



Holyoake Curtain-type fire dampers are designed to restore the fire resistance of a wall or floor, in which a hole has been formed to permit the passage of air, either ducted or not, to enable an air distribution system to function. The arrangement of interlocking blades mounted in a guide channel frame minimizes space requirements, and facilitates ease of installation in ductwork.

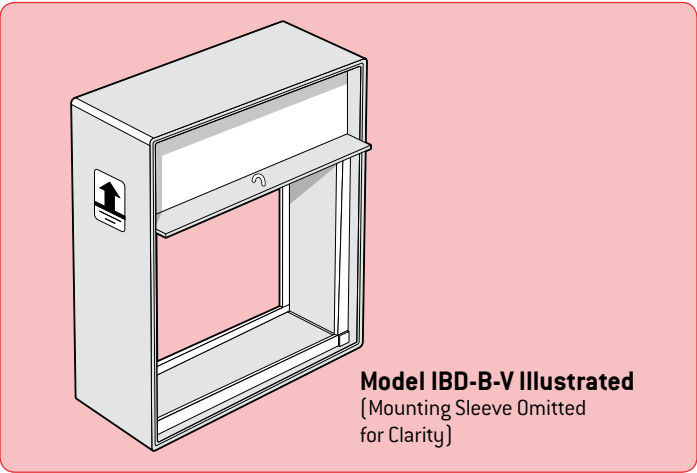
All Holyoake Series IBD units carry up to a 4 HOUR rating, as determined by the following testing Authorities.
(Tested in New Zealand and Australia)

- BRANZ **Assessment Report Certificate**
 IBD Damper mounted in a concrete wall or floor
- BRANZ **Fire Test Certificate No.392**
 IBD Damper mounted in a plasterboard wall

(Certificates are available upon request)

Standard Construction

- Frame:** 110mm x 1.2mm galvanised steel, roll formed guide channel.
- Blades:** 70mm x 1.0mm galvanised steel, roll formed interlocking profile.
- Springs:** Blade End: stainless steel
Retraction: stainless steel
Note: Horizontal dampers with a duct 'B' dimension of less than 180mm have all blades fitted with end springs only. Above 180mm constant force springs only are fitted. All vertical dampers have the bottom blade only fitted with end springs.
- Fusible Links:** Standard 71°C with optional "test" facility (test latch) on all air stream duct heights greater than 160mm.
- Mounting:** Vertical or horizontal, but in all cases the blades must be horizontal.



Model IBD-B-V Illustrated
(Mounting Sleeve Omitted for Clarity)

Alternate Activation:

Either electric solenoid or electro-thermal link release mechanisms can be furnished. These devices can be activated by smoke detectors of compatible design. By definition, a fire damper provides an effective barrier to the passage of fire and products of combustion, but when its operation is initiated by the detection of smoke or other products of combustion it may then be termed "smoke damper". The difference between a fire damper and a smoke damper is not a physical one, but is in the method of initiating the operation.

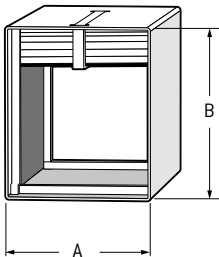
Mounting Sleeves:

Series IBD fire dampers must be installed in sleeves (refer to pages of this manual). These sleeve assemblies are available, please consult the sales office.

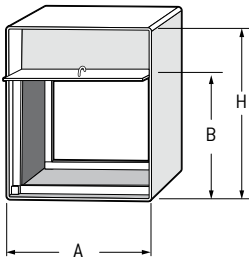
Stainless Steel:

Construction in stainless steel is available for both IBD and mounting sleeves.

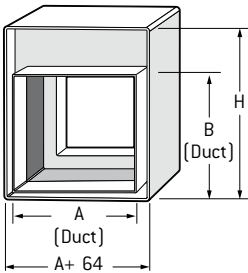
Style-A



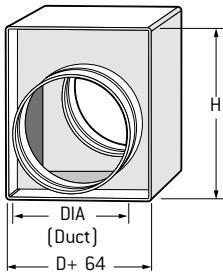
Style-B



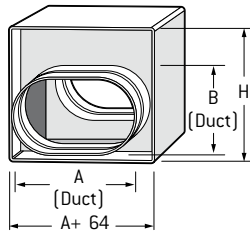
Style-C



Style-CR



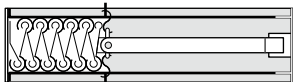
Style-CO



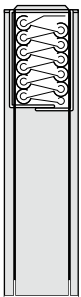
Single Section Maximum Dimensions

STYLE	A		B		C		CO		CR
Alternative Max. Dimension Combinations	A	B	A	B	A	B	A	B	*D
Vertical	838	1828	838	1600	774	1568	774	1568	774
	1219	762	1219	654	1155	622	1155	622	
Horizontal	838	965	838	835	774	803	774	803	
	1016	762	1016	654	952	622	952	622	

Mounting Sleeves omitted for clarity.



Horizontal



Vertical

Notes

1. In specifying a fire damper the width should always be stated first, and the height second.
2. Nominal dimensions are opening sizes and allow clearance for insertion into mounting sleeve: 6 mm Style A & B.
3 mm Style C, CR & CO. Where this allowance is not required specify "exact size".



Assembly and Dimensional Information

[A & B Dimensions allow 6mm clearance for mounting sleeve of nominated size]

Model IBD-A-V

Interlocking blade, vertical mounting damper, gravity operated, spring loaded initial movement, blade stack located within air stream.

Maximum size combinations:

A 838 x B 1828 or A 1219 x B 762

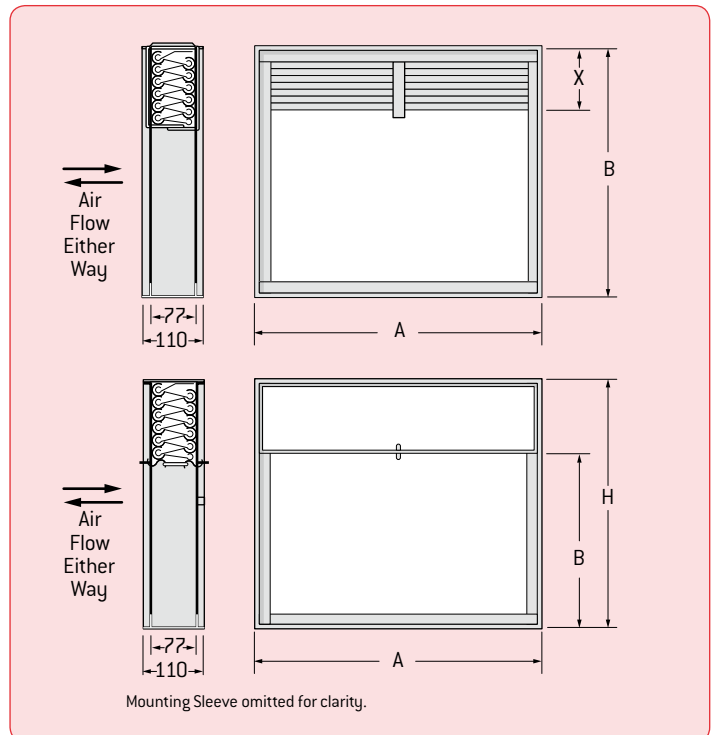
[Single Section].

Model IBD-B-V

Interlocking blade, vertical mounting damper, gravity operated, spring loaded initial movement, blade stack located out of air stream.

Maximum size combinations:

A 838 x B 1600 or A 1219 x B 654 [Single Section]



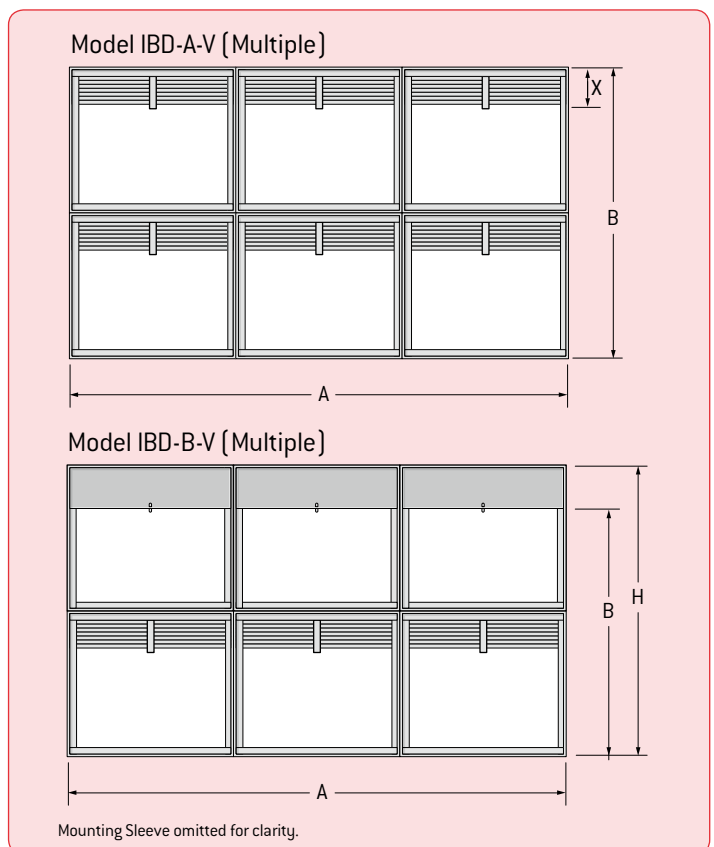
Model IBD-A-V (multiple)

See above for details on individual IBD-A-V dampers

Model IBD-B-V (multiple)

Where opening is larger than maximum single section size, an assembly of equal size single section dampers is used. Style 'B' assemblies where more than one unit high, would consist of 'B' type units in the top row only and 'A' type elsewhere. Multiple assemblies are shipped in sections for field assembly. Adequate fire rated bracing must be provided by the installer to prevent collapse of multiple unit assemblies when closed, even under relatively low pressure differential conditions.

Maximum multiple unit module for vertical dampers is 3 wide by 2 high single sections as shown.



STYLE 'A' (Single Section)																	
Dimension 'B'	From	-	64	184	304	424	544	664	784	904	1024	1144	1264	1384	1504	1624	1744
	To	63	183	303	423	543	663	783	903	1023	1143	1263	1383	1503	1623	1743	1828
Dimension 'X'		15	30	42	54	66	78	90	102	114	126	138	150	162	174	186	198

STYLE 'B' (Single Section)																
Dimension 'B'	From	-	84	144	179	239	299	359	394	454	514	574	609	669	729	789
	To	83	143	178	238	298	358	393	453	513	573	608	668	728	788	823
Dimension 'H' = B +		29*	29*	54	54	54	54	79	79	79	79	104	104	104	104	129
Dimension 'B'	From	824	884	944	1004	1039	1099	1159	1219	1254	1314	1374	1434	1469	1529	1589
	To	883	943	1003	1038	1098	1158	1218	1253	1313	1373	1433	1468	1528	1588	1600
Dimension 'H' = B +		129	129	129	154	154	154	154	179	179	179	179	204	204	204	204

* 54 mm for Electric Solenoid Release Dampers



Assembly and Dimensional Information

(A & B Dimensions allow 6mm clearance for duct of nominated size)

Model IBD-A-H

Interlocking blade, horizontal mounting fire damper, spring loaded for complete travel, blade stack located within air stream.

Where dimension ‘B’ exceeds 180mm, two constant force springs anchored to the frame and attached to the last blade draw the blade curtain closed. Where dimension ‘B’ is less than 180mm, all blades are fitted with “omega” springs at blade ends, which drive the curtain to the closed position.

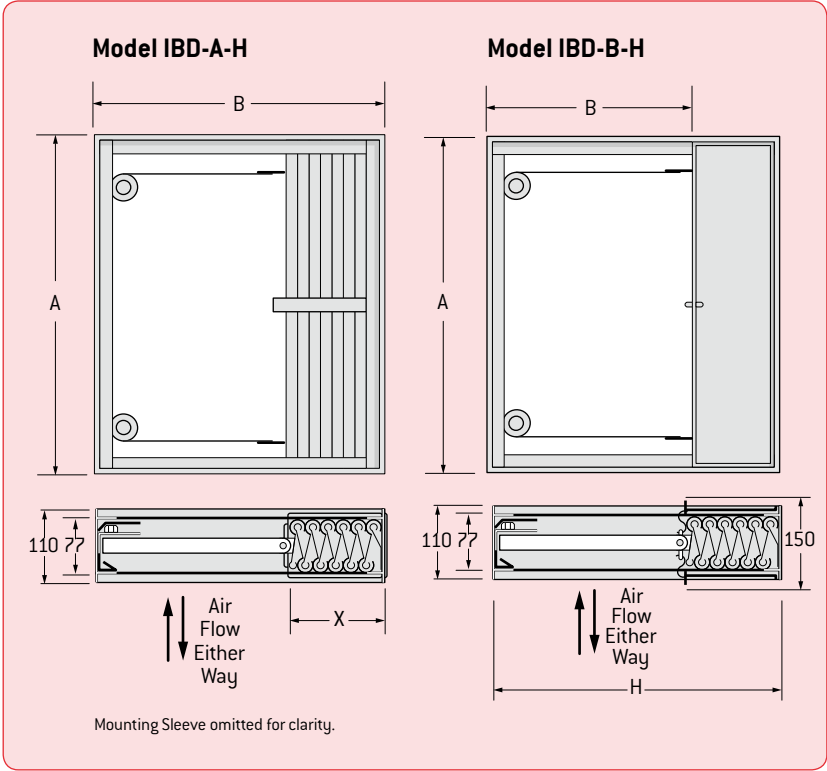
Maximum size combinations:-
A 838 x B 965 or A 1016 x B 762 (Single Section)

Model IBD-B-H

Interlocking blade, horizontal mounting fire damper, spring loaded for complete travel, blade stack located out of air stream.

Spring arrangement similar to IBD-A-H.

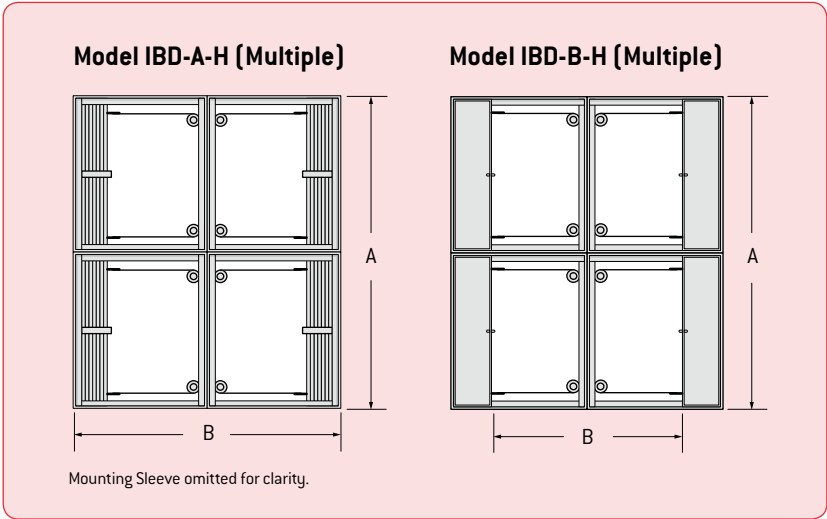
Maximum size combinations:-
A 838 x B 835 or A 1016 x B 654 (Single Section)



Model IBD-A-H (multiple)

Model IBD-B-H (multiple)

Where opening is larger than maximum single section size, an assembly of equal size single section dampers is used. Blade stacks for assemblies two sections across the ‘B’ dimension are normally installed as illustrated, with blade stacks outermost, thus improving access and minimising air flow interference. Multiple assemblies are shipped in sections for field assembly.



STYLE 'A' (Single Section)											
Dimension 'B'	From	-	71	101	151	181	244	364	484	604	844
	To	70	100	150	180	243	363	483	603	723	843
Dimension 'X'		26	42	56	70	40	52	64	76	88	100

STYLE 'B' (Single Section)																	
Dimension 'B'	From	-	36	86	111	161	181	239	299	359	394	454	514	574	609	669	729
	To	35	85	110	160	180	238	298	358	393	453	513	573	608	668	728	789
Dimension 'H' = B +		54	54	54	79	79	54	54	54	79	79	79	79	104	104	104	129



Assembly and Dimensional Information

Model **IBD-C-V**

Interlocking blade, vertical mounting damper, gravity operated, spring loaded initial movement, fitted with enclosure plates and square or rectangular spigots to suit duct connections.

Model **IBD-CR-V**

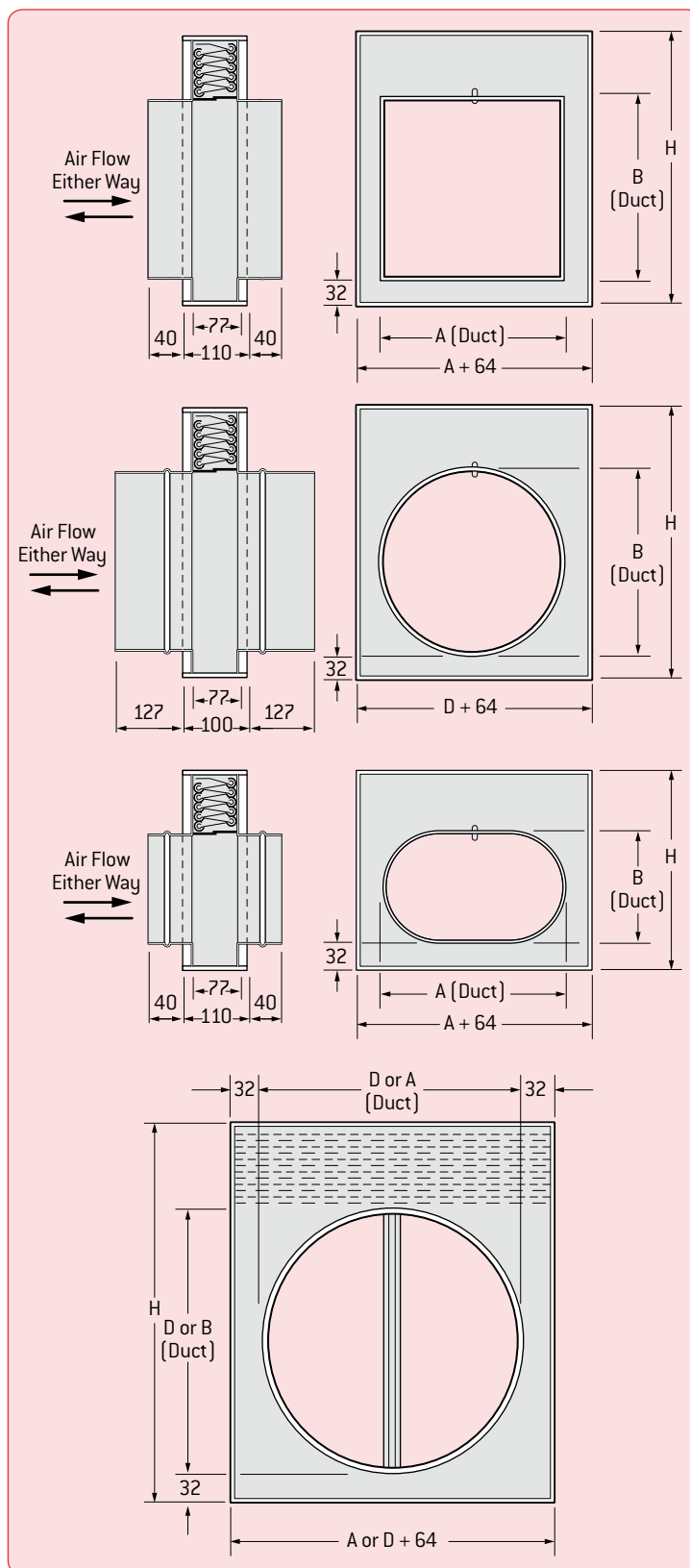
Interlocking blade, vertical mounting damper, gravity operated, spring loaded initial movement, fitted with enclosure plates and round spigots to suit duct connections.

Model **IBD-CO-V**

Interlocking blade, vertical mounting damper, gravity operated spring loaded initial movement fitted with enclosure plates and oval spigots to suit duct connections.

Typical Multiple Assembly

Where opening is larger than maximum single section size, an assembly of equal size single section dampers is used. Where 'H' requires more than one section, the blade stack for the lower section will be in the air stream. The extent of this obstruction may be determined by dimension 'X' on Model IBD-A-V, of the appropriate size.



A, B & D Dimensions allow 3mm clearance for duct of nominated size

STYLE C, CR & CO (Single Section)													
Dimension 'B' or 'D'	From To	-	52	112	147	207	267	327	362	422	482	542	577
		51	111	146	206	266	326	361	421	481	541	576	637
Dimension 'H' = B or D +		61	61	86	86	86	86	111	111	111	111	136	136
Dimension 'B' or 'D'	From To	792	852	912	972	1007	1067	1127	1187	1222	1282	1342	1402
		851	911	971	1006	1066	1126	1186	1221	1281	1341	1401	1436
Dimension 'H' = B or D +		161	161	161	186	186	186	186	211	211	211	211	236



Assembly and Dimensional Information

Typical Section Styles C, CR & CO, Horizontal

Model IBD-C-H

Interlocking blade, horizontal mounting fire damper, *spring loaded for complete travel, fitted with enclosure plates and square or rectangular spigots to suit duct connections.

Model IBD-CR-H

Interlocking blade, horizontal mounting fire damper, *spring loaded for complete travel, fitted with enclosure plates and round spigots to suit duct connections.

Model IBD-CO-H

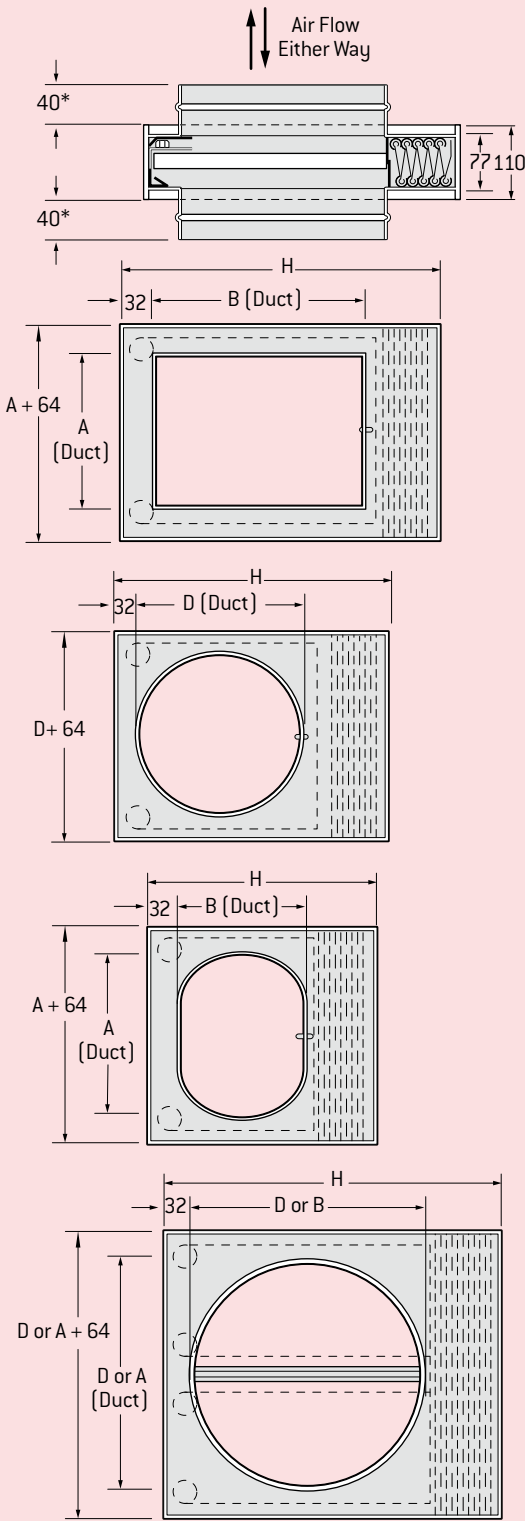
Interlocking blade, horizontal mounting fire damper, *spring loaded for complete travel, fitted with enclosure plates and oval spigots to suit duct connections.

* Where B or D dimension exceeds 148 mm, two constant force springs anchored to the frame and attached to the last blade draw the blade curtain closed. Where B or D are less than 148 mm, all blades are fitted with “omega” springs at blade ends, which drive the curtain to the closed position.

Typical Multiple Assembly

Where opening is larger than maximum single section size, an assembly of equal size single section dampers is used. Where ‘H’ requires two sections, the blade stacks are located out of the air stream on opposite sides of the opening.

* 127 for IBD-CR-H



A, B & D Dimensions allow 3mm clearance for duct of nominated size

Dimension 'B' or 'D'	From To	-	54	79	129	149	207	267	327	362	422	482	542	577	637	697	757	792
		53	78	128	148	206	266	326	361	421	481	541	576	636	696	756	791	803
Dimension 'H' = B or D +		86	86	111	111	86	86	86	111	111	111	111	136	136	136	136	161	161