

## APPLICATIONS

FLOWTECH provides a wide range of Ceiling Diffusers to suit the various requirements of ceiling air distribution.

Supply air ceiling diffusers (SCD) and return air ceiling diffusers (RCD) can be Square or Rectangle in shape with One, Two, Three or Four Way Patterns. The different diffuser patterns are used to control the supply air direction. Typical examples of such application are supply diffusers near glass areas, in corridors and in corners.

FLOWTECH SCD is supplied with Opposed Blades Damper (OBD) to facilitate the precise air volume control. (Note: OBD is used for fine tuning the air volume flow rate and should not be used to replace the branch Volume Control Damper). RCD is supplied without OBD and usually used for return air applications. In certain applications, SCD must be used as return air diffuser; that is, where return air volume requires precise control, such as room pressurization applications. This is frequently required for Clean Room Engineering applications such as Hospitals, Pharmaceutical Plants, Biotech Laboratories, Computer Rooms and Silicon Industry.

SCD and RCD are commonly used for Heating, Cooling and Isothermal Ventilation applications. However, such applications are limited to 4 meters ceiling height. For Ceiling Heights above 4.0 Meters, refer to specially terminal devices such as Jet Nozzle Diffusers and Drop Ceiling Diffusers.

SCD and RCD are tested by Intertek to ASHRAE 70 - 1991 standard method of testing for rating performance of air outlets and inlets.

Perforated ceiling diffuser (PCD) is of the same construction as SCD but with a removable perforated face of GI sheet powder coated, or aluminium sheet as optional.



Supply Air 4 Way Ceiling Diffuser (SCD-4S)



Supply Air 3 Way Ceiling Diffuser (SCD-3S)



Return Air Rectangular 4 Way Ceiling Diffuser (RCD-4R)



4 Way Supply Ceiling Diffuser with Perforated Face (PCD)

## FEATURES

### MATERIAL:

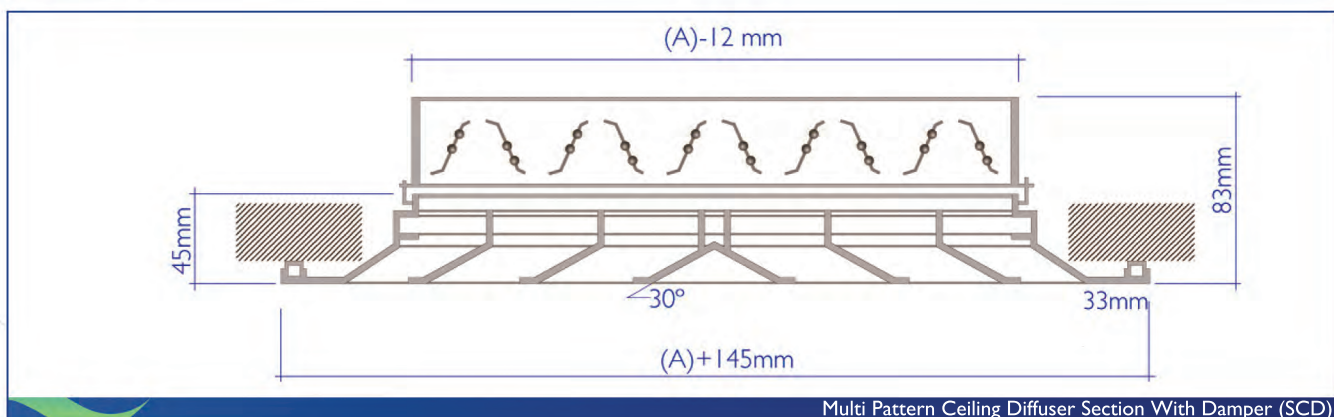
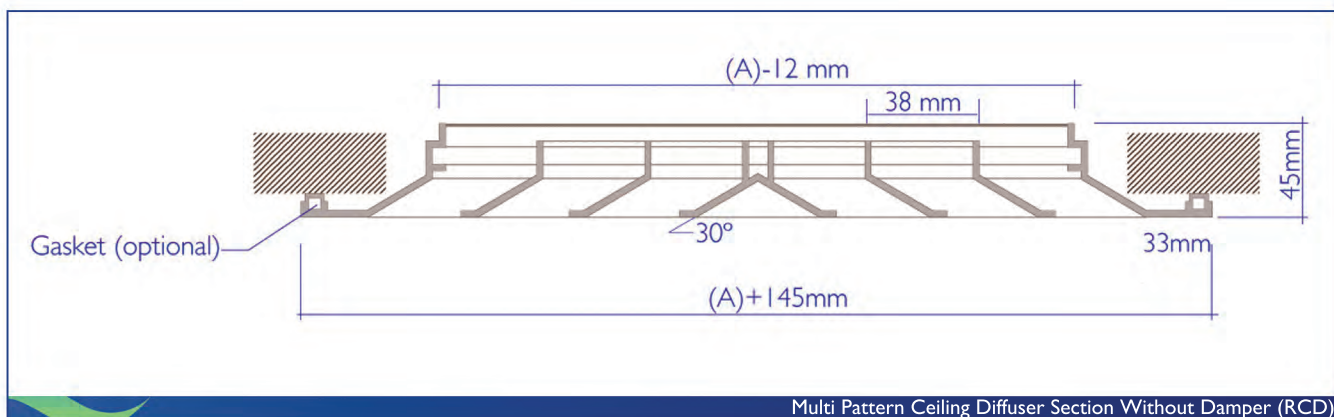
- Frame and Core are made of extruded aluminium alloy 6063 to T6 Heat Treatment
- The Opposed Blades Damper is extruded aluminium alloy 6063/T6
- Mitred Corner
- Spring loaded core

### Opposed Blades Damper (OBD):

FLOWTECH OBD is fixed to the rear frame of SCD model by means of "S" clamp for ease of removal and rigid construction.

To adjust the OBD opening, remove the core and turn the adjustment screw available at the front face of the damper (Clockwise to open / Counter Clockwise to close).

## DIMENSIONS



## STANDARD SIZES

### Square Ceiling Diffusers

Neck Size	Face Size
150 x 150	295 x 295
225 x 225	370 x 370
300 x 300	445 x 445
375 x 375	520 x 520
450 x 450	595 x 595
525 x 525	670 x 670
600 x 600	745 x 745

### Rectangular Ceiling Diffusers

A & B Size (mm)	
225 x 150	370 x 295
300 x 150	445 x 295
375 x 150	520 x 295
450 x 150	595 x 295
525 x 150	670 x 295
300 x 225	445 x 370
375 x 225	520 x 370
450 x 225	595 x 370
525 x 225	670 x 370



### FINISH OPTIONS / FIXING

- Available in Powder Coated RAL 9010 or 9016 as standard.
- Other powder coated color finishes are available on request.
- Fixing options are Concealed Screw Fixing.

### ACCESSORIES

#### Opposed blade damper for supply (optional)

The specially designed blades have an overlapping lip which assures a tight closure.  
Control is done by adjustment screw through the face of diffuser.  
Material: Extruded aluminium construction.

#### Equalizing grid (optional)

Individually adjustable blades, to provide precise directional control of air through the diffuser.  
Nylon tension bushes.  
Extruded aluminium construction.

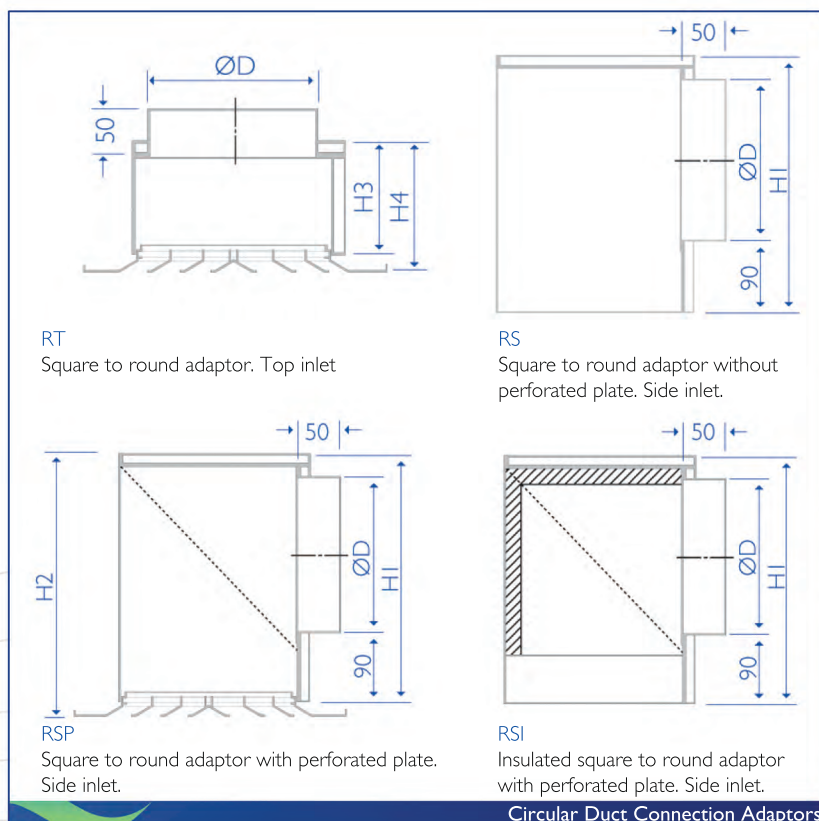
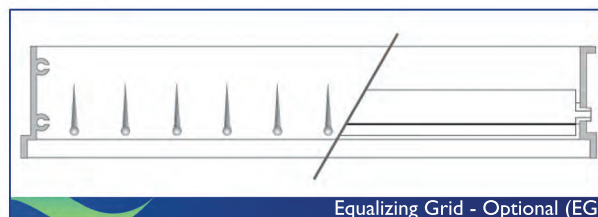
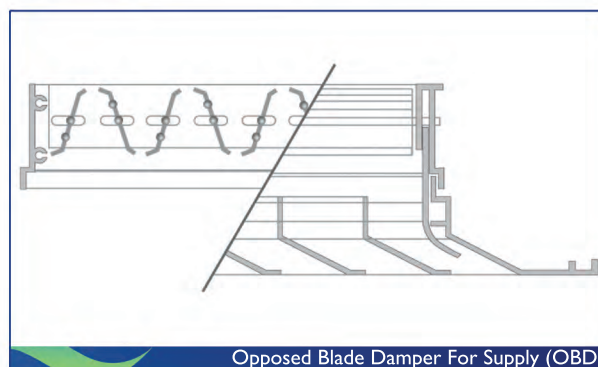
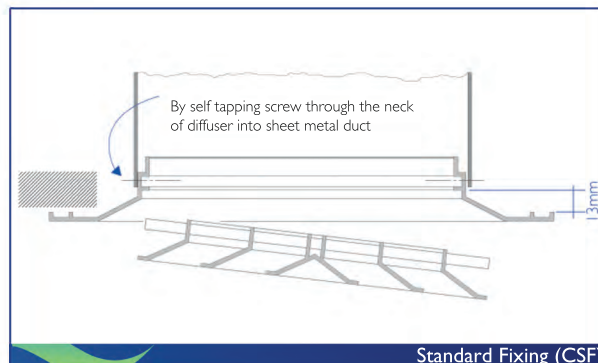
#### Circular duct connection adaptors (optional)

Suitable for supply and exhaust ceiling diffusers.  
Round inlet.  
Galvanized steel construction.  
Special construction available on request.

NOMINAL SIZES	ØD	TYPE RS		TYPE RT	
		H1	H2	H3	H4
150X150	100	240	285	150	195
225X225	150	290	335	175	220
300X300	200	340	385	200	245
375X375	250	390	435	225	270
450X450	300	440	485	250	295
525X525	350	490	535	275	320
600X600	400	540	585	300	345

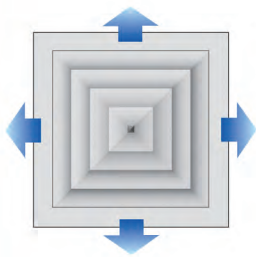
#### Fixing

4 holes 8mm diameter for straps or drop rods.

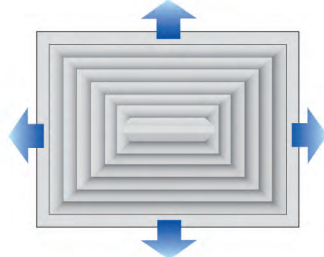


**MULTI PATTERN CEILING DIFFUSERS**

**4 WAY DISCHARGE**



Square (SCD-4S)

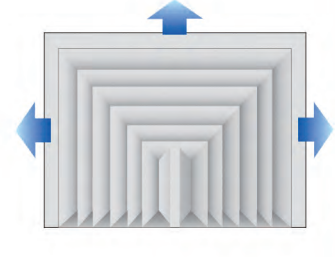


Rectangular (SCD-4R)

**3 WAY DISCHARGE**

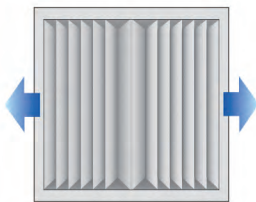


Square (SCD-3S)

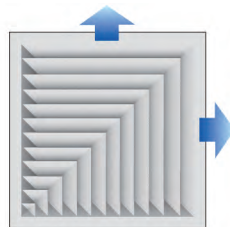


Rectangular (SCD-3R)

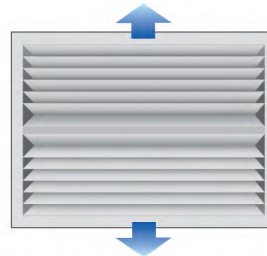
**2 WAY DISCHARGE**



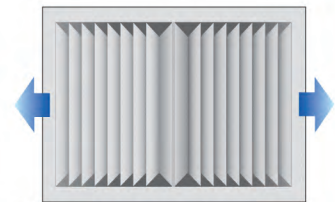
Square (SCD-2S)



Corner (SCD-2SC)

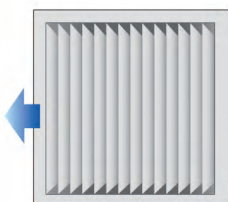


Rectangular  
Vertical (SCD-2RV)

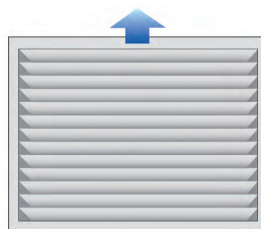


Rectangular  
Horizontal (SCD-2RH)

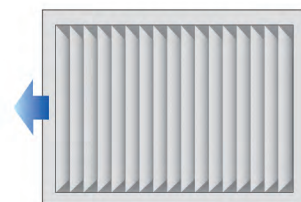
**1 WAY DISCHARGE**



Square (SCD-1S)



Rectangular  
Vertical (SCD-1RV)



Rectangular  
Horizontal (SCD-1RH)