EASY®

PRE INSULATED DUCT SYSTEM



PRODUCT CONFORMITY

certifire

Features and Benefits

PRE INSULATED DUCT SYSTEM Hygiene & Air Quality

- No release of particles due to internal aluminum surface
- Improved Air Quality as the aluminum surface prevents growth of bacteria and fungi.

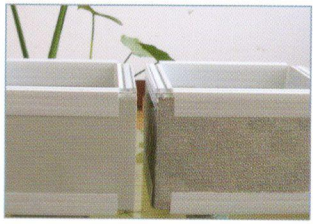




PRE INSULATED DUCT SYSTEM Air Seal

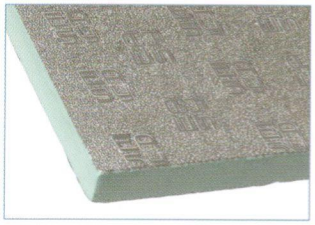
- Invisible flanging system ensures low level of Air Leaks when compared to conventional ducts.
- Elimination of the longitudinal leaks and the reduction of ones at the transversal junction.





PRE INSULATED DUCT SYSTEM Superior thermal Insulation

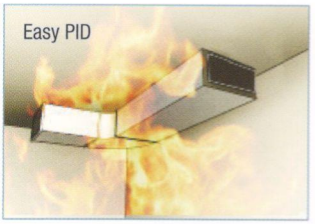
- High thermal insulation with closed cell structure and superior thermal conductivity @ λ 0.021 W/(m°C)

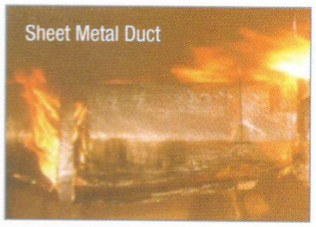


type of material	Term. Conduct λ (10°C)(W//(m°C))
Fiber Glass	0.034
Nitrile Rubber	0.034
Easy Panel	0.021

PRE INSULATED DUCT SYSTEM Fire Resistance

- Self extinguishing properties,
- low fire participation
- No flaming droplets

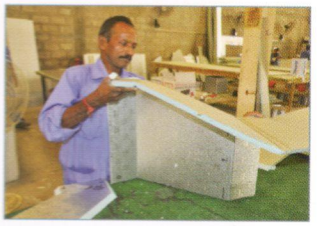




PRE INSULATED DUCT SYSTEM Construction

- Possibilities to fabricate & repairs of ducts at workshop or directly at site.
- Ease of transport

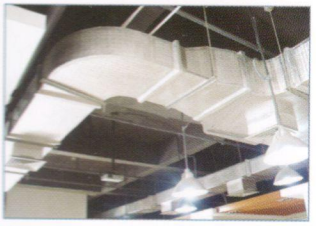




PRE INSULATED DUCT SYSTEM Installation

- Lightness of Easy PID ensures easy installation and reduced weight on the structures.
- Less labor time and materials cut the cost of installation.





PRE INSULATED DUCT SYSTEM Environmental Friendly

- CFC- free production makes EASY PID environmentally friendly and eligible to green building concept.





PRE INSULATED DUCT SYSTEM Economical

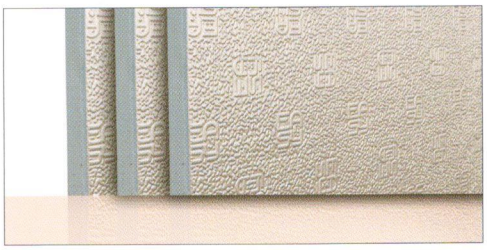
- Low thermal values and reduced air leakage helps in Energy saving and operating cost.
- Competitive compared to traditional ducts.



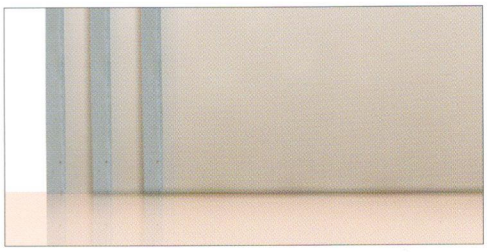


Types of Panels

PRE INSULATED DUCT SYSTEM Conditioned Area Application

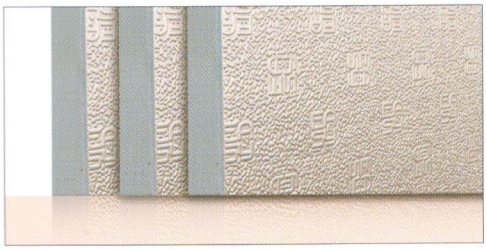


EZ–12AP21 CONDITIONED AREA PANEL	
Size Of The Panel	4000 X 1200 mm
Thickness Of The Panel	20.5 mm
Thickness internal/external aluminium	80 / 80 µm
Finish Of The Aluminium	Embossed

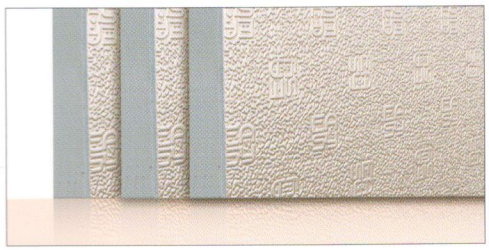


EZ–12ASP21 CONDITIONED AREA PANEL	
Size Of The Panel	4000 X 1200 mm
Thickness Of The Panel	20.5 mm
Thickness internal/external aluminium	80 / 80 µm
Finish Of The Aluminium	Embossed / Smooth

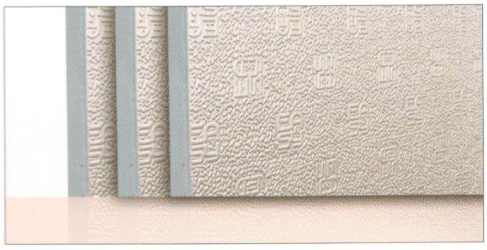
PRE INSULATED DUCT SYSTEM Unconditioned Area Application



EZ–12AS31 UNCONDITIONED AREA PANEL	
Size Of The Panel	4000 X 1200 mm
Thickness Of The Panel	30 mm
Thickness internal/external aluminium	80 / 200 µm
Finish Of The Aluminium	Embossed /Embossed



EZ–12AR31 UNCONDITIONED AREA PANEL	
Size Of The Panel	4000 X 1200 mm
Thickness Of The Panel	30 mm
Thickness internal/external aluminium	80 / 80 µm
Finish Of The Aluminium	Embossed /Embossed



EZ–12AS21 UNCONDITIONED AREA PANEL	
Size Of The Panel	4000 X 1200 mm
Thickness Of The Panel	20.5 mm
Thickness internal/external aluminium	80 / 200 µm
Finish Of The Aluminium	Embossed /Embossed

PRE INSULATED DUCT SYSTEM Certification Available:

- British Standard 476 part 6
- British Standard 476 part 7
- NES 713 toxicity index
- Third Party supervision 'Certifier'
- Certificate of Thermal conductivity
- Dubai Central Laboratory Approved
- IMO Certified
- UL - 723 (ASTM E84)

Technical Data Sheet

PRE INSULATED DUCT SYSTEM **EZ-12AP21 / EZ-12ASP21 / EZ-12AS31 / EZ-12AR31 / EZ-12AS21**

DESCRIPTION

Sandwich panels made of an insulating component in rigid polyurethane foam and laminated on both sides with centesimal aluminium foil.

UTILIZATION

These panels are suitable for the construction of air-distribution ducts in air-conditioning and heating systems.

DIMENSION AND TOLERANCE

The standard production thickness are of 20.5 mm & 30mm with a tolerance of + / - 0.5 mm (within the tolerance foreseen by ISO 1923 standard). The standard production length is of 4000 mm with a tolerance of + / - 5 mm (within the tolerance specified by ISO 1923 standard).

The standard production width is of 1200 mm with a tolerance of + / - 3 mm (within the tolerance specified by ISO 1923 standard). The squaring operation is carried out with an accuracy of + / - 30°C.

INSULATING MATERIAL CHARACTERISTICS

The rigid foamed polyurethane of which these panels are made is a result of a chemical reaction between specifically formulated, first quality polyoils and isocyanates. The polymer obtained from the specific reaction (which involves the transition from the liquid to the solid state) is physiologically and chemically inert, insoluble and unable to be metabolized.

The density of the panels with a thickness of 20mm foamed PUR is of 45 kg/m^3 with a tolerance of + / - 3 kg/m^3 panels with a thickness of 30mm foamed PUR is of 48 kg/m^3 with a tolerance of + / - 2 kg/m^3.

The sheathing is made up of centesimal aluminium with a thickness of 80 µm and 200 µm on both sides of the panels depending on the type: this sheathing is coated with a lacquer based on polyester resin on one side and on the other by thermo-welding lacquer based on vinyl resin.

SPECIFIC HEAT CONDUCTIVITY

Thanks to the high number of closed cells, exceeding 95%, the foam of the panels has a coefficient of initial specific heat conductivity, measured according to ISO 8302 standard of 0,021 W/(m K) at the temperature of 10°C.

UTILIZATION TEMPERATURE

These panels can be used constantly in a temperature range from –30°C to +65°C without any substantial difference in thermo-ventilating insulation specifications.

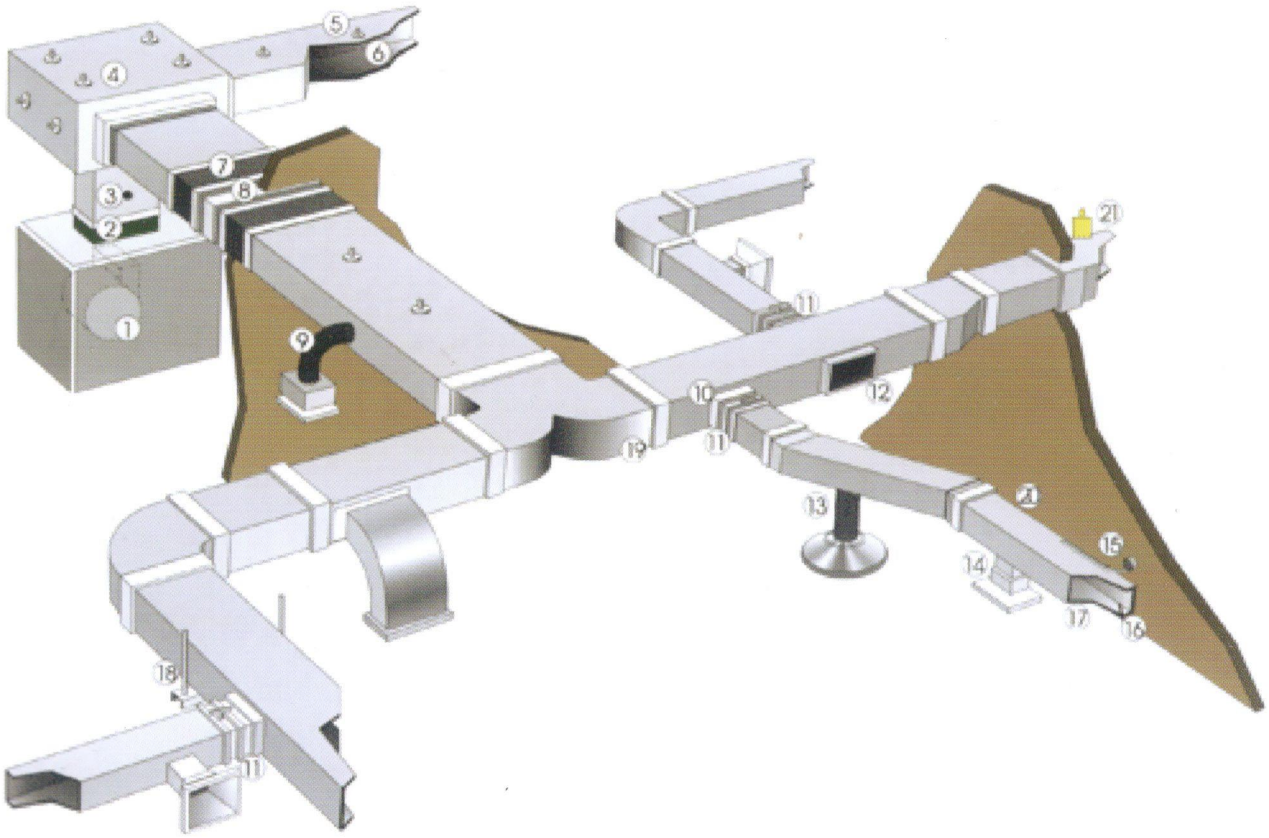
PACKAGING

Delivery is made in packs of 10 panels for 20.5mm thick panels and standard packs of 7 panels for 30mm thick, packed with thermo-ventilating shrinkable polythene sheets.

WARNINGS

The information and data contained herein are based on the present technical knowledge and practical experience of manufacturer as well as on documentation considered reliable, but which has no binding value.

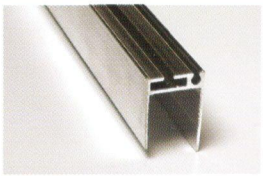
Accessories



Invisible flange joint and tee connector

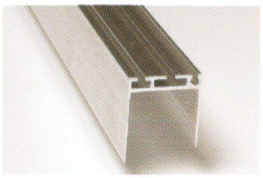
EZ-F102L0 - Invisible flange joint aluminum 20 mm

This special alumiunium flange permits 20 mm th. ducts to be joined with extremely low leakage. The bars are supplied in 4 meter lengths.



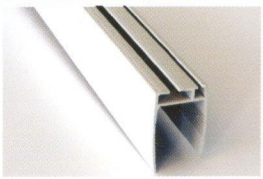
EZ-FI03L0 - Invisible flange joint aluminum 30 mm

This special alumiunium flange permits 30 mm th. ducts to be joined with extremely low leakage. The bars are supplied in 4 meter lengths.



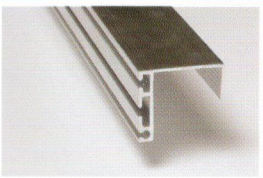
EZ-FI12L0 - Invisible flange joint polymer 20 mm

This special alumiunium flange permits 20 mm th. ducts to be joined with extremely low leakage. The bars are supplied in 4 meter lengths.



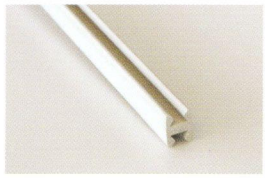
EZ-FT02L0 / EZ-FT03L0 - Tee connector flange joint 20/30 mm

This flange permits the flanging of one duct into the side of another take-offs as tap-in or plenum chamber. The bars are supplied in 4 meter length.



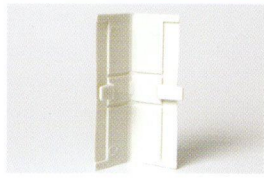
EZ-FH00L0 - H polymer bayonet

Built in shock-resistant polymer, this piece permits "invisible flanges" to be connected. Supplied in 4 meter rods.



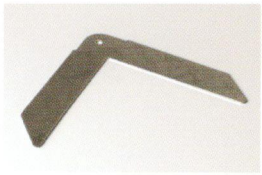
EZ-AP92L0 / EZ-AP93L0 - Covering angle 20/30 mm

Grey polymer covering angle.



EZ-AZ92L0 / EZ-AZ93L0 - Zinc-coated steel angle bracket 20/30 mm

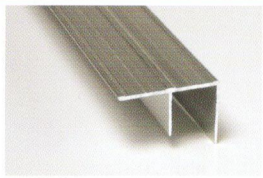
1.5 mm thick zinc-coated steel angle bracket.



AHU & Grilles connections

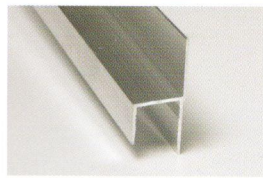
EZ-FF02L0 / EZ-FF3L0 - " F" section bar in aluminium - 20/30 mm

Permits all accessories with fastening frames higher than 20 mm to be fastened to the ducts. Supplied in 4 meter rods.



EZ-FC02L0 / EZ-FC03L0 - Chair section bar in aluminium - 20/30 mm

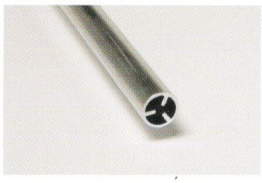
Used to fasten ducts to air handling units and in the assembly of linear diffusers. This section bar is supplied in 4 meter rods.



Reinforcement

EZ-FR00L0 - Reinforcement section bar in aluminium

Special high stiffness aluminium alloy reinforcement section bar.
Bars are supplied in 4 meters rods.



EZ-AD90L0 - Aluminium shaped disk

Aluminium disk to distribute the pressure created at the centre over a wider surface to prevent damage to the panel. Disk diameter 100mm, hole diameter 10 mm.



EZ-ASC230 Self threading screws

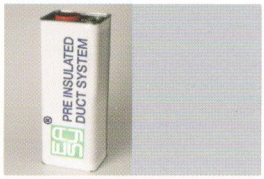
Hexagon head self-threading screws with washer. Used to fasten reinforcement section bars, wing-profile turning vanes and splitters in elbows, etc.



Glues, tapes and sealants

EZ-AG 90L0 - Paint glue 15 kg

Special glue formulated to obtain perfect adhesion on easy panels foam. The product is supplied ready-to-use. Diluition is possibile with special solvent



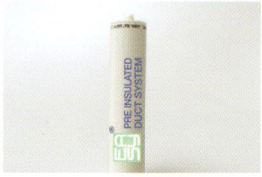
EZ-AT89L0 / 90L0 - Easy aluminum tape

Self-adhesive aluminium tape to use in the construction of the ducts.



EZ-AS90L0 - Duct sealant

Single component silicone sealant.
280 cc stick.



EZ-AG85L0 - Profiles glue

Medium-viscosity adhesive for the gluing of aluminium and Polymer section bars.
500 gr pack.

