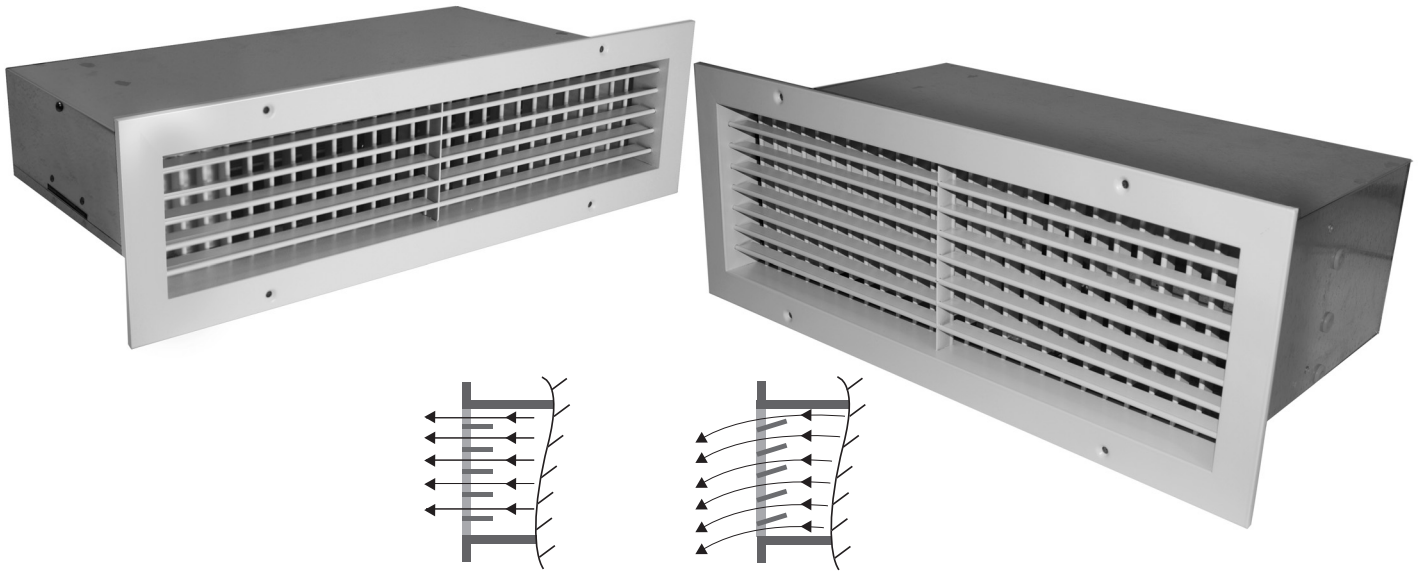


## WALL/BULKHEAD ELECTRONIC VAV DIFFUSERS



Angle of blades can be changed to reduce the throw.

### DESCRIPTION

The Rickard electronic wall/bulkhead VAV diffusers are normally used in sidewalls or bulkheads where restricted ceiling voids exist or covered ceilings are not available. When multiple units are mounted in a row they are very effective at distributing air across long areas.

A comfortable room temperature is maintained by varying the supply air volume in accordance with demand. This is achieved by opening or closing the diffuser's aperture, which is a set of air foil shaped aluminum vanes driven by an electric actuator.

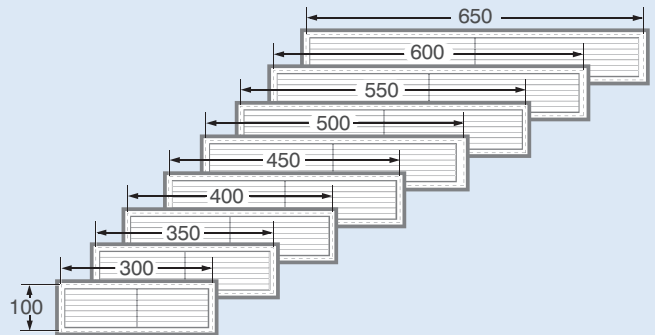
The Electronic Wall/Bulkhead VAV Diffusers are available in 100mm and 150mm heights. The 100mm size is available in lengths from 300 to 650mm and the 150mm size comes in lengths from 500 to 700mm; see range dimension diagrams for more detail. Like the linear slot diffuser, the wall/bulkhead diffuser must be connected to a wall thermostat for it to become a master diffuser.

### Features

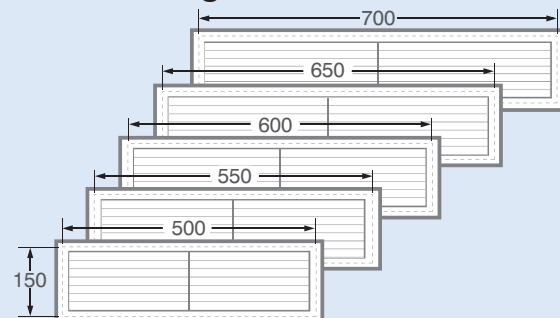
- Air throw can be adjusted by simply changing angle of blades within housing.
- Maintains constant air volumes from 10% to 100%.
- Very effective at distributing air across long areas.

### DIMENSIONS

#### 100mm Height



#### 150mm Height



Dimensions in mm

# RICKARD ELECTRONIC VAV DIFFUSER SERIES

## SPECIFICATIONS AND PERFORMANCE

Width size (mm)	Part Numbers (100mm, high)		Standard Duct Static Pressure (Pa)			
			20	30	40	50
300	WBD3001/100	Air flow (L/s)	58	75	90	95
		Throw (m)	5.2	6.4	7.2	8.3
		NC Level (NC)	28	32	36	38
350	WBD3501/100	Air flow (L/s)	80	102	113	122
		Throw (m)	7.2	8.2	9.5	10.1
		NC Level (NC)	29	33	37	39
400	WBD4001/100	Air flow (L/s)	100	130	149	155
		Throw (m)	7.8	8.6	10.4	10.7
		NC Level (NC)	29	33	36	38
450	WBD4501/100	Air flow (L/s)	105	140	153	160
		Throw (m)	7.0	8.4	9.1	10.7
		NC Level (NC)	29	33	37	39
500	WBD5001/100	Air flow (L/s)	110	144	162	170
		Throw (m)	8.4	9.4	10.0	11.4
		NC Level (NC)	29	34	37	39
550	WBD5501/100	Air flow (L/s)	120	156	185	200
		Throw (m)	8.2	9.5	10.6	11.7
		NC Level (NC)	30	34	38	40
600	WBD6001/100	Air flow (L/s)	135	178	205	216
		Throw (m)	8.6	9.9	11.4	12.6
		NC Level (NC)	30	34	38	40
650	WBD6501/100	Air flow (L/s)	160	215	252	275
		Throw (m)	8.8	10.3	11.7	13.0
		NC Level (NC)	30	33	38	41

Width size (mm)	Part Numbers (150mm, high)		Standard Duct Static Pressure (Pa)			
			20	30	40	50
500	WBD5001/150	Air flow (L/s)	165	219	258	292
		Throw (m)	8.7	10.0	11.4	12.8
		NC Level (NC)	30	35	39	41
550	WBD5501/150	Air flow (L/s)	190	250	288	302
		Throw (m)	8.8	10.5	11.2	12.8
		NC Level (NC)	30	34	38	41
600	WBD6001/150	Air flow (L/s)	215	285	330	350
		Throw (m)	9.2	11.6	13.1	15.9
		NC Level (NC)	31	35	38	41
650	WBD6501/150	Air flow (L/s)	230	300	350	370
		Throw (m)	9.4	10.3	13.0	15.0
		NC Level (NC)	32	35	39	42
700	WBD7001/150	Air flow (L/s)	267	329	378	410
		Throw (m)	9.7	11.0	14.0	15.0
		NC Level (NC)	32	35	39	42

Throw data is taken 25mm below the ceiling on a line through the centre of the diffuser with the vanes fully open & an air velocity of 0.25m/s.

Noise criteria levels apply to a single diffuser mounted in a room having a Sound Absorption of 10dB in octave bands having centre frequencies from 125Hz to 8000Hz (ie. the difference between Sound Pressure Level (dB re: 10<sup>-6</sup> Pa) and Sound Pressure Level (dB re: 10<sup>-12</sup> Pa) is equal to 10dB). These levels represent only the noise generated by the diffuser and do not take into account any duct-borne noise.

Diffusers are factory set for a minimum of 30% of the maximum flow levels reflected above. It should be noted that minimum air flow settings are approximate & may require to be reset on site to compensate for actual site system pressures.