

Valuable advantages

- » **competitiveness:** the “smart solution” combines economical advantages with the usual technical performances of pre-insulated aluminium ducts;
- » **fast to assemble:** pre-cut panels are supplied inside a box, few easy and fast moves are enough to complete the whole operation;
- » **technical quality:** the product fully complies with the requirements of low pressure systems. The specific panel with a 12 mm thickness grants a thermal insulation comparable to a 20 mm thick rubber mattress;
- » **off-cuts reduction:** the pre-cut solution optimizes the use of the material itself by reducing the off-cuts.

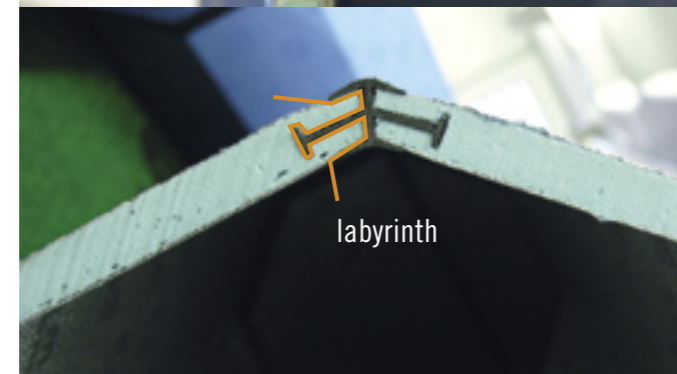
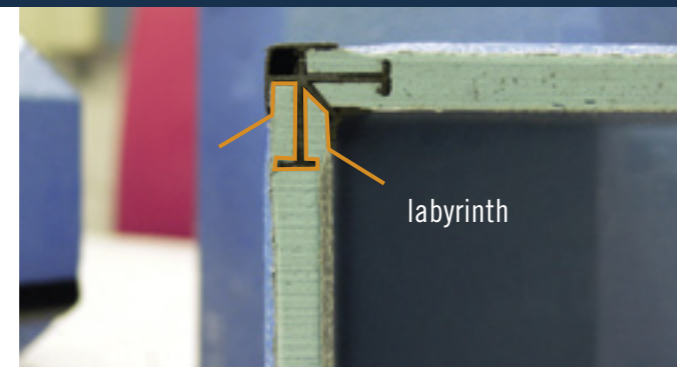
These new solutions, **smart4** and **smart8**, also reconfirm and grant all the technical characteristics which in almost 20 years have been appreciated in all the rectangular versions (indoor and outdoor) of P3ductal system, such as:

- » **total safety in case of fire:** Class 0-1 is also confirmed for both the smart4 and smart8 panels;
- » **highest security in case of earthquake:** due to the high rigidity and lightness of materials;
- » **very high hygiene and quality of the air:** thanks to the use of aluminium for the internal surface of ducts
- » **complete respect of the environment:** our smart4 and smart8 panels follow the exclusive “Hydrotec” technology, which requires the expansion with water of the polyurethane insulation. This solution avoids the undesired greenhouse effect gases.
- » **very good thermal insulation:** $\lambda_i=0,022 \text{ W/(m } ^\circ\text{C)}$ at 10 °C
- » **very low friction losses:** thanks to the fact that the internal surfaces of duct are scarcely wrinkled
- » **extraordinary air seal:** our special “labyrinth” bayonet, thanks to its particular shape, creates a true labyrinth by reducing the leakage of air. Thanks to such bayonet and a particular frame a very good air seal is granted.

Bayonet “labyrinth”: fastness and seal

Smart panels are fast and easy to assemble. It is enough to fold the panel, as per the cuts already made, in order to obtain ducts with quadrangular and octagonal sections. Then the “labyrinth” bayonet is to be inserted in the long narrow junction opening, which is already there on the panel.

The bayonet allows a fast assembly and creates a real Labyrinth: this reduces the losses due to leakage and also grants the very high performances of the duct.



the air, for P3 a mission
for over 50 years

For more than 3 generations we have been working in the air distribution ducts field.

Today P3 is part of an ever increasing international group, whose mission is the promotion of the P3ductal preinsulated aluminium duct with the aim of turning it into an important reality in the air distribution ducts market.

P3 has renewed the construction system of traditional galvanised sheet metal ducts, by creating and developing the P3ductal technology which uses preinsulated aluminium panels, accessories, tools and machinery intended for the construction and installation of air distribution ducts.

The P3ductal system is produced in various plants around the world, distributed in more than 40 countries and can count on a widespread sales network, able to give the required support to all its customers and consultants.



One of P3's strong points is the constant research in order to improve the quality of its products. There is a continuous commitment and innovation of its internal laboratories which cooperate in close relationship with various University Research Centres. P3 is able to offer vanguard performances and technologically advanced materials.

Since 1996 P3 has been working under a certified management system according to the UNI EN ISO 9001-2000 standard and has already obtained the Environmental Certificate UNI EN ISO 14001-2004 and the OHSAS 18001-1999 certification.



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change duct!

enter the new world of air ducts



P3ductal smart
fast construction duct[al] system

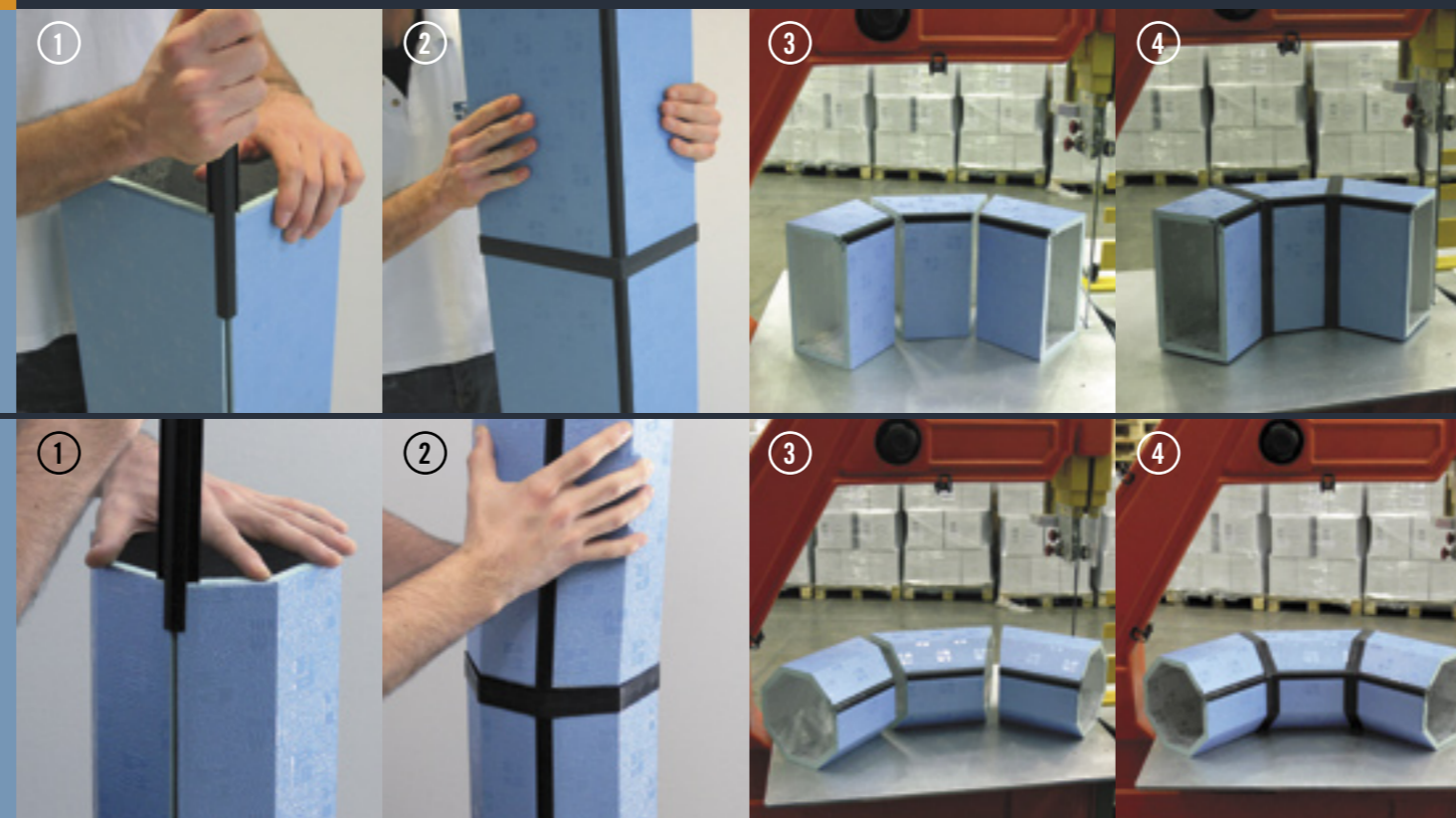
Twenty years ago I decided to change the raw materials used to make ducts. Such a change from zinc-coated sheet metal with insulation to pre-insulated aluminium has been rewarded by the recognition of our clients. Today, more than ever, I strongly feel the desire to improve the existing duct construction procedures, ready to tackle this new challenge. Change the duct with us. choose P3ductal smart!

Luciano Griggio - P3 President



P3ductal smart4&8: change your duct construction, in four steps

smart4
smart8



The real secret behind the **smart4** and **smart8** solutions is the fast and quick assembly.

The philosophy is simple: starting from a straight duct, which can quickly be assembled thanks to the special kit, you can obtain all fittings (bends, reductions, off-sets, etc.) necessary to construct a complete duct system for any requirement.

The steps are few and fast:

1. using the 12 mm pre-cut panels, you assemble the straight duct by simply bending and inserting the “labyrinth” bayonet (panels and bayonets are provided together in a kit form);
2. with a specific straight frame it is possible to unite the single pieces of duct, in order to obtain any length of straight duct.
3. in order to make the fittings you start from the straight duct and with a series of transversal cuts you obtain the single components that, once re-united, generate the fittings.
4. the fittings components are then joined with a angled frame.

P3ductal smart4&8: fast, insulated and economical

Going from duct to system is easier than ever

Where to use P3ductal smart4

The new **smart4** solution for rectangular and square ducts completes the traditional P3ductal solution in particular for those low pressure and low velocity systems, where a fast and easy construction and installation is particularly required.

- pressures up to 250 Pa
- available sizes are from 100x100 to 500x500 mm (with a 50 mm interval)

Where to use P3ductal smart8

The new **smart8** solution for octagonal ducts is efficient, economical and ideal for those visible systems which require both high insulation and aesthetic properties.

- pressures up to 300 Pa
- available sizes are from 150 mm to 400 mm diameter (with a 50 mm interval)

