ADA Ductboard™ Seismic
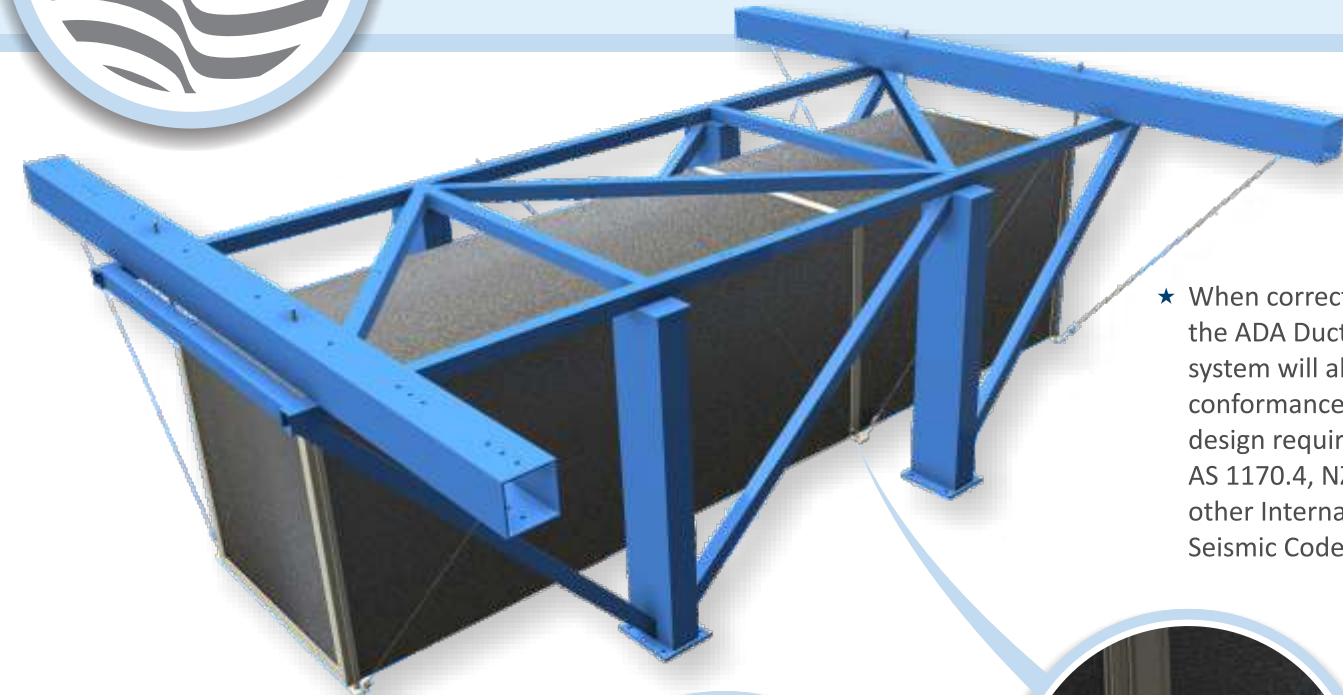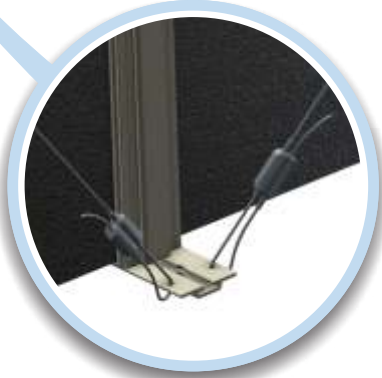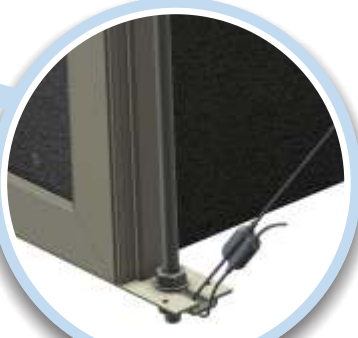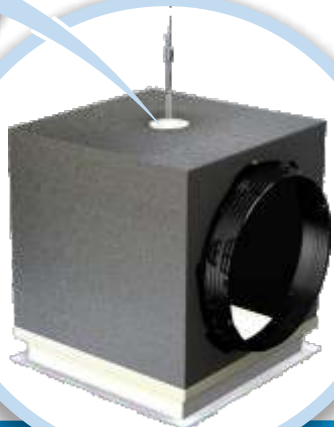
★ When correctly designed, the ADA Ductboard™ system will allow conformance to the design requirements of AS 1170.4, NZS 4219 and other International Seismic Codes

★ 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.

★ All configurations were tested to Performance Level III with horizontal accelerations of 15 m/s² to a maximum of 16Hz

★ Ductboard Support Plates used in conjunction with a special M8 threaded rod and CADDY® Speed Link System suspends Cushion Head Boxes for seismic applications

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ADA Ductboard™
Suspension Systems, Acoustic Data & Test Report Summary

SLK2C200
Locking Device

SLK2L*
Hook

SLK2L*SEM8
Threaded Stud End (8mm)

SLK2L*WA6
Wedge Anchor

CADDY® SPEED LINK SYSTEM

★ ADA recommends the CADDY® Speed Link System for ductwork suspension
★ For seismic applications the SLK parts shown have been tested and approved
★ Systems include locking device, flexible wire rope, and various specialty end fittings
★ A complete range of CADDY® parts and accessories are available for other general ductwork suspension applications

* = length of pre-attached wire rope, available in various lengths

ACOUSTIC DATA

★ Testing of the attenuation provided by ADA Ductboard™ was undertaken in 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

Additional attenuation - 3m length of 40mm duct

Cross-section	Octave Band Centre Frequency, Hz							
	63	125	250	500	1K	2K	4K	8K
200 x 300	11.5	6.2	15.2	16.5	15.9	9.2	8.9	4
300 x 600	-2.4	8.1	7.6	5.8	4.9	2.3	5.7	2.6
600 x 900	2.8	10.9	4.5	4.7	3.2	1.8	4.4	1.9

Additional attenuation - 3m length of 300mm x 600mm duct

Thickness	Octave Band Centre Frequency, Hz							
	63	125	250	500	1K	2K	4K	8K
40mm	-2.4	8.1	7.6	5.8	4.9	2.3	5.7	2.6
25mm	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.

TEST REPORT SUMMARY

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)

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)

UL 181.11 *Standard for Factory-Made Air Ducts and Air Connectors*
Tested by AWTA Product Testing
• Test Number 17-002142

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

ADA Ductboard™ System

★ Alternative to fabricated metal insulated ductwork
★ Available in thicknesses from 20-65mm
★ Higher R-Value rating for thinner insulation thickness
★ Lightweight compared to metal ductwork
★ Versatile - can be CNC cut to create a variety of ductwork components
★ Unique range of duct fittings and accessories available
★ Range of PVC and aluminium extrusions available to aid in fabrication & assembly of ductwork components
★ Excellent for use in high humidity areas
★ Ideal for use in sterile, clean air and hygiene controlled environments
★ Compliance with AS4254.2 for rigid ductwork, specifically AS/NZS 1530.3 & UL 181 burning test
★ Fire rating of four zero (AS/NZS 1530.3 - 1999 *Simultaneous determination of Ignitability, Flame Propagation, Heat Release and Smoke Release*)
★ Tested to AS60068.3.3 *Environmental testing: Guidance - Seismic test methods for equipment*
★ Green Star compliant
★ Acoustic benefits

Thickness(mm)	20	25	30	40	65
R-Value	1.0	1.2	1.5	2.0	3.0

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

DBHEA40

DBHE20/DBHEA20/25/30

STEP 1

STEP 2

STEP 3

ALTERNATE STEP 3 (with Reducer)

★ Available for all flexible duct sizes from Ø150mm up to Ø450mm
★ Suits 20mm, 25mm, 30mm & 40mm ADA Ductboard™ (R1, R1.2, R1.5 & R2) in any application
★ Uses simple EZY Y® clip-on starter collars and reducers
★ Options to fit adjustable damper blade
★ Eliminates requirement for metal fixings or silicon sealants
★ Made from fire retardant polymer

20 mm

25 mm

40 mm

*Also adaptable to suit 30mm ADA Ductboard™

★ Aluminium end capping profiles contain groove for silicon sealant or rubber/foam sealing strip

DBFEA65   DBSEA65

DBBEA   DBSEA20/25/30/40   DBYE20

DBJEA20/25/30/40

DBDE20/DBDEA20/25/30/40/65

★ Ductboard Support Plates used in conjunction with 8 or 10mm threaded rod to prevent sagging of large spans
★ Many aluminium extrusions can be mitre joined with aluminium corner stakes for ease of assembly and increased strength

DBBEA
DBJE20/DBJEA20/25/30

DBBEA
DBJE40

DBBEA
DBFEA65

★ Capping profiles contain groove for silicon sealant or rubber/foam sealing strip

★ DBBEA drive cleat holds together the two capping profiles for 20, 25, 30 & 40mm ductboard

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INSULATED DOUBLE SPIGOT ADAPTOR

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

ACCESSORIES PART LIST

For 20mm Ductboard - UV stabilised PVC			20/25/30mm Ductboard Adaptors		Reducer	
DBCE20	DBDE20	DBFE20	150mm	DBSA15	200-150	ERI2015
			200mm	DBSA20	250-200	ERI2520
			250mm	DBSA25	300-250	ERI3025
			300mm	DBSA30	350-250	ERI3525
DBHE20	DBHEE20	DBJE20	350mm	DBSA35	350-300	ERI3530
			400mm	DBSA40	450-350	ERI4535
			450mm	DBSA45	450-400	ERI4540
DBYE20	DBJCE20 (PVC & Alu)	DBBEA (Alu)	**40mm Ductboard Adaptors**		**Insulated Double Spigot Adaptor**	
		Also used for 25, 30 & 40mm range	150mm	DBSA1540	150mm	DBIDSA15
			200mm	DBSA2040	200mm	DBIDSA20
For 20, 25, 30 & 40mm Ductboard - Alu 10um Anodized			250mm	DBSA2540	250mm	DBIDSA25
DBCEAx	DBDEAx	DBHEAx	300mm	DBSA3040	300mm	DBIDSA30
			350mm	DBSA3540	350mm	DBIDSA35
			400mm	DBSA4040	400mm	DBIDSA40
			450mm	DBSA4540	NOTE: Indicates duct size - requires next size up Ductboard Adaptor to fit	
DBJEAx	DBFEAx	DBSEAx	**Starter Collars (Fire Retardant)**			
			150mm	DBC15	**Ductboard Support Plates (pair)**	
			200mm	DBC20	M8	DBSP8
For 65mm Ductboard - Alu 20um Anodized			250mm	DBC25	M10	DBSP10
DBDEA65	DBFEA65	DBSEA65	300mm	DBC30		
			350mm	DBC35	**Safety Hanger (8mm)**	
			400mm	DBC40	75mm	DBSH75
			450mm	DBC45	95mm	DBSH95
					500mm	DBSH500

For the full range of ADA Ductboard™ Accessories, refer to the ADA Ductboard™ Systems booklet