

ELECTRONIC VAV CEILING DIFFUSERS



DESCRIPTION

These Rickard electronic diffusers feature a modern flush to the ceiling look and are available in 3 distinctive styles: square, round and swirl.

These square and round style diffusers produce low noise levels and are designed for general building zones where a uniform radial air distribution pattern is preferred. The swirl style diffuser is more efficient at generating good mixing between supply and room air.

Air volume control is achieved through the vertical up and down movement of the central control disc mechanism within the diffuser. This increases or decreases the aperture size which varies the volume of conditioned air to enter the occupied space.

The master and slave controller, as well as the sensor board are integrated into a single unit, reducing the number of onboard cables and connectors.

Available in neck sizes from 150 to 350mm diameters and a 595 x 595mm tile size (see range dimension diagrams for more detail)

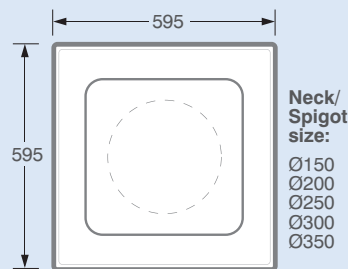
Features

- Every diffuser is a master as standard
- Ceiling diffusers have temperature and occupancy sensing as standard
- Rickard ancillaries are backward-compatible
- Can be installed in both suspended tiled ceilings with "T" frames and plastered ceilings.

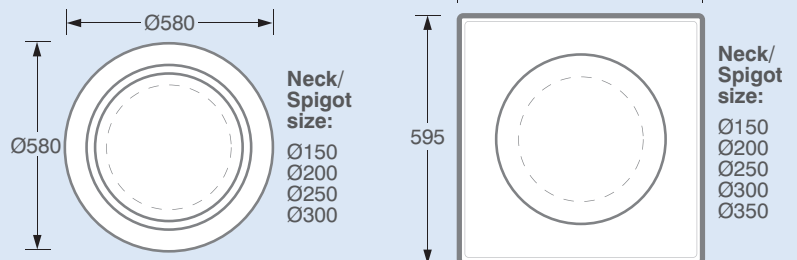
*Minimum 12 weeks lead time.

DIMENSIONS

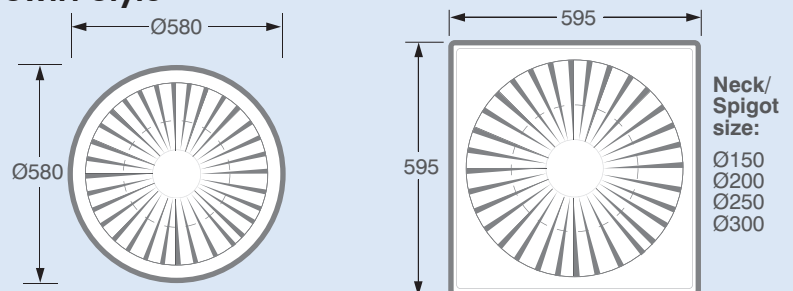
Square Style



Round Style



Swirl Style


















Dimensions in mm













RICKARD ELECTRONIC VAV DIFFUSER SERIES

SPECIFICATIONS AND PERFORMANCE

Square and Round Styles

Neck Size (mm)	Style	Model Number			Neck Total Pressure (Pa)								
		580mm Diameter	595mm x 595mm		20	30	40	50	60	70	80	90	100
150			VSD1501S595-V2	Air flow (L/s)	63	77	88	99	108	117	125	133	140
			VCD1501S595-V2	Throw (m)	2.0	2.1	2.7	3.0	3.3	3.5	3.7	4.0	4.2
		VRD1501R580-V2		NC Level (NC)	-	-	-	-	26	28	31	33	35
200			VSD2001S595-V2	Air flow (L/s)	96	118	137	153	169	184	195	207	218
			VCD2001S595-V2	Throw (m)	2.0	2.6	3.0	3.2	3.6	3.9	4.2	4.5	4.7
		VRD2001R580-V2		NC Level (NC)	-	27	28	29	30	33	36	38	40
250			VSD2501S595-V2	Air flow (L/s)	140	171	198	221	242	261	279	296	313
			VCD2501S595-V2	Throw (m)	2.4	2.6	3.2	3.5	3.9	4.2	4.5	4.7	5.1
		VRD2501R580-V2		NC Level (NC)	-	27	29	31	33	36	38	40	42
300			VSD3001S595-V2	Air flow (L/s)	176	216	250	280	307	332	355	377	398
			VCD3001S595-V2	Throw (m)	2.5	2.8	3.3	3.7	4.2	4.6	4.8	5.2	5.4
		VRD3001R580-V2		NC Level (NC)	27	28	30	32	35	37	39	41	43
350			VSD3501S595-V2	Air flow (L/s)	246	301	349	389	426	461	492	523	551
			VCD3501S595-V2	Throw (m)	2.7	3.2	3.6	4.1	4.5	5.0	5.5	5.7	5.9
		VRD3501R580-V2		NC Level (NC)	2.7	28	30	32	35	38	40	43	45

Swirl Styles

Neck Size (mm)	Style	Model Number			Neck Total Pressure (Pa)				
		580mm Diameter	595mm x 595mm		20	40	50	60	70
150			VSW1501S595-V2	Air flow (L/s)	68	79	88	96	104
		VRW1501R580-V2		Throw (m)	1.8	2.1	2.3	2.5	2.7
				NC Level (NC)	26	29	31	33	35
200			VSW2001S595-V2	Air flow (L/s)	112	130	145	159	172
		VRW2001R580-V2		Throw (m)	2.2	2.5	2.8	3.1	3.3
				NC Level (NC)	28	31	33	35	37
250			VSW2501S595-V2	Air flow (L/s)	159	183	205	225	243
		VRW2501R580-V2		Throw (m)	2.9	3.3	3.7	4.1	4.4
				NC Level (NC)	29	33	35	37	39
300			VSW3001S595-V2	Air flow (L/s)	194	224	250	274	296
		VRW3001R580-V2		Throw (m)	2.9	3.3	3.7	4.1	4.4
				NC Level (NC)	30	33	36	38	40

Throw data is taken 25mm below the ceiling on a line through the centre of the diffuser with the control disc 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: 10⁻⁶ Pa) and Sound Pressure Level (dB re: 10⁻¹² 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.