





POLYPANEL

Cushion Boxes - 20mm Polypanel	123
Return Air Boxes - 20mm Polypanel	123
Polypanel Extrusion & Components	124
Polypanel Spigots	124

polypanel

5 ZERO RIGID DUCT



Polypanel is a tested and proven alternative to sheet metal ducting and components.

It is widely accepted and currently in use in major domestic and commercial projects throughout the world. (In the United Arab Emirates, the location of highest rate of building development per capita, Pre insulated Aluminium board has taken over in excess of 50% market share in last 4 years)

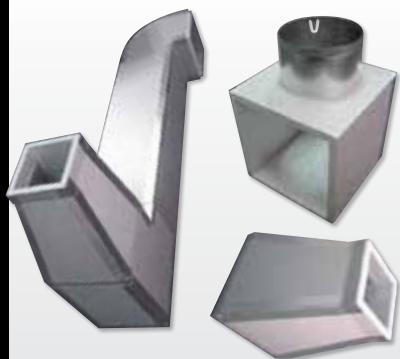
Comprising closed cell polyisocyanurate foam enclosed in two layers of aluminium textured sheet, this product offers superior features and benefits to both the installer and end user, including light weight, strength, ease of fabrication, low vapour permeability and superior hygiene characteristics.

Polypanel Ducting

- Can be fitted closer to ceilings than galvanised sheet as no space need be left for insulation cladding. This saves on ceiling cavity height.
- Can be fitted to fibrous cement and suspended ceilings due to light weight.
- Minor adjustments can often be made on site without the need to fabricate a new section in the factory. This saves both time and money.
- Requires less machinery to position in place due to light weight.

Where can you use Polypanel?

- Hospitals
- Commercial high rise buildings
- Wineries
- Domestic buildings and apartments
- Pharmaceutical Cleanrooms
- Factories/ Commercial Offices
- Anywhere where indoor air quality is important and/or when you have installation, schedule and cost constraints.



ALUMINIUM EXTERIOR OF THE DUCT

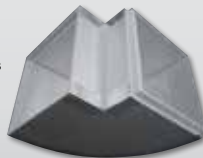
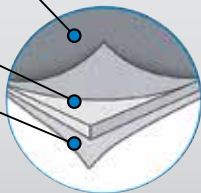
Embossed aluminium creates a sturdy exterior which will protect against impact. The lacquer coating increases corrosion resistance.

PIR (Polyisocyanurate) Board

Durable, light & good insulation.

ALUMINIUM INTERIOR OF THE DUCT

Coated with translucent lacquer providing low vapour permeability and preventing air pollution within the duct.



Comparison Chart

Properties	Steel Duct	Polypanel	Remarks
Insulation	Additional insulation required at extra cost to fabricate and install	Pre-insulation sandwich between two aluminium sheets. No extra process required	Pre-insulated Polypanel has better insulation consistency and good vapour barrier
Weight	0.8 gauge: 6.5kg/m ² 1.0 gauge: 8.1kg/m ²	Polypanel 20/35 = 1.10kg/m ² Polypanel 20/45 = 1.30kg/m ² Polypanel 30/35 = 1.85kg/m ²	Polypanel is less than 25% of steel duct weight. Requires less machinery and manpower to install
Noise	High noise generation and transfer	Limited reverberation effect	GI duct hard surfaces promote sound propagation and resonance. Polypanel tends to absorb rather than reflect sound
Corrosion	By water vapour in air	Not affected by water vapour	Corrosion in GI ducts is even more common in coastal regions
Chemical	Rapid corrosion by chemical reaction in air	Strong chemical resistance	External aluminium surface of Polypanel is coated with lacquer
Installation	Hard to cut, bend and install	Easy, light & fast to install	Fast fabrication and installation of Polypanel ducts
Maintenance	Difficult, requires tradesmen and equipment	Easy, Simple tools and simple process to repair, renew or adjust	Blanket insulation for steel ducts may be easily damaged and is difficult & expensive to repair or replace
Durability	About 10 years	Semi-permanent	Polypanel , though lightweight, is remarkably stable
Cost	Expensive	More effective Price-Quality relationship than GI duct and insulation	Overall Polypanel system is cheaper than GI plus insulation

Cushion Boxes - 20mm Polypanel



Anywhere where indoor air quality is important and/or when you have installation, schedule and cost constraints. Polypanel starter boxes, plenums and return air boxes are light, durable and easier to fit than traditional metal. They can be made in any sizes and are easy to handle.

Features

- Lightweight
- Insulated
- Easy to get into the roof
- Easy to attach duct
- A real time saver

Polypanel products are widely accepted and currently in use in major domestic and commercial Projects. Comprising of closed cell polyisocyanurate foam enclosed in two layers of aluminium textured sheet, this product offers superior features and benefits to both the installer and end user, including light weight, strength, ease of fabrication, low vapour permeability and superior hygiene characteristics.

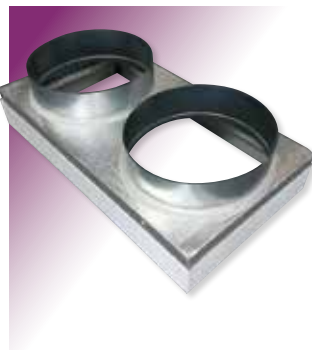
Polypanel can be used in:

- Hospitals
- Commercial high rise buildings
- Wineries
- Domestic buildings and apartments
- Pharmaceutical Cleanrooms
- Factories/ Commercial Offices

Cushion Boxes - 20mm Polypanel

Sizes Available/Dimensions				
Item #	Size (L x W x H)		Spigot Size	
	mm	inch	mm	inch
482547	555 x 555 x 250	22" x 22" x 10"	150	6"
482548	555 x 555 x 300	22" x 22" x 12"	200	8"
482549	555 x 555 x 350	22" x 22" x 14"	250	10"
482550	555 x 555 x 400	22" x 22" x 16"	300	12"
482551	555 x 555 x 450	22" x 22" x 18"	350	14"

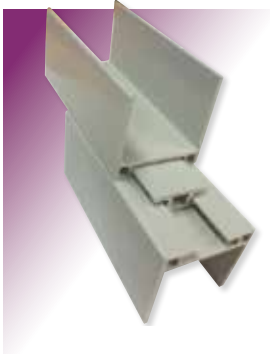
Return Air Boxes - 20mm Polypanel



Return Air Boxes - 20mm Polypanel

Sizes Available/Dimensions					
Item #	Spigots	Size (L x W x H)		Spigot Size	
		mm	inch	mm	inch
483002	1	550 x 550 x 150	22" x 22" x 6"	350	14"
483003	1	550 x 550 x 150	22" x 22" x 6"	400	16"
483010	1	600 x 400 x 150	24" x 16" x 6"	350	14"
483011	1	600 x 400 x 150	24" x 16" x 6"	400	16"
483031	2	750 x 550 x 150	30" x 22" x 6"	350	14"
483032	2	750 x 550 x 150	30" x 22" x 6"	400	16"
483043	2	900 x 500 x 150	36" x 20" x 6"	350	14"
483044	2	900 x 500 x 150	36" x 20" x 6"	400	16"
483046	2	900 x 550 x 150	36" x 22" x 6"	350	14"
483047	2	900 x 550 x 150	36" x 22" x 6"	400	16"
483051	2	1150 x 550 x 150	46" x 22" x 6"	400	16"
483052	2	1150 x 550 x 150	46" x 22" x 6"	450	18"

Polypanel Extrusion & Components



Polypanel Extrusion & Components

Sizes Available/Dimensions			
Item #	Description	Size	
		Width (mm)	Length (m)
635261	Extrusion T Connect - PVC	20	4
635266	Extrusion T Connect - PVC	30	4
129274	F Extrusion - Aluminium	20	4
635255	F Extrusion - PVC	20	4
635267	F Extrusion - PVC	30	4
635268	F Extrusion - PVC	40	4
635259	Flange Extrusion - PVC	20	4
635265	Flange Extrusion - PVC	30	4
129275	H Extrusion - Aluminium	20	4
635251	H Extrusion - PVC	20	4
635258	H Extrusion - PVC	40	4
635260	H Extrusion BAYONET - PVC	20	4
635256	H Extrusion HIGH BACK - PVC	20	4
635269	U Extrusion - Aluminium	42	4
169273	PVC Dual Corners		
169272	PVC Single Angle		
639274	Galvanised Corner Angles		

Polypanel Spigots



Polypanel Spigots

Sizes Available/Dimensions			
Item #	Spigot Size		
	mm	inch	
124818	Ø 100	Ø 4"	
124819	Ø 150	Ø 6"	
124820	Ø 200	Ø 8"	
124821	Ø 250	Ø 10"	
124822	Ø 300	Ø 12"	
124823	Ø 350	Ø 14"	
124824	Ø 400	Ø 16"	
124825	Ø 450	Ø 18"	
124826	Ø 500	Ø 20"	
124827	Ø 550	Ø 22"	
124828	Ø 600	Ø 24"	