

Product Information Update

Subject: SDW Swirl Diffusers, AK-AKV-SDW Plenum**Date:** October 2006**Applicability:** 2/7/EN/6**Ref:** PIU 1/1/525PIU Issued: YES NO

The following information and attachments supersede all information previously issued under circular 1/1/519, which is now withdrawn.

The SDW Swirl Diffuser, AK-SDW and AKV-SDW plenum boxes are standard products manufactured in the UK. The SDW replaces part of the VDW range manufactured in Germany.

The aerodynamic and acoustic performance for the SDW and AK-SDW can be taken from leaflet 2/7/EN/6. For AKV-SDW please refer critical noise selections to the Technical Department.

The types and sizes sourced from TROX Germany are:

- All round faced variants i.e. VDW-R
- Size 825 x 72 VDW-Q

Please find attached the following sheets:

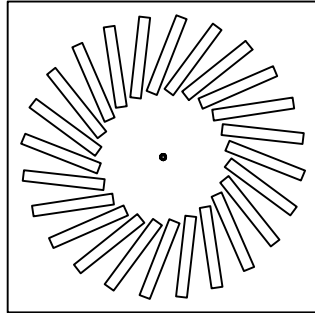
- DATA SHEET REF SDWDATA ISSUE 3
- DATA SHEET REF AKVSDW ISSUE 2
- CODE SHEET REF SDW ISSUE 1
- CODE SHEET REF AK-SDW ISSUE 2
- CODE SHEET REF AKVSDW ISSUE 1



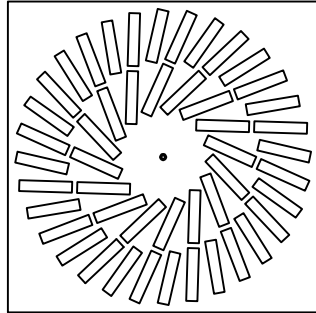
C A Palfrey
Associate Technical Director

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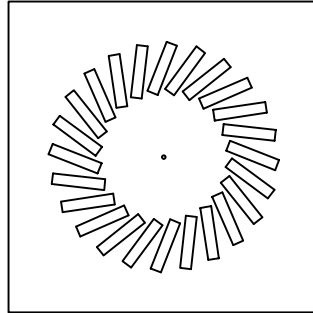
SDW STANDARD SIZES/ FACE STYLES:



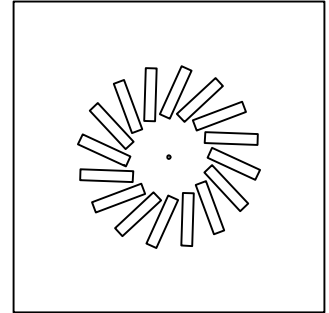
SIZE 600 x 24 (x600 TILE)
 TYPES -Q- -QL- -QM- -QS- -QB-
 SIZE 600 x 24 (x750 TILE)
 TYPES -QM- -QS- -QB-
 SIZE 625 x 24 (x625 TILE)
 TYPE -Q-



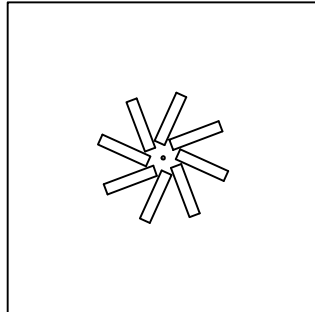
SIZE 600 x 48 (x600 TILE)
 TYPE -Q- -QL- -QM- -QS- -QB-
 SIZE 600 x 48 (x750 TILE)
 TYPE -QM- -QS- -QB-



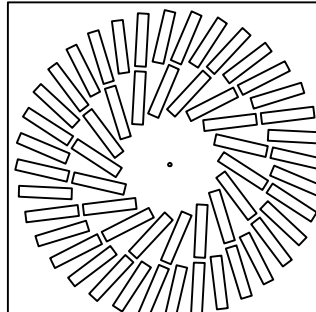
SIZE 500 x 24 (x600 TILE)
 TYPES -QL- -QM- -QS- -QB-
 SIZE 500 x 24 (x750 TILE)
 TYPES -QM- -QS- -QB-



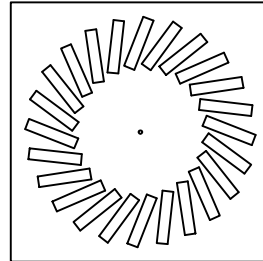
SIZE 400 x 16 (x600 TILE)
 TYPES -QL- -QM- -QS- -QB-
 SIZE 400 x 16 (x750 TILE)
 TYPES -QM- -QS- -QB-



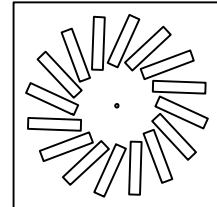
SIZE 300 x 8 (x600 TILE)
 TYPES -QL- -QM- -QS- -QB-
 SIZE 300 x 8 (x750 TILE)
 TYPES -QM- -QS- -QB-



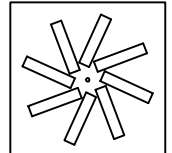
SIZE 625 x 54 (x625 TILE)
 TYPE -Q-



SIZE 500 x 24 (x500 TILE)
 TYPE -Q-

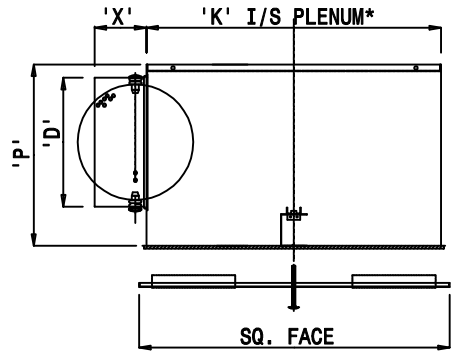


SIZE 400 x 16 (x400 TILE)
 TYPE -Q-

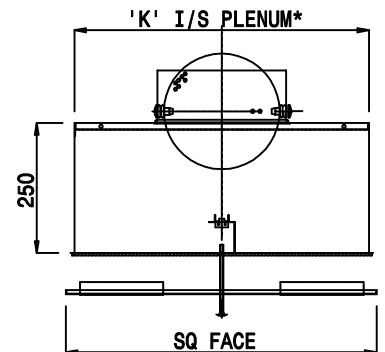


SIZE 300 x 8 (x300 TILE)
 TYPE -Q-

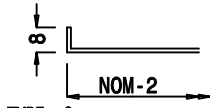
SDW SIDE ENTRY PLENUM:
 CODE -ZH- (SUPPLY) / -AH- (EXTRACT)



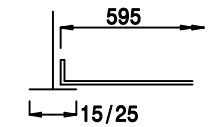
SDW TOP ENTRY PLENUM:
 CODE -ZV- (SUPPLY) / -AV- (EXTRACT)



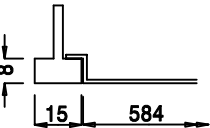
STANDARD EDGE DETAILS:



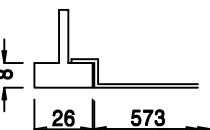
TYPE -Q-
 Face-mounted



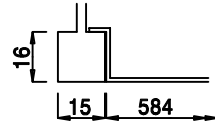
TYPE -QL-
 To 'Lay-on' FLAT tee-bar
 15mm or 25mm wide



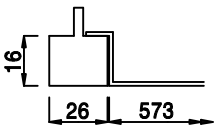
TYPE -QS15-
 To 'Lay-on' Tegalur tee-bar
 15mm wide x 8mm deep



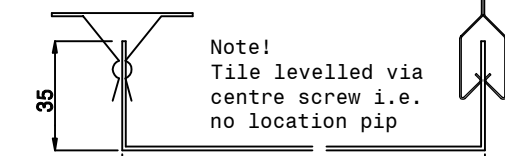
TYPE -QS26-
 To 'Lay-on' Tegalur tee-bar
 26mm wide x 8mm deep



TYPE -QM15-
 To 'Lay-on' Tegalur tee-bar
 15mm wide x 16mm deep



TYPE -QM26-
 To 'Lay-on' Tegalur tee-bar
 26mm wide x 16mm deep



TYPE -QB-
 To 'Push-In' spring tee-bar;
 Suitable for 'tee' or 'omega' type

PLENUM SIZES:

NOM SIZE	NO BLADES	'K'	'P'	'D'
300 x 8	288	250	158	
400 x 16	370	295	198	
500 x 24	474	295	198	
600 x 24	565*	345	248	
600 x 48	588*	345	248	
625 x 24	565	345	248	
625 x 54	615	345	248	

*Note!
 Plenum width 'K' = 550mm
 for type -QB- (both sizes)
 and type -QM/QS- (600x48)
 with 600 tile

NOTE!
 DIFFUSER FACE & PLENUM SUPPLIED SEPERATELY
 FOR SITE JOINING VIA CENTRE FIXING SCREW
 (SCREW HEAD C/W PLASTIC CAP TO MATCH FINISH);
 DIFFUSER FACE ONLY SUPPLIED FOR NON-ACTIVE
 TYPE (-CODE -F-) ie NO CENTRE HOLE/ SCREW

SPIGOT
 OPTION: 'X'
 TYPE 'O' 40
 TYPE 'M' 75/100

PLENUM OPTIONS:
 CODE -O- STANDARD SPIGOT;
 CODE -M- C/W SPIGOT DAMPER;
 CODE -MN- C/W TEST CONNECTION;
 CODE -D- C/W 15mm CLASS 'O' LINING

GENERAL:
 -DIFFUSER & PLENUM FROM GALV. STL.
 -DIFFUSER STANDARD FINISH PAINTED RAL 9010;
 -PLENUM NATURAL FINISH

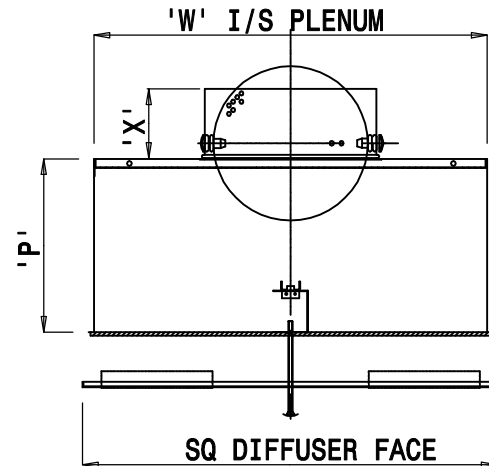
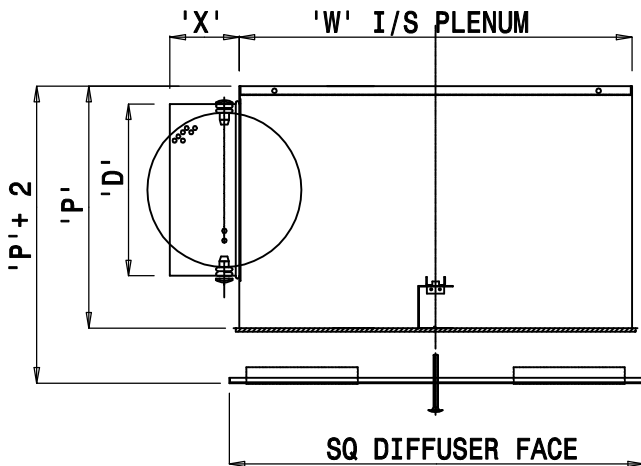
Product Information:

VARIABLE HEIGHT AKV-SDW SWIRL DIFFUSER PLENUM
 ie HEIGHT RELATED TO REQUIRED SPIGOT DIAMETER
 OR WHEN EXTENDED PLENUM HEIGHT REQUIRED

TABLE 1

AVAILABLE SPIGOT SIZES 'D' (SUBJECT TO LIMITATIONS AS SHOWN IN TABLE 2 & AS NOTED)

73/ 78/ 98/ 123/ 138/ 148/ 158/ 178/ 198/ 222/ 248/ 278/ 298/ 313/ 348/ 353/ 398/ 448/ 498/ 558/ 598



NOTE! FOR DETAILS OF SWIRL DIFFUSER FACE STYLES - REFER STANDARD DATA SHEET DRG 'SDWDATA'

TYPE AKV-SDW-(ZH/AH)-O-O

SUPPLY (-ZH) OR EXTRACT (-AH) SIDE ENTRY PLENUM WITH STANDARD SPIGOT (-O) ['X' = 40mm]

TYPE AKV-SDW-(ZV/AV)-O-O

SUPPLY (-ZV) OR EXTRACT (-AV) TOP ENTRY PLENUM WITH STANDARD SPIGOT (-O) ['X' = 40mm]

TYPE AKV-SDW-(ZH/AH)-O-(M/MN)

AS ABOVE BUT WITH BALANCING FLAP DAMPER (-M) IN SPIGOT ['X' = 75/100] OR WITH FLAP DAMPER AND TEST POINT CONNECTION (-MN)

TYPE AKV-SDW-(ZV/AV)-O-M

AS ABOVE BUT WITH BALANCING FLAP DAMPER (-M) IN SPIGOT ['X' = 75/100m]

TYPE AKV-SDW-(ZH/AH)-D-(O/M)

AS EITHER OF ABOVE BUT INCLUDING INTERNAL LINING (-D)

TYPE AKV-SDW-(ZV/AV)-D-(O/M)

AS EITHER OF ABOVE BUT INCLUDING INTERNAL LINING (-D)

TABLE 2

NOM	SIZE	'W'	MAX 'D'
300	x 8	288	248
400	x 16	370	348
500	x 24	474	448
600	x 24	565*	498
625	x 24	565	498
600	x 48	588*	558
625	x 54	615	598

***Note!**

Plenum width 'W' = 550mm for diffuser face type -QB- (both sizes) and type -QM/QS- (600x48) with 600 tile

TABLE 3

PLENUM	(PLENUM HEIGHT#)	
	'P' MIN	'P' MAX
AKV-SDW- (ZH/AH)	'D'+78	1000
AKV-SDW- (ZV/AV)	(D/2)+75	1000

#Note!

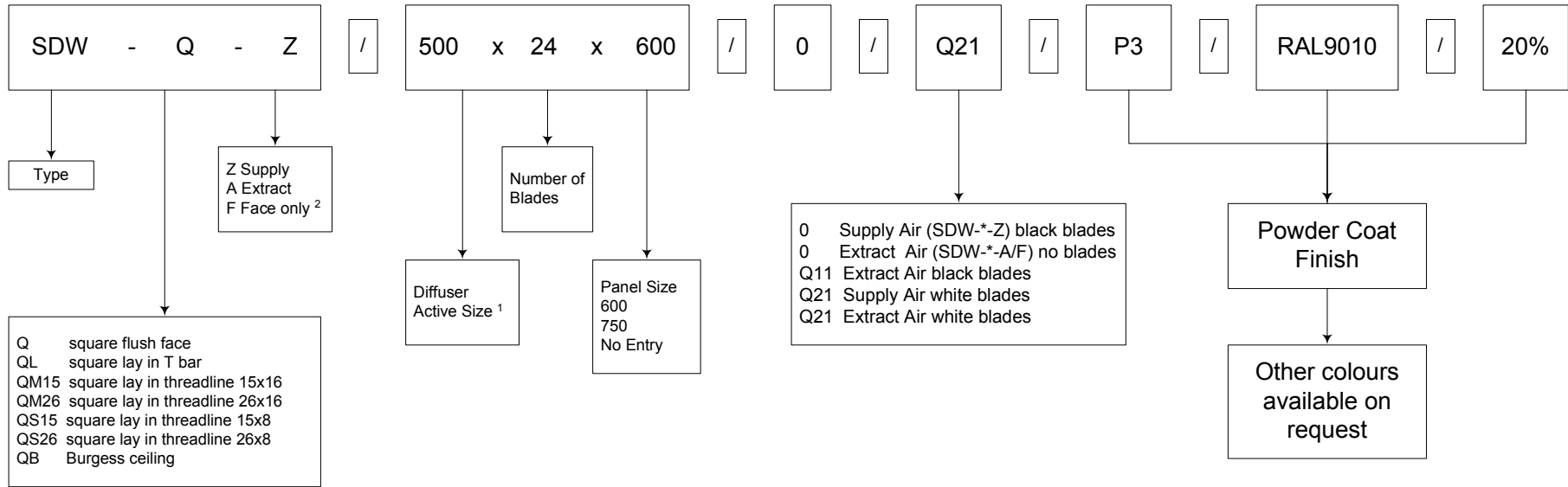
Plenum height 'P' can relate to :
 -Minimum possible plenum height available to suit particular spigot size
 -Extended plenum height requirement

NOTE!

- PLENUM SUPPLIED SEPERATELY FOR SITE JOINING TO DIFFUSER FACE VIA CENTRE FIXING SCREW;
- ASSEMBLY SUPPORTED BY OTHERS (4 NO HOLES PROVIDED AT TOP EDGE OF PLENUM);
- PLENUM FROM PRE-GALV. MILD STEEL NATURAL FINISH;
- SUPPLY PLENEMS C/W INTERNAL BAFFLES TO ASSIST DISCHARGE;
- INTERNAL LINING MATERIAL 12mm BLACK FACED CLASS 'O' SELF-ADHESIVE FOAM

SDW Diffusers - Code Sheet

Code Ref.: SDW
Issue: 1
Date: 29-01-04



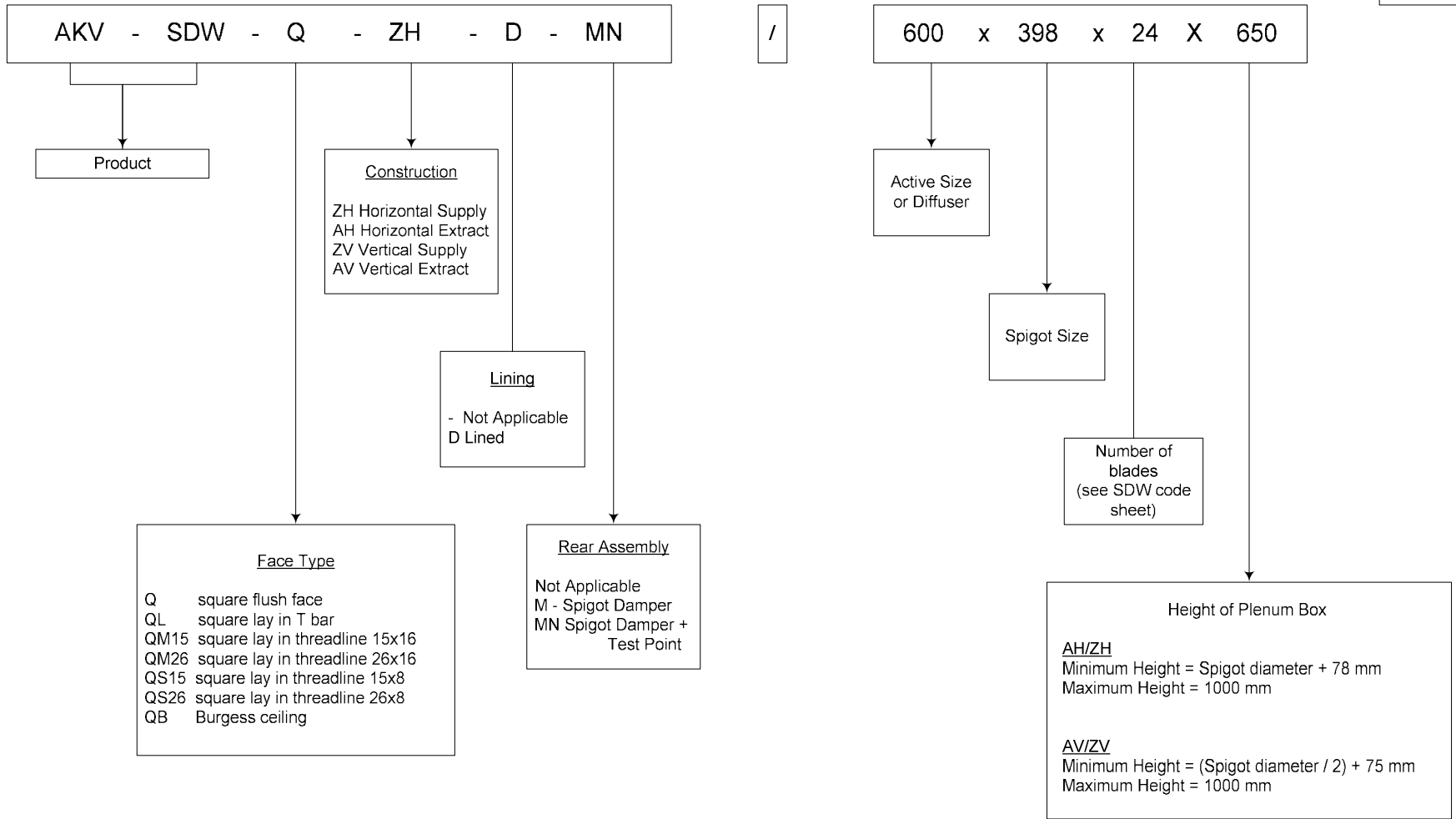
¹ Available Sizes

Q	Q-500	QS15	QS15-500	QS26	QM15	QM26	QL	QB
300 x 8 400 x 16 500 x 24 600 x 24 600 x 48 625 x 24 625 x 54	400 x 16 x 500	300 x 8 x 600 400 x 16 x 600 500 x 24 x 600 600 x 24 x 600	500 x 24 x 500	300 x 8 x 600 400 x 16 x 600 500 x 24 x 600 600 x 24 x 600 600 x 48 x 600	300 x 8 x 600 300 x 8 x 750 400 x 16 x 600 400 x 16 x 750 500 x 24 x 600 500 x 24 x 750 600 x 24 x 600 600 x 24 x 750 600 x 48 x 600 600 x 48 x 750 625 x 24 x 750 625 x 54 x 750	300 x 8 x 600 300 x 8 x 750 400 x 16 x 600 400 x 16 x 750 500 x 24 x 600 500 x 24 x 750 600 x 24 x 600 600 x 24 x 750 600 x 48 x 600 600 x 48 x 750 625 x 24 x 750 625 x 54 x 750	300 x 8 x 600 400 x 16 x 600 500 x 24 x 600 600 x 24 x 600 600 x 48 x 600	300 x 8 x 600 400 x 16 x 600 500 x 24 x 600 600 x 24 x 600 600 x 48 x 600

² Face section without central fixing hole, for use on lay in ceilings
QL, QS15, QS26, QM15 & QM26 without rear plenum

AKV-SDW Plenums - Code Sheet

Code Ref.: AKV-SDW
 Issue: 1
 Date: 09-01-06



AK-SDW Plenums - Code Sheet

Code Ref.: AK-SDW
 Issue: 2
 Date: 15-05-06

AK - SDW - Q - ZH - D - MN

/

600 x 398 x 24

Product

Construction
 ZH Horizontal Supply
 AH Horizontal Extract
 ZV Vertical Supply
 AV Vertical Extract

Lining
 - Not Applicable
 D Lined

Face Type
 Q square flush face
 QL square lay in T bar
 QM15 square lay in threadline 15x16
 QM26 square lay in threadline 26x16
 QS15 square lay in threadline 15x8
 QS26 square lay in threadline 26x8
 QB Burgess ceiling

Rear Assembly
 Not Applicable
 M - Spigot Damper
 MN Spigot Damper +
 Test Point

Active Size
 or Diffuser

Spigot Size

Number of
 blades

Product Information Update

Subject: SDW Swirl Diffusers

Date: May 2007

Applicability: Quick Selection Guide

Ref: PIU 1/1/543

PIU Issued: YES

NO

When using the performance data given on page 43 of the Quick Selection Guide, the minimum supply air volume for each size should be as stated on page 7 of the leaflet 2/7/EN/6.

C A Palfrey



Associate Technical Director

Product Information Update

Subject: VDW Swirl Diffusers

Date: May 2007

Applicability: Quick Selection Guide

Ref: PIU 1/1/544

PIU Issued: YES

NO

When using the performance data given on page 45 of the Quick Selection Guide, the minimum supply air volume for each size should be as stated on page 7 of the leaflet 2/7/EN/6.

C A Palfrey



Associate Technical Director