AIR DIFFUSION AGENCIES

ADA DUCTBOARD™ SYSTEM

Welcome to ADA

YOUR ONE STOP AIRCONDITIONING TRADE CENTRE

A family owned Australian business

Air Diffusion Agencies is a renowned Australian manufacturer of state of the art accessories and technologies to provide you with a comprehensive range of components for your heating, ventilating, and/or air-conditioning (HVAC) system.

We are the leading Australian supplier of quality air conditioning equipment and refrigeration components to the industry, and a holder of several patented products. We offer a complete range of products including air diffusers, flexible ducting, fittings, ductboard, sheetmetal, zoning equipment, combustion heating components, spare parts and units.

We are a proudly 100% Australian family owned and managed company that is market driven by our valuable customers to design and provide innovative products that will meet your needs today, and in the future.

We really are your one stop air conditioning trade centre, put us to the test today!

Price books and catalogues are released each year do you have the latest copy?

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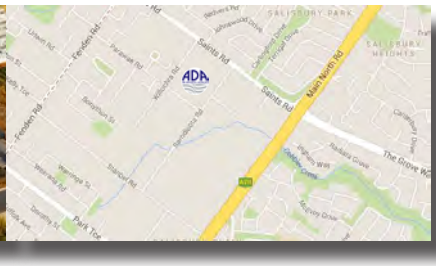

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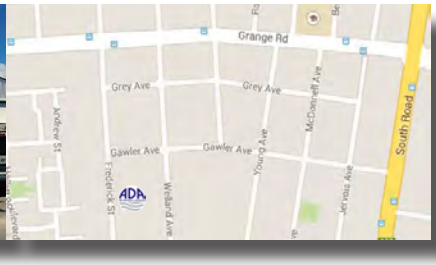

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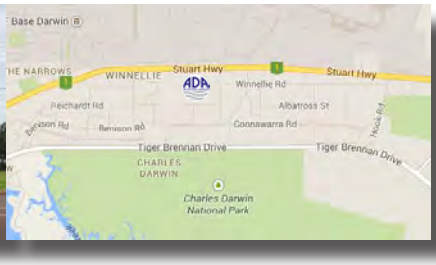

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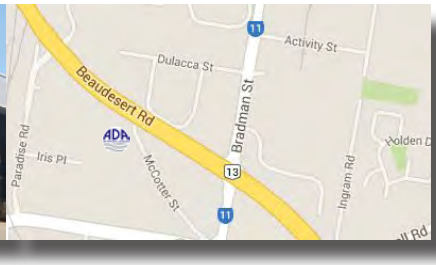

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Product Description

What is ADA Ductboard™?

ADA Ductboard™ is a sandwich panel of aluminium foil faced material pre-insulated with a polyisocyanurate (PIR) foam core. This board is designed to be used as an alternative to fabricated metal insulated ductwork commonly used in the distribution of ventilation, heating and air conditioning systems.

ADA Ductboard™ panels can be sourced in different wall thicknesses achieving R1.0 up to R3.0 to meet common National Construction Code (NCC) Section J compliant situations.

Why ADA Ductboard™?

With the need to provide solutions to reduce the carbon footprint of construction, ADA Ductboard™ starts by eliminating the need to use huge amounts of sheet metal to provide the distribution of conditioned ventilation to multiple areas. ADA Ductboard™ also requires less energy to manufacture, leading to a huge holistic embodied energy saving and CO_2 reduction. The need for big heavy machinery to fabricate metal ductwork is eliminated, again reducing the carbon footprint of this product.

ADA Ductboard™ is easily managed and worked to provide accurate designed ductwork sections with the use of CNC equipment. This can be tailored with computer building design equipment to perfect the end product. The need for high structural support loadings to cater for metal ductwork is reduced using ADA Ductboard™ as the light weight will reduce these, providing efficiencies within the building structure necessary in supporting ductwork loads. The reduced weight reduces the mass per metre loadings used for AS1170.4 earthquake compliance. Another advantage of ADA Ductboard™ is the reduction in size of the equivalent fabricated metal ductwork, increasing net lettable space or reducing the ceiling space required.

Due to the light weight of the panel, the transportation costs are reduced. Onsite delivery and onsite handling of the product can be easily done by a smaller crew with minimal lifting equipment. With these efficiencies comes reduced installation times leading to faster builds and therefore reduction in building construction costs.

Product Description

What are the benefits of ADA Ductboard™?

- Suitable for use in new building installations as well as refurbishing projects of existing buildings
- Adaptable to suit many different applications where optimisation of space is important
- Higher insulation R-Value with thinner panel thickness
- Reduced holistic carbon footprint from conception through to delivery and onto installation, compared to fabricated metal ductwork, hence cutting CO_2 emissions and creating energy savings across the product lifecycle
- Versatile as it can be cut to form almost any shape. Sheets come in 4000mm x 1200mm making it easier to construct ductwork with less joints compared to sheet metal
- Considerably lighter in weight compared to alternatives reducing the engineering and structural reliance to suspend ductwork. The need to provide heavy duty lifting equipment is reduced during installation
- Installation is simpler and quicker as the ductwork is easily joined and installed in place, reducing cost of labour
- Low air-leakage rates improve efficiencies and running costs
- Smooth clean inner surface perfect for use in sterile, clean air and hygiene controlled environments
- Great for use in high humidity areas. The internal surface is non-perforated, which eliminates delamination of surface coatings on evaporative air conditioning systems
- Easily integrated with existing systems
- Compressive strength of ≥ 120Pa
- Water absorption rate of ≤ 1%
- Operating temperature from -60 to +100°C
- Easily modified onsite to cater for system configuration changes
- Easy manoeuvrability and transportation of ductwork
- Zero ODP (Ozone Depletion Potential) & low GWP (Global Warming Potential)
- Non-fibrous rigid inner core therefore no fibres exposed to the airstream
- Reduced earthquake compliance loadings (AS1170.4 & NZS4219)
- Ductwork fabricated from ADA Ductboard™ tested to AS60068.3.3 for seismic applications
- Compliance with AS4254.2 for rigid ductwork, specifically AS/NZS 1530.3 & UL 181 burning test
- Ductwork suitable for duct pressures up to 1000Pa
- Acoustic benefits
- LEED and Greenstar benefits

Conclusion

The need to find efficiencies in the building industry challenges many architects, engineers, contractors and end users. They must provide easy, workable, and cost effective solutions to decrease the global impact and reduce CO_2 emissions while still providing a practical outcome. The introduction of ADA Ductboard™ compliments this need and with its ease of installation and many other benefits, ADA Ductboard™ will suit most HVAC situations.

Technical Data

General

ADA Ductboard™ is a rigid sandwich panel with aluminium foil cladding on both sides and filled with rigid polyisocyanurate foam. Density is typically 48kg/m^3.

Structure

Carbon dioxide and n-pentane blown, diphenyl methane-4,4'-diisocyanate(MDI)/polyester/ polyether rigid polyisocyanurate foam.

Relevant Standards

AS/NZS 4859.1 Materials for the Thermal Insulation of Buildings Part 1: General criteria and technical provisions
All ductboard must meet current Building Code of Australia (BCA)/National Construction Code (NCC) requirements for insulation value and must be tested by a NATA accredited laboratory.

ADA Ductboard™ has been tested to this standard in a range of thicknesses and R-Values from 1.0 to 3.0 to meet all relevant BCA/NCC Section J requirements.

Note the R3.0 ductboard has an outer liner of colourbond sheet metal material with an aluminium foil inner face.

ADA Ductboard™ detailed AS/NZS 4859.1 results are shown in *Table 1.*

AS/NZS 4254.2 Ductwork for air-handling systems in buildings Part 2: Rigid duct
This standard calls for testing of rigid ductwork in accordance with AS/NZS 1530.3 and the UL 181 burning test.

> **AS/NZS 1530.3 Simultaneous determination of Ignitability, Flame Propagation, Heat Release and Smoke Release**
> All ductboard must be tested by a NATA accredited laboratory to this standard.
>
> ADA Ductboard™ detailed AS/NZS 1530.3 test results are shown in *Table 1.*
>
> **UL 181.11 Standard for Factory-Made Air Ducts and Air Connectors**
> All ductboard must pass the UL 181 burning test. ADA Ductboard™ passes this test.

AS 60068.3.3 Environmental testing: Guidance - Seismic test methods for equipment
This standard details the test method for seismically testing ductwork fabrications. ADA Ductboard™ fabrications and recommended suspension methods were tested to this standard. Refer to the section ‘Ductboard Seismic’ for more details.

Technical Data

AS/NZS Test Results

For test report references refer to ‘ADA Ductboard™ Test Reports’ at the back of this booklet.

Table 1

Nominal Thickness	Coating Internal	Coating External	AS/NZS 4859.1 R-Value	AS/NZS 1530.3			
				Ignitability (0-20)	Flame Propagation (0-10)	Heat Release (0-10)	Smoke Release (0-10)
20mm	Aluminium foil, black anodising, 0.08 nominal thickness	Aluminium foil, silver anodising, 0.08 nominal thickness	R1.0	0	0	0	0-1
25mm	Aluminium foil, black anodising, 0.08 nominal thickness	Aluminium foil, silver anodising, 0.08 nominal thickness	R1.2	0	0	0	2
30mm	Aluminium foil, black anodising, 0.08 nominal thickness	Aluminium foil, silver anodising, 0.08 nominal thickness	R1.5	0	0	0	1
40mm	Aluminium foil, black anodising, 0.08 nominal thickness	Aluminium foil, silver anodising, 0.08 nominal thickness	R2.0	0	0	0	2
65mm	Aluminium foil, silver anodising, 0.08 nominal thickness	White Colour-bond Steel 0.2 nominal thickness	R3.0	0	0	0	5*

*Refer 4254.2 Section 2.1.2 Rigid Ductwork - (a) The assembled duct system shall have a smoke development index not greater than ‘3’

General Performance Data

Table 2

Test Data Item	Result
Compressive Strength	≥ 120kPa
Water Absorption Rate	≤ 1.0%
Operating Temperature	-60 to +100°C

Table 3

Test Data Item	Test	Result
Harmful substance (Formaldehyde)	GB18580-2001	Nil
Harmful substance (Benzene)	GB18580-2001	Nil

Technical Data

Acoustic Testing

Testing of the attenuation provided by ADA Ductboard™ was undertaken in general accordance with the requirements as outlined in the standard ANSI E477-13: Standard Test Method for Laboratory Measurements of Acoustical and Airflow Performance of Duct Liner Materials and Prefabrication Silencers.

Relevant test results are summarized below. The full test report can be provided on request.

Table 4: Additional attenuation provided by 3m length 40mm ADA Ductboard ™

Cross Section	Octave Band Centre Frequency. Hz							
	63	125	250	500	1K	2K	4K	8K
200mm x 300mm	11.5	6.2	15.2	16.5	15.9	9.2	8.9	4
300mm x 600mm	-2.4	8.1	7.6	5.8	4.9	2.3	6.7	2.6
600mm x 900mm	2.8	10.9	4.5	4.7	3.2	1.8	4.4	1.9

Table 5: Additional attenuation provided by 3m length for 300mm x 600mm duct

Thickness	Octave Band Centre Frequency. Hz							
	63	125	250	500	1K	2K	4K	8K
40mm ADA Ductboard™	-2.4	8.1	7.6	5.8	4.9	2.3	5.7	2.6
25mm ADA Ductboard™	2.9	5.4	9.2	5.5	5.6	3.5	1	3.8

Note the negative result for 40mm at 63Hz does not indicate that this duct amplified sound, but rather, that it provided less attenuation than the unlined sheet metal against which the results are normalised. The reduced attenuation for the 40mm duct is likely due to the increased stiffness of the 40mm ductwork, when compared to the walls of both the unlined steel and 25mm ductwork.

Ductwork Assembly & Suspension

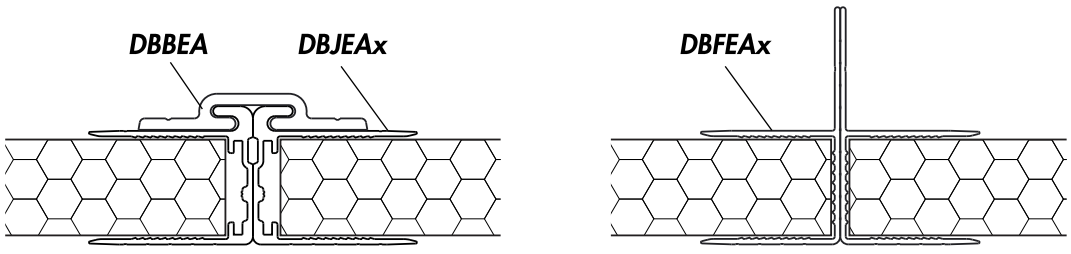
General Specification

Ductwork

- All ductwork must be machine cut with precision routing machines. Joints must be clean and free from burrs and debris.
- All profiled cuts must be sealed with a fire rated water based sealant and after assembly (folding to shape), the internal corners shall also have a bead of approved sealant applied.
- For internal ductwork, all external joints shall be taped with 75mm wide aluminium reinforced foil tape. 50mm tape is generally used for cushion head boxes.
- For external ducts, utilizing the 65mm range, external longitudinal joints shall be covered with 50 x 50 white colourbond sheet metal angle. The angle is to be sealed internally with silicon sealant and mechanically secured to transverse duct flange joints at both ends. The angle shall be fixed with either aluminium sealed blind rivets or 16mm long galvanized needle point pan head screws at a maximum of 200mm centres.
- Maximum recommended length of duct is 1980mm for ductwork with the longest external side being no more than 600mm and a perimeter of less than 2360mm (eg. 600 x 580 is the maximum.) For larger duct the maximum recommended length is 1150mm.
- All ductwork spanning ≥800mm wide shall be supported centrally with Ductboard Support Plates placed at 1500mm maximum centres. Ductwork spanning ≥1000mm in height shall also be supported centrally with Ductboard Support Plates. Refer to the section 'Ductboard Support Plates' for more detail.

Aluminium Extrusions

All transverse joints shall use aluminium ADA Ductboard™ Extrusions with built-in provision for an aluminium drive cleat (DBBEA). There is also a flange extrusion (DBFEA) that may be used if preferred.



The corners of the extrusion shall be mitred and sealed to provide an airtight connection. Prior to fitting the extruded frame, a bead of approved sealant shall be applied to the inside and outside of the ductboard to ensure a weatherproof and airtight joint. For external frames, a bead of silicon sealant shall be applied along the top edge of the extrusion where it meets the surface of the board.

Features of the aluminium ADA Ductboard™ Extrusions include:

- Minimum thickness 1.5mm for all board ≥ 40mm thick
- Minimum thickness 1.3mm for 30mm thick board
- Minimum thickness 1.1mm for 20 & 25mm thick board
- 20 micron anodizing on the 65mm range for external ductwork
- 10 micron anodizing on the 20-40mm range for internal ductwork

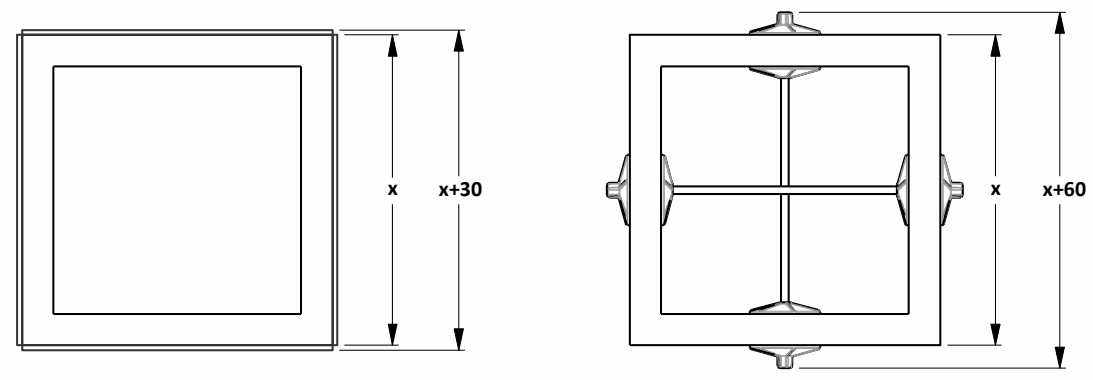
PVC Extrusions

There is also a range of ADA Ductboard™ Extrusions in PVC suitable for domestic use with 20mm thick board. For more detail on extrusions refer to the 'Ductboard Extrusions' sections.

Ductwork Assembly & Suspension

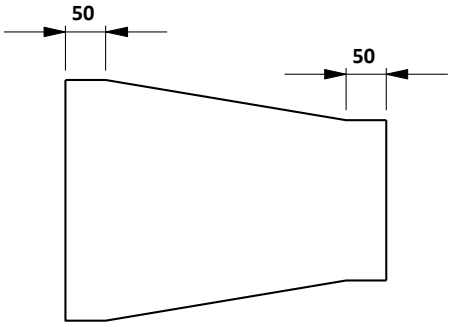
Clearances

Using the aluminium drive cleat DBBEA will add 30mm overall (15mm per side) to specified external duct size. Using Support Plates will add 60mm overall (30mm per side) to specified external duct size.



Transitions

Any transition ductwork will need a minimum of 50mm of straight at the joins.



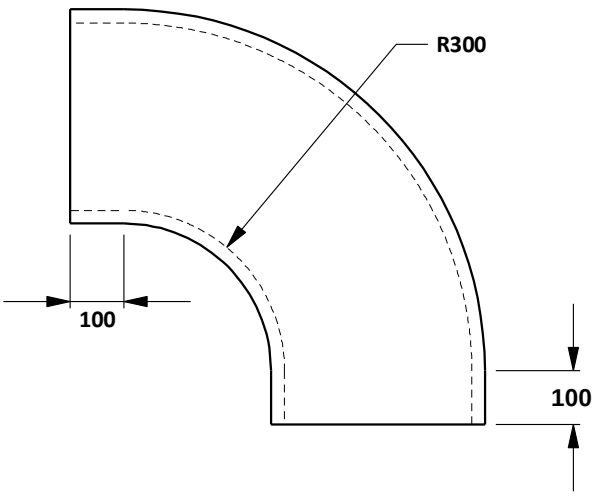
Duct Penetrations

Any penetrations in the ductwork must be framed with extrusion, therefore allow 50mm of straight is required to surround any penetration.

Flexible duct take-offs are either castellated metal collars used with duct sealant, or the patented ADA Ductboard Adaptor with clip-in collars. Refer to the section 'Ductboard Adaptors' for detail.

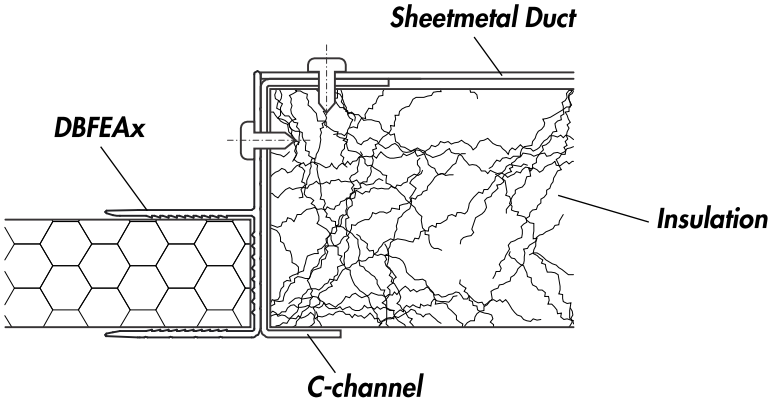
Bends

Use radius bends where practical. Minimum radius is 300mm internal and for small bends the use of a square throat is preferred. Minimum straight on throat is 100mm.

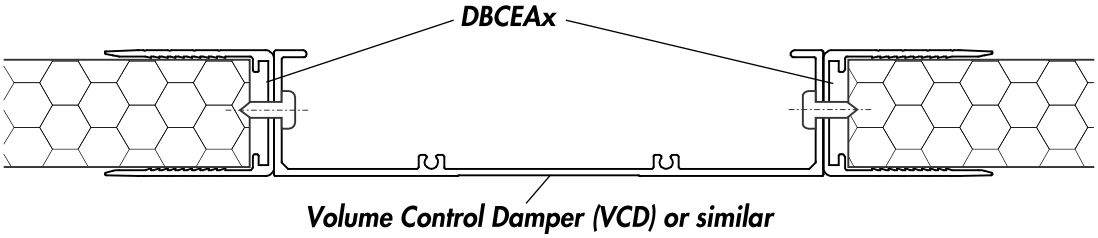


Ductwork Assembly & Suspension

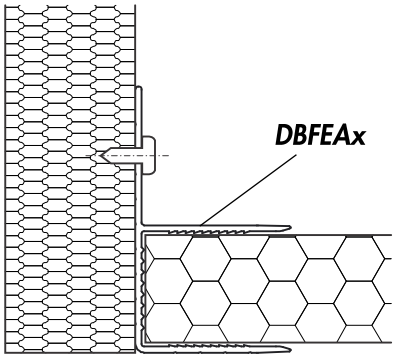
Sheetmetal to Ductboard connection
For sheetmetal connections use the flanged extrusion DBFEA



Ductboard to VCD (Volume Control Damper) connection
Use DBCEA in line with a VCD



Ductboard through Firewall
Use the flanged extrusion DBFEA



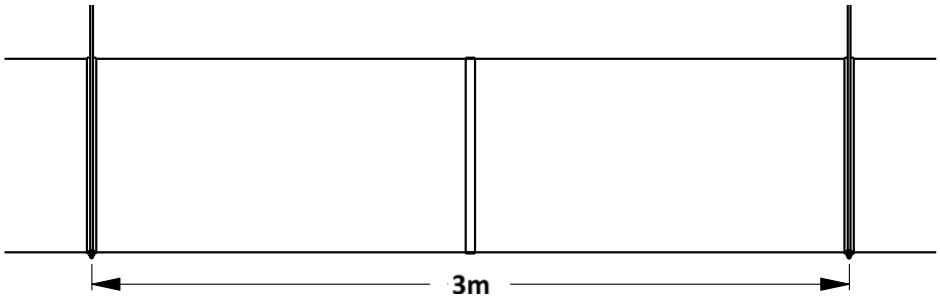
Ductwork Assembly & Suspension

Installation

Joining the Ductwork
All transverse joints shall have an approved sealant applied between the flanges to form an airtight seal. External joins or any join to external ductwork shall incorporate an over-flashing, fabricated from white colourbond sheet metal material, to create a waterproof join.

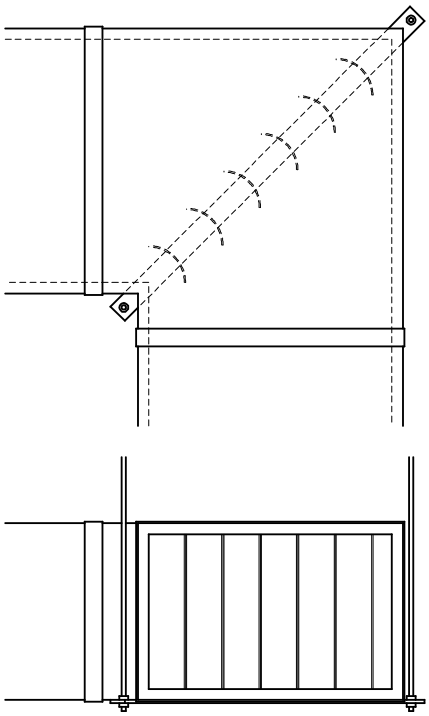
Fixing the Extrusions
The drive cleat extrusion DBBEA shall be fixed to the joiner extrusions with a minimum of 2 fasteners per side. For duct with sides longer than 1m, it is recommended to use half length drive cleat extrusions and drive in from both sides. Fasteners shall be either aluminium sealed blind rivets or 20mm long galvanized needle point pan head screws.

Ductwork Suspension (General)
The ductwork shall be generally supported at 3m spacing.



The ductwork shall be supported by 10mm galvanized threaded rods, or alternatively by the approved wire rope system. Air Diffusion Agencies recommends the CADDY® SPEED LINK Universal Support System for wire rope ductwork suspension. The wire must be either galvanized or stainless steel and minimum diameter wire rope is 2mm with certified adjustable locking mechanisms. Refer to the section 'Ductboard Suspension Methods' for more detail.

Where large square bends are used, the installation will require a metal support under the vanes.



Ductwork Assembly & Suspension

Ductwork Suspension (Seismic)
For compliance with AS 1170.4 & NZS 4219 use the suspension systems as detailed in the section 'Ductboard Seismic' and 'Ductboard Safety Hanger'.

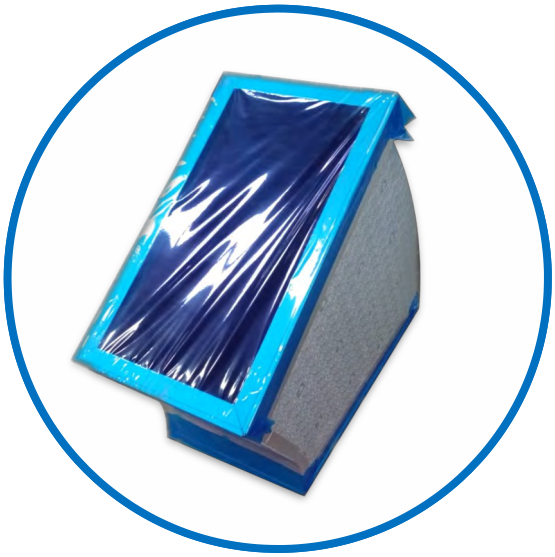
Sealant
For all internal sealant, Air Diffusion Agencies specifies the use of a water based acrylic, high strength duct and metal sealant. The sealant shall be a fire rated polymer sealing compound for sealing of ductwork.

Equivalent sealant features must include:

- Fire rated, AS1530.3.1989 (AMDT 1 April 1992)
- Flexible
- Excellent adhesion to most building materials
- Water based
- Weather resistant

For all external sealant a water proof silicon sealant must be used.

Duct Wrap
Ductwork fabrications can have the openings covered in duct wrap to prevent the ingress of dust during transport and prior to commissioning. This is available on request.



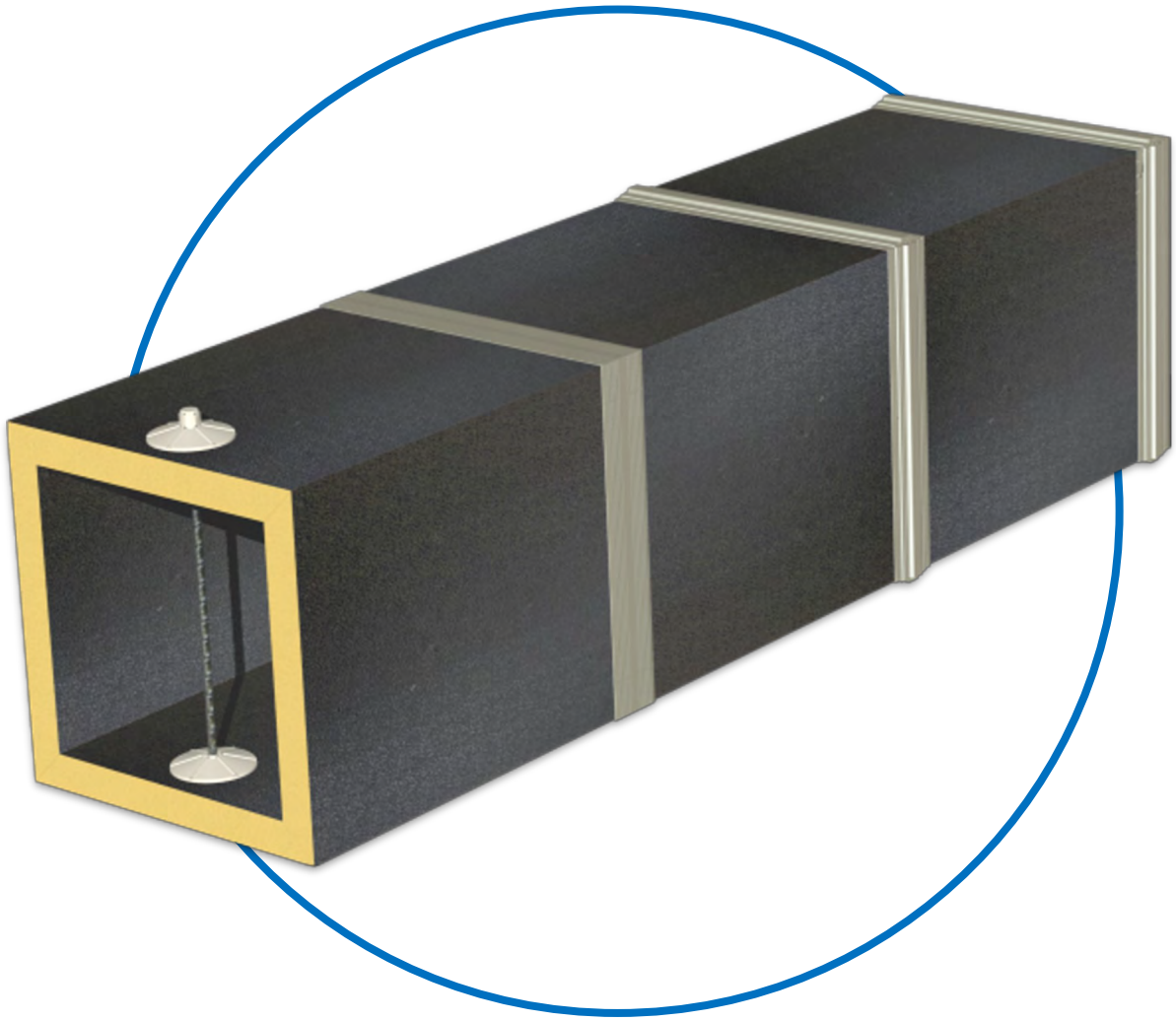
Ductwork Extrusions & Accessories

Introduction

The following sections describe in more detail the range of ADA Ductboard™ Extrusions suitable for use with ADA Ductboard™ and other accessories that can be used with this system. Diagrams help to explain the usage of the various profiles and briefly explain how the profiles are fabricated and assembled to the board. Extrusion ranges are available for 20, 25, 30, 40 and 65mm board.

Usage of the following accessories are outlined:

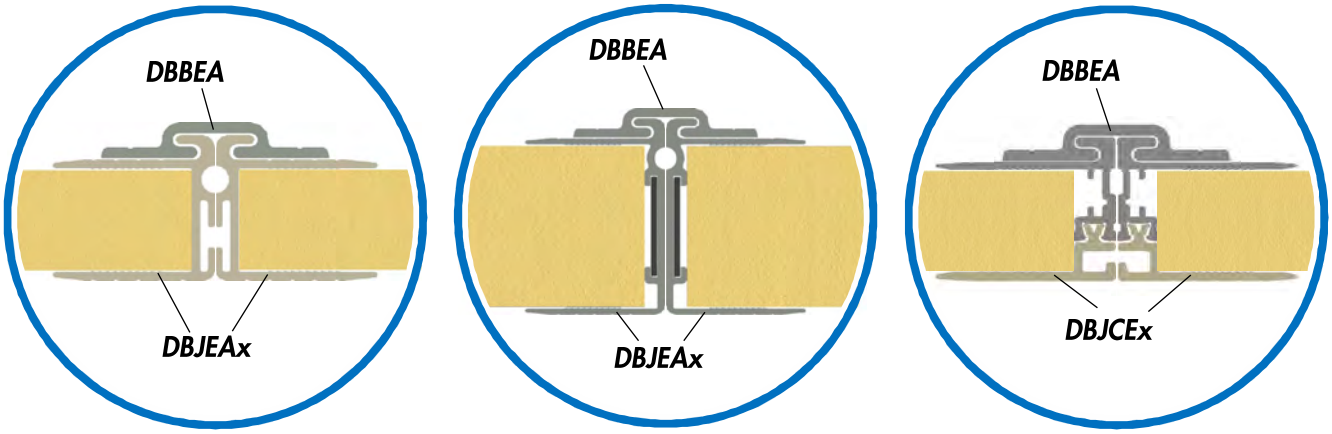
- Ductboard Adaptors
- Insulated Double Spigot Adaptors
- Ductboard Support Plates
- CADDY® SPEED LINK Universal Support System for ductwork suspension
- Ductboard Seismic system
- Ductboard Safety Hanger system

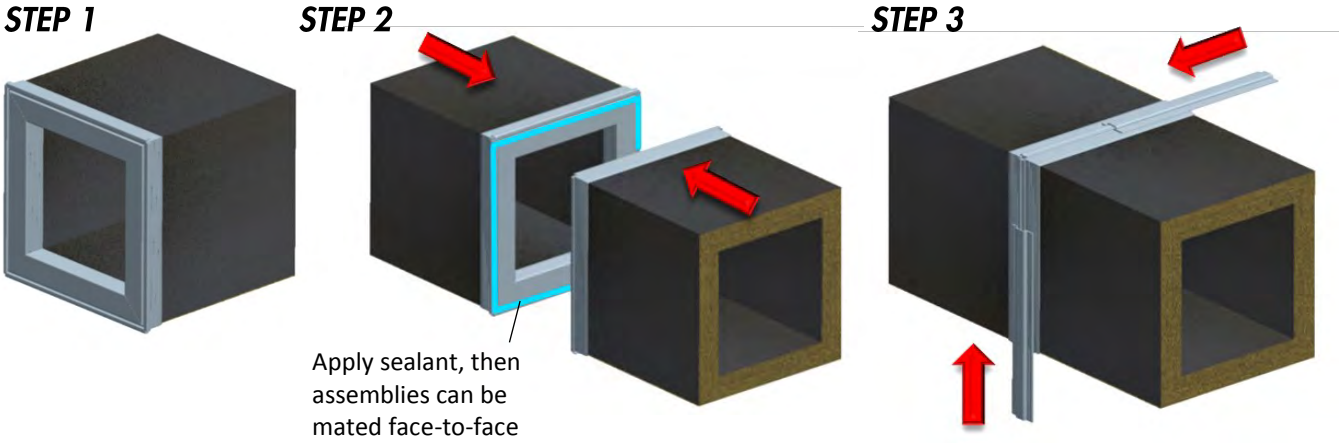


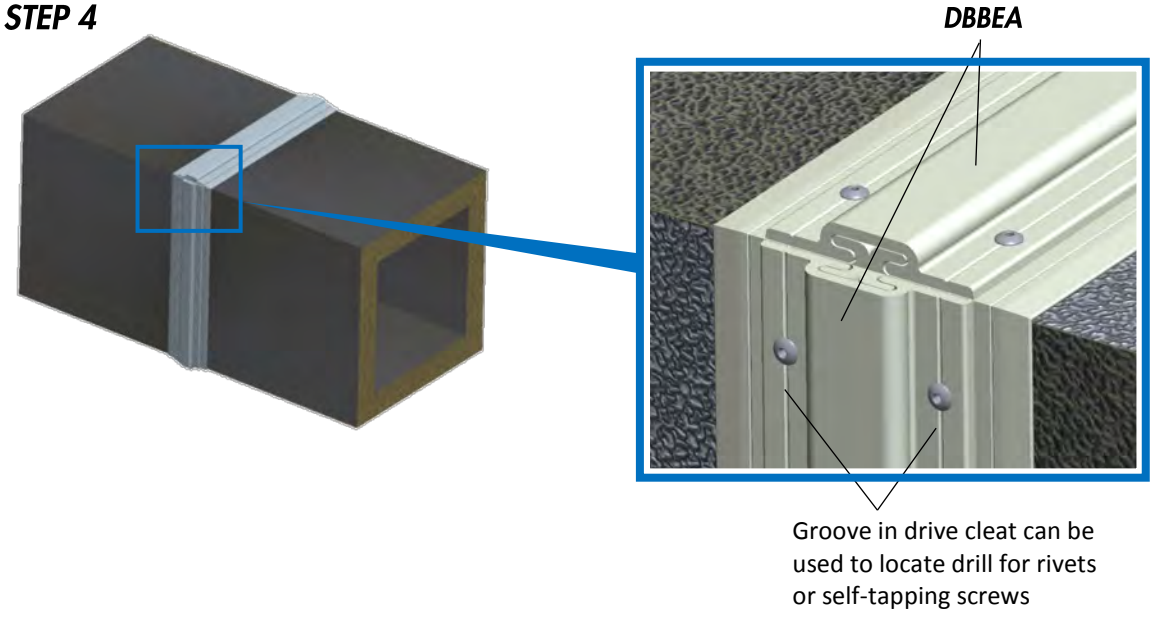
Ductboard Extrusions

Transverse Joints

- Same drive cleat (DBBEA) and sealing method used throughout the range
- The dual material extrusion DBJCEx is designed to reduce cold tracking in high humidity areas – it has an aluminium 'outer' and a PVC 'inner'

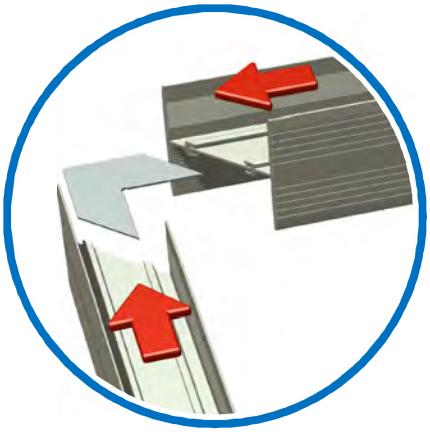






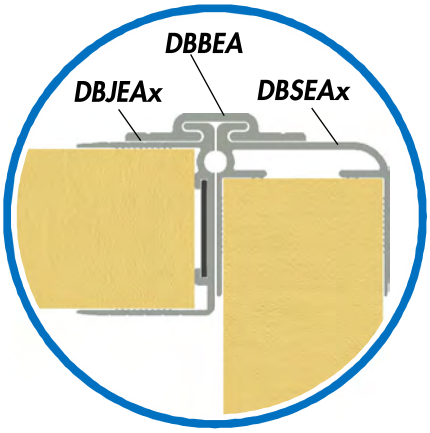
Ductboard Extrusions

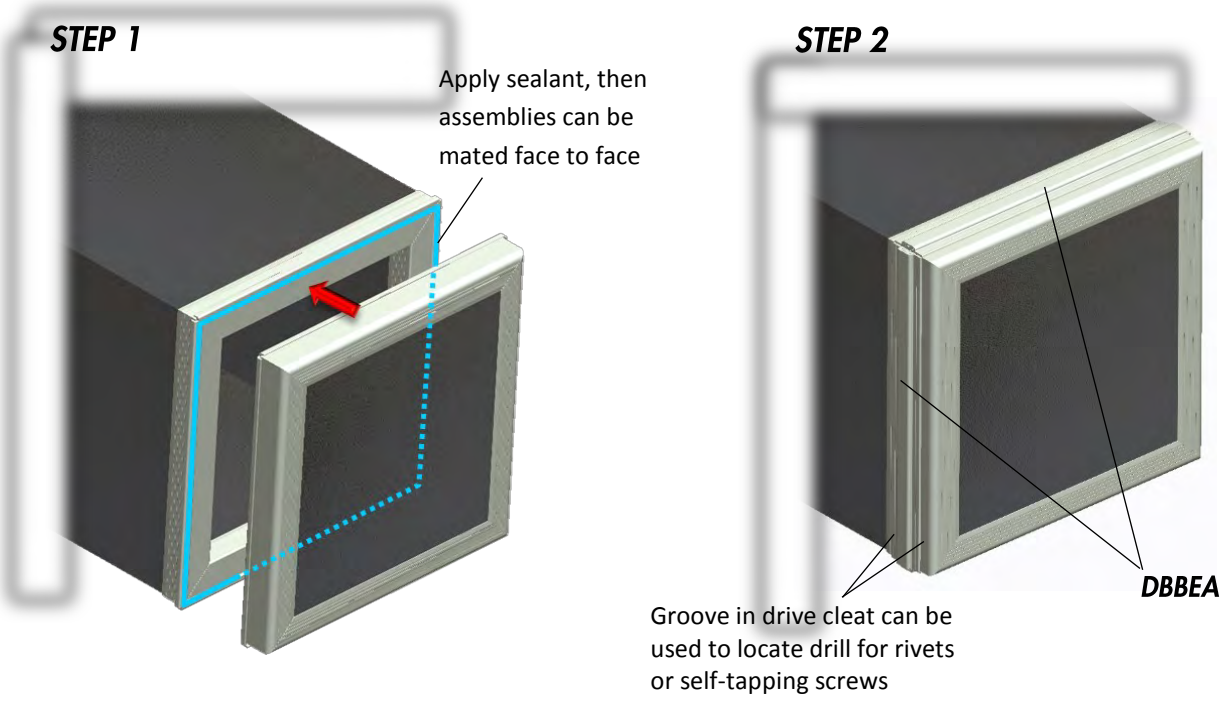
- Most extrusions can be mitre joined using aluminium corner stakes (CS) for ease of assembly and increased strength



End Cap Joint

- Transverse End Cap Joints can be created using the DBSEA extrusion in conjunction with the DBJEA

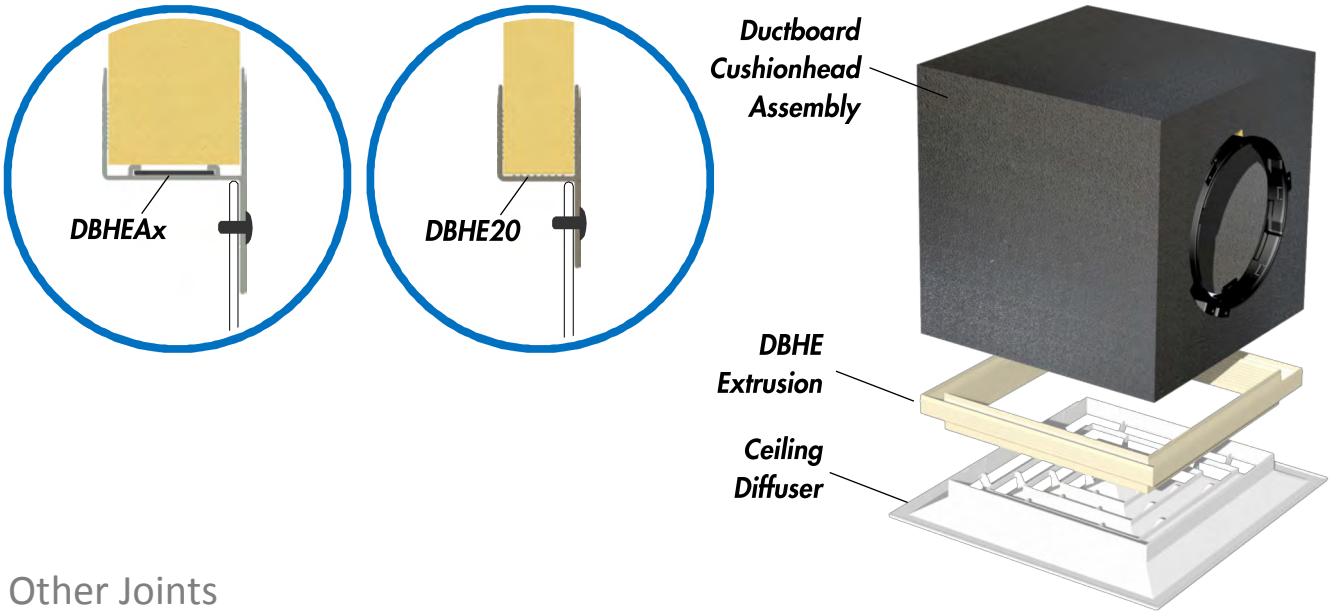




Ductboard Extrusions

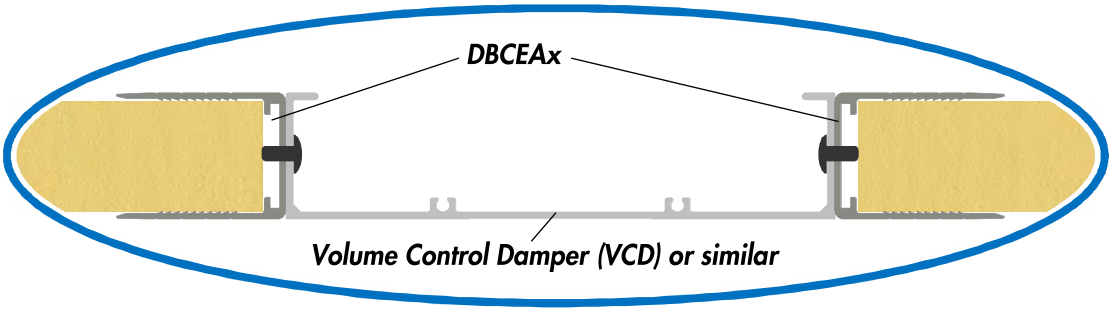
Cushionheads

- DBHEAx extrusion attaches to ADA Supply Air Diffuser, FASTClip™ Return Air Grille or similar

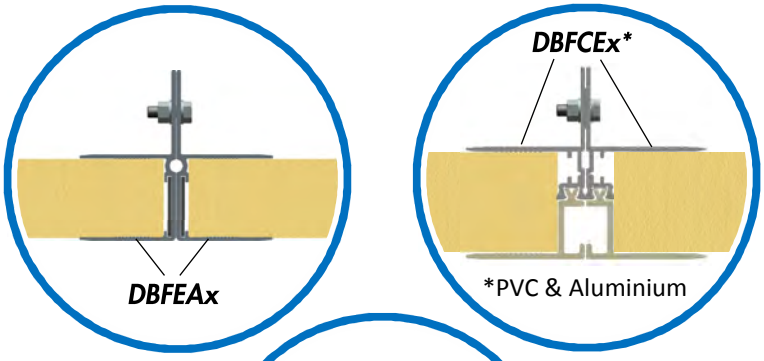


Other Joints

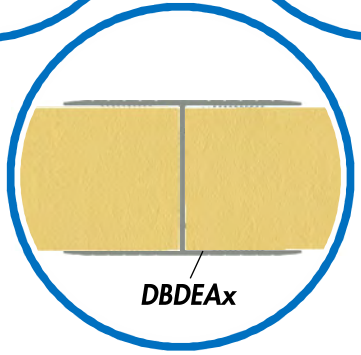
Volume Control Dampers (VCD)



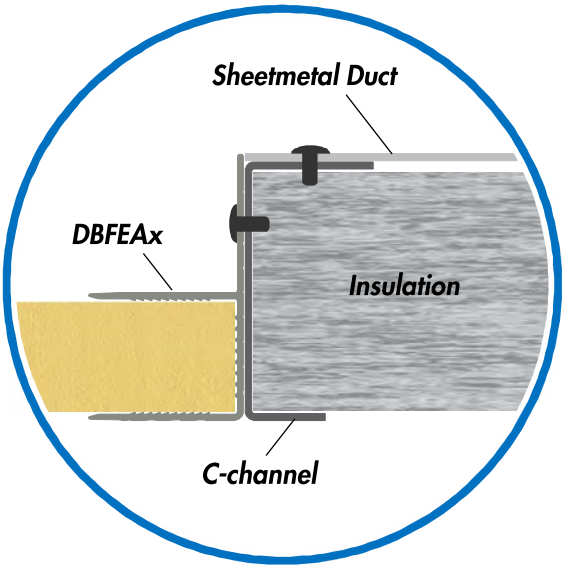
Alternate Transverse Joint



Joiner



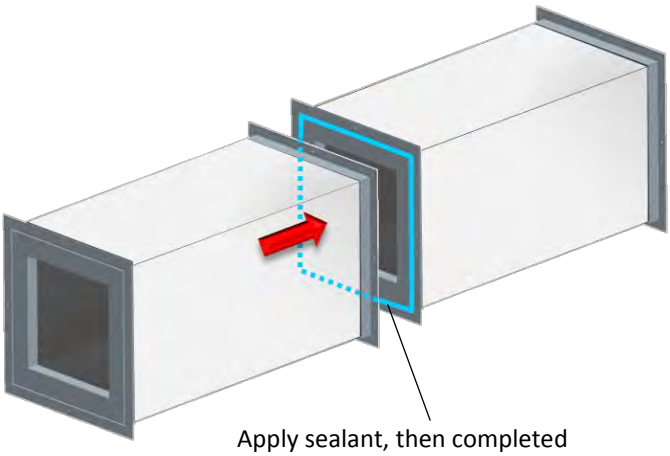
Sheet Metal Duct Joint



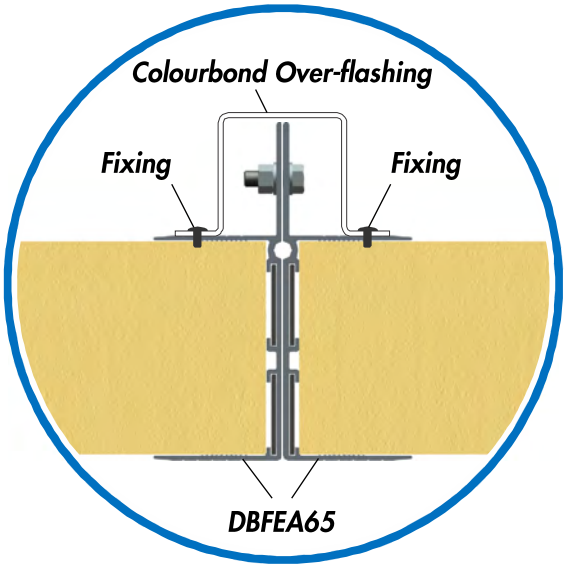
Ductboard Extrusions

External Transverse Joint (65mm)

For external transverse joints using 65mm ADA Ductboard™ with external colourbond coating, use DBFEA65 with additional colourbond over-flashing.

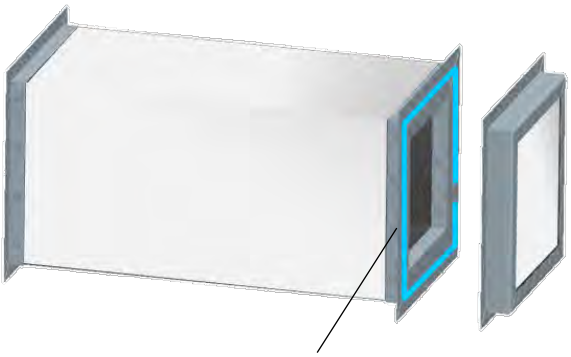


Apply sealant, then completed assembly can be mated and joined using screws or rivets as shown

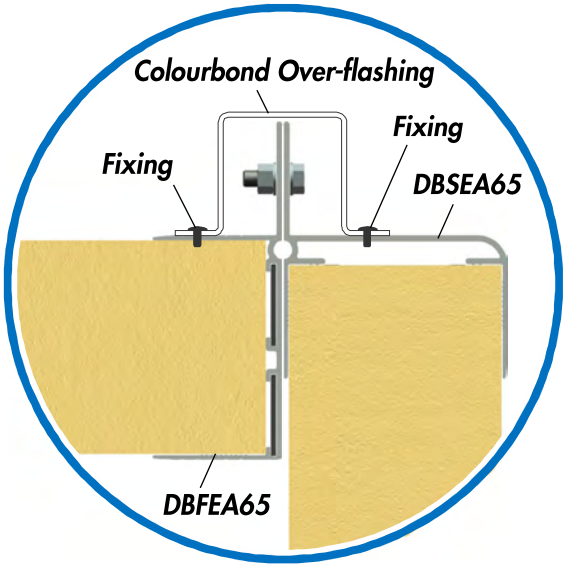


External End Cap Joint (65mm)

DBSEA65 extrusion is used to create a stop end assembly.



Apply sealant, then stop end assembly can be mated to duct assembly using screws or rivets as shown



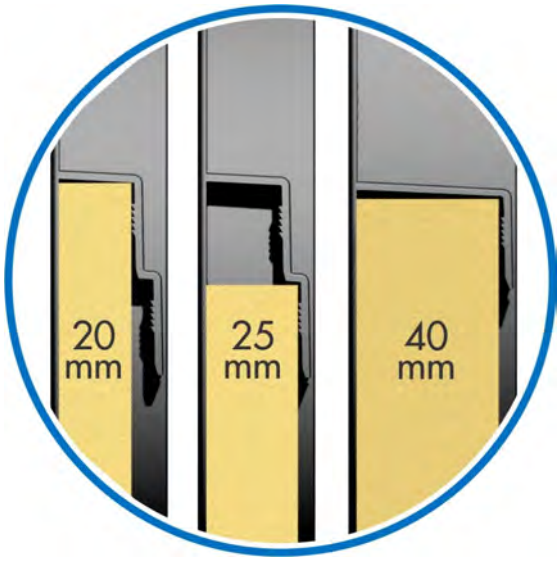
Ductboard Adaptors

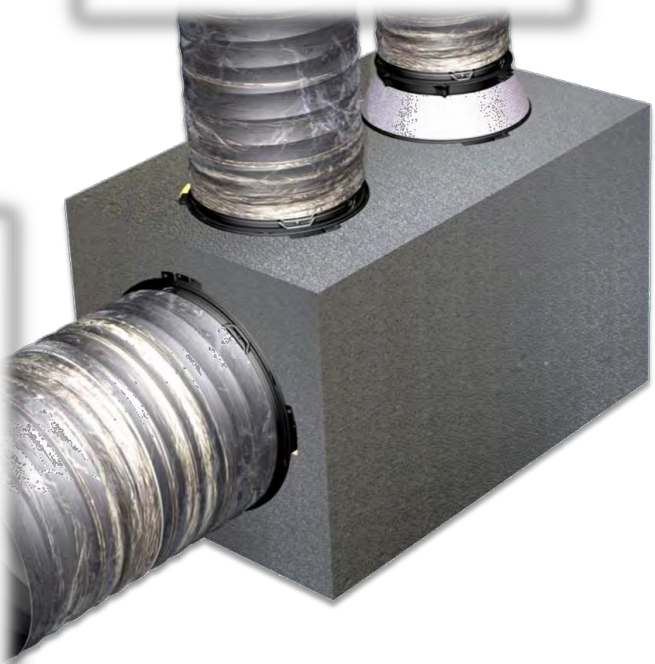
General Information

- Sizes available for all flexible duct from Ø150mm up to Ø450mm
- Uses the simple patented EZY Y® clip-on starter collars and reducers
- Eliminates requirement for complex metal fixings
- Made from fire retardant polymer

20/25mm Ductboard Adaptor

40mm Ductboard Adaptor





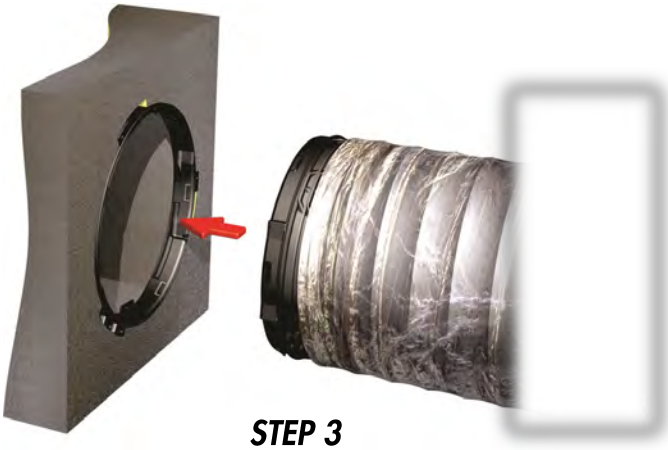
Ductboard Adaptors

STEP 1

Ductboard Adaptor bayonets into ductboard

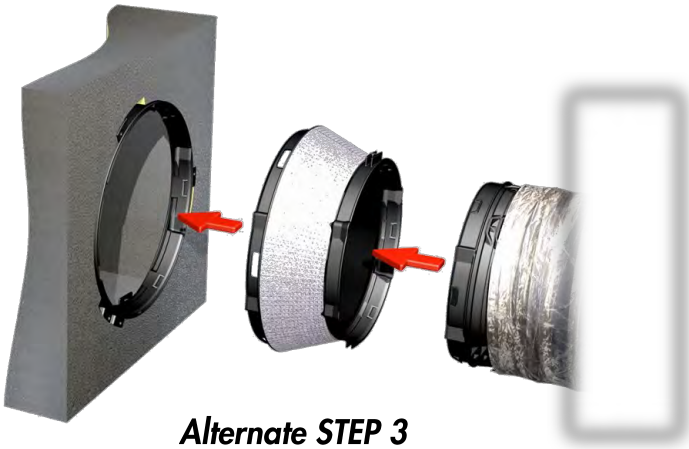
STEP 2

Duct fitted to Collar (can be done in factory for special orders)



STEP 3

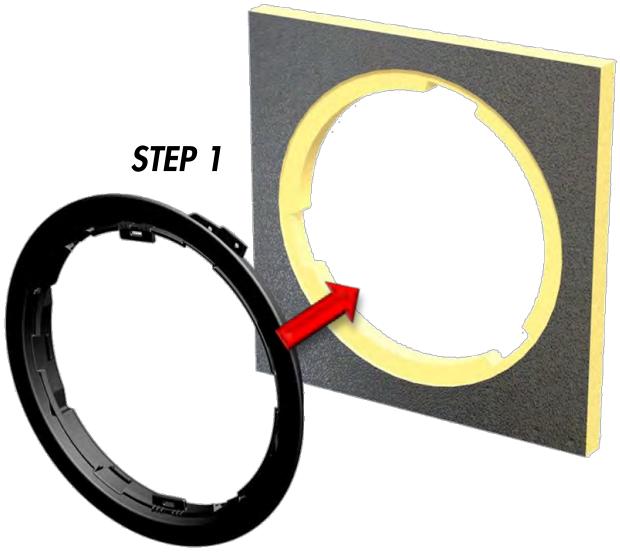
Collar with duct attached clips directly into Ductboard Adaptor



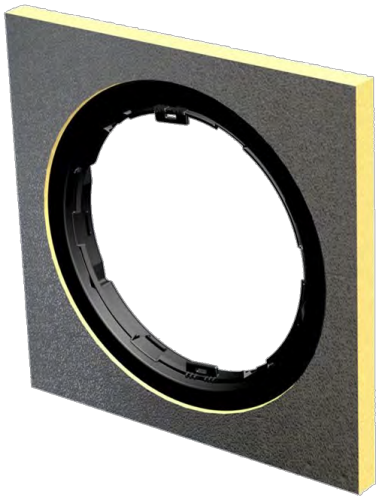
Alternate STEP 3

Reducer clips directly into Ductboard Adaptor and the Collar with duct attached clips into the Reducer

- The 20/25mm Ductboard Adaptor can be used with 30mm ADA Ductboard™ by routing a 5mm rebate on the inside face of the board



STEP 1

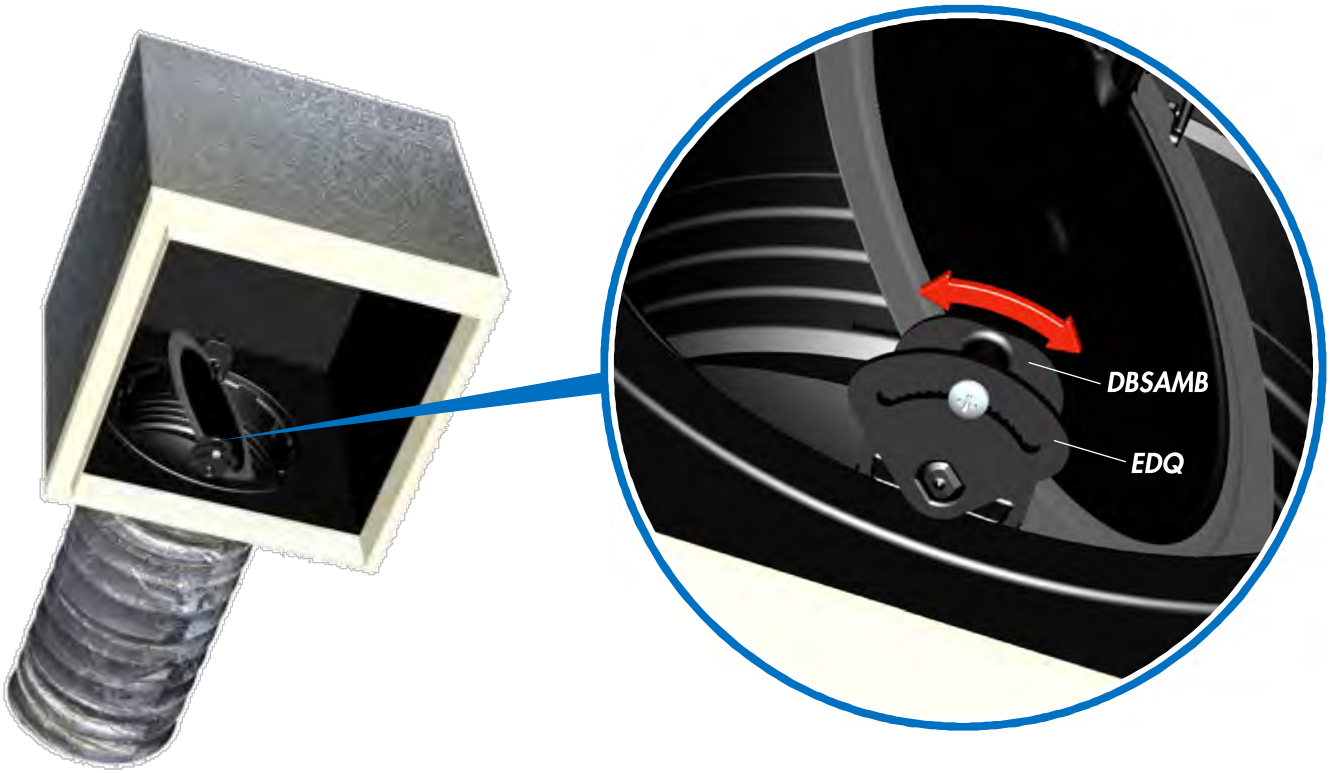


STEP 2

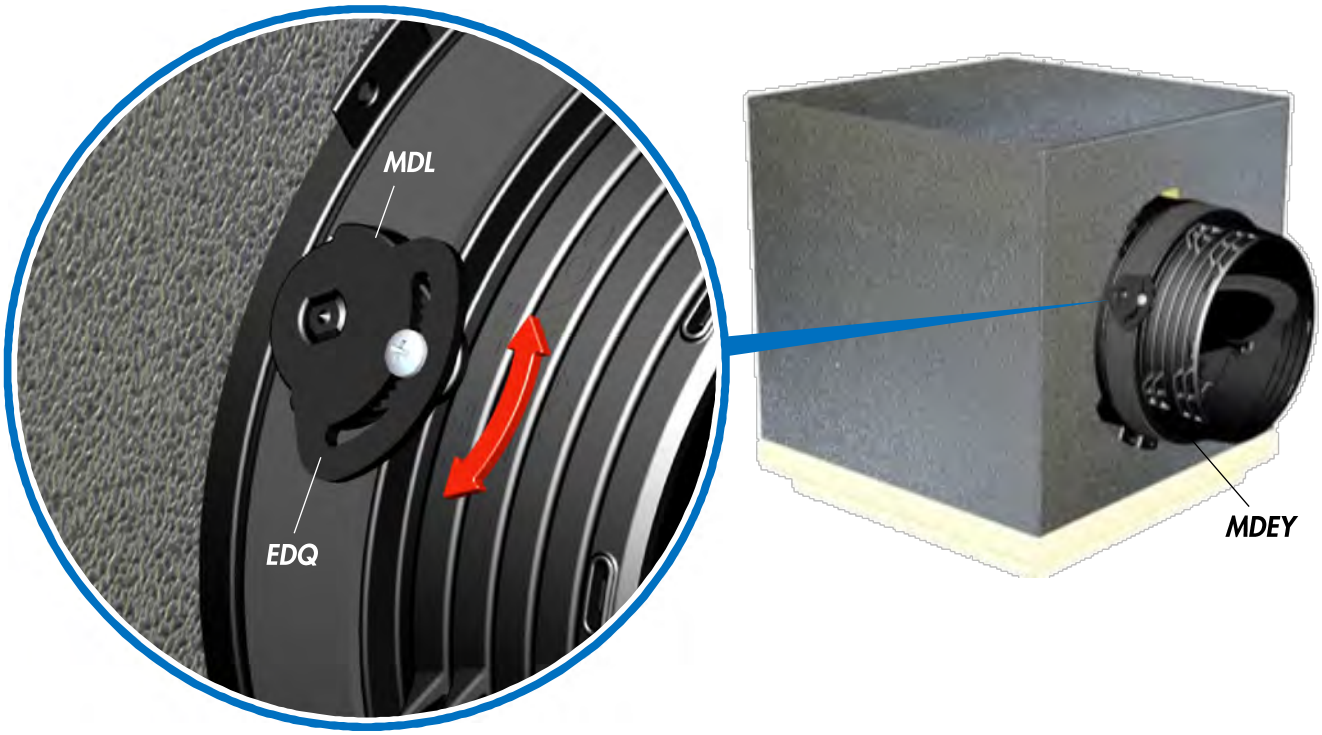
Ductboard Adaptors

Manual Dampers

There is an option to fit a manually adjustable Damper Blade using a Ductboard Adaptor, clip-on Mounting Brackets (DBSAMB) and a Quadrant (EDQ).



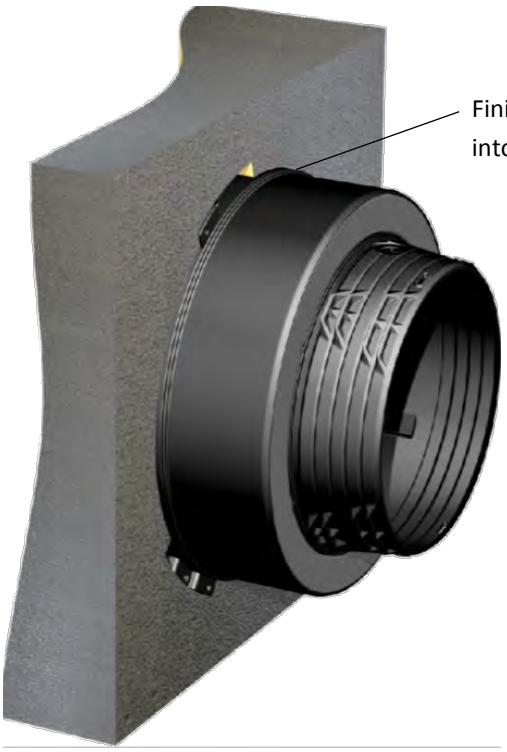
There is an alternate option to fit a manually adjustable Damper Blade, recommended for applications where internal access is not available. This option uses a Ductboard Adaptor, Damper Body (MDEY), Manual Damper Lock (MDL) and a Quadrant (EDQ).

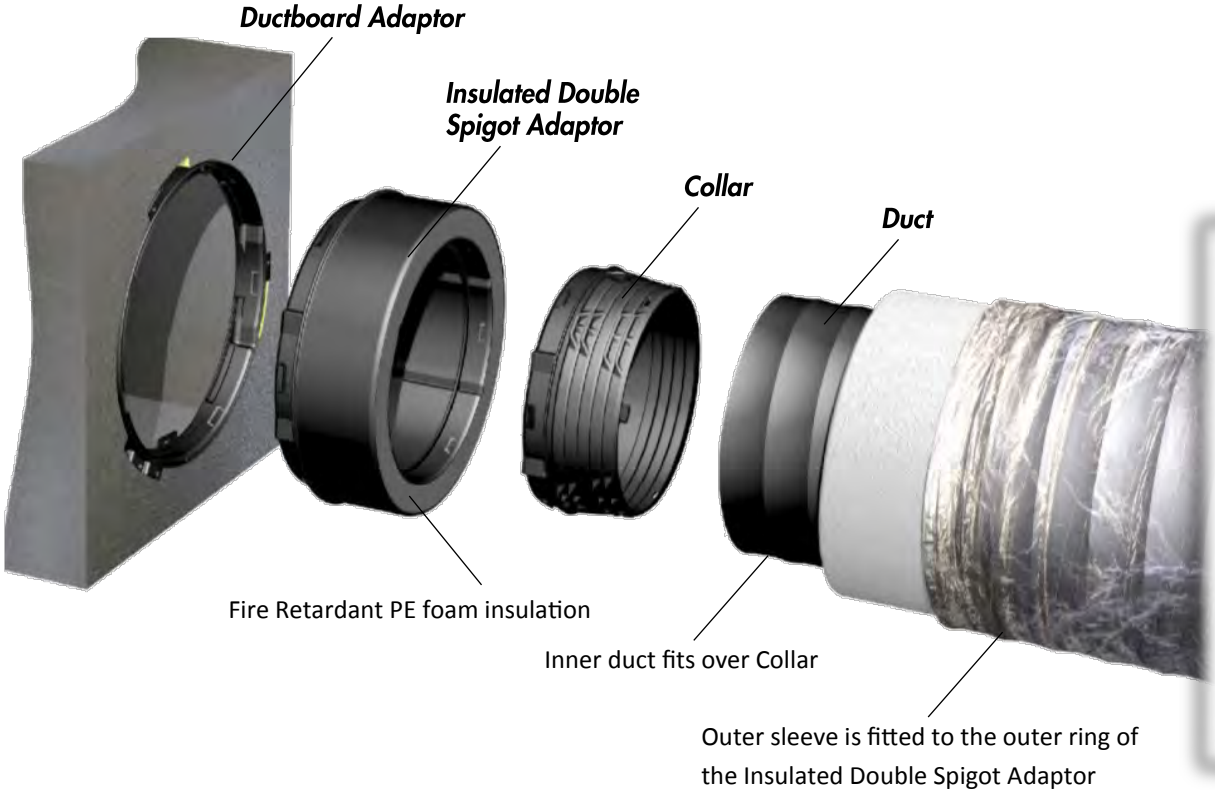


Insulated Double Spigot Adaptor

General Information

- Designed to reduce cold tracking in high humidity environments
- Fits directly to Ductboard Adaptor and uses patented EZY Y® clip-on starter collar
- Sizes available for all flexible duct from Ø150mm up to Ø400mm
- Made from fire retardant polymer

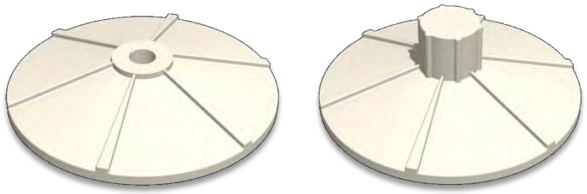


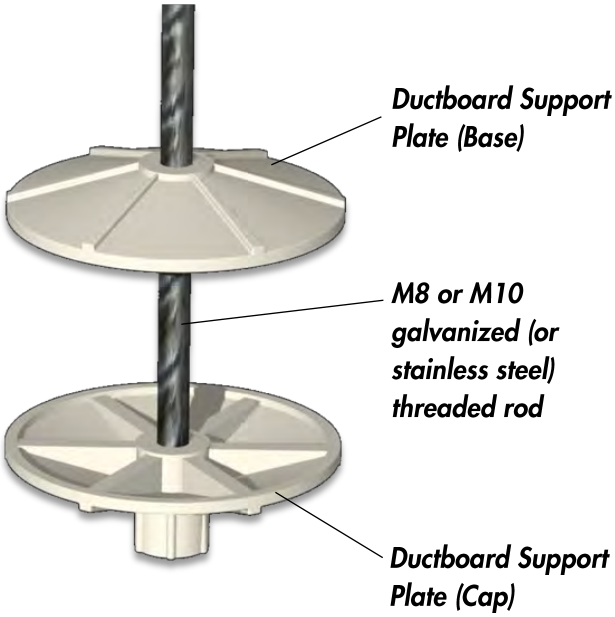


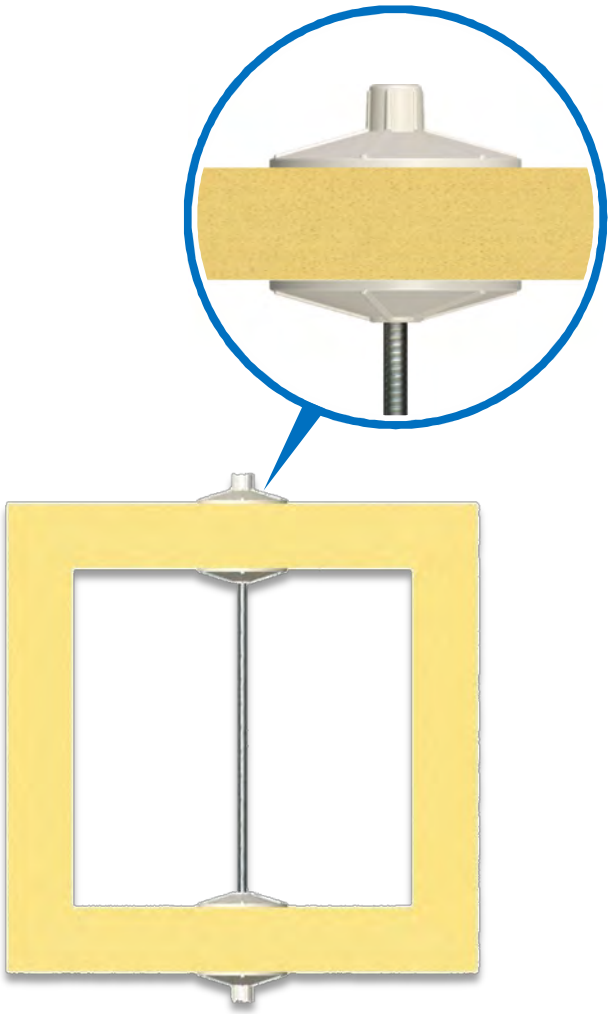
Ductboard Support Plates

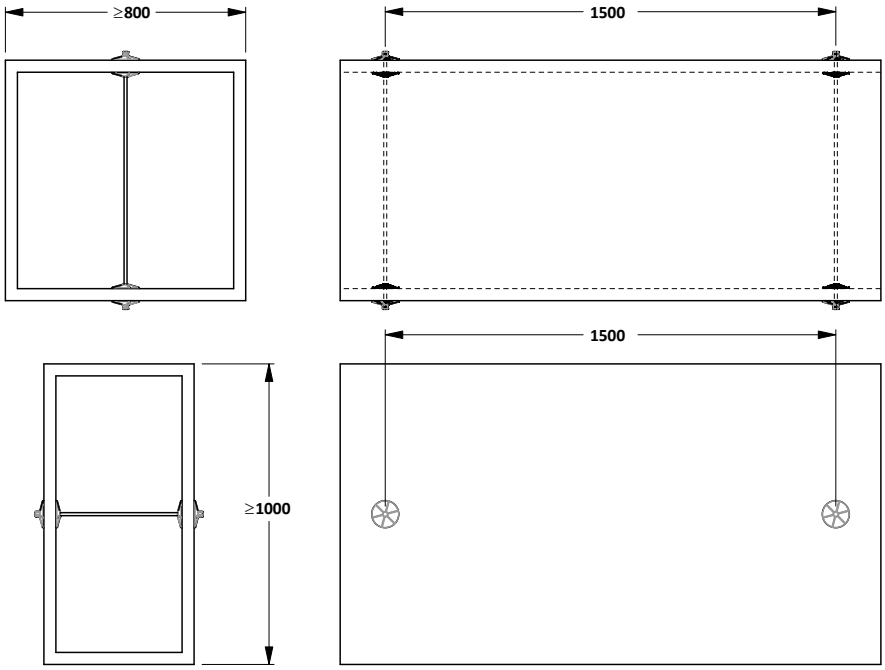
General Information

Ductboard Support Plates are used in conjunction with 8mm or 10mm galvanized threaded rod to provide additional support and strength to large spans of ADA Ductboard™.









Ductboard Suspension Methods

CADDY® SPEED LINK System

Air Diffusion recommends the CADDY® SPEED LINK Universal Support System for ductwork suspension and bracing.

The CADDY® SPEED LINK SLK system provides a versatile overhead support solution that is easy to adjust and installs quickly to almost any structure. It is available with a variety of specialty end fittings for the most common building structure types, a range of wire rope diameters and lengths, and includes a unique keyless locking device.

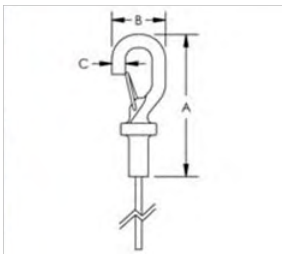
The CADDY® SPEED LINK SLK system is a cost-effective alternative to threaded rod, strut and strut nuts. This innovative system has the versatility to meet virtually all your support needs.
For additional details, refer to the CADDY® SPEED LINK Universal Support System brochure available on the nVent website – www.erico.com/caddy.asp

- Systems include locking device, flexible wire rope, and specialty end fitting
- Selection of locking devices for different applications and load requirements
- Double-sided locking mechanism with push/pull keyless release enables simple height adjustment
- Keyless release tubes are easy to operate while wearing gloves
- Low-profile locking device minimises visual impact
- Extensive range of end fittings for various types of structural attachments
- Allows objects to be hung at a variety of angles, even from sloped ceilings
- Cable spread of 90 degrees allows positioning the device closer to the load
- Individual packaging holds wire rope neatly until objects are ready to install

Ductboard Suspension Methods

CADDY® SPEED LINK SLK with Hook



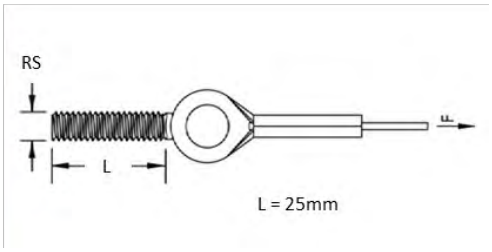



- Fastens to the building structure or hanging services by looping around and hooking to wire rope
- Easy to remove for applications requiring maintenance
- Spring latch helps provide secure connection
- Static Load Safety Factor: 5:1

Part Number	Article Number	Wire Rope Length	Material	Finish	Static Load F	Standard Pack Qty
Wire Rope Diameter: 2mm						
SLK2L2	196538	2m	Steel, Zinc alloy, PP	Electro-galvanized	440N	10 pc
SLK2L3	196539	3m	Steel, Zinc alloy, PP	Electro-galvanized	440N	10 pc
SLK2L5	196540	5m	Steel, Zinc alloy, PP	Electro-galvanized	440N	10 pc
SLK2L7	196541	7m	Steel, Zinc alloy, PP	Electro-galvanized	440N	10 pc
SLK2L10	196542	10m	Steel, Zinc alloy, PP	Electro-galvanized	440N	10 pc

CADDY® SPEED LINK SLK with Threaded Stud End





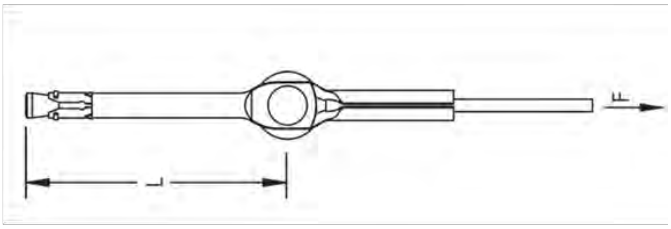
- Attaches to structures with threaded anchors or devices with threaded holes
- Connects directly to threaded devices in HVAC assemblies
- Static Load Safety Factor: 5:1

Part Number	Article Number	Wire Rope Length	Rod Size RS	Material	Finish	Static Load F
Wire Rope Diameter: 2mm						
SLK2L2SEM6	196558	2m	M6	Steel, Zinc alloy, PP	Electro-galvanized	440N
SLK2L2SEM8	196559	2m	M8	Steel, Zinc alloy, PP	Electro-galvanized	440N
SLK2L3SEM6	196560	3m	M6	Steel, Zinc alloy, PP	Electro-galvanized	440N
SLK2L3SEM8	196561	3m	M8	Steel, Zinc alloy, PP	Electro-galvanized	440N
SLK2L5SEM6	196562	5m	M6	Steel, Zinc alloy, PP	Electro-galvanized	440N
SLK2L5SEM8	196563	5m	M8	Steel, Zinc alloy, PP	Electro-galvanized	440N

Indicates suitable for seismic applications

Ductboard Suspension Methods

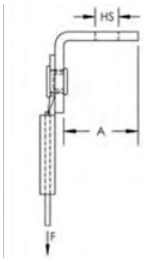
CADDY® SPEED LINK SLK with Wedge Anchor



- Quickly and easily attaches into cracked and non-cracked concrete
- No special tool required
- Drill Bit Diameter: 6mm
- Drill Hole Depth: 60mm
- Static Load Safety Factor: 5:1
- Complies with SMACNA HVAC-DCS and ETA-13/0106 approval available for wedge anchor from Power Fasteners Inc

Part Number	Article Number	Wire Rope Length	Length L	Material	Finish	Static Load F
Wire Rope Diameter: 2mm						
SLK2L2WA6	196734	2m	63.5mm	Steel, Zinc alloy, PP	Electro-galvanized	440N
SLK2L3WA6	196735	3m	63.5mm	Steel, Zinc alloy, PP	Electro-galvanized	440N
SLK2L5WA6	196736	5m	63.5mm	Steel, Zinc alloy, PP	Electro-galvanized	440N
SLK2L7WA6	196737	7m	63.5mm	Steel, Zinc alloy, PP	Electro-galvanized	440N

CADDY® SPEED LINK SLK with Angle Bracket



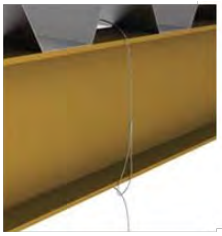
- Ideal for attaching to concrete, steel and using screws to attach to wood surfaces
- Static Load Safety Factor: 5:1

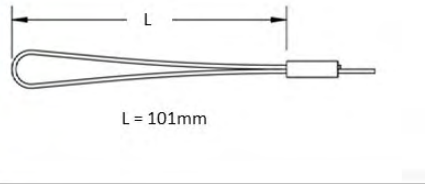
Part Number	Article Number	Wire Rope Length	Material	Finish	Static Load F
Wire Rope Diameter: 2mm					
SLK2L2AB	196529	2m	Steel, Zinc alloy, PP	Electro-galvanized	440N
SLK2L3AB	196530	3m	Steel, Zinc alloy, PP	Electro-galvanized	440N
SLK2L5AB	196531	5m	Steel, Zinc alloy, PP	Electro-galvanized	440N

Indicates suitable for seismic applications

Ductboard Suspension Methods

CADDY® SPEED LINK SLK with Loop





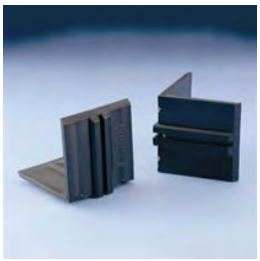
- Wire rope wraps around structure and through loop for quick installation
- Ideal for attaching to purlins, beams and other structural members
- Works well in tight or confined spaces
- Loop attaches directly to pipe, ductwork or other hanging assemblies
- Static Load Safety Factor: 5:1

Part Number	Article Number	Wire Rope Length	Material	Finish	Static Load
Wire Rope Diameter: 2mm					
SLK2L1LP	196604	1m	Steel, Zinc alloy, PP	Electro-galvanized	440N
SLK2L2LP	196543	2m	Steel, Zinc alloy, PP	Electro-galvanized	440N
SLK2L3LP	196544	3m	Steel, Zinc alloy, PP	Electro-galvanized	440N
SLK2L5LP	196545	5m	Steel, Zinc alloy, PP	Electro-galvanized	440N
SLK2L7LP	196605	7m	Steel, Zinc alloy, PP	Electro-galvanized	440N
SLK2L10LP	196606	10m	Steel, Zinc alloy, PP	Electro-galvanized	440N

Ductboard Suspension Methods

CADDY® SPEED LINK accessories

Air Duct Corner Protector



- Includes ribs to keep the wire rope in place
- Prevents the wire rope from damaging the duct

Part Number	Article Number	Material	Width
SLADCP	195851	Black PVC	50mm

CADDY® SPEED LINK SLK Locking Device

- Push/pull keyless release allows easy adjustment
- Suitable for 1.5mm and 2mm CADDY® SPEED LINK cable
- Low-profile locking device minimises visual impact
- Double-sided locking mechanism enables simple height adjustment

Part Number	Article Number	Wire Rope Diameter	Material	Height
SLK2C200	196600	1.5-2mm	Steel, PP, Zinc alloy	55mm

Wire Spool

- Spool with CADDY® SPEED LINK steel wire
- Wire rope made from seven bundles of seven strands of steel aircraft wire

Part Number	Article Number	Wire Rope Diameter	Material	Length	Static Load
SLC2L1000MSP	196002	2mm	Electro-galv Steel	300m	440N

Wire Rope Cutter

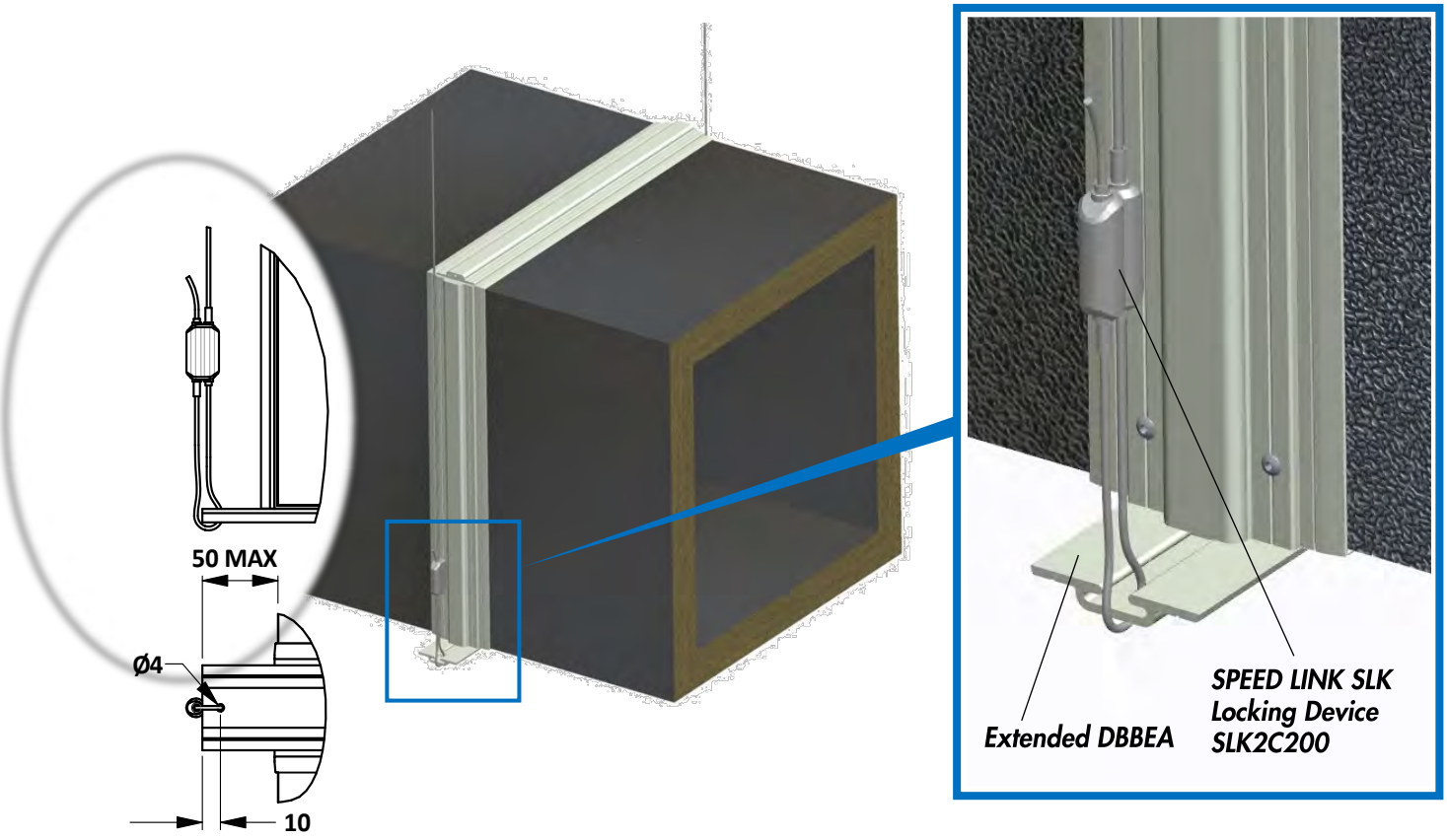
- Designed to reduce wire rope fraying

Part Number	Article Number	Material
SLWC	195853	Steel

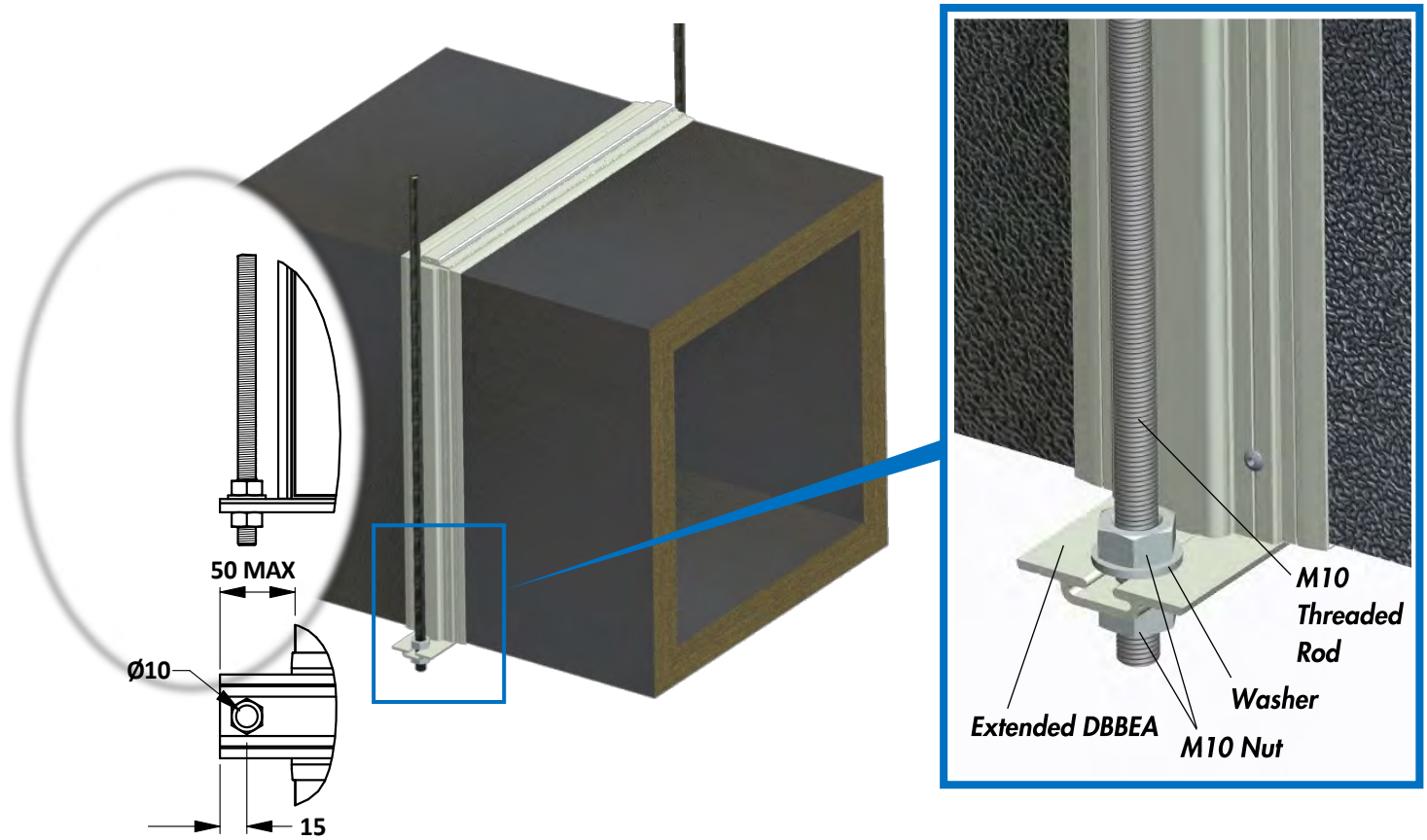
Indicates suitable for seismic applications

Ductboard Suspension Methods

- Typical ductwork suspension method using CADDY® SPEED LINK Universal Support System



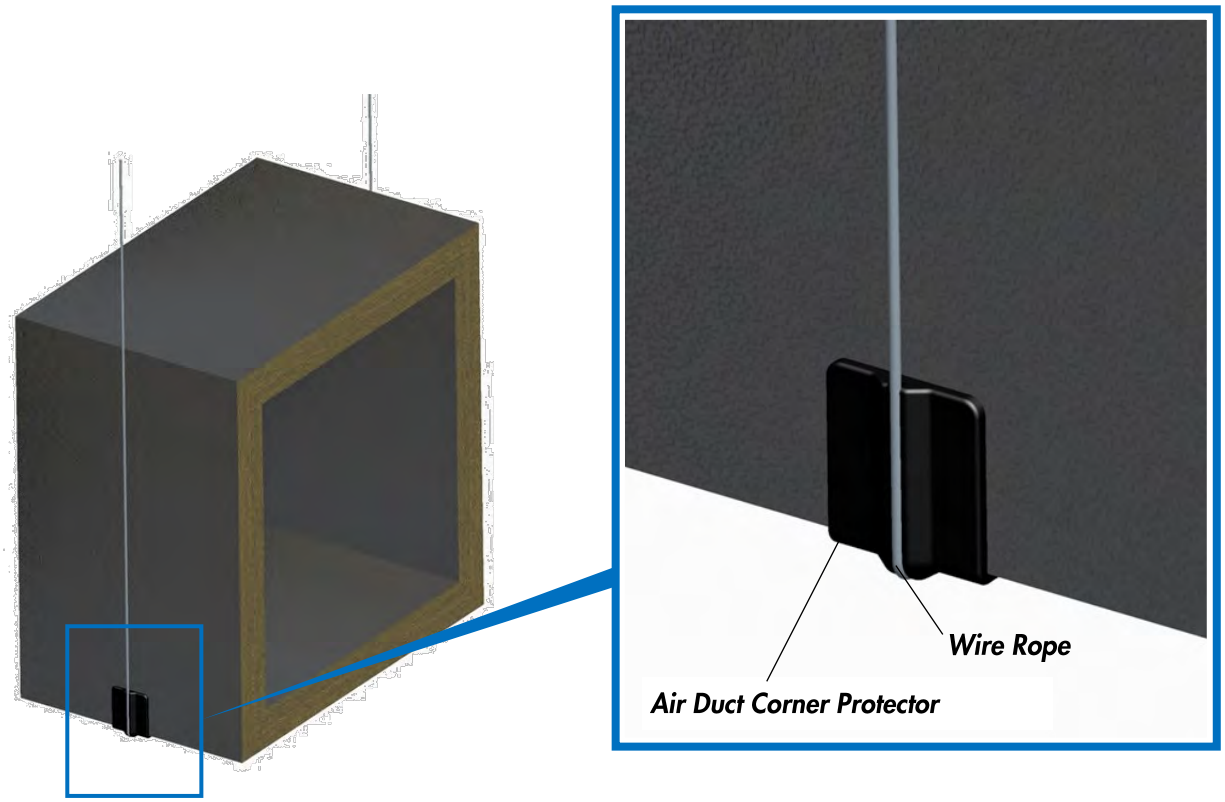
- Standard galvanised threaded rod can also be used to suspend ductwork

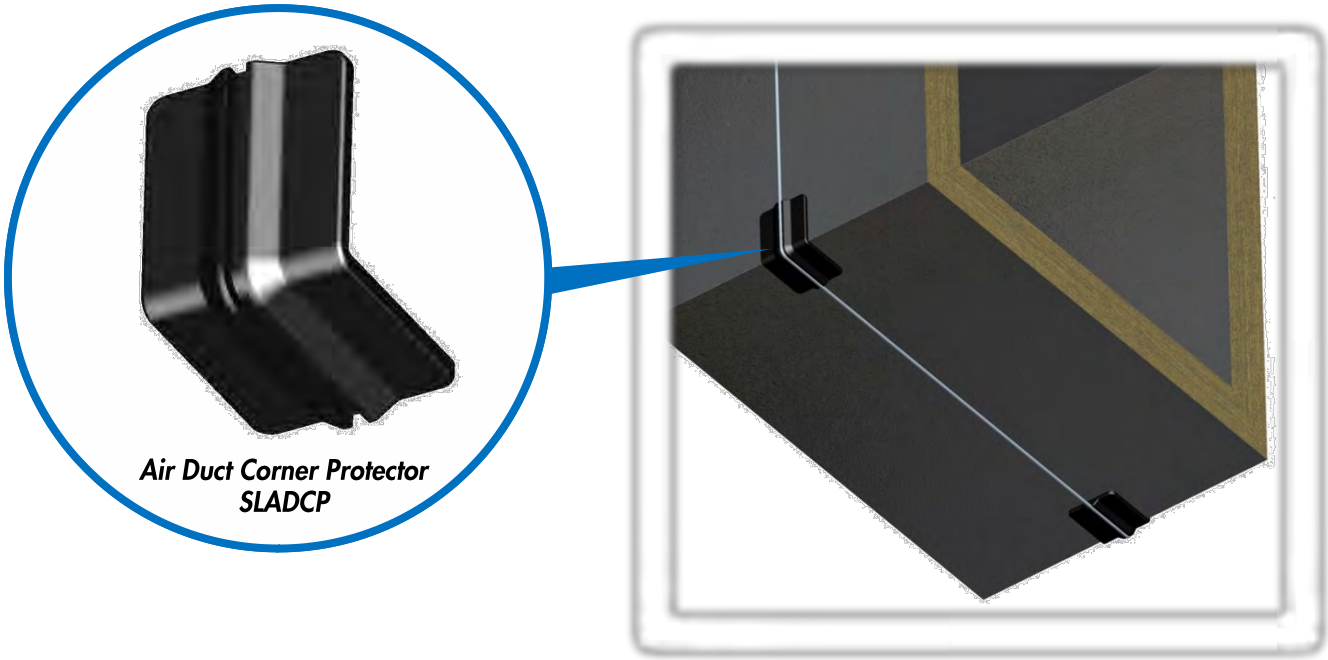


Ductboard Suspension Methods

Air Duct Corner Protector

- Prevents the wire rope from damaging the ductboard

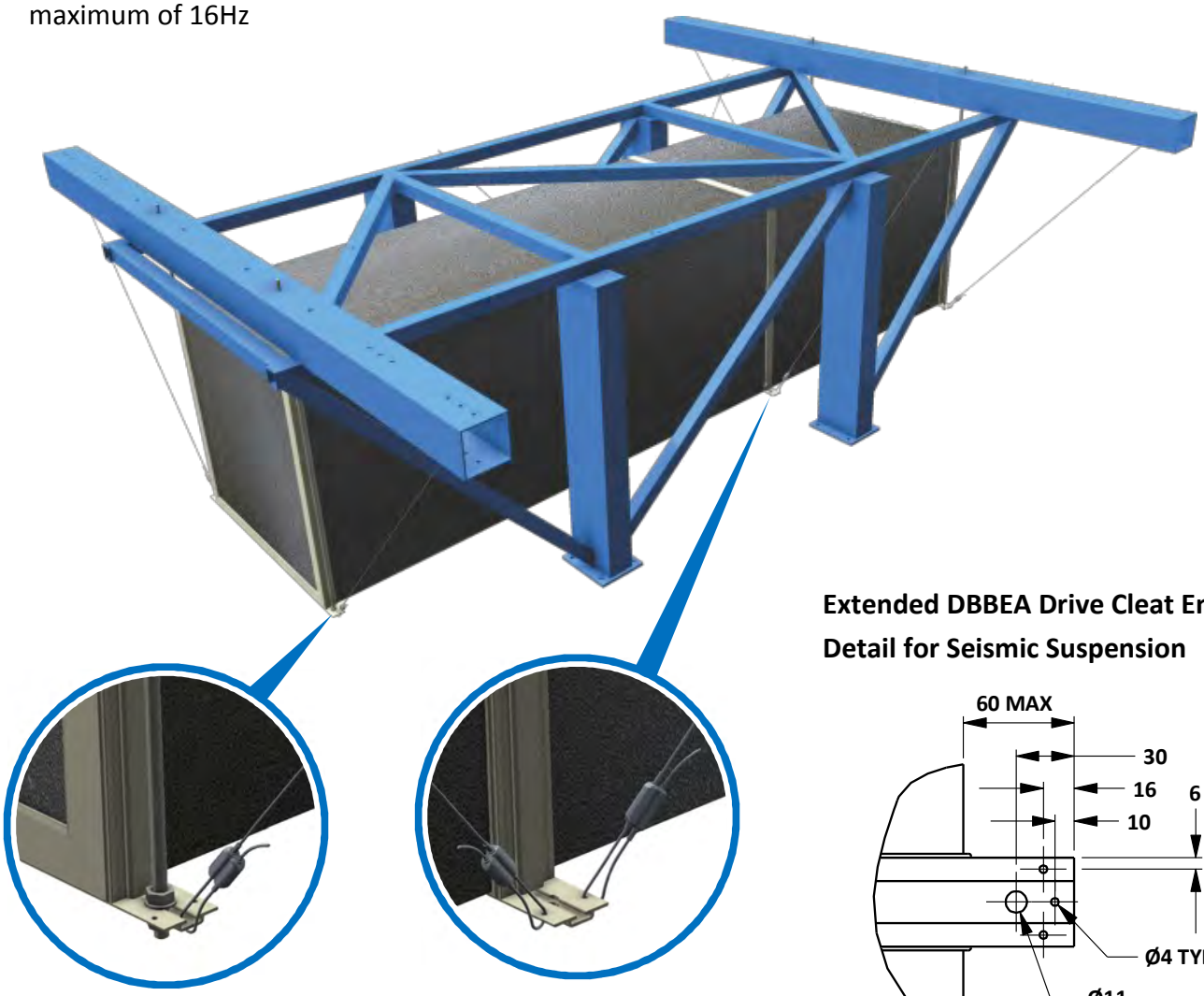




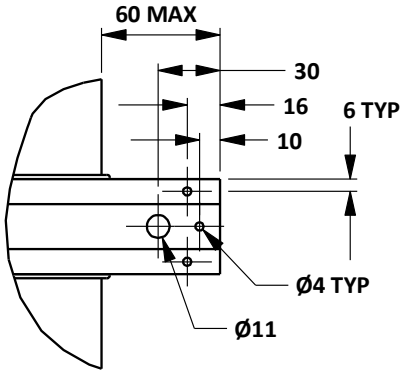
Ductboard Suspension Methods

Ductboard Seismic (for compliance with AS 1170.4 & NZS 4219)

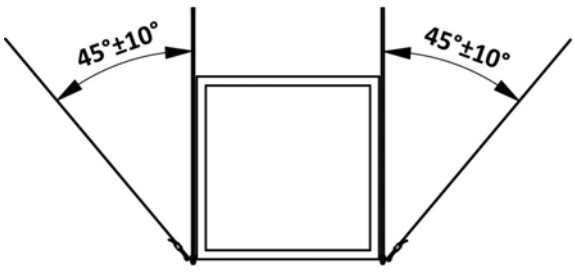
- When correctly designed, the ADA Ductboard™ system will allow conformance to the design requirements of AS 1170.4, NZS 4219 and other International Seismic Codes
- Various ADA Ductboard™ fabrications and recommended suspension methods were successfully tested using AS 60068.3.3 *Environmental testing: Guidance - Seismic test methods for equipment.* This standard details the test method for seismically testing ductwork fabrications. Full test report available on request
- All configurations were tested to Performance Level III with horizontal accelerations of 15 m/s^2 to a maximum of 16Hz



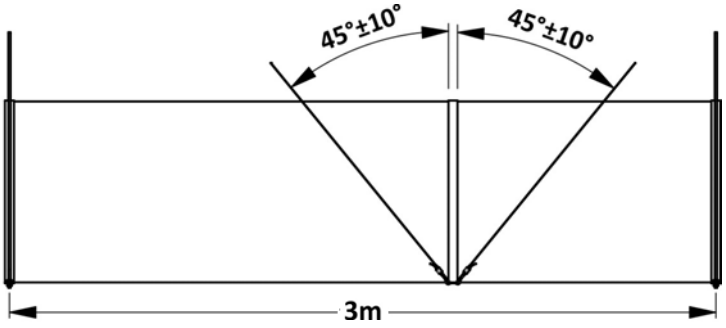
Extended DBBEA Drive Cleat End Detail for Seismic Suspension



Transverse Bracing



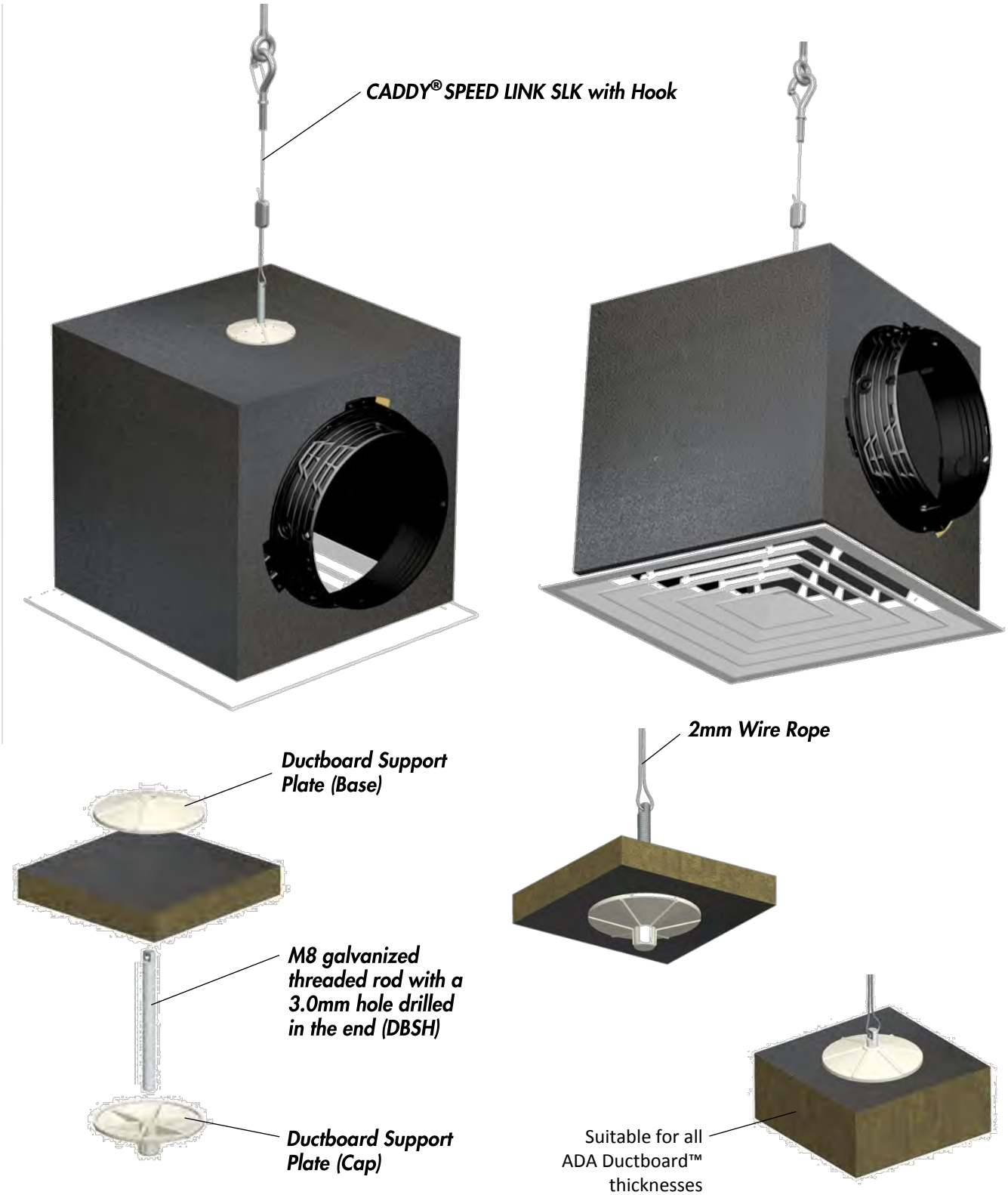
Transverse Support & Longitudinal Bracing



Ductboard Suspension Methods

Ductboard Safety Hanger (for compliance with AS 1170.4 & NZS 4219)

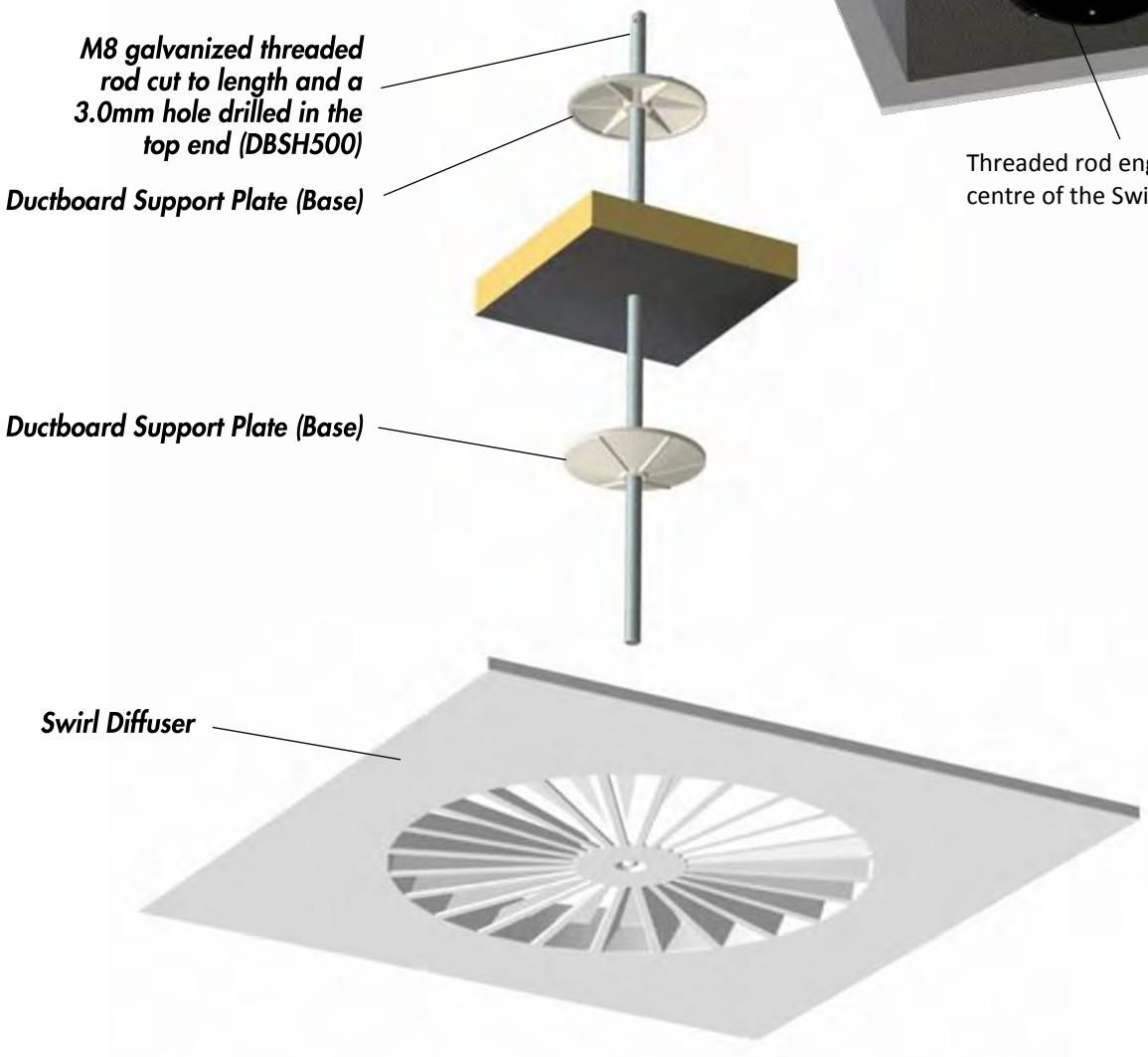
- The Ductboard Safety Hanger system retains cushion head boxes or similar type ductwork in the event the suspended ceiling fails during a seismic event
- Tested to AS 60068.3.3 *Environmental testing: Guidance - Seismic test methods for equipment.* Full test report available on request
- Single wire recommended up to 4 kg



Ductboard Suspension Methods

- The Ductboard Safety Hanger system can also be easily integrated with Swirl Diffusers

Threaded rod engages in the centre of the Swirl Diffuser



ADA Ductboard™ Test Reports

AS/NZS 1530.3 *Simultaneous determination of Ignitability, Flame Propagation, Heat Release and Smoke Release*

Tested by AWTA Product Testing

- Test Number 7-586221-CS (20mm)
- Test Number 7-596666-CS (25mm)
- Test Number 7-589133-CS (30mm)
- Test Number 7-595610-CS (40mm)
- Test Number 7-595599-CS (65mm)

UL 181.11 *Standard for Factory-Made Air Ducts and Air Connectors*

Tested by AWTA Product Testing

- Test Number 17-002142

AS/NZS 4859.1 *Materials for the Thermal Insulation of Buildings Part 1: General criteria and technical provisions*

Tested by CSIRO Materials Science and Engineering in accordance with ASTM C 518 Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.

- CMSE Report XC3117 (20mm)
- CMSE Report XC3192 (20, 25, 30, 40, 50mm)
- CMSE Report XC3242 (65mm)

AS 60068.3.3 *Environmental testing: Guidance - Seismic test methods for equipment*

Tested by EngTest Adelaide University

- Test Report C160801-RP-01_Rev1_Air Diffusion Duct Testing

ANSI E477-13: *Standard Test Method for Laboratory Measurements of Acoustical and Airflow Performance of Duct Liner Materials and Prefabrication Silencers*

Tested by Resonate Acoustics

- Test Report A16498RPI Revision B

Environmental

Green Star compliant

- Document Reference: QA17I13-012

Safety

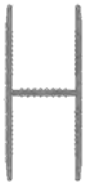
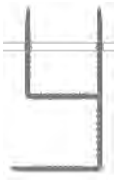
MSDS document reference

- MSDS PIR-PUR foam-TPI

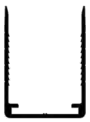
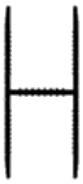
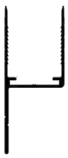
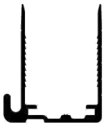
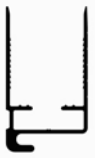
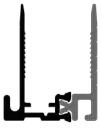
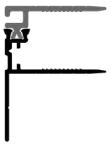
Ductboard Extrusions List

20mm Extrusions

UV Stabilized PVC

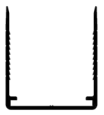
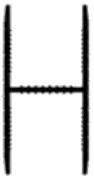
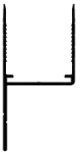
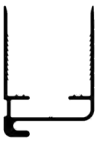
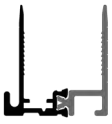
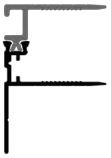
DBCE20 Capping	DBDE20 Joiner	DBFE20 F Section	DBHE20 H Section	DBHEE20 Extended H Section	DBJE20 Drive Cleat Capping	DBYE20 Corner Capping	
							

Anodized Aluminium (10µm)

DBCEA20 Capping	DBDEA20 Joiner	DBFEA20 F Section	DBHEA20 H Section	DBJEA20 Drive Cleat Capping	DBSEA20 Drive Cleat End Capping	DBJCE20* Drive Cleat Capping	DBFCE20* F Section
						 *PVC & Aluminium	 *PVC & Aluminium

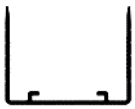
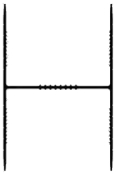
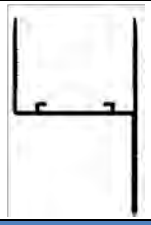
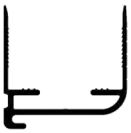
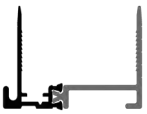
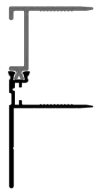
25 & 30mm Extrusions

Anodized Aluminium (10µm)

DBCEAx Capping	DBDEAx Joiner	DBFEAx F Section	DBHEAx H Section	DBJEAx Drive Cleat Capping	DBSEAx Drive Cleat End Capping	DBJCEx* Drive Cleat Capping	DBFCEx* F Section
						 *PVC & Aluminium	 *PVC & Aluminium

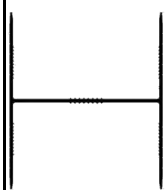
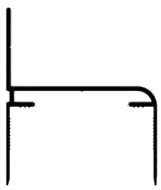
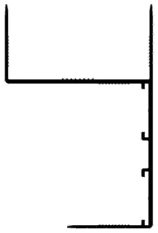
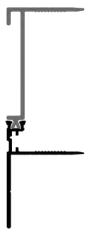
40mm Extrusions

Anodized Aluminium (10µm)

DBCEA40 Capping	DBDEA40 Joiner	DBJEA40 Drive Cleat Capping	DBHEA40 H Section	DBFEA40 F Section	DBSEA40 Drive Cleat End Capping	DBJCE40* Drive Cleat Capping	DBFCE40* F Section
						 *PVC & Aluminium	 *PVC & Aluminium

65mm Extrusions

Anodized Aluminium (20µm)

DBDEA65 Joiner	DBSEA65 End Capping	DBFEA65 F Section	DBJEA65 Drive Cleat Capping	DBYEA65 Corner Capping	DBJCE65* Drive Cleat Capping	DBFCE65* F Section	DBBEA Drive Cleat
					 *PVC & Aluminium	 *PVC & Aluminium	

Ductboard Accessories List

PIR Ductboard	
R1.0	DB20PIRBSF
R1.2	DB25PIRBSF
R1.5	DB30PIRBSF
R2.0	DB40PIRBSF
R3.0	DB65SFWC

20/25mm Ductboard Adaptor	
150mm	DBSA15
200mm	DBSA20
250mm	DBSA25
300mm	DBSA30
350mm	DBSA35
400mm	DBSA40
450mm	DBSA45

40mm Ductboard Adaptors	
150mm	DBSA4015
200mm	DBSA4020
250mm	DBSA4025
300mm	DBSA4030
350mm	DBSA4035
400mm	DBSA4040
450mm	DBSA4045

Insulated Double Spigot Adaptor	
150mm	DBIDSA15
200mm	DBIDSA20
250mm	DBIDSA25
300mm	DBIDSA30
350mm	DBIDSA35
400mm	DBIDSA40

Starter Collars	
150mm	EZC15
200mm	EZC20
250mm	EZC25
300mm	EZC30
350mm	EZC35
400mm	EZC40
450mm	EZC45

Starter Collars (Fire Retardant)	
150mm	DBC15
200mm	DBC20
250mm	DBC25
300mm	DBC30
350mm	DBC35
400mm	DBC40
450mm	DBC45

Reducer	
200-150	ERI2015
250-200	ERI2520
300-250	ERI3025
350-250	ERI3525
350-300	ERI3530
400-350	ERI4035
450-350	ERI4535
450-400	ERI4540

Damper Body	
150mm	MDEY15
200mm	MDEY20
250mm	MDEY25
300mm	MDEY30
350mm	MDEY35
400mm	MDEY40

Ductboard Accessories List

Damper Blade	
150mm	EB15
200mm	EB20
250mm	EB25
300mm	EB30
350mm	EB35
400mm	EB40

Ductboard Spigot Adaptor Mounting Bracket
DBSAMB

Manual Damper Quadrant
EDQ

Manual Damper Lock
MDL

Ductboard Support Plates	
M8	DBSP8
M10	DBSP10

Ductboard Safety Hanger
DBSH75
DBSH95
DBSH500

Aluminium Corner Stake
CS9
CS20
CS25

Ductboard Sealant	
SILIW	White
SILIG	Grey
SILIC	Clear
SILIBL	Black

Reinforced Foil Tape	
TAPES5	50mm x 50m
TAPES7	75mm x 50m
TAPES10	100mm x 50m

Duct Wrap 50m Blue	
DWRAP600	600mm x 60m
DWRAP900	900mm x 60m
DWRAP1200	1200mm x 60m

Register Springs	
RS875	8mm x 75mm
RS8100	8mm x 100mm
RS8150	8mm x 150mm
RS8200	8mm x 200mm

All accessories and components mentioned in this booklet are available from your local Air Diffusion Agencies ‘One Stop Airconditioning Shop’.

Refer to www.airdiffusion.com.au for your closest location.

ADA Ductboard™ Projects

Royal Adelaide Hospital

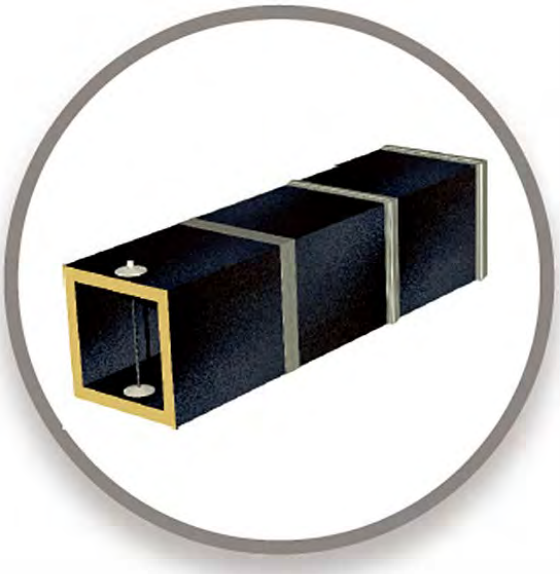
Adelaide Convention Centre

Flinders Medical Centre Upgrade

Aldi Supermarket—West Lakes

Beerenberg Farm

Notes



LONSDALE	19 Roxburgh Av	P: 08 8307 2300	F: 08 8307 2305
SALISBURY	72-78 Willochra Rd	P: 08 8182 0777	F: 08 8182 0705
WELLAND	99-109 Frederick St	P: 08 8116 3600	F: 08 8116 3605
DARWIN	116 Winnellie Rd	P: 08 8984 6800	F: 08 8984 6805
BRISBANE	7/29 McCotter St	P: 07 3714 8900	F: 07 3714 8905

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