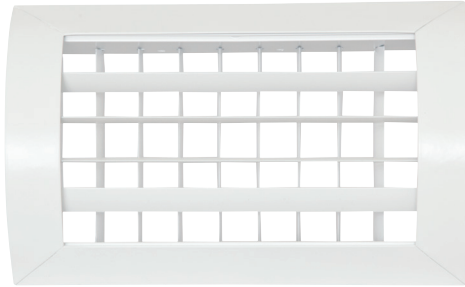


AIRFOIL



GRILLES
DUCT
FITTINGS

making it happen sooner...



CURVED DOUBLE DEFLECTION REGISTER (C2AR)

Airfoil's Curved Double Deflection Register is manufactured to blend in with the circular spiral duct for supply air functions. The double set of fully adjustable blades gives a high level of control of the air pattern across four directions. Incorporating two sets of individually adjustable blades, the front blades may be set either horizontally or at angles either up or down. Rear blades are adjusted in a similar way but only in a vertical plane.

Made from high-grade extruded aluminium sections to ensure functional strength and performance, Airfoil's Curved Double Deflection Register provides a contemporary attractive feel and modern look. It comes in standard powder coated white with optional colours and finishes available on request.

Curved Double Deflection Register Options

- > Flange size: 32mm standard with optional 25mm or 38mm
- > Blade spacing: 19mm or 25mm
- > Custom-made to any size dimensions
- > Horizontal blades at front or vertical blades at front
- > Optional accessories SS (stream splitter) or OBD (opposed blade damper)
- > Specific colours and finishes available on request

Product specification codes:

C2ARH Fixed core curved double deflection register with front horizontal blades

C2ARV Fixed core curved double deflection register with front vertical blades

Specification: Product code + size.

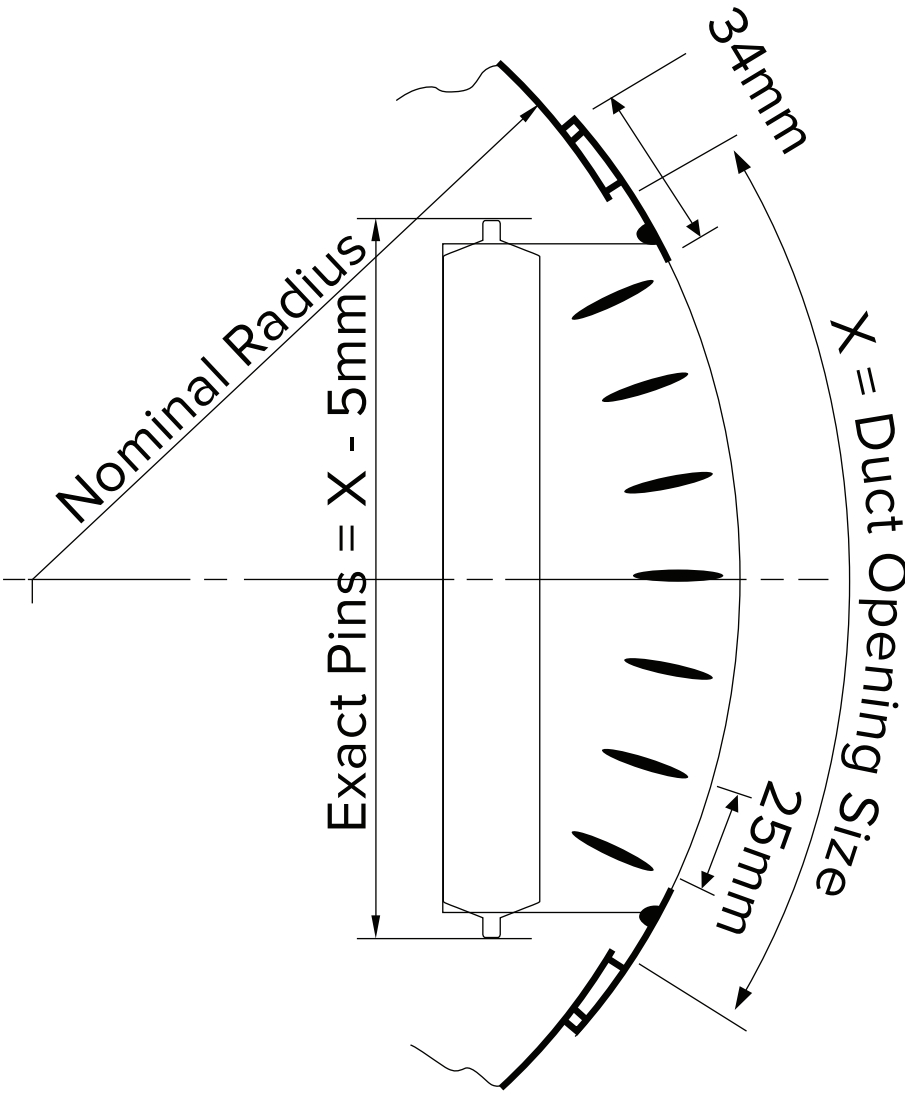
Example: **C2ARH200x150** Fixed core curved double deflection register with front horizontal blades; width 200mm x height 150mm

C2ARV150x200 Fixed core curved double deflection register with front vertical blades; height 150mm x width 200mm



CURVED DOUBLE DEFLECTION REGISTER

Cross Sectional Diagram: Model C2ARH



CURVED DOUBLE DEFLECTION REGISTER

Performance Data 25mm Centres

AREA FACTOR		0.17	0.33	0.5	0.66	1.0	1.25
NECK AREA — M ²		0.023	0.045	0.068	0.090	0.135	0.169
TYPICAL SIZES		150 X 150	225 X 200	300 X 225	300 X 300	450 X 300	450 X 375
		225 X 100	300 X 150	450 X 150	400 X 225	600 X 225	675 X 250
			450 X 100	675 X 100	600 X 150	900 X 150	750 X 225
SPREAD ANGLE		0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°	0° 22½° 45°
47	Throw Metres — min	3.2 2.2 2.0	2.2 1.7 1.4				
	Throw Metres — max	5.1 3.4 2.2	3.4 2.5 2.0				
	Static Pressure — (Pa)	2.5 5.0 7.5	— — —				
94	Throw Metres — min	6.2 4.8 3.7	4.3 3.2 2.5	3.4 2.5 2.0	3.2 2.2 1.4		
	Throw Metres — max	9.3 7.1 5.4	6.8 4.8 3.7	5.4 4.0 2.8	4.8 3.4 2.8		
	Static Pressure — (Pa)	10 22.5 32.5	2.5 5 10	— — 2.5	— — —		
141	Throw Metres — min		6.5 4.5 3.7	5.4 3.7 2.8	4.5 3.4 2.2	4.0 2.5 2.0	
	Throw Metres — max		10.3 7.3 5.7	8.2 5.9 4.5	7.3 5.1 4.0	5.7 4.3 3.2	
	Static Pressure — (Pa)		7.5 12.5 20	2.5 5 7.5	— 2.5 5	— — —	
189	Throw Metres — min		8.4 6.2 5.1	7.1 5.1 3.7	6.2 4.8 3.4	5.1 3.7 2.5	4.5 3.4 2.4
	Throw Metres — max		13.5 9.8 7.3	10.2 7.9 5.9	9.8 7.1 5.1	7.6 5.7 4.0	7.3 5.3 3.9
	Static Pressure — (Pa)		10 22.5 32.5	5 7.5 12.5	2.5 5 10	— — 2.5	— — —
236	Throw Metres — min			8.1 6.2 5.2	7.6 5.7 4.3	6.2 4.5 3.4	5.7 4.3 3.3
	Throw Metres — max			13.5 9.8 7.3	12.4 9.0 6.5	9.6 7.1 5.4	8.7 6.8 5.1
	Static Pressure — (Pa)			7.5 12.5 20	5 10 12.5	— 2.5 5	— — 3.5
283	Throw Metres — min			10.4 7.6 5.7	9.3 6.8 4.8	7.6 5.4 4.0	7.1 4.9 3.9
	Throw Metres — max			16.3 11.9 8.7	14.7 10.1 7.9	11.5 7.9 6.2	10.9 7.5 6.0
	Static Pressure — (Pa)			10 17.5 25	7.5 12.5 20	2.5 5 7.5	1.5 4 6
330	Throw Metres — min				11.3 7.9 5.9	8.4 6.2 4.8	8.2 5.9 4.5
	Throw Metres — max				16.9 12.4 9.3	14.1 9.8 7.2	12.7 9.0 6.8
	Static Pressure — (Pa)				10 17.5 25	5 7.5 10	3.5 6.0 9
375	Throw Metres — min				12.4 9.3 6.8	9.6 7.1 5.1	9.3 6.8 4.8
	Throw Metres — max				19.7 14.1 10.3	15.2 10.4 8.2	14.4 10.1 7.7
	Static Pressure — (Pa)				12.5 22.5 32.5	5 7.5 12.5	3.5 6 11
425	Throw Metres — min				14.1 10.1 7.6	10.4 7.6 5.9	10.1 7.3 5.7
	Throw Metres — max				22.3 15.2 11.9	16.9 12.4 9.3	15.8 11.3 8.7
	Static Pressure — (Pa)				15 27.5 40	5 10 15	5 8.5 12.5
472	Throw Metres — min					12.4 8.7 6.5	11.3 8.2 6.2
	Throw Metres — max					18.5 14.1 10.4	17.6 13.1 9.8
	Static Pressure — (Pa)					7.5 12.5 20	6.5 11 15
566	Throw Metres — min					15.8 10.4 7.9	13.9 9.8 7.5
	Throw Metres — max					22.6 16.9 12.2	20.8 15.8 11.9
	Static Pressure — (Pa)					10 17.5 25	8.5 14 22.5
660	Throw Metres — min					16.9 12.2 9.3	16.6 11.6 8.7
	Throw Metres — max					27.3 19.7 14.1	25.2 18.2 13.6
	Static Pressure — (Pa)					12.5 25 35	11 20 30
755	Throw Metres — min						17.8 13.4 10.1
	Throw Metres — max						29.8 21.8 15.9
	Static Pressure — (Pa)						14 25 37.5
850	Throw Metres — min						
	Throw Metres — max						
	Static Pressure — (Pa)						
944	Throw Metres — min						
	Throw Metres — max						
	Static Pressure — (Pa)						
1180	Throw Metres — min						
	Throw Metres — max						
	Static Pressure — (Pa)						
1416	Throw Metres — min						
	Throw Metres — max						
	Static Pressure — (Pa)						

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

CURVED DOUBLE DEFLECTION REGISTER

Performance Data 25mm Centres

AREA FACTOR		1.33			1.5			1.66			2.0			2.5			2.66		
NECK AREA — M ²		0.180			0.203			0.225			0.270			0.338			0.360		
TYPICAL SIZES		600 x 300 900 x 200 1200 x 150			450 x 450 675 x 300 900 x 225			600 x 375 750 x 300 1500 x 150			600 x 450 900 x 300 1200 x 225			750 x 450 900 x 375 1125 x 300			600 x 600 800 x 450 1200 x 300		
SPREAD ANGLE		0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°		
141	Throw Metres — max Static Pressure — (Pa)																		
189	Throw Metres — min	4.3	3.2	2.2															
	Throw Metres — max Static Pressure — (Pa)	6.8	5.0	3.8	—	—	—												
236	Throw Metres — min	5.4	4.0	3.2	4.3	3.2	2.5												
	Throw Metres — max	8.7	6.2	5.2	6.8	4.8	3.7												
	Static Pressure — (Pa)	—	—	2.5	—	—	—												
283	Throw Metres — min	6.5	4.5	3.7	5.9	4.3	3.2	5.3	3.8	3.0	4.8	3.7	2.8						
	Throw Metres — max	10.4	7.3	4.8	9.3	7.1	4.8	8.4	5.8	4.5	7.9	5.4	4.3						
	Static Pressure — (Pa)	—	2.5	5	—	—	2.5	—	—	—	—	—	—						
330	Throw Metres — min	7.6	5.7	4.3	6.8	4.8	3.7	6.2	4.5	3.4	5.9	4.3	3.2						
	Throw Metres — max	11.9	8.7	6.5	10.4	7.6	5.9	9.8	6.5	5.1	9.3	7.1	4.8						
	Static Pressure — (Pa)	2.5	5	7.5	—	2.5	5	—	—	2.5	—	—	2.5						
375	Throw Metres — min	9.0	6.5	4.5	8.2	5.7	4.3	7.3	5.4	4.0	6.8	4.8	3.7	6.2	4.3	3.3	5.9	4.0	3.2
	Throw Metres — max	13.5	9.8	7.4	12.9	9.0	6.8	11.2	7.9	6.4	10.4	6.6	5.7	9.4	6.6	5.1	8.7	6.2	4.8
	Static Pressure — (Pa)	2.5	5	10	1.5	4	6	—	2.5	5	—	—	2.5	—	—	—	—	—	—
425	Throw Metres — min	9.8	7.1	5.4	9.0	6.2	4.8	8.2	5.7	4.3	7.6	5.7	4.0	6.9	4.9	3.6	6.5	4.5	3.4
	Throw Metres — max	15.2	10.8	8.4	14.1	9.8	7.3	12.9	9.0	6.8	11.9	8.7	6.5	10.8	7.7	5.8	10.4	7.1	5.4
	Static Pressure — (Pa)	5	7.5	10	2.5	5	7.5	1.5	4	6	—	2.5	5	—	—	3	—	—	2.5
472	Throw Metres — min	10.8	7.9	5.9	9.8	7.1	5.4	9.0	6.5	4.9	8.4	6.2	4.5	8.0	6.2	4.5	7.6	5.1	3.7
	Throw Metres — max	17.1	12.4	9.3	15.2	11.3	8.4	14.4	10.4	7.9	13.5	9.6	7.1	13.5	9.6	7.1	11.9	8.2	6.5
	Static Pressure — (Pa)	5	10	12.5	1.5	5	10	2.5	5	7	—	2.5	5	—	2.5	5	—	—	2.5
566	Throw Metres — min	13.0	9.6	7.3	11.9	8.7	6.5	10.9	8.2	6.2	10.1	7.6	5.7	9.7	7.1	5.3	9.6	6.8	5.1
	Throw Metres — max	20.2	15.2	11.3	18.5	13.5	9.9	17.2	12.1	9.1	15.8	11.3	8.4	14.7	10.6	8.1	14.1	10.1	7.8
	Static Pressure — (Pa)	7.5	12.5	20	5	7.5	12.5	2.5	5	10	2.5	5	7.5	1.5	4	6	—	2.5	5
660	Throw Metres — min	16.3	11.3	8.4	14.1	9.8	7.3	13.8	9.6	7.1	13.5	9.6	6.9	11.7	8.4	6.6	10.6	7.9	6.2
	Throw Metres — max	23.7	17.4	13.0	21.3	15.2	11.9	20.8	15.0	11.6	20.2	14.8	11.3	18.0	13.2	10.1	16.9	12.1	9.3
	Static Pressure — (Pa)	10	17.5	25	5	10	15	5	7.5	12.5	5	7.5	10	3.5	6	9	2.5	5	7.5
755	Throw Metres — min	17.4	13.0	9.6	15.2	11.9	8.2	14.1	10.1	7.7	13.5	9.6	7.3	12.8	9.4	6.9	12.4	8.9	6.8
	Throw Metres — max	28.4	19.7	15.2	24.9	18.0	13.5	22.2	16.3	12.1	20.8	15.2	11.3	20.2	14.6	10.6	19.7	14.1	10.1
	Static Pressure — (Pa)	12.5	22.5	32.5	7.5	12.5	20	5	10	15	5	7.5	12.5	3.5	6	11	2.5	5	7.5
850	Throw Metres — min	19.7	14.7	10.6	17.4	13.0	9.6	16.0	12.1	8.7	15.2	10.8	8.2	14.7	10.4	7.7	14.1	10.1	7.4
	Throw Metres — max	30.4	22.6	16.9	28.9	19.7	14.7	25.5	17.7	13.8	23.7	16.9	13.0	23.1	16.1	12.4	22.6	15.6	11.7
	Static Pressure — (Pa)	15	27.5	40	10	17.5	25	7.5	12.5	20	7.5	10	15	5	8.5	12.5	5	7.5	10
944	Throw Metres — min				19.7	14.1	10.8	18.0	13.0	9.9	16.9	11.9	9.0	15.9	11.3	8.7	15.4	11.0	8.4
	Throw Metres — max				31.3	22.6	16.7	27.9	20.4	15.2	26.1	18.5	14.1	25.1	16.8	13.6	24.5	16.9	13.3
	Static Pressure — (Pa)				12.5	22.5	32.5	10	17.5	25	17.5	12.5	20	6.5	11	15	5	7.5	12.5
1180	Throw Metres — min							21.4	15.8	11.9	20.8	15.2	11.3	20.1	14.6	11.0	18.4	13.9	10.7
	Throw Metres — max							32.6	25.2	19.5	31.5	23.7	18.1	30.5	22.9	16.9	29.8	22.6	16.3
	Static Pressure — (Pa)							12.5	22.5	32.5	10	20	30	8.5	14	22.5	7.5	12.5	20
1416	Throw Metres — min										24.7	18.4	13.4	23.4	17.2	13.1	22.6	16.6	12.5
	Throw Metres — max										38.2	28.2	20.8	35.2	26.8	19.5	33.7	26.1	18.7
	Static Pressure — (Pa)										15	27.5	40	12.5	22.5	32.5	10	17.5	25
1888	Throw Metres — min																29.9	17.8	13.4
	Throw Metres — max																42.9	31.7	25.4
	Static Pressure — (Pa)																15	27.5	40
2360	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

CURVED DOUBLE DEFLECTION REGISTER

Performance Data 25mm Centres

AREA FACTOR		1.33			1.5			1.66			2.0			2.5			2.66		
NECK AREA — M ²		0.180			0.203			0.225			0.270			0.338			0.360		
TYPICAL SIZES		600 x 300 900 x 200 1200 x 150			450 x 450 675 x 300 900 x 225			600 x 375 750 x 300 1500 x 150			600 x 450 900 x 300 1200 x 225			750 x 450 900 x 375 1125 x 300			600 x 600 800 x 450 1200 x 300		
SPREAD ANGLE		0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°		
141	Throw Metres — max Static Pressure — (Pa)																		
189	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	4.3	3.2	2.2															
236	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	5.4	4.0	3.2	4.3	3.2	2.5												
283	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	6.5	4.5	3.7	5.9	4.3	3.2	5.3	3.8	3.0	4.8	3.7	2.8						
330	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	7.6	5.7	4.3	6.8	4.8	3.7	6.2	4.5	3.4	5.9	4.3	3.2						
375	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	9.0	6.5	4.5	8.2	5.7	4.3	7.3	5.4	4.0	6.8	4.8	3.7	6.2	4.3	3.3	5.9	4.0	3.2
425	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	9.8	7.1	5.4	9.0	6.2	4.8	8.2	5.7	4.3	7.6	5.7	4.0	6.9	4.9	3.6	6.5	4.5	3.4
472	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	10.8	7.9	5.9	9.8	7.1	5.4	9.0	6.5	4.9	8.4	6.2	4.5	8.0	6.2	4.5	7.6	5.1	3.7
566	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	13.0	9.6	7.3	11.9	8.7	6.5	10.9	8.2	6.2	10.1	7.6	5.7	9.7	7.1	5.3	9.6	6.8	5.1
660	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	16.3	11.3	8.4	14.1	9.8	7.3	13.8	9.6	7.1	13.5	9.6	6.9	11.7	8.4	6.6	10.6	7.9	6.2
755	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	17.4	13.0	9.6	15.2	11.9	8.2	14.1	10.1	7.7	13.5	9.6	7.3	12.8	9.4	6.9	12.4	8.9	6.8
850	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	19.7	14.7	10.6	17.4	13.0	9.6	16.0	12.1	8.7	15.2	10.8	8.2	14.7	10.4	7.7	14.1	10.1	7.4
944	Throw Metres — min Throw Metres — max Static Pressure — (Pa)				19.7	14.1	10.8	18.0	13.0	9.9	16.9	11.9	9.0	15.9	11.3	8.7	15.4	11.0	8.4
1180	Throw Metres — min Throw Metres — max Static Pressure — (Pa)				31.3	22.6	16.7	27.9	20.4	15.2	26.1	18.5	14.1	25.1	16.8	13.6	24.5	16.9	13.3
1416	Throw Metres — min Throw Metres — max Static Pressure — (Pa)				12.5	22.5	32.5	10	17.5	25	17.5	12.5	20	6.5	11	15	5	7.5	12.5
1888	Throw Metres — min Throw Metres — max Static Pressure — (Pa)							21.4	15.8	11.9	20.8	15.2	11.3	20.1	14.6	11.0	18.4	13.9	10.7
2360	Throw Metres — min Throw Metres — max Static Pressure — (Pa)							32.6	25.2	19.5	31.5	23.7	18.1	30.5	22.9	16.9	29.8	22.6	16.3
								12.5	22.5	32.5	10	20	30	8.5	14	22.5	7.5	12.5	20
											24.7	18.4	13.4	23.4	17.2	13.1	22.6	16.6	12.5
											38.2	28.2	20.8	35.2	26.8	19.5	33.7	26.1	18.7
											15	27.5	40	12.5	22.5	32.5	10	17.5	25
																	29.9	17.8	13.4
																	42.9	31.7	25.4
																	15	27.5	40

Throw measurements are at 1.5mls min and .65mls max terminal velocity.