AIRFOIL

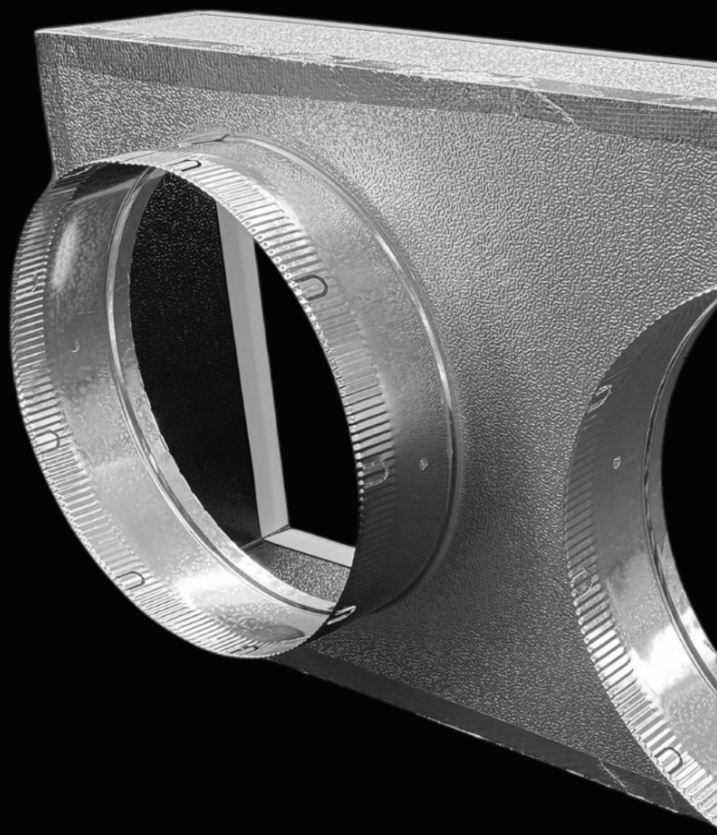
GRILLES
DUCT
FITTINGS

making it happen sooner...

AUSTRALIAN MADE
AND OWNED

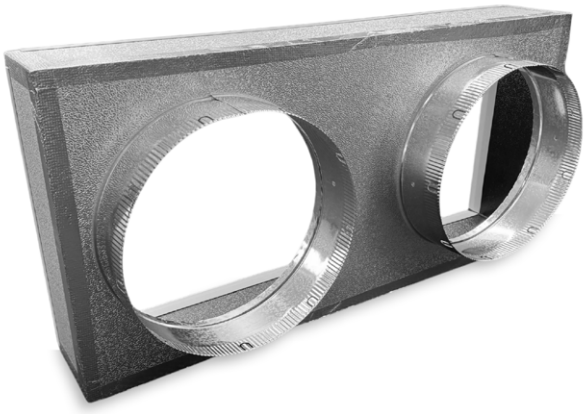
Quality System™

Quality
Endorsed
Company
ISO 9001
SAI GLOBAL



POLY BOARD RETURN AIR PLENUM BOX - TOP ENTRY

RB-RAB-T



POLY BOARD RETURN AIR PLENUM BOX - TOP ENTRY
PB-RAB-T

PRODUCT DESCRIPTION AND APPLICATION

Airfoil's Australian Made 20mm Polyurethane Foam Pre-Insulated Poly Board Return Air Plenum Box (PB-RAB-T) is a light weight Fire Rated alternative to our Sheet Metal range. The Poly Board aluminium sheeted exterior is coated with a 2g/m^2 resistant epoxy varnish further enhancing its insulation qualities guaranteeing durability and reliability.

The primary function of the (PB-RAB-T) is to facilitate the gathering of Return Air from the conditioned space, channeling it back to the HVAC system for reconditioning. This crucial process ensures the maintenance of adequate air circulation and ventilation within the building.

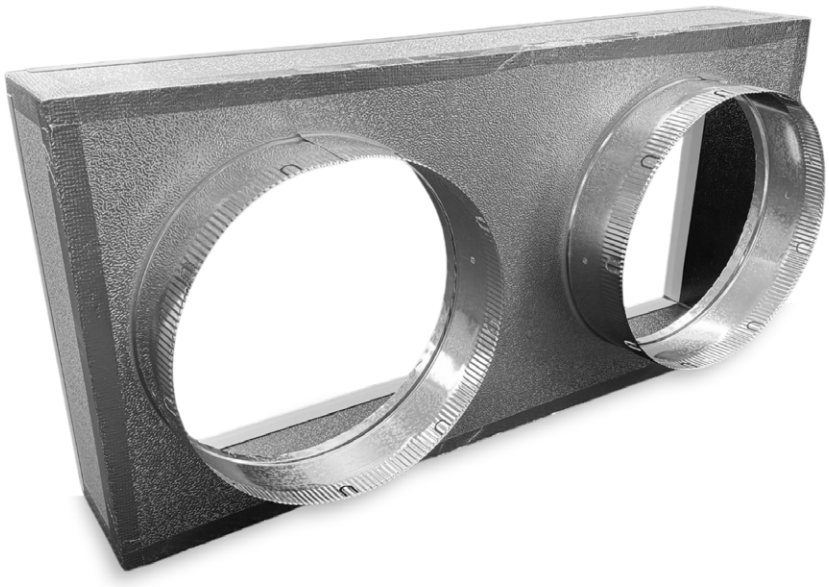
To enhance flexibility, the Airfoil PB-RAB-T offers multiple Top Entry spigot placements, this unique design allows the Top Entry (PB-RAB-T) to efficiently return air directly from the rear of the Return Air Grille.

Designed to seamlessly integrate with Airfoils' Return Air Grille range this quality Plenum Box ensures compatibility and efficiency. Suitable for commercial settings where thermal and acoustic requirements are paramount, it stands as a testament to Airfoil's commitment to excellence in Poly Board solutions.

POLY BOARD RETURN AIR PLENUM BOX - TOP ENTRY
PB-RAB-T

PRODUCT SPECIFICATIONS AND INFORMATION

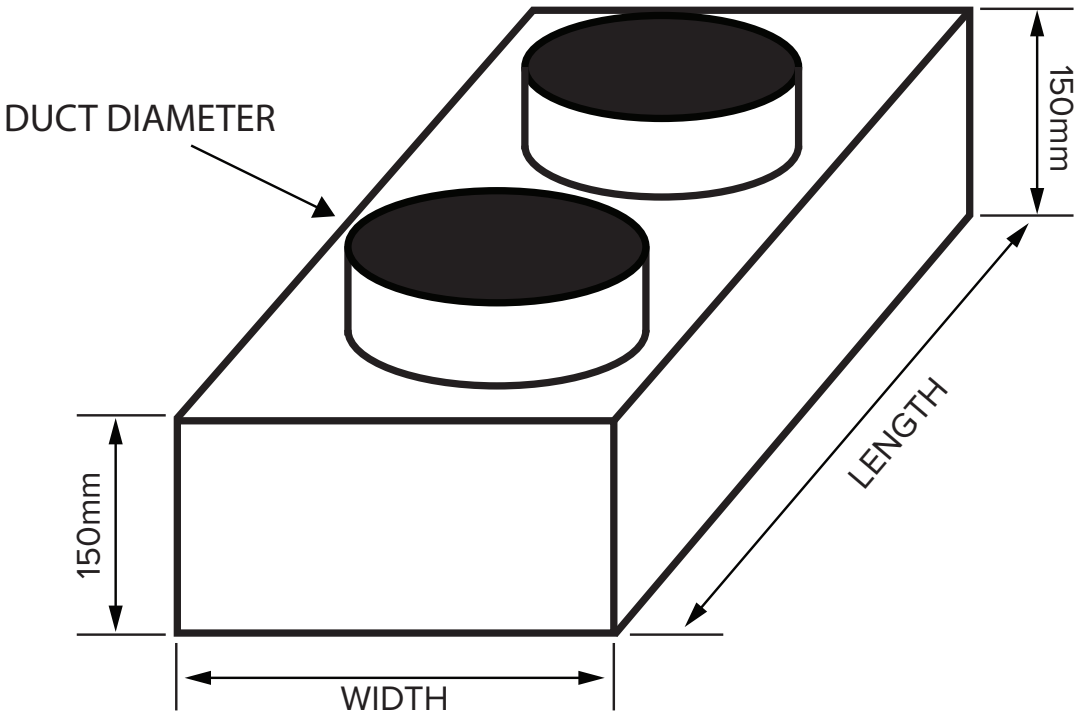
- **Product ordering code – PB-RAB-T**
- Australian Made and Designed
- Custom made to any size (order by internal opening size)
- Manufactured from 20mm Polyurethane Foam (Pre-Insulated)
- Aluminium Outside / Black-Faced internal
- R-Value
- Light weight
- Coated with 2g/m^2 resistant epoxy varnish
- Density = 66kg/m^3
- Available with optional 20mm C-Extrusions cover attachment trim
- Easy installation
- Custom box heights manufactured to suit grille requirements
- Mounted behind grille
- Acoustic qualities
- Thermal qualities
- Spigot placements opposite the open end of the box
- Spigot sizes available are 100mm, 150mm, 200mm, 250mm, 300mm, 350mm 400mm, 450mm, 500mm, 550mm and 600mm diameters
- Customised oval spigots available to suit varying box height restrictions
- Used for return air in heating and cooling
- **Tested information available (AWTA)**



POLY BOARD RETURN AIR PLENUM BOX - TOP ENTRY
PB-RAB-T

CROSS SECTIONAL DIAGRAM

TOP ENTRY RETURN AIR PLENUM BOX

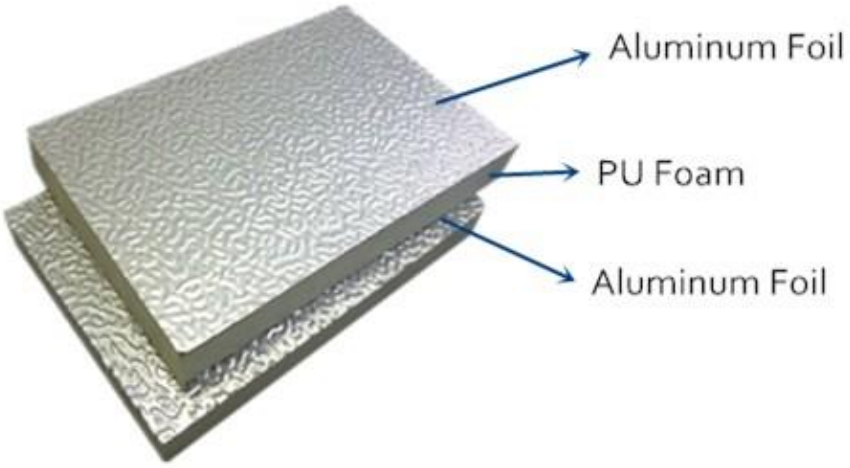


SPIGOT PLACEMENTS ARE OPPOSITE THE OPEN END

POLY BOARD RETURN AIR PLENUM BOX - TOP ENTRY
PB-RAB-T

PU FOAM PRE-INSULATED PANEL (20MM THICK)

Polyurethane Foam Pre-insulated Panels consists of 20 mm thickness with aluminium foil, aluminium sheet or Galvanised Iron on both or either sides. The aluminium foil is coated with a 2g/m^2 layer of corrosion-resistant epoxy varnish paint which also acts to reduce fungus and mold growth.

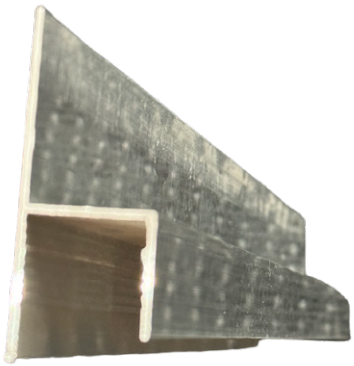


The aluminum foil can be produced in silver, white or black colour, with a smooth or embossed finish. The surface of the panel also can be aluminum sheet, GI or printed color steel, as per the images below:

POLY BOARD RETURN AIR PLENUM BOX - TOP ENTRY
PB-RAB-T

TECHNICAL DATA
PU FOAM PRE-INSULATED PANEL (20MM THICK)

PROPERTY	UNIT	SPECIFICATION
Standard Size	mm	3950*1200*20
Foam Density	kg/m^3	50-55
Aluminium Foil Thickness	micron	80
Aluminium Sheet Thickness	micron	200
Thermal Conductivity	W/m.K	0.02
Thermal Resistance	R-Value	R1.0 (AS/NZS 4859 - ASTM C518 -2017)
Fire Rating	3 Zero	AS/NZS 1530.3-1999
Compressive Strength	Mpa	0.25
Bending Strength	Mpa	2
Water Absorption	%	0.01
Dimension Change	%	0.3
Maximum Wind Velocity	m/s	13-20
Maximum Running Temperature	°C	80



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