



FLATPACK PRE-INSULATED VENTILATION DUCT WORK: SAVING TIME, SPACE AND LABOUR COSTS ONSITE

Description

PanelDuct® is pre-insulated flat-pack metal ducting which easily push-fits together onsite. This unique patented ventilation system is mass produced and is readily available off-the-shelf for immediate delivery. All panels feature integral compression seals, creating an innovative airtight system.

Installation

PanelDuct® is installed in a single fix with a self-aligning assembly that requires no hardware or tape. The patented interlocking system of compression seals and innovative flange design eliminate the possibility of any gaps.

PanelDuct® is delivered to site in flatpack form, requiring only 20% of the usual storage space.

PanelDuct® is suitable for any insulated ventilation application, particularly in high specification projects where pressurised clean air delivery is assured at minimal operating costs. The system can be installed in both new build and retrofit projects and is fully compatible with standard galvanised sheetmetal ductwork.

Compliance

All **PanelDuct®** products are fire rated to Euroclass B_{s3d0} as per ISO EN 13501-1, tested in accordance with EN 13823 & EN 11925-2.

Duct Panels, Fittings and Systems comply with the strength and leakage requirements of EN1507, achieving Class D airtightness, as certified by BSRIA.

Duct Panels exhibit an additional static insertion loss of 5dB per unit area, over traditional rectangular ductwork, as measured by Sound Research Labs, in accordance with EN7235.

PanelDuct® absorb breakout noise to the extent that noise attenuation is not required, as measured by NoiseAir Environmental.

PanelDuct® is designed according to the guidelines of DW/144 and tested in compliance with DW/143.



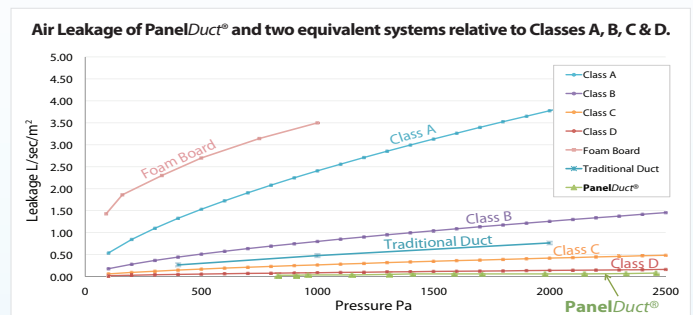
Physical Properties

Foam Layer Thickness	35mm
Foam Thermal Conductivity	0.023W/m·K
Foam Density Range	40-45kg/cu.m.
Closed Cell Content	>96%
Outer Facing	0.5mm thk Galvanised Steel Z275 0.5mm thk Stainless Steel 304 0.5mm thk Plastisol Steel Galv Steel Powder Coated in any RAL colour
Inner Facing	0.5mm Embossed Aluminium Foil 0.5mm Smooth Aluminium Foil 0.7mm Smooth PVC Sheet optional AGION® anti-microbial coating
Max Design Pressure	Positive: 4000Pa Negative: 3000Pa
Max Air Velocity	13m/s
Temperature Range	-30°C to +80°C Internal and External

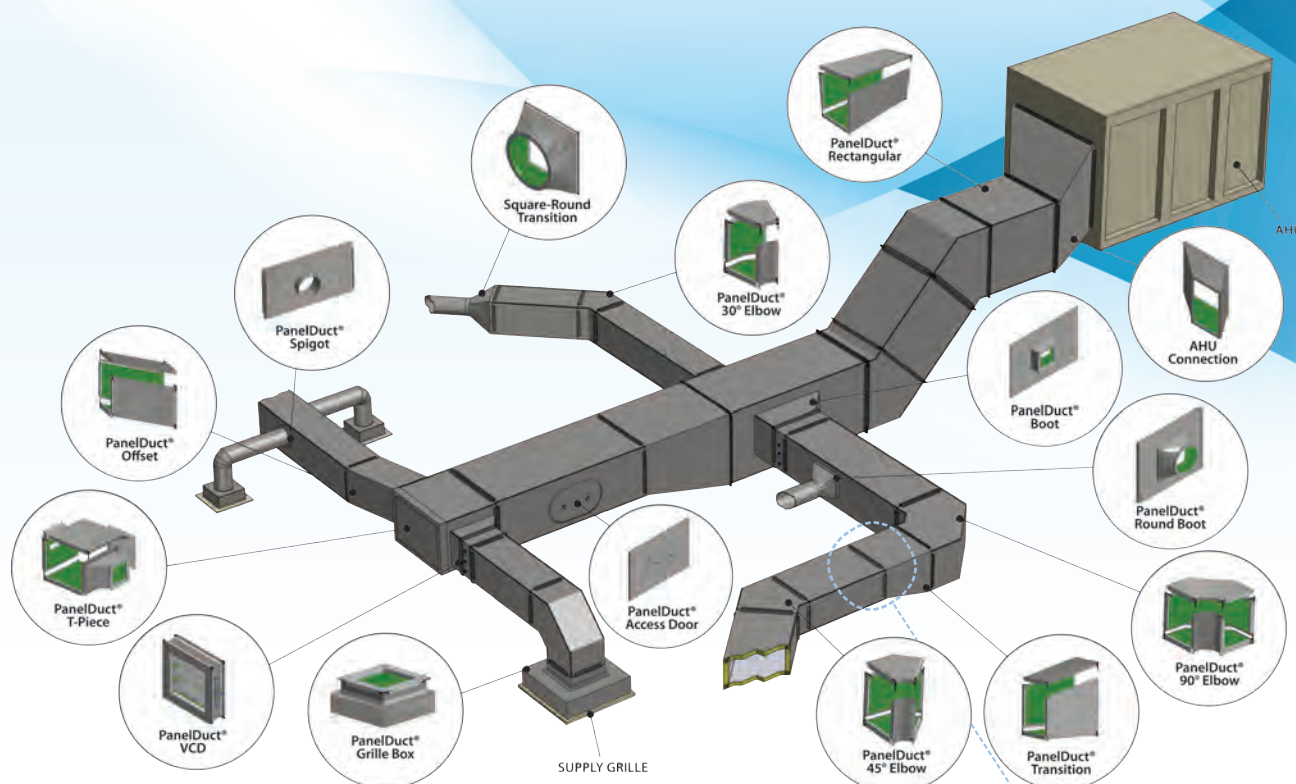
Air Tightness

Ventilation systems built with **PanelDuct®** bring airtightness to unprecedented levels. All panels feature integral compression seals, creating an innovative airtight system.

Ductwork fabricated with **PanelDuct®** has minimal air leakage, even at 2500Pa, which far outperforms any other system currently available. Accordingly, the CO₂ emissions and energy running costs of **PanelDuct®** systems are the lowest achievable.



These results, as measured and certified by BSRIA, show that the standard **PanelDuct®** system outperforms Class D airtightness per EN1507 / DW144.



Key PanelDuct® Benefits:

Quickest Installation:

Ducting, insulation & cladding installed in just one fix.

Most Compact:

PanelDuct® is delivered to site in flatpack form, requiring just 20% of the storage space.

Highest Energy Efficiency:

PanelDuct®'s unbeatable air tightness can enable 15% cost savings over traditional running costs.

Quietest Operation:

PanelDuct®'s composite panel materials offer the best noise suppression on the market.

Most Durable:

PanelDuct®'s outer metal skin is far tougher than any equivalent pre-insulated foamboard.

Lowest Cost Delivery:

PanelDuct®'s compact delivery volume requires only one fifth of the hauliers' involvement.

Lowest Leakage:

PanelDuct®'s systems are virtually airtight, achieving classification of Class D air tightness.

Best Insulation:

PanelDuct®'s unique interlocking design gives a market leading U-value of 0.62W/(m².K).

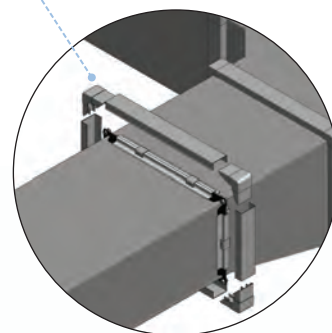
Quickest Delivery:

PanelDuct® panels are pre-manufactured in 14 widths and are available off the shelf.

"There is no waiting time for fabrication."

Optional Flange Coving

For high profile exterior installations, PanelDuct® can be supplied with an optional durable flange coving, matched to any RAL colour, concealing all flanges and connections. As PanelDuct® needs no external cladding, it can offer unparalleled aesthetics for significant cost savings.



Product Range

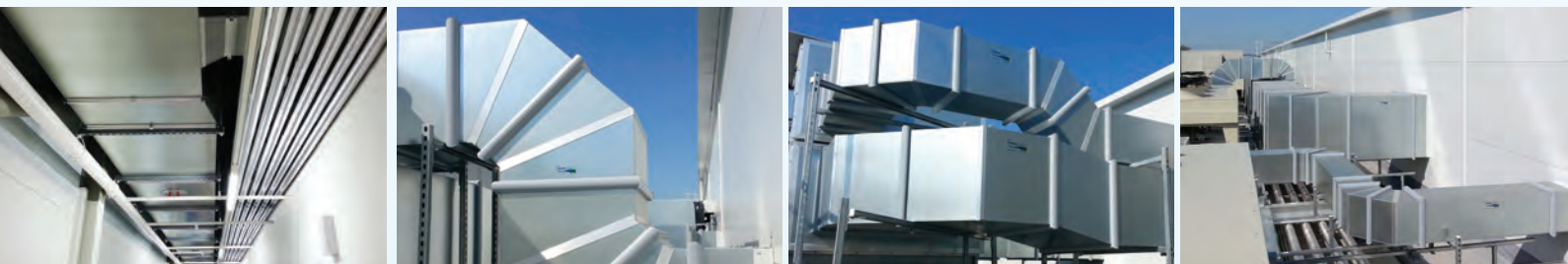
PanelDuct® panels can accommodate the full size and range of any ventilation system including all fittings and accessories.

- Ducts are sized from 200mm to 1100mm at increments of 50mm.
- Standard Length: 1450mm.
- Panels can be ordered trimmed to any shorter length.
- Panels are easily adapted to overcome unexpected complications with onsite modifications.

The interlocking design of the panels is fully patent protected, as is the process by which they are made.



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PATENTED | UNIQUE | GROUND BREAKING | DURABLE | MODULAR | AIRTIGHT