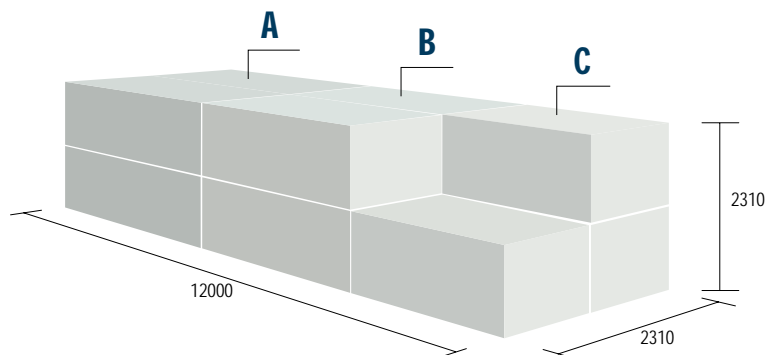
Example with standard accessories.

Code	U.M.	Description	Q.ty
15HP21	m ²	Piral HD Hydrotec Panel	2.736,0
21FN01	m	Invisible Flange Joint in Aluminium 20 mm	1.760
21FN03	m	Tee Connector Flange Joint in Aluminium 20 mm	40
21FN04	m	H Bayonet in Polymer	850
21FN05	n.	Covering Angle in Polymer 20 mm	1.750
21SQ01	n.	Zinc-Coated Steel Angle Bracket 20 mm	3.500
21CL01	kg	"PAINT" Glue 5 Kg (Product Subject to Expiration)	220
21NS02	n.	75 mm P3ductal Aluminium Tape (50 m Roll)	128
21SL01	n.	Sealant Aluminium Colour (Product Subject to Expiration)	216
21PR01	m	"U" Section Bar in Aluminium 20 mm	360
21PR02	m	"Chair" Section Bar in Aluminium 20 mm	80
21PR03	m	"F" Section Bar in Aluminium 20 mm	160
21PR04	m	Grille Section Bar 20 mm	120
21RF01	n.	Aluminium Shaped Disk	1.000
21RF02	m	Reinforcement Section Bar in Aluminium	308
21RF03	n.	Zinc-plated Self-Threading Screws 6,3 x 45 mm	400
21SS01	n.	Self-Adhesive Hanger Bracket	400
21CL08	n.	"Profiles" Glue 500 gr. (Product Subject to Expiration)	14
21CL07	n.	Ultra-Rapid Glue 500 gr. (Product Subject to Expiration)	1



Example with reduced accessories.

Code	U.M.	Description	Q.ty
15HP21	m ²	Piral HD Hydrotec Panel	2.784
21FN02	m	Invisible Flange Joint in Polymer 20 mm	1.760
21FN04	m	H Bayonet in Polymer	850
21FN05	n.	Covering Angle in Polymer 20 mm	1.750
21SQ01	n.	Zinc-Coated Steel Angle Bracket 20 mm	3.500
21CL01	kg	"PAINT" Glue 5 Kg (Product Subject to Expiration)	220
21NS02	n.	75 mm P3ductal Aluminium Tape (50 m Roll)	128
21SL01	n.	Sealant Aluminium Colour (Product Subject to Expiration)	216



40 foot container.

(with standard accessories)

Block	N° of panels	Panel dimensions
A	200	4000 x 1200 mm
B	200	4000 x 1200 mm
C	170	4000 x 1200 mm



20 foot container capacity.

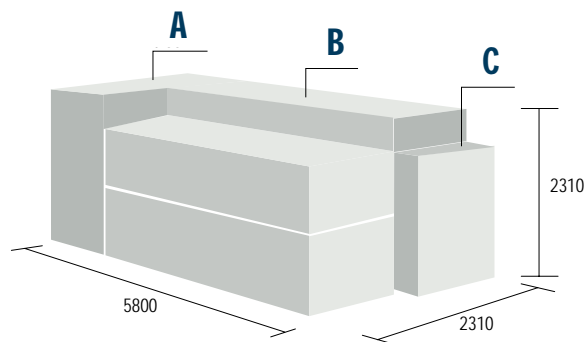
Example with standard accessories.

Code	U.M.	Description	Q.ty
15HP21	m ²	Piral HD Hydrotec Panel	1.200
21FN01	m	Invisible Flange Joint in Aluminium 20 mm	800
21FN03	m	Tee Connector Flange Joint in Aluminium 20 mm	40
21FN04	m	H Bayonet in Polymer	400
21FN05	n.	Covering Angle in Polymer 20 mm	750
21SQ01	n.	Zinc-Coated Steel Angle Bracket 20 mm	1.500
21CL01	kg	"PAINT" Glue 5 Kg (Product Subject to Expiration)	100
21NS02	n.	75 mm P3ductal Aluminium Tape (50 m Roll)	64
21SL01	n.	Sealant Aluminium Colour (Product subject to expiration)	96
21PR01	m	"U" Section Bar in Aluminium 20 mm	160
21PR02	m	"Chair" Section Bar in Aluminium 20 mm	40
21PR03	m	"F" Section Bar in Aluminium 20 mm	80
21PR04	m	Grille Section Bar 20 mm	40
21RF01	n.	Aluminium Shaped Disk	400
21RF02	m	Reinforcement Section Bar in Aluminium	132
21RF03	n.	Zinc-plated Self-Threading Screws 6,3 x 45 mm	200
21SS01	n.	Self-Adhesive Hanger Bracket	200
21CL08	n.	"Profiles" Glue 500 gr. (Product Subject to Expiration)	6
21CL07	n.	Ultra-Rapid Glue 500 gr. (Product Subject to Expiration)	1



Example with reduced accessories.

Code	U.M.	Description	Q.ty
15HP21	m ²	Piral HD Hydrotec Panel	1.248
21FN02	m	Invisible Flange Joint in Polymer 20 mm	800
21FN04	m	H Bayonet in Polymer	400
21FN05	n.	Covering Angle in Polymer 20 mm	750
21SQ01	n.	Zinc-Coated Steel Angle Bracket 20 mm	1.500
21CL01	kg	"PAINT" Glue 5 Kg (Product Subject to Expiration)	100
21NS02	n.	75 mm P3ductal Aluminium Tape (50 m Roll)	64
21SL01	n.	Sealant Aluminium Colour (Product Subject to Expiration)	96

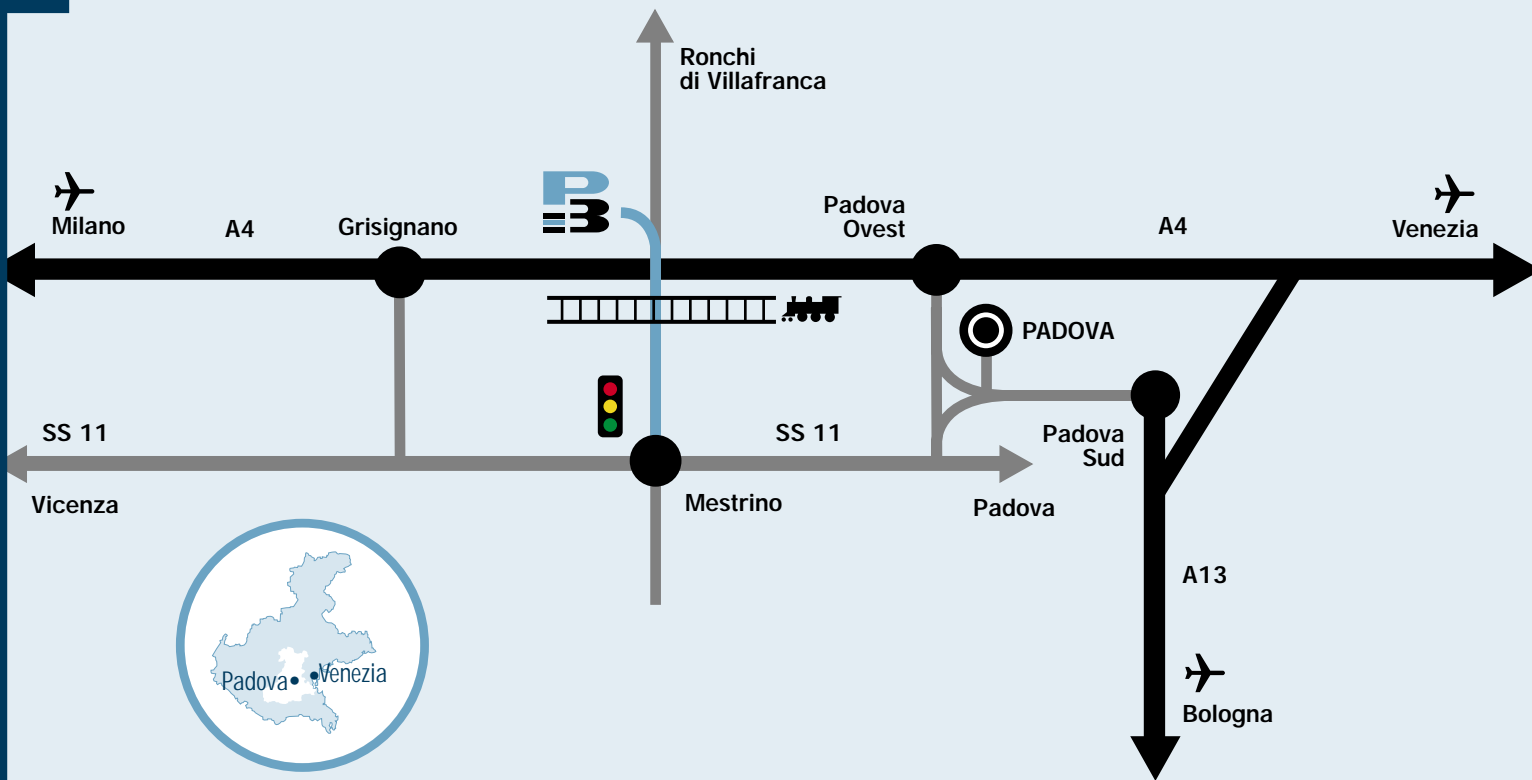


20 foot container.

(with standard accessories)

Block	N° of panels	Panel dimensions
A	100	2000 x 1200 mm
B	190	4000 x 1200 mm
C	20	2000 x 1200 mm

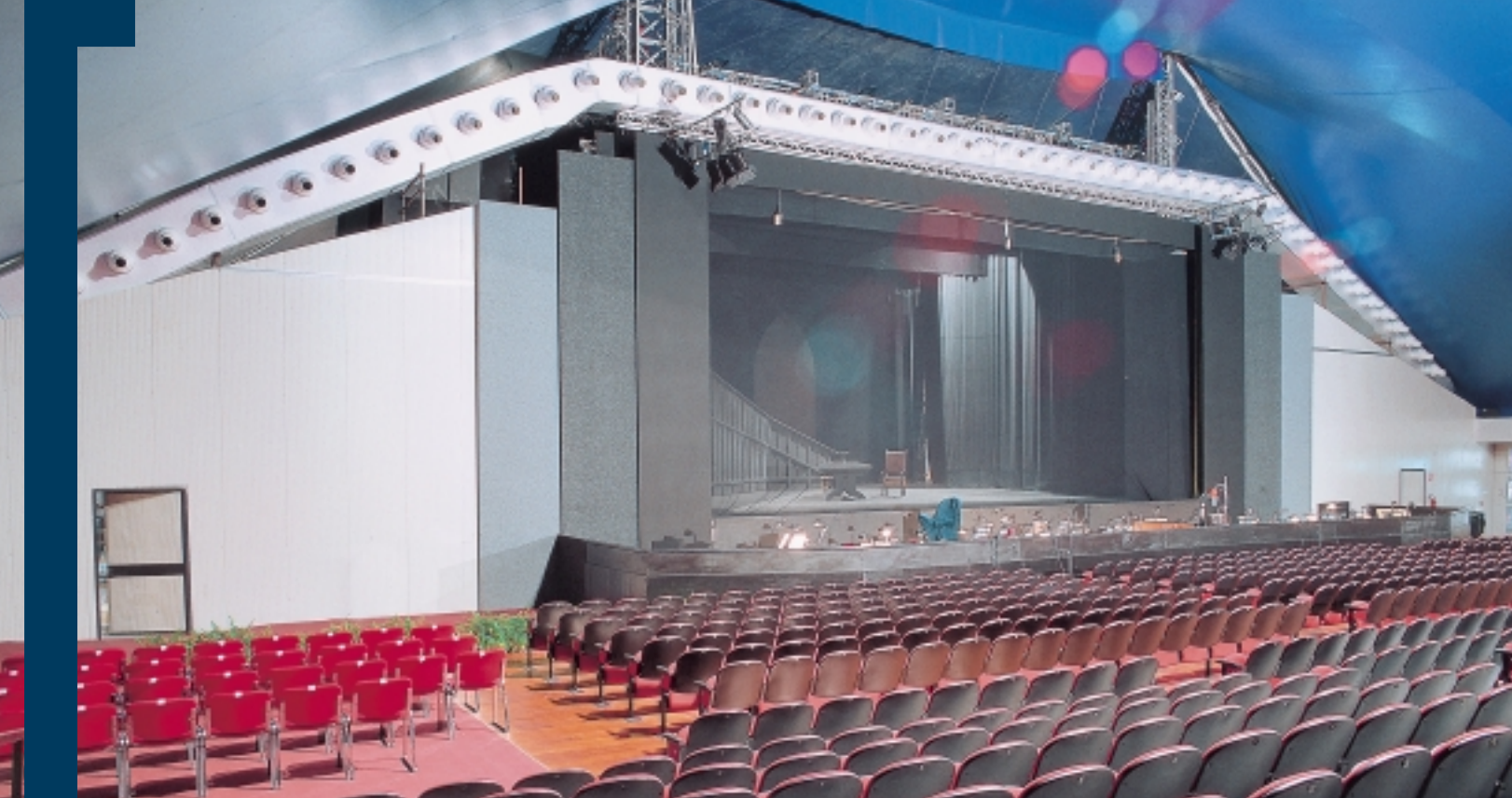




You have left the motorway A4 or A13:

- From Bologna (Padova Sud exit): Take the main road No. 11 Padova-Vicenza in the direction VICENZA. At the crossroads before the town of Mestrino you have to turn right for Ronchi, after that you go on for about 4 Km.
- From Milan (Grisignano exit): Take the main road No. 11 Padova-Vicenza in the direction PADOVA. At the crossroads after the town of Mestrino you have to turn left for Ronchi, after that you go on for about 4 Km.
- From Venice (Padova Ovest exit): Take the main road No. 11 Padova-Vicenza in the direction VICENZA. At the crossroads before the town of Mestrino you have to turn right for Ronchi, after that you go on for about 4 Km.





Hospitals Reparto di Psichiatria, Padova, Italia. Ospedale Civile di Schio, Vicenza, Italia. Ospedale Civile di Bolzano, Bolzano, Italia.

Al Jazeera Hospital, Abu Dhabi, Emirati Arabi. Saint Vincent De Paule Hospital, Malta. Saint Philip's Hospital, Malta.

Ospedale Civile, Cerignola (FG), Italia. Nambour Hospital, Australia. Coomera medical Center, Australia.

Office blocks Centro direzionale Cristal Palace, Brescia, Italia. Telemalta Corporation, Malta. Air Malta Co Ltd, Malta.

Centro Direzionale e Commerciale, Latina, Italia. BMW Offices, Australia. The Sonmez Shopping Center, Bursa, Turkey.

Federal Police Headquarters, Australia.

Airports Centres Technico-Opérationnel de Tunis-Air, Djerba, Tunisia. Aeroporto Caselle, Torino, Italia. Aeroporto Marco Polo, Venezia, Italia.

Dublin International Airport, Dublin, Irlanda.





Shopping centers The Sonmez Shopping, Bursa, Turchia. Centro Commerciale Giotto, Padova, Italia. Centro Commerciale Vimodrone, Milano, Italia. The Valdi Shopping Center, Russia. Centre Commerciale Neapolis, Nabeul, Tunisia. Ipermercato, Sassuolo (MO), Italia.

A-Mart All Sport, Toowomba, Brisbane, Oxley, Australia. Currambine Marketplace, Perth, Australia.

University, schools and institutional buildings Euratom (Centro Europeo di ricerca Nucleare), Varese, Italia. Universidade do Porto Fac. Arquitectura, Portogallo. Athlone Court House, Irlanda. The Italian Aerospace Center, Malindi, Kenia. Maracaibo International Museum, Maracaibo, Venezuela. Malta Maritime Authority, Malta. University of Malta, Malta. The University of Porto - Faculty of Architecture, Porto, Portogallo. Melbourne University school of Botany, Melbourne, Australia.





Banks Cassa di Risparmio di Padova e Rovigo, Padova, Italia. Caveau per Banca Commerciale Italiana, Milano, Italia. Mid-Med Bank Ltd, Malta. Lohombus Bank, Malta. Bank of Valletta Ltd, Malta. Banca Popolare di BG e VA, Varese, Italia.

Food-processing centers Latte Ala, Ferrara, Italia. Lavorazione Lattebusche, Belluno, Italia. Industria Alimentare Bauli, Verona, Italia. Industria Alimentare Barilla, Italia. Macello Sival Carni, Vicenza, Italia. Nestlé Tunisia, Tunisia. Macello di Carpi, Carpi (MO), Italia. Industria Dolciaria Gazzoni (Dietorelle), Bologna, Italia. Cadbury - schweppes, Melbourne, Australia. S.C.&W. CO-OP (Dairy Production), Melbourne, Australia.

Industrial activities Inter Offset, Belgio. Roederstein Portugal, Portogallo. Capsugel, Belgio. Caves Da Raposeira, Portogallo. Dow-Chemie, Belgio. Philipp Morris Inc. Industries, Spagna. Cardiomedix Ltd, Malta. Petrochemical Industries Co. (P.I.C.), Shuaiba, Kuwait.





Restaurant and hotels Batalha Hotel, Porto, Portogallo. Mc Donald's, Belgio. Hotel Milano Due, Malta. Hotel Qawra Palace, Malta.

Hotel Preluna, Malta. Hotel Amina, Kairouan Tunisia. Ivanhoe Hotel, Australia. Skyways International Hotels, Malta.

Exhibitions Fiera di Milano, Milano, Italia. Fiera di Bologna, Bologna, Italia.



General Sales Conditions.

1. Irreversibility of the order

The order, issued by the Buyer, based on the general sales conditions of P3 Srl, is irreversible and binding from the date in which it is signed by the Buyer.

The order is to be accepted by P3 Srl only if confirmed in writing by the former and sent to the Buyer via mail or fax or if the supply is just under way; therefore, with the confirmation of P3 Srl, the order is to be treated as a purchase and sale contract. Where the Buyer cancels the order or is late or refuses to withdraw, (even only partially), the order, P3 Srl will have the right to receive as expenses or compensation an amount equal to 50% of the entire value of the non-delivered goods.

2. Delivery

The delivery time limits are only indicative and are not binding in any way. Thus late deliveries with regard to the supply of the raw materials or the unforeseen suspension of the production cycle, strikes, both of the staff and the suppliers, events of force majeure or acts of god (such as storms, damaging acts, acts of vandalism, theft, burglary, extortion, natural disasters, acts of war and revolution etc.), do not give the Buyer the right to withdraw or rescind from the contract or claim compensation for damages or any kind by P3 Srl.

3. Complaints

Any complaints relating to possible defects noted on the goods supplied by P3 Srl, within 12 months from the duration of the guarantee, must be communicated to P3 Srl only by the Buyer himself within eight days from the date in which the defects are noticed, under penalty of cancellation of the guarantee. The Buyer must send, via registered post A.R., or via fax, a clear and detailed description of the defect(s) as well as an indication of the date and number of the invoice issued by P3 Srl in relation to the defective goods. P3 Srl will send the reply to the Buyer within seven days from receiving each complaint, on the basis of the conditions of guarantee detailed in paragraph 9 below.

P3 Srl reserves the right to make any changes or modifications which it considers necessary, still maintaining the standard of quality, and does not have to communicate the aforesaid changes or modifications to the Buyer and the Buyer may not raise objections with regard to possible defects relating to the advertising, commercial and technical documentation distributed by P3 Srl.



4. Price, Discounts, Re-negotiation of Price

P3 Srl sells his products to the public at the prices detailed in the price list in force at the moment in which the order issued by the Buyer is accepted, as detailed in paragraph 1.

With regards to the prices in the price list for the public, P3 Srl reserves the right to offer discounts, if agreed to in writing with the Buyer beforehand. The costs of packaging and wrapping are normally included in the price list for the public.

If special packaging is required, such as wooden, plastic or cardboard crates or cages, the full cost will be charged to the Buyer, as pointed out by P3 Srl in the confirmation of order and in the invoice.

The prices are settled on the basis of the costs of the goods and labour-force in force at the moment when the orders are accepted. Where these costs must be increased by more than 5%, with respect to the prices agreed, these increases will be added to the sale price, if preceded by written notice (even via fax) of at least 15 days.

With regard to the orders which have already been confirmed, and are to be carried out within at least 30 days from the acceptance of the orders, the increases caused by the variation of the costs will not be applied.

5. Payment

Payments must be made at P3 Srl's premises within the time limits set and using the methods agreed to in the confirmation of order. The Buyer accepts all the risks relating to the credit transfer or the transfer of the sums of money or any other methods which may be used, whatever the chosen method is. The time limits for payment must not be postponed or late due to possible complaints made by the Buyer. Where deferred payments are made using promissory notes or bank guarantees, in one or more instalments, these payments must be considered as being paid with recourse, not without recourse, and for this reason they do not produce novations of the original credit, thus leaving intact the Buyer's duty to pay the price agreed, in order to satisfy all the credit issued by the former or by the Banks to cover the amounts due to P3 Srl.

6. Interest

Where the payment is late or not paid at all, P3 Srl will charge the Buyer, as from the expiry of the amount agreed, the interests as according to the nominal annual rate for deposits in Euro every six months, called EURIBOR, calculated by the Federation of European Banks (FEB), increased by 6 % every year.



7. Reservation of Title to Property

It is expressly agreed that, with regard to invoices for deferred payments, the title to the goods belongs to P3 Srl up until the complete payment of the agreed price by the Buyer, including interest and additional charges, and may not be considered as immovable goods for any reason whatsoever and P3 Srl has the right to reclaim the goods which have not been fully paid for even from third parties who are in possession of the goods or are title holders of the real property rights of the goods in question or of the property (in the case where it has been installed). The Buyer is bound to draw up every deed necessary for the efficient completion of the conditional right of domain.

8. Termination due to the Buyer

The failure to pay even only one instalment of the price agreed, relating to deferred payments made in instalments, (as indicated in P3 Srl's invoices) not lower than an eighth of the price (excluding interest and expenses) or the failure to pay two consecutive instalments of any amount, gives P3 Srl the right to terminate the contract, to reclaim immediate possession of the goods supplied and to retain the amount of the instalments already paid as indemnity for the use or for the deterioration of the goods supplied to the Buyer, except the compensation for additional damages, including the discharge or security expenses of the goods and any other possible expenses.

9. Guarantee

P3 Srl guarantees the utmost quality of the goods, tools, machines, equipment, accessories and parts produced or marketed, designed or created by the former in conformity with the EC Directive. The duration of the guarantee is 12 months from the date of the issue of each sales invoice, which is sent to the Buyer via ordinary post or via a Courier who has to deliver the goods to the Buyer.

The characteristics of the construction of the tools, machines and equipment to be used for the construction and installation of the ducts, using the P3ductal system as a base, are described in the "User's Manual for Use and Maintenance", a copy of which is to be inserted in the packaging or attached to the Document of Transport (DOT) upon delivery.

The guarantee excludes defects deriving from negligence, lack of skill, abnormal use or incorrect use by the Buyer or by the Client, and does not include acts of god and force majeure. The guarantee will not be effective if the machines, the tools, the accessories are damaged or repaired or modified or disassembled without P3 Srl's or one of P3 Srl's employees check or without the authorization of the former.



The guarantee does not include and does not extend, as indicated in the previous paragraph, to direct or indirect damage due to the Buyer, and does not give the right, in any case whatsoever, to withdraw from the contract or to compensation for the damage caused due to the failure to use the goods or the substitution of the defective parts. Nevertheless, it is to be understood that, in the case of dispute, the Buyer must continue to pay the instalments within the time limits and according to the methods agreed, otherwise the right to the guarantee will be removed.

10. The Quality of the Pre-insulated Aluminium Panels

The panels are produced with materials appropriately chosen and, hence, P3 Srl guarantees the highest quality.

For each type of panel, a technical data-sheet containing the description of the relative characteristics is available. The tolerance of the materials are also specified in the technical data-sheets.

Where bubbles, hollows, marks and defects in general of varying form and size are noted, it is necessary to remember that the former can originate from the continual production process and may not be linked, in any way, with acts of negligence or lack of attention or skill. Given that this phenomenon can occur (based on the findings of the statistics) within the limit of 7% – 8% with respect to the total quantity, expressed in m² of the panels produced and, therefore, within the normal tolerance limits for similar types of materials, the defects do not at all prejudice neither the physical and mechanical characteristics of the panels nor the use of the panels designed for duct construction. P3 Srl is bound to supply the parts, ascertained as being defective, for free, as long as the Buyer indicates the defects using the method(s) detailed in paragraph 3 above. The assembly and disassembly, delivery and transport costs for the parts to be replaced or repaired are to be fronted by the Buyer, as travel expenses, accommodation expenses in the case of Technical Assistance by P3 Srl.

11. The Duties of the Duct Constructor

The construction and installation of the ducts must be carried out using the tools and equipment supplied by P3 Srl and implementing the technology of the P3ductal system.

The Duct Constructor accepts all the duties towards the Clients (final users) in so far as the quality, compatibility and safety of the operations carried out by the former using the products purchased from P3 Srl is concerned. Therefore, P3 Srl has no duty toward the Client (users).



12. Transport – Risk – Damages

The delivery of the goods must be considered as ex factory of P3 Srl, and so all the risks and damages relating to transport must be considered the liability of the Buyer, from when the goods are delivered to the forwarding agent or the courier, even if P3 Srl has already chosen, upon request from the Buyer, the Company which is to transport the goods.

Nevertheless, the Buyer is bound to verify, upon receiving the goods, whether the goods correspond to the amount and quality of those described in the packing list attached to the export invoice, issued by P3 Srl at delivery to the Courier. Where the Buyer notices a discrepancy between the goods delivered and the details of both the invoice and the packing list, or damage of any sort, the Buyer must immediately communicate this in writing, to the courier or the forwarding agent, thus putting into action the complaint process with regard to the transport agency or third parties, and at the same time communicating the information to P3 Srl.

13. General Provisions

The Buyer declares that he is fully aware of and accepts, without any reservation, the “General Sales Conditions” detailed in the P3ductal General Product Catalogue, in which material supplied are described. Any deviation from the “General Sales Conditions”, mutually agreed to by P3 Srl and the Buyer, must be agreed in writing and is to be strictly limited to what is specifically detailed and is not to imply novations even of the general conditions, which remain unchanged, unless there is express agreement to the contrary.

14. Disputes

With regard to any dispute arising from the contents of a contract drawn up with P3 Srl will be referred to the Tribunal of Padova (Italy). The same applies to any dispute arising from the validity, interpretation or performance of the present “General Sales Conditions”.



Code Index

PANELS

14PR01	Piralyte Panel (phenolic)
15HE21	Piral HD Hydrotec Panel Coupled W/Polyester Film
15HL21	Piral HD Hydrotec Smooth Panel
15HP21	Piral HD Hydrotec Panel
15HP31	Piral HD Hydrotec Big Size Panel
15HS31	Piral HD Hydrotec Outsider Panel
15HG21	Piral HD Hydrotec Panel

32SC02	Sturdy Cardboard Packaging
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ACCESSORIES

21CL00	Solvent for "PAINT" Glue
21CL01	"PAINT" Glue 5 Kg (Product Subject to Expiration)
21CL02	"PAINT" Glue 15 Kg (Product Subject to Expiration)
21CL06	Ultra-Rapid Glue 50 gr. (Product Subject to Expiration)
21CL07	Ultra-Rapid Glue 500 gr. (Product Subject to Expiration)
21CL08	"Profiles" Glue 500 gr. (Product Subject to Expiration)
21CP03	Turning Vanes in Aluminium
21CP04	Flat Guide For Turning Vanes Fastening (Length 2 m)
21CR10	Aluminium Tap-In Collars Diameter 100 mm
21CR15	Aluminium Tap-In Collars Diameter 150 mm
21CR20	Aluminium Tap-In Collars Diameter 200 mm
21CR25	Aluminium Tap-In Collars Diameter 250 mm
21CR30	Aluminium Tap-In Collars Diameter 300 mm
21CR35	Aluminium Tap-In Collars Diameter 350 mm
21CS10	Damper Quadrant Set – Big Size
21FN01	Invisible Flange Joint in Aluminium 20 mm

21FN02	Invisible Flange Joint in Polymer 20 mm
21FN03	Tee Connector Flange Joint in Aluminium 20 mm
21FN04	H Bayonet in Polymer
21FN05	Covering Angle in Polymer 20 mm
21FN06	Invisible Flange Joint in Aluminium 30 mm
21FN07	Tee Connector Flange Joint in Aluminium 30 mm
21FN08	Covering Angle in Polymer 30 mm
21FN09	Invisible Flange Joint in Polymer 30 mm
21FS03	Thermal Insulating Tape for Joints
21FT01	Traditional Flange Joint in Aluminium 20 mm
21FT02	Traditional Flange Joint in Polymer 20 mm (Only Made-to-Order Request)
21FT03	Bayonet in Aluminium
21FT04	Bayonet in Polymer (Only Made-to-Order Request)
21FT05	Reinforcement Angles in Polyamide-Fibre Glass
21GN04	Section Bar Supporting Anti-Vibration Sheet
21GN05	Anti-Vibration Sheet H= 100 mm (25 m Roll)
21GR01	Self-Adhesive Duct Gaskets
21GS01	Gum Skin Waterproof Coating
21NS01	75 mm Aluminium Tape (50 m Roll)
21NS02	75 mm P3ductal Aluminium Tape (50 m Roll)
21PR01	"U" Section Bar in Aluminium 20 mm
21PR02	"Chair" Section Bar in Aluminium 20 mm
21PR03	"F" Section Bar in Aluminium 20 mm
21PR04	Grille Section Bar 20 mm
21PR05	Saddle Section Bar in Aluminium 20 mm
21PR06	"S" Section Bar in Aluminium 20 mm
21PR07	"F" Section Bar in Aluminium 30 mm

21PR11	"U" Section Bar in Polymer 20 mm
21PR12	"Chair" Section Bar in Polymer 20 mm
21RF01	Aluminium Shaped Disk
21RF02	Reinforcement Section Bar in Aluminium
21RF03	Zinc-plated Self-Threading Screws 6,3 x 45 mm
21RV01	Special Aluminium Rivets 3,8 x 30 mm
21SK01	Starter Kit
21SL01	Sealant Aluminium Colour (Product subject to expiration)
21SL02	Special Sealant, Sanitary Use, White Colour (Product subject to expiration)
21SQ01	Zinc-Coated Steel Angle Bracket 20 mm
21SQ02	Zinc-Coated Steel Angle Bracket 30 mm
21SR01	Double Vane Section Bar for Modular Damper
21SR02	Omega Vane Section Bar for Modular Damper
21SR03	"C" Section Bar for Modular Damper
21SR04	Gear for Modular Damper
21SR05	Gear Shims for Modular Damper
21SR06	Gasket for Modular Damper
21SR07	Drive for Modular Damper
21SR08	Screws for Modular Damper
21SS01	Self-Adhesive Hanger Bracket
21SS05	Hooked Hanger Bracket



TOOLS

22BR04 "T" Hexagonal Wrench No. 3

22CL04 Electric Plate Bending Roll mod. 98

22CM04 Telescopic Compass

22CT01 Cutter

22CT02 Hack-Saw

22DM01 P3Ductal Template

22GN01 Stainless Steel Goniometer

22LB01 File W/Abrasive Surface

22LM01 Cutter Spare Blades

22LN04 Universal Jack Plane for 22LN10 mod 98

22LN07 Spare blades for Automatic Straight Cut Machine

22LN10 Automatic Straight Cut Machine mod.98

22ML01 Special Anti-Rebound Hammer

22MR01 Folding Ruler in Stiff Plastic

22MR02 Tape-Measure 5 m Length

22MT01 Nylon Marking Pencil

22PC46 Double 45° Blade-Holder Cartridge for 30 mm Thick.

22PD01 Tool-slide

22PD16 Double 15° Blade-Holder Cartridge

22PD23 Double 22.5° Blade-Holder Cartridge

22PD46 Double 45° Blade-Holder Cartridge

22PG01 Double 45° Blade-Holder Cartridge

22PL01 45° Left Jack Plane mod. 98

22PL02 45° Right Jack Plane mod. 98

22PL03 90° Straight Jack Plane mod. 98

22PL04 20 mm Jack Plane Spare Blades

22PL05 30 mm Jack Plane Spare Blades

22PN01 Straight Pliers for Invisible Flange Joint

22PN02 90° Pliers for Invisible Flange Joint

22PS05 Silicone Rifle

22PS06 Silicone Rifle Tip

22PT01 Computerized Cut System Machine (CAM)

22SG01 Adjustable Tape Marker

22SL01 Soft Spatula

22SL02 Stiff Spatula

22SM01 Manual Glue Spreader

22SM02 Spare Brush for Manual Glue Spreader

22SP01 Pneumatic Glue Spreader mod. 98

22SP02 Spare Gun for Pneumatic Glue Spreader mod. 98

22SP03 Spare Flexible Hose for Pneumatic
Glue Spreader Mod. 98

22SP04 Spare Brush Pipe Support for Pneumatic
Glue Spreader mod. 98

22SP05 Spare Brush for Pneumatic
Glue Spreader mod. 98

22SQ07 700 mm Square in Aluminium

22SQ12 1200 mm Square in Aluminium

22ST12 1200 mm Length Aluminium Ruler

22ST40 4000 mm Length Aluminium Ruler

22SZ01 Panel Brush

22TN01 Section Bar Cutting Machine

22TV01 Folding Work Table W/Special Matting

22TV02 Spare Matting for 22TV01

22VL05 P3ductal Tool Box mod. 98

