

# Sectorising Baffles/Throw Reducing Vanes – ACCESSORIES

## Model: SB – Sectorising Baffles

Satin etch black on steel, standard 45° baffle for all round neck Holyoke diffusers.

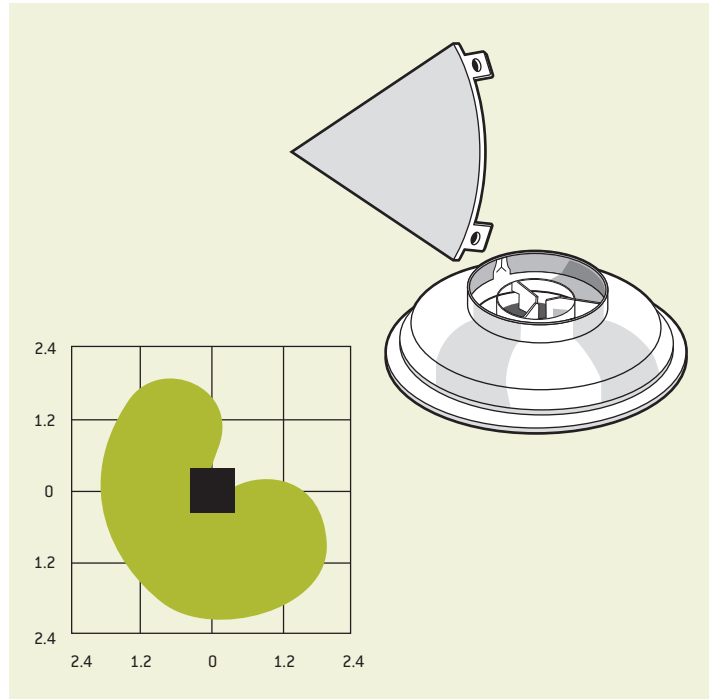
**Multi-directional** performance from CRA and CSRV diffusers.

Use Model SB sectorising baffles to eliminate air and supply throw to any sector of throw radius, in 45° modules.

The primary air pattern of a model CSRD as defined by the 0.5m/s isovel shown above is obtained from a 250 diameter neck diffuser with a 600 square louvered face, handling 0.127m<sup>3</sup>/s. One quarter of the diffuser neck is blanked off by two adjacent SBs, making a three way throw.

Selection should take into account the reduction in distribution face area, by using the appropriate selection table for a full face diffuser, and multiplying actual air delivery by the inverse of the true free area proportion e.g. for this example, select on CSRD data (page 180D), using  $4/3 \times 0.127\text{m}^3/\text{s} = 0.169\text{m}^3/\text{s}$ . This gives a throw at VT of 0.5m/s, of 2.0 m, & NC 33.

**Note: Weights subject to neck size and configuration, contact your local Holyoke branch.**



## Model: TRV – Throw Reducing Vanes

Throw reducing vanes increase the selection flexibility of the CMP range.

They are also a convenient device for overcoming drafts created by obstacles placed in an air stream after installation. Each vane is formed from sheet aluminium, and takes the shape of two sides of a triangular pyramid, 38 mm long, so that it neatly clips into the space between adjacent wings of the diffuser.

It functions by dividing a single air stream into two smaller divergent streams, in the same way as divergent throw is created by the vertical blades on a side wall grille. Vanes are supplied in “sticks”, from which the required number can be easily broken away, and installation is usually done in sets of more than one vane.

A set of four vanes will clip correctly into four wing spacers - see illustration.

The diagrams adjacent show the 1.0 m/s isovel reduced by 40% when using TRV's on a model CMP 225 x 225 with different core styles.

The number and location of TRV's required per side of the diffuser are shown in the table below. When installed in accordance with this:

1. Throw reduction will be as shown in the isovel diagrams.
2. Total pressure requirements will be 1.40 times that listed in performance tables.
3. Noise level will be 4 NC higher than the listed figure.

**Note: Standard 1200 mm length 0.21 Kg.**

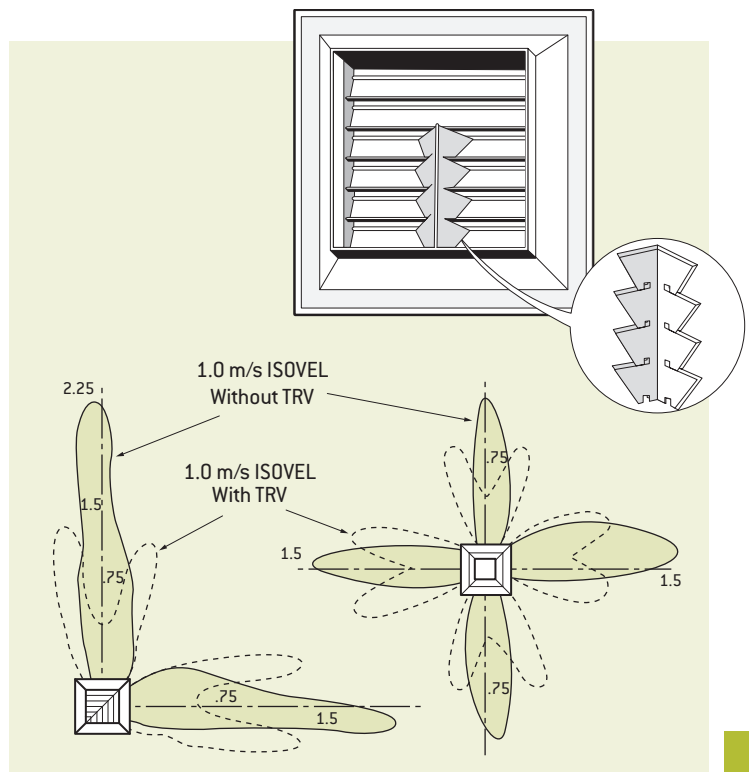


Table for Selection of Throw Reducing Vanes												
X →	75	150	225	300	375	450	525	600	675	750	900	1200
	1	1 1/2	2 1/2	3	4	5	5	6	7	8	11	
	2	2	3	4	4	5	7	7	8	10	14	
	3	4	5	7	8	9	11	12	13	16	22	

## Product Ordering Key and Suggested Specifications

Product Reference	Quantity +	Description	Listed Size, W x H or Diameter +	Specification
ADC-2	1	Access Door Tab Type with Cam Locks.	450 x 450	ADC-2 and ADH-2 - Access Doors shall be constructed from double skin galvanized mild steel and are complete with cam locks and hinges, as appropriate. Dove tailed frame tabs are supplied for ease of installation. All shall be as manufactured by Holyoake.
ADH-2	5	Access Door Tab Type Hinged with Cam Locks.	200 x 200	
APP	4	Access Pressed Panel.	APP-SML (250 x 150) APP-MED (300 x 200) APP-LGE (450 x 350)	APP - Access Pressed Panels shall be constructed from galvanized mild steel and are complete with locking knobs. All shall be as manufactured by Holyoake.
AS25L	3	Air Scoop, Blades Parallel to Long Dimension.	900 x 300	AS25/AS50 Air Scoops - shall be constructed from a zinc coated steel casing with gang operated parallel blades (at 25, or 50 mm Pitch) and a hinged pre-punched strip, for setting. All shall be as manufactured by Holyoake.
AS25S	1	Air Scoop, Blades Parallel to Short Dimension.	300 x 900	
AS50L	5	Air Scoop, Blades Parallel to Long Dimension.	900 x 300	
AS50S	7	Air Scoop, Blades Parallel to Short Dimension.	300 x 900	
CH		Cushion Head - Ordering Codes & Specifications are shown on Page 376K & 386K		
DA25	4*	25 mm Duct Flange 5.8 m length.		<b>DUCT FLANGE</b> Duct Flanging System - For secure airtight joints for ductwork, dampers, and accessories. All shall be as supplied by Holyoake.
DA35	4*	35 mm Duct Flange 5.8 m length.		
DA25	16*	25 mm Corner (with clips) for use with DA25 Flange.		
DC35L	16*	35 mm Corner (with clips) for use with DA35 Flange.		
DCJ	256*	140 mm long snap on 'J' Cleats.		
DM SEAL	3*	15 m roll of Duct Flange Gasket Tape.		
<b>* Guide to form 8 o° 12 00 x 1200 Flange Assemblies.</b>				
DUCT TAPE	5	Each.	Silver Duct Tape 48 mm x 55 mm.	Duct Tape - A premium grade polyethylene coated cloth duct tape. All shall be as supplied by Holyoake.
	1	Carton of 24.		
EGS	5	Equalising Grid, Square, or Short Blades (600 x 600 Maximum).	Grille/Diffuser Neck Size, or Nominal Neck Size	EGS / EGL - Equalising Grids shall be constructed from extruded aluminium blades and Casing, stainless steel friction wire interlaced with blade axles, hold the required setting. Bright zinc plated clips fix the grids to the neck of the diffusers, or grille. All shall be as manufactured by Holyoake.
EGL	4	Equalising Grid, Long Blades (600 x 600 Maximum).	Grille/Diffuser Neck Size, or Nominal Neck Size	
OBD-1	5	Extruded Black Anodised Aluminium - OBD.	200 x 200	OBD - Opposed Blade Dampers shall be constructed from extruded black anodised aluminium. All shall be as manufactured by Holyoake.
OBD-2	7	Extruded Black Anodised Aluminium - OBD.	300 x 300	
OBD-3	2	Extruded Black Anodised Aluminium - OBD.	500 x 200	

+ Example

# ACCESSORIES

## Product Ordering Key and Suggested Specifications

Product Reference	Quantity +	Description	Listed Size, W x H, or Diameter +	Specification
PDI	3	Pressure Differential Indicator Sensor.	100 DIA	PDI/PDIA/FM-PDI/FM-PDIA/DM-PDIA/PDI-BS/PDIA-BS- Pressure Differential Indicator sensors and Flow Measuring and Flow Balancing stations shall be constructed from small diameter tubing with Galvanised steel sleeves and disc dampers where appropriate. All shall be as manufactured by Holyoake.
PDIA	7	Pressure Differential Indicator Sensor - Amplified.	150 DIA	
FM-PDI	2	PDI Flow Measuring Station.	300 DIA	
FM-PDIA	3	PDI Flow Measuring Station - Amplified.	400 DIA	
DM-PDIA	6	Flange Mounted PDIA for Rectangular Ducts.	Size 150	
PDI-BS	3	Flow Balancing Station.	100 DIA	
PDIA-BS	3	Flow Balancing Station - Amplified.	175 DIA	
PREMI-CH		PREMI-AIRE™ Cushion Head - Ordering Codes and Specification are shown on Page 386K.		
PREMI-AIRE™		PREMI-AIRE™ Pre-Insulated Duct System. See Page 387K.		
RD	20	Radial Balancing Damper.	RD 150	RD - Radial Balancing dampers shall be constructed from Galvanised Mild steel with UV Stabilized Fire Rated Polymer Drive Pinions. All shall be as manufactured by Holyoake.
SAB	10	Self Aligning Bend.	SAB 100	SAB - Self Aligning Bends shall be manufactured in four segments from Galvanized steel, to allow 90° to 180° bends. They shall be crimped both ends to insert into Spiroloc ducting. All shall be as manufactured by Holyoake.
SB (For use with CRA, CRP, CSRL, CSRLA, CSRV and CMP).	4	Sectorising Baffles.	Inlet DIA Neck Connection 300 DIA.	SB - Sectorising Baffles are satin etched black on steel and shall be manufactured in 45° sections, except CMP. All shall be as manufactured by Holyoake.
SPIN CON	10	Spin Connector (Suitable for Rigid, Semi Rigid and Flexible Ducting).	Nominal Duct DIA 300 DIA.	Spin Connectors/Spin Collars – shall be constructed from Galvanized Steel of 0.45 mm for sizes 100 - 250 mm and 0.55 mm for sizes 251 - 400 mm. For connection of Duct to Duct (Spin Con), or to provide a circular duct connection (Spin Collar), to a square, or rectangular plenum. All shall be as manufactured by Holyoake.
SPIN COL	5	Spin Collar (Suitable for Flexible Ducting).	Nominal Duct DIA 200 DIA.	
SSD	2	Stream Splitter Damper.	Neck Size 900 mm x 300 mm.	SSD - Stream Splitter Dampers shall be constructed from zinc coated steel finished in matt black and shall be designed to control volume and direction from a main to a branch duct. All shall be as manufactured by Holyoake.
SRA **	7	Square to Round Adaptor.	Nom W x H x DIA.	SRA/RRA/SSA – Square to Round, Rectangular to Round and Square to Square Adaptors shall be constructed from 0.55mm Galvanized Steel and shall be complete with a circular spin collar to suit circular duct, or a square duct connection. All shall be as manufactured by Holyoake.
RRA **	6	Rectangular to Round Adaptor.	Nom W x H x DIA.	
SSA **	7	Square to Square Adaptor.	Nom (W x H) x Nom (W x H).	
** (For use with HI35, EC125, OBD-1, 2, 3, RD, BD 85 and other options).				
TRV	5	Throwing Reduction Vanes.	300 mm x 300 mm 5 Vanes.	TRV - Throw Reducing Vanes shall be manufactured from sheet Aluminium and shall be affixed to the rear of a CMP Diffuser. All shall be as manufactured by Holyoake.
TVS	2	Turning Vane, Short Blades.	150 mm x 300 mm.	TVS/TVL – Turning Vanes have curved blades and shall be constructed from extruded aluminium. They shall be hinged and complete with a pre-punched strip for fixing.
TVL	2	Turning Vane, Long Blades.	300 mm x 150 mm.	
TVA-90	3	Turning Vane Arrangement, Inlet Adaptor.	Diffuser Neck 150 mm x 150 mm.	All shall be as manufactured by Holyoake.
TVMA-90	1	Turning Vane Arrangement with PDIA, Inlet Adaptor.	300 mm x 150 mm.	TVA-90/TVMAI-90/TVAI-90 and TVMA-90 - Turning Vane arrangements shall be constructed from zinc coated steel and finished in matt black and shall be designed to provide a better discharge pattern and accurate flow data, as appropriate. All shall be as manufactured by Holyoake.
TVAI-90	5	Turning Vane Arrangement, Inlet Adaptor (Insulated).	375 mm x 375 mm.	
TVMAI-90	2	Turning Vane Arrangement with PDIA, Inlet Adaptor (Insulated).	300 mm x 300 mm.	

+ Example