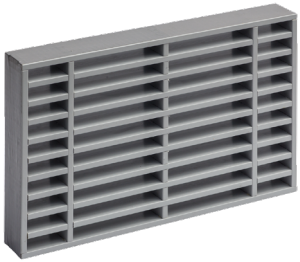

WDBA

Fire-resistant wall/door diffuser
Transfer
Tested in accordance with BS 476; B20, 1987

Available types
W D B A O O

- **W** wall/door diffuser
- **D** transfer
- **B** fire-resistant
- **A** rectangular, thickness 40 mm, 60 minutes fire-resistant
- **O** none
- **O** not applicable

Single cover diffuser
W D O O E O

- **W** wall/door diffuser
- **D** transfer
- **O** not applicable
- **O** not applicable
- **E** cover diffuser
- **O** not applicable

SA-Select
Check SA-Select to create extended order codes and selection details online. **NB!** At this moment, SA-Select is only available in Dutch. But it is possible to create extended order codes and selection details online.

Use
The fire-resistant element type WDBA is suitable for use in fire-retardant wall or door constructions. It should be fixed mechanically in the recess or it can be fitted between two cover diffusers (optional). The gap between the recess and the element should be filled with intumescent sealant. The fire-resistant element consists of thermal foam material, enclosed by plastic profiles. In temperatures above 100 °C it expands strongly in volume and consequently closes the opening. As the basic material is hygroscopic, the element should be stored and used in dry conditions only.

Characteristics

Free passage:	approx. 56 to 69 %

Finish
Fire-resistant element
Plastic profiles filled with heat-sensitive foam material.

Post-treatment:	none
Colour:	grey
Fitting:	intumescent sealant

Cover diffusers WDOOEO (optional)

Material:	pressed steel
Post-treatment:	none
Colour:	white RAL 9010

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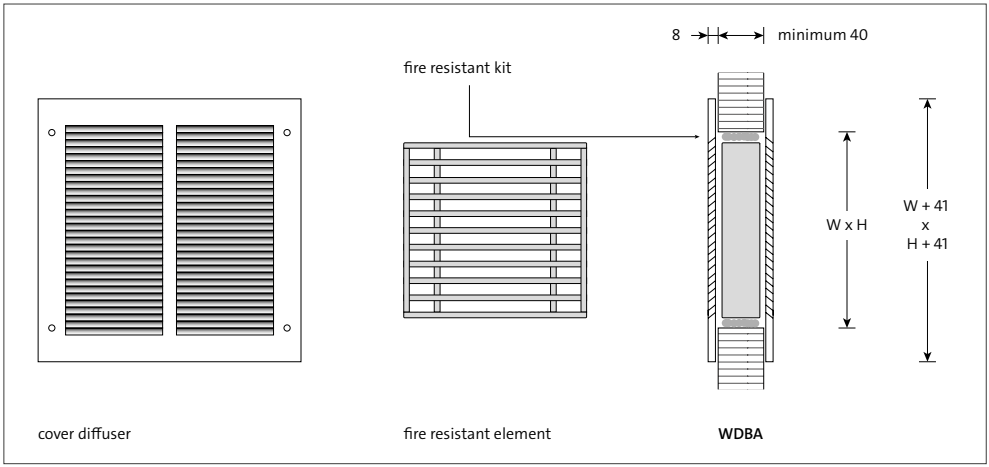
Dimensions



Available dimensions

H	W									
	100	150	200	250	300	350	400	450	500	600
100	■	■	■	■	■	■	■	■	■	■
150	■	■	■	■	■	■	■	■	■	■
200	■	■	■	■	■	■	■	■	■	■
250	■	■	■	■	■	■	■	■	■	■
300	■	■	■	■	■	■	■	■	■	■
350	■	■	■	■	■	■	■	■	■	■
400	■	■	■	■	■	■	■	■	■	■
450	■	■	■	■	■	■	■	■	■	■
500	■	■	■	■	■	■	■	■	■	■
600	■	■	■	■	■	■	■	■	■	■

Comment

- The listed dimensions are in mm.
- W x H is the recess size.
- The actual width is W - 2 mm.
- The actual height is H - 2 mm.
- Any sizes in between are available on request.
- Fire resistance of 60 minutes in accordance with BS 476 : part 20 : 1987.

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Selection details

WDBA

air volume		free passage in cm²																	
		50		60		80		100		125		150		200		250		300	
m³/s	m³/h	P_s	L_p	P_s	L_p	P_s	L_p	P_s	L_p	P_s	L_p	P_s	L_p	P_s	L_p	P_s	L_p	P_s	L_p
0.0100	**36**	5	-																
0.0125	**45**	8	11	6	7														
0.0150	**54**	12	15	9	12	5	-												
0.0175	**63**	17	20	12	16	7	-	4	-										
0.0200	**72**	22	23	15	19	9	13	5	-	4	-								
0.0250	**90**	34	29	24	25	13	19	9	14	6	-	4	-						
0.0300	**108**			34	30	19	23	12	19	8	14	6	10						
0.0400	**144**					34	31	22	26	14	21	10	17	6	11	4	-		
0.0500	**180**							34	32	22	27	15	23	9	17	6	12	4	-
0.0600	**216**									32	32	22	28	13	22	8	17	6	13
0.0800	**288**											40	35	22	29	15	25	10	21
0.1000	**360**													35	35	23	30	16	27
0.1250	**450**															36	36	25	32
0.1500	**540**																	36	37

air volume		free passage in cm²																	
		400		500		600		800		1000		1250		1500		2000		2500	
m³/s	m³/h	P_s	L_p	P_s	L_p	P_s	L_p	P_s	L_p	P_s	L_p	P_s	L_p	P_s	L_p	P_s	L_p	P_s	L_p
0.0800	**288**	6	15	4	10														
0.1000	**360**	9	21	6	16	4	12												
0.1250	**450**	14	26	9	22	7	18	4	12										
0.1500	**540**	21	31	14	27	10	23	6	17	4	13								
0.1750	**630**	28	35	18	31	13	27	8	21	5	17	4	-						
0.2000	**720**			24	34	17	30	10	25	7	20	5	16	3	13				
0.2500	**900**					27	36	16	30	11	26	7	22	5	19				
0.3000	**1080**							23	35	15	31	10	27	8	23	5	19	4	15
0.4000	**1440**									27	38	18	34	14	31	9	26	6	23
0.5000	**1800**											29	40	21	37	14	32	10	29
0.6000	**2160**															20	37	14	33
0.8000	**2880**																	26	41

Preferred range for use in doors: 8 - 10 Pa.

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Free passage in cm²

H	W									
	100	**150**	**200**	**250**	**300**	**350**	**400**	**450**	**500**	**600**
100	56	85	114	146	179	208	241	273	302	363
150	89	134	180	232	283	329	380	432	478	575
200	122	184	246	317	387	450	520	591	653	786
250	154	233	312	402	491	570	660	750	829	997
300	187	283	378	487	596	691	800	909	1004	1209
350	220	332	444	572	700	812	940	1067	1180	1420
400	252	381	510	657	804	933	1080	1226	1355	1631
450	285	431	577	742	908	1054	1219	1385	1531	1842
500	318	480	643	827	1012	1175	1359	1544	1706	2054
600	383	579	775	998	1220	1416	1639	1862	2058	2476

Important information

Fire-resistant products based on thermal foam material, such as the WDBA, are tested in accordance with BS 476 : part 20 : 1987; or similar products tested in accordance with NEN-EN 1366-3, or NEN 6069 pertain to “dividing constructions”.

The NEN-EN 1366-2 (or NEN 6077) regarding ‘fire dampers in air ducts’ applies to using fire-resistant elements in air ducts, such as fire dampers, where tests take place under much greater pressure differences. Therefore, the aforementioned products cannot simply be used in air ducts.

General

- Static pressure loss Ps in Pa.
- The assumed space attenuation is 10 dB.
- Sound pressure Lp in dB(A).
- It is permitted to interpolate the interim values.
- The selection details apply to the WDBAOO and in combination with the WDOOEO diffuser.

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