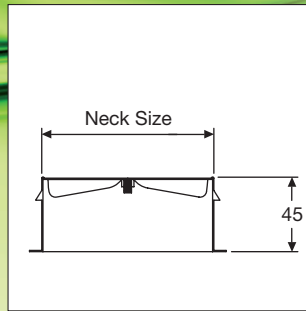
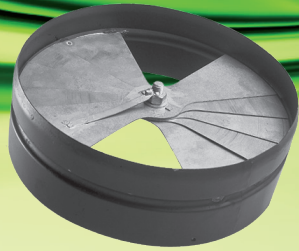


# CEILING DIFFUSERS ACCESSORIES



## C1 Radial Fan Blade Damper

### Materials

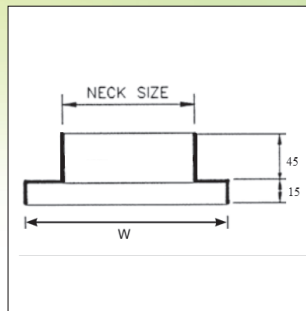
0.6mm SPGC galvanized steel.

### Surface Finish

Collar : Black powder coated, oven baked as standard.  
Blade : Galvanized finish.

### Standard Sizes *Unit : mm*

ø150 / ø200 / ø250 / ø300 / ø350



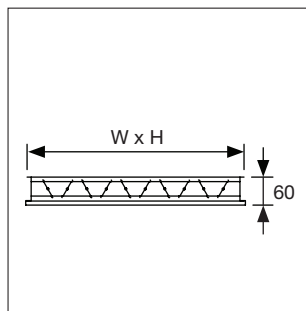
## D2 Adapter

### Materials

0.6mm galvanized steel.

### Surface Finish

Black powder coated, oven baked as standard.



## G1 Opposed Blade Damper

### Materials

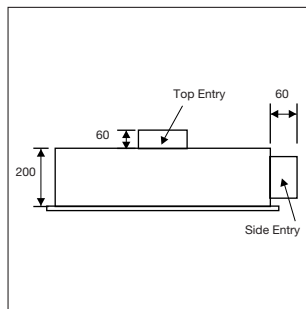
Frame : 0.6mm SPGC galvanized steel

Blade : 0.5mm SPGC galvanized steel

### Surface Finish

Black powder coated, oven baked as standard.

\*Maximum dimension is 500mm x 500mm damper size bigger than this will come in sections can be set at fully open, half open & fully close.



## PB Plenum Box

### Materials

0.5mm galvanized steel.

### Surface Finish

Electrogalvanized mill finish as standard.

Oval Dimension		
Diameter Oval (inch)	Width	Height
6	175	89
8	247	105
10	308	129
12	378	159

# CEILING DIFFUSERS ACCESSORIES



## C2 Crown Damper

### Materials

0.6mm thickness galvanized steel.

### Surface Finish

Black powder coat, oven baked as standard.

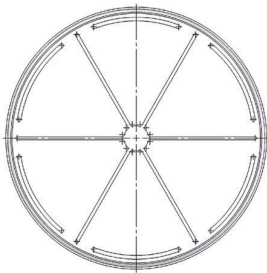
### Standard Sizes Unit : mm

150ø / 200ø / 250ø / 300ø

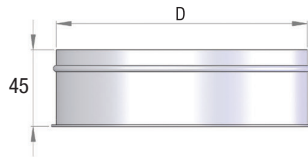
### Features

- Six blades can be adjusted to control the damper opening without using any tools.
- Maximum effective (free) area percentage.
- Low noise level.
- Uniform air flow pattern.
- Standard C2 installation with blades bending upwards, (inverted upon request)

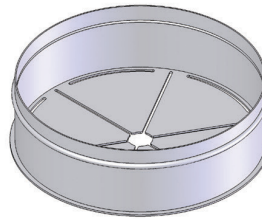
## Construction Illustrations



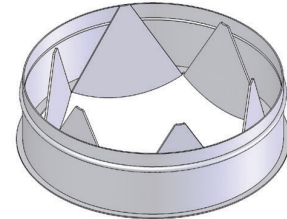
Top View



Side View

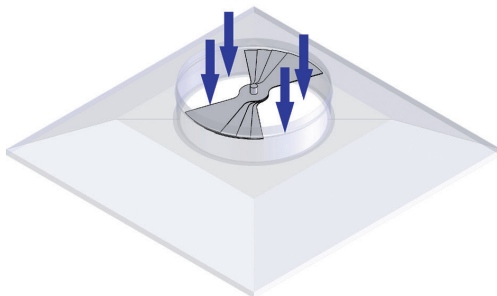


Fully Close

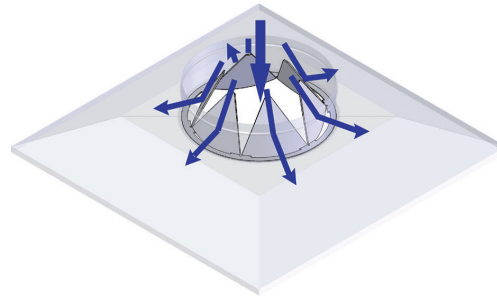


Fully Open

## Comparison Of Radial Fan Blade Damper And Crown Damper



Ceiling diffuser adapter with radial fan blade damper, which air flow is concentrated in the center of the diffuser. Free area is 70% when blades are fully opened.



Ceiling diffuser adapter with crown damper (C2), which air flow has been distributed to every corner of the diffuser. Free area is 95% when blades are fully open.

*Crown damper has more free area and distributes air more uniformly compare to radial blade damper. This is to ensure that the supplied air is distributed uniformly to the occupant zone and reduces noise level at the same time. Please refer to the diagrams above.*

## Apply the following factor for C2 & PB :

	C2	C1 / PB
Tot. Press	X 1.1	X 1.2
NC	+ 2	+ 2
Throw	X 0.9	X 0.85

# RECOMMENDED NOISE CRITERIA FOR ROOMS

Type of Area	Range of NC
<b>RESIDENCES</b>	
Private homes (rural and suburban)	20-30
Private homes (urban)	25-35
Apartment houses, 2-and 3-family units	30-40
<b>HOTELS</b>	
Individual rooms or suites	30-40
Ballrooms, banquet rooms	30-40
Halls and corridors, lobbies	35-45
Garages	40-50
Kitchens and laundries	40-50
<b>HOSPITALS AND CLINICS</b>	
Private rooms	25-35
Operating rooms, wards	30-40
Laboratories, halls and corridors	
Lobbies and waiting rooms	35-45
Washrooms and toilets	40-50
<b>OFFICES</b>	
Board room	20-30
Conference rooms	25-35
Executive office	30-40
Supervisor office, reception room	30-45
General open offices, drafting rooms	35-45
Halls and corridors	35-50
Tabulation and computation	40-60
<b>AUDITORIUMS AND MUSIC HALLS</b>	
Concert and opera halls	15-25
Studios for sound reproduction	25-30
Legitimate theaters, multi-purpose halls	
Movie theaters, TV audience studios	
Semi-outdoor amphitheaters	30-35
Lecture halls, planetarium	
Lobbies	35-45

Type of Area	Range of NC
<b>CHURCHES AND SCHOOLS</b>	
Sanctuaries	20-30
Libraries	30-40
Schools and classrooms	30-40
Laboratories	35-45
Recreation halls	35-50
Corridors and halls	35-50
Kitchens	40-50
<b>PUBLIC BUILDINGS</b>	
Public libraries, museums, court rooms	30-40
Post office, general banking areas, lobbies	35-45
Washrooms and toilets	40-50
<b>RESTAURANTS, CAFETERIAS, LOUNGES</b>	
Restaurants	35-45
Cocktail lounges	35-50
Night clubs	35-45
Cafeterias	40-50
<b>STORES, RETAIL</b>	
Clothing stores	
<b>Department stores (upper floors)</b>	35-45
<b>Department stores (main floor)</b>	40-50
<b>Small retail stores</b>	
<b>Supermarkets</b>	40-50
<b>SPORTS ACTIVITIES, INDOOR</b>	
Coliseums	30-40
Bowling alleys, gymnasiums	35-45
Swimming pools	35-45
<b>TRANSPORTATION (RAIL, BUS, PLANE)</b>	
Ticket sales offices	30-40
Lounges and waiting rooms	35-50