



TECHNICAL SUBMITTAL

Project:	MCFC Women's First Team	T.S No:	TS-M-015
A&B Contract No:	4070	Date:	18/06/2025
Engineer:	Stephen Hoy	Rev: P01	

F.T.A.O.	Name: Paul Buck Organisation: John Turner Construction Group
Copies To:	Name: Andrea Elliott / Sophie Kendall Organisation: CASE Building Services / A&B Engineering Ltd

Plant Item:	Attenuators.
Proposal Manufacturer:	Allaway Acoustics.
Model Types:	<p>Please find attached the Performance Schedule for the AHU and crosstalk attenuators, along with the data sheets A02H and A13G.</p> <p>Our selections have been made in accordance with the latest C01 drawings and plant data. The attenuators have been chosen to minimise duct borne noise transmitted through the air distribution grilles.</p> <p>All noise criteria is based on the Hepworth Acoustics Report P23-R01V3.</p>
Attachments:	<ul style="list-style-type: none">• Allaway Acoustics Attenuator Performance Schedule.• A02H Rectangular Attenuator Data Sheet.• A13G Circular Attenuator Data Sheet.

Approval Required By:	A.S.A.P
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<u>Response:</u>	
Date:	Signed:

Item	System Reference	Code	Suffix	DWG	L1	L2/ID	W	H	Vol	PD	Wt	No.		Performance, dB							
					mm	mm	mm	mm	m³/s	Pa	kg	Off.		63	125	250	500	1k	2k	4k	8k
1	ROOF																				
2	ATT/01 AHU 2 INTAKE	SL	GJ	A02H	600		650	400	1.72	30	31	1	IL	3	5	10	15	20	15	13	8
3	ATT/02 AHU 2 EXHAUST	SL	GJ	A02H	600		650	400	1.804	30	31	1	IL	3	5	10	15	20	15	13	8
4	ATT/03 AHU 2 EXTRACT	SP	G	A02H	1200		800	500	1.804	30	66	1	IL	5	10	18	28	36	28	24	14
5	ATT/04 AHU 2 SUPPLY	SP	G	A02H	1200		700	500	1.72	30	63	1	IL	5	10	18	28	36	28	24	14
6	ATT/13 AHU 5 INTAKE	SP	G	A02H	900		800	400	1.76	40	47	1	IL	5	8	16	25	35	28	24	14
7	ATT/14 AHU 5 SUPPLY	SP	G	A02H	900		800	400	1.76	40	47	1	IL	5	8	16	25	35	28	24	14
8	ATT/15 KEF EXHAUST	SP	GM	A02H	1500		800	500	2.08	40	78	1	IL	7	13	21	33	39	30	26	21
9	ATT/16 KEF EXTRACT	SP	GM	A02H	1200		800	500	2.08	40	66	1	IL	6	11	18	27	34	25	22	14
10																					
11	LOWER ROOF																				
12	ATT/01 AHU03/04 INTAKE	SP	G	A02H	900		700	750	2.227	30	65	1	IL	5	9	16	26	37	30	26	16
13	ATT/02 AHU03/04 EXHAUST	SP	G	A02H	900		700	750	2.227	30	65	1	IL	5	9	16	26	37	30	26	16
14	ATT/03 AHU03/04 SUPPLY	SP	G	A02H	900		700	750	2.227	30	65	1	IL	5	9	16	26	37	30	26	16
15	ATT/04 AHU03/04 EXTRACT	SP	G	A02H	900		700	750	2.227	30	65	1	IL	5	9	16	26	37	30	26	16
16	ATT/05 AHU01 INTAKE	SP	G	A02H	900		700	500	0.62	30	51	1	IL	6	12	19	30	45	39	33	22
17	ATT/06 AHU01 EXHAUST	SL	GJK	A02H	900		500	300	0.62	30	30	1	IL	3	7	13	26	37	30	26	16
18	ATT/07 AHU01 EXTRACT	SL	GJK	A02H	1200		500	250	0.62	30	33	1	IL	2	5	11	27	46	39	34	21
19	ATT/08 AHU01 SUPPLY	SL	GJK	A02H	1200		500	250	0.62	30	33	1	IL	2	5	11	27	46	39	34	21
20																					
21	FIRST FLOOR																				
22	CTA 01	PL	G	A13G	900	200			0.08	5	10	1	IL	1	3	7	19	28	23	20	15
23	CTA 02	PL	GK	A13G	900	250			0.12	5	12	1	IL	2	3	7	18	25	19	17	13
24	CTA 03	PL	G	A13G	900	200			0.08	5	10	1	IL	1	3	7	19	28	23	20	15
25	CTA 04	PL	G	A13G	900	200			0.08	5	10	1	IL	1	3	7	19	28	23	20	15
26	CTA 05	PL	G	A13G	900	150			0.04	5	8	1	IL	1	3	7	19	28	23	20	15
27	CTA 06	PL	G	A13G	900	150			0.04	5	8	1	IL	1	3	7	19	28	23	20	15
28	CTA 07	SL	GJK	A02H	900		500	300	0.44	10	30	1	IL	3	7	13	26	37	30	26	16
29	CTA 08	SL	GJK	A02H	900		500	300	0.44	10	30	1	IL	3	7	13	26	37	30	26	16

NOTES

LABEL WITH ITEM NO. & SYSTEM REF.

IL = INSERTION LOSS (dB)

G - SELF FINISH PRE-GALVANISED STEEL CONSTRUCTION.



PROJECT NAME: MANCHESTER CITY WOMENS CLUB
DATE: 18/06/2025

PROJECT No: 97995
SCHEDULE No: 12597995Q5

J - SPLITTERS ARRANGED HORIZONTALLY.
M - MELINEX ENCAPSULATED INFILL.
K - PROTECTIVE PAINT FINISH TO VISIBLE INTERNAL METAL SURFACES

AS EXHAUSTO/MAICO NOISE DATA AND A&B DRAWINGS.

EXTERNAL NOISE TO HEPWORTH ACOUSTICS REPORT P23-371-R01V3

DATA SHEET A02H

RECTANGULAR ATTENUATOR

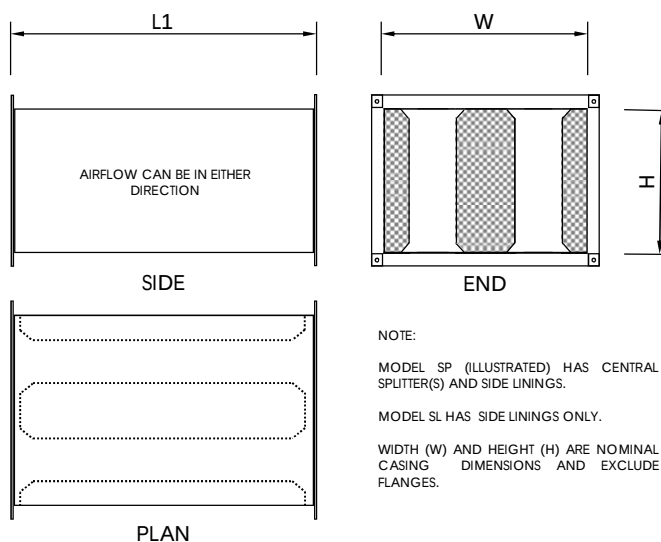
FLANGED

MODEL SP / MODEL SL



THIS IS NOT A STAND ALONE DOCUMENT AND UNLESS REFERRED TO IN A DATED EQUIPMENT SCHEDULE IS SUBJECT TO REVISION WITHOUT NOTICE.

DIMENSIONS



SPECIFICATION

ATTENUATORS ARE CONSTRUCTED IN ACCORDANCE WITH DW 144 SPECIFICATION FOR MEDIUM PRESSURE (CLASS B) DUCTWORK.

CASES ARE STIFFENED AND FITTED WITH PROPRIETARY FLANGES.

MODEL SP - HAS SOUND ABSORBENT SPLITTERS ARRANGED VERTICALLY WITHIN THE CASING TO FORM A SERIES OF CENTRAL ELEMENTS AND SIDE LININGS.

MODEL SL - HAS SOUND ABSORBENT SPLITTERS ARRANGED VERTICALLY WITHIN THE CASING TO FORM SIDE LININGS ONLY.

SPLITTERS AND SIDE LININGS CONTAIN A SOUND ABSORBENT INFILL THAT IS ENCAPSULATED WITH GLASS CLOTH AND PLAIN/PERFORATED STEEL.

SPLITTERS HAVE AERODYNAMIC FAIRINGS AT EACH END.

NOTES

THIS DATA SHEET IS TO BE READ IN CONJUNCTION WITH THE EQUIPMENT SCHEDULE.

LARGER ATTENUATORS WILL BE OF MODULAR CONSTRUCTION FOR EASE OF HANDLING AND MAY BE SPLIT ON THE LENGTH, WIDTH, HEIGHT OR COMBINATION THEREOF (SEE DATA SHEET A09 FOR DETAILS).

ATTENUATORS WILL BE SUPPLIED WITHOUT SUPPORT STEELWORK, BRACKETS, FIXINGS, GASKET, MASTIC OR OTHER SUCH ITEMS, UNLESS OTHERWISE STATED.

IT IS THE INSTALLERS RESPONSIBILITY TO PROVIDE THE FLANGE SEAL TO THE CONNECTING DUCT.

INSERTION LOSS, PRESSURE LOSS AND FLOW NOISE ARE DERIVED FROM TESTS CARRIED OUT IN ACCORDANCE WITH ISO 7235 AND MAY VARY DEPENDING ON INSTALLED CONDITIONS.

MANUFACTURING DIMENSIONAL TOLERANCE < 1.0 %.

SUFFIX

THE SUFFIX TO THE ATTENUATOR MODEL DEFINES THE MATERIAL OF FABRICATION AND ANY ADDITIONAL FEATURES OR SPECIAL CONSTRUCTIONAL DETAILS.

G - PRE-GALVANISED STEEL CONSTRUCTION.

S - GRADE 316 STAINLESS STEEL CONSTRUCTION.

H1 - HIGH TEMPERATURE APPLICATION (2 HOUR/300°C).

C - HIGH PRESSURE APPLICATION (DW 144, CLASS C).

K - PROTECTIVE PAINT FINISH TO VISIBLE INTERNAL METAL SURFACES.

T - 20MM FLANGES.

J - SPLITTERS AND/OR SIDE LININGS ARRANGED HORIZONTALLY.

M - MELINEX ENCAPSULATED INFILL.

Z(***) - MODULAR CONSTRUCTION (SEE DATA SHEET A09 FOR DETAILS).

X - SPECIAL CONSTRUCTION, REFER TO EQUIPMENT SCHEDULE FOR DETAILS.

FLANGE DETAILS

ATTENUATORS ARE FITTED WITH 30 mm PROFILE FLANGES COMPLYING WITH DW144 AND DW/TM1.

STANDARD SIZES

LENGTH (L1) - 600, 900, 1200, 1500, 1800, 2100, 2400, 2700, & 3000 mm.

WIDTH (W) - ANY DIMENSION ABOVE 149 mm.

HEIGHT (H) - ANY DIMENSION ABOVE 99 mm.

ALL ATTENUATORS ARE MADE TO ORDER.

NON STANDARD ATTENUATORS ARE AVAILABLE.

WEIGHT

WEIGHTS ARE GIVEN ON THE EQUIPMENT SCHEDULE.

MODULAR CONSTRUCTION

ATTENUATORS MANUFACTURED IN ONE SECTION WILL HAVE NO "Z" SUFFIX IN THE CODE.

WHEN ATTENUATORS ARE SUPPLIED IN MODULAR FORM, THE ACTUAL NUMBER OF SECTIONS IN THE LENGTH, WIDTH AND HEIGHT DEFINED BY THE "Z" SUFFIX. REFER TO DATA SHEET A09 FOR DETAILS.

Z	#	#	#
A "Z" SUFFIX IN THE ATTENUATOR CODE DENOTES THAT THE ATTENUATOR WILL BE SUPPLIED IN MODULES.	NUMBER OF MODULES IN LENGTH.	NUMBER OF MODULES IN WIDTH.	NUMBER OF MODULES IN HEIGHT.

DATA SHEET A13G

CIRCULAR ATTENUATOR

SPIGOT CONNECTION

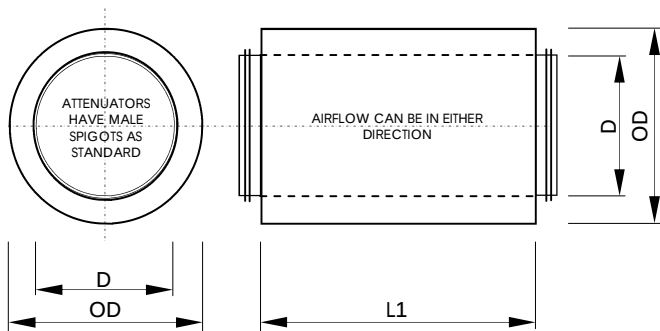
MODEL PL (WITHOUT POD)

MODEL PLP (WITH POD)



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DIMENSIONS



NOMINAL DIAMETER (D)

MAX OUTSIDE DIAMETER (OD)

BETWEEN 100 - 500 mm
ABOVE 500 mm

D + 110 mm.
D + 170 mm.

LENGTH (L1) IS NOMINAL CASING DIMENSION, EXCLUDING SPIGOTS.

SPECIFICATION

ATTENUATORS ARE CONSTRUCTED IN ACCORDANCE WITH DW 144 SPECIFICATION FOR MEDIUM PRESSURE (CLASS B) DUCTWORK.

CASES ARE STIFFENED AND FITTED WITH MALE SPIGOTS WITH INTEGRAL SEALS.

SOUND ABSORBENT INFILL IS ENCAPSULATED WITH GLASS CLOTH AND PERFORATED STEEL.

CENTRAL PODS (TYPE PLP) HAVE AERODYNAMIC FAIRINGS AT EACH END.

NOTES

THIS DATA SHEET IS TO BE READ IN CONJUNCTION WITH THE EQUIPMENT SCHEDULE.

EXCESSIVELY LARGE OR HEAVY ATTENUATORS MAY BE MANUFACTURED IN MATING SECTIONS FOR EASE OF HANDLING.

ATTENUATORS WILL BE SUPPLIED WITHOUT SUPPORT STEELWORK, BRACKETS, FIXINGS, GASKET, MASTIC OR OTHER SUCH ITEMS, UNLESS OTHERWISE STATED.

IT IS THE INSTALLERS RESPONSIBILITY TO SEAL THE ATTENUATOR TO THE CONNECTING DUCT.

INSERTION LOSS, PESSION LOSS AND FLOW NOISE DATA ARE DERIVED FROM TESTS CARRIED OUT IN ACCORDANCE WITH ISO 7235 AND MAY VARY DEPENDING ON INSTALLED CONDITIONS.

MANUFACTURING DIMENSIONAL TOLERANCE < 1.0 %.

WEIGHT

WEIGHTS ARE GIVEN ON THE EQUIPMENT SCHEDULE.

SUFFIX

THE SUFFIX TO THE ATTENUATOR MODEL DEFINES THE MATERIAL OF FABRICATION AND ANY ADDITIONAL FEATURES OR SPECIAL CONSTRUCTIONAL DETAILS.

G - PRE-GALVANISED STEEL CONSTRUCTION.

S - GRADE 316 STAINLESS STEEL CONSTRUCTION.

H1 - HIGH TEMPERATURE APPLICATION (2 HOUR/300°C).

C - HIGH PRESSURE APPLICATION (DW 144, CLASS C).

K - PROTECTIVE PAINT FINISH TO VISIBLE INTERNAL METAL SURFACES.

M - MELINEX ENCAPSULATED INFILL.

X - SPECIAL CONSTRUCTION, REFER TO EQUIPMENT SCHEDULE FOR DETAILS.

FLANGE DETAILS

ATTENUATORS ARE FITTED WITH MALE SPIGOTS AS STANDARD.

STANDARD SIZES

DIAMETER(D) - 100, 125, 150, 160, 180, 200, 250, 300, 315, 355, 400, 450, 500, 560 & 630 mm.

LENGTH (L1) - 600, 900, 1200, 1500, 1800, 2100, 2400, 2700 & 3000 mm.

ALL ATTENUATORS ARE MADE TO ORDER.

NON STANDARD SIZES AVAILABLE.