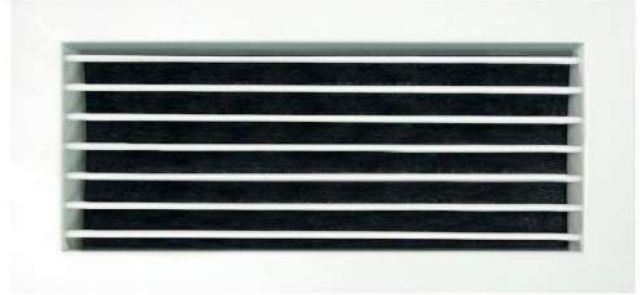


## Description

PA Single Deflection Grille (Model: SD) is designed for Return Air and Exhaust Air applications for ACMV Systems. It is suitable for both wall and ceiling mounted. Besides standard constructed from extruded aluminium, stainless steel material is available upon request. Finishing for SD is standard powder coated in white colour, other colours are available upon request.



## Installation Guideline

### 1. Accessories Connection

List of available accessories for SD:

- Adaptor Box (ADR)
- Opposed Blade Damper (OBD)
- Fan Blade Damper (FBD)
- Plenum Box (PB) [Must pre-installed above the ceiling]

All accessories used for the SD must secure and tighten to the back of the SD with the use of a minimum of two M5 self-tapping screws on each side of the neck of the SD before the installation work can be carried out

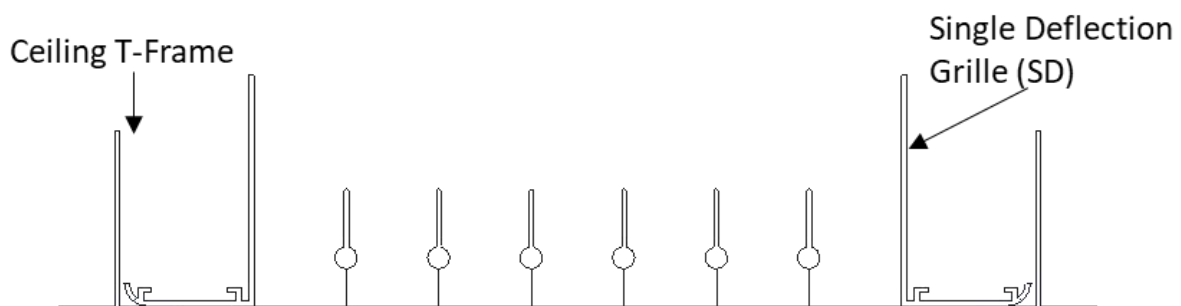
### 2. Opening Clearance

The hole opening on the wall or ceiling shall be larger than the combination of the SD's neck with its respective accessories combination to permit the installation of the system and the gap should be within 5mm of the overall size of the SD's neck and its accessories combination.

### 3. Installation Detail

#### A. Ceiling T-Frame Laying (Ceiling Mounted)

The SD will directly rest on the ceiling T-Frame while the back of the SD is tightened to the concrete slab or the main framework of the ceiling frame above the ceiling with the use of a metal wire. This is to ensure that the SD will not drop and cause any accidents after the installation work is completed.

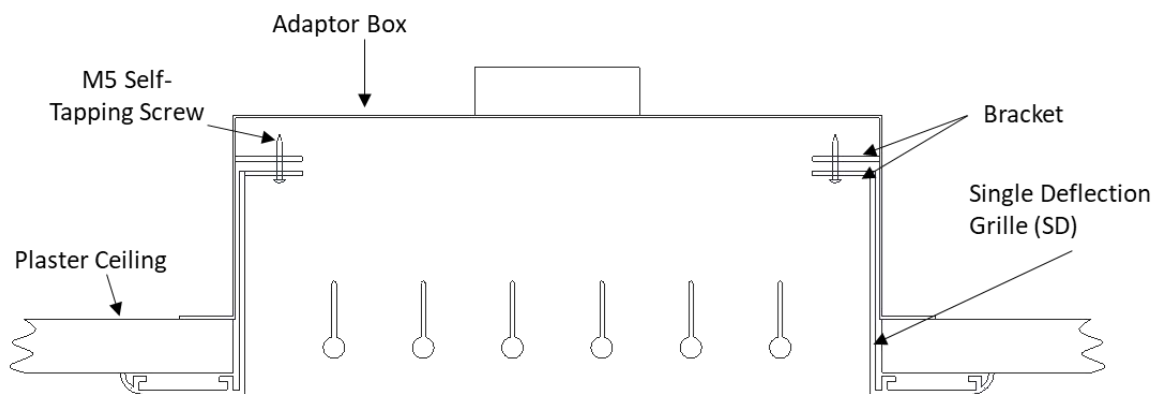


### B. Plaster Ceiling Mounting (Ceiling Mounted)

#### DUCTED RETURN

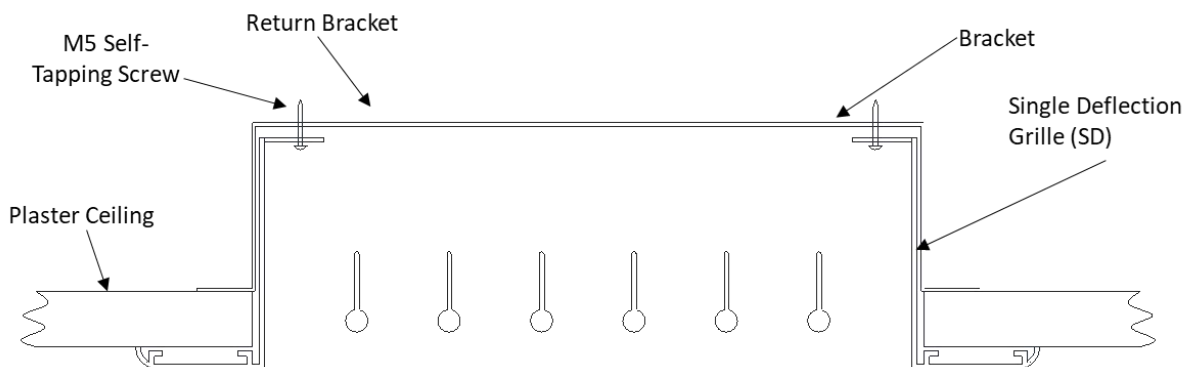
For ducted return, the specially made adaptor box with an additional secure bracket must pre-installed above the ceiling before the closure of the plaster ceiling. A marking should be made to indicate the location of the adaptor for the ease of future work.

Once the plaster ceiling dries up and is ready for installation work, open the hole using either a manual or electrical cutting tool based on the location of the adaptor box. After that, the user can secure the SD to the bracket of the adaptor box with the use of an M5 self-tapping screw and tighten it until the surface of the SD is flush with the ceiling.



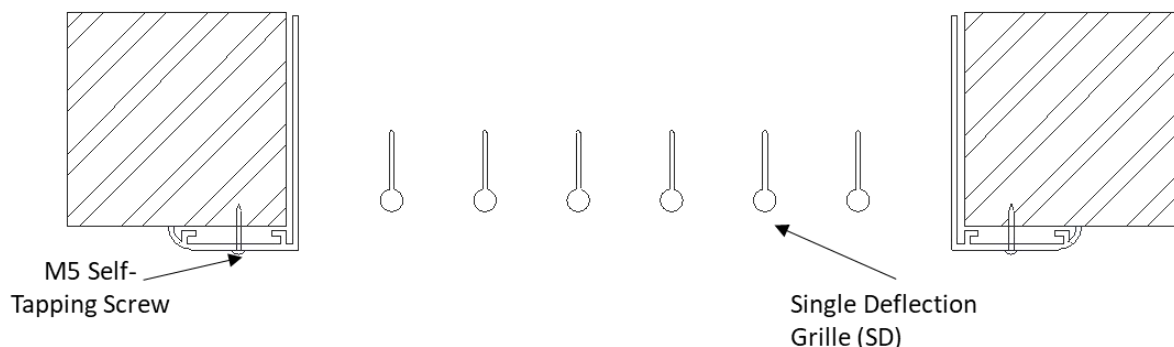
#### CEILING RETURN

For ceiling return, the user can directly make a hole on the plaster ceiling based on the neck of the SD. Put the return bracket on the ceiling and direct secure the SD to the return bracket with the use of an M5 self-tapping screw and tighten it until the surface of the SD is flush with the ceiling.



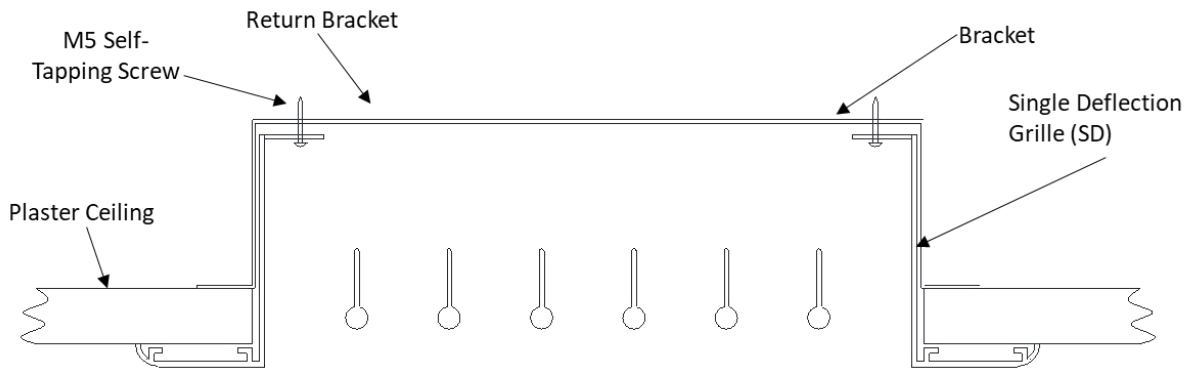
### C. Countersunk Screw Mounting (For Both Ceiling & Wall Mounted)

After insert the SD into the opening hole, direct secure the SD with the use of an M5 countersunk screw on the frame of the SD tighten it until the surface of the SD is flush with the ceiling or wall.



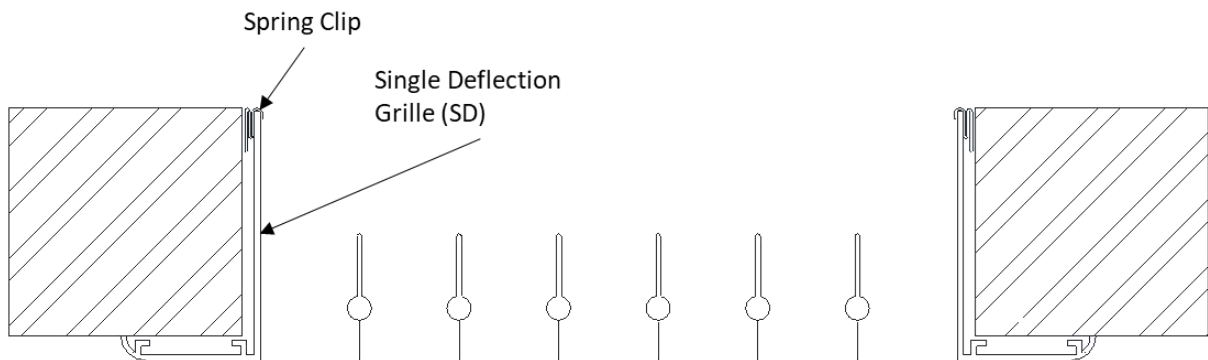
### D. Concealed Mounting (For Both Ceiling & Wall Mounted)

A ledge must be added for installing bracket in either drywall, sheet metal or angle form. After insert the SD into the opening hole, secure the SD into the bracket with use of an M5 self-tapping screw and tighten it until the surface the surface of the SD is flush with the ceiling or wall



### E. Spring Clip Mounting (For Both Ceiling & Wall Mounted)

Add the spring clip to the end the SD frame. Direct insert the SD with spring clip into the opening hole, the spring clip will maintain the position of the SD in between the wall opening



### F. Plenum Box Mounting (For Both Ceiling & Wall Mounted)

The plenum box must be pre-installed above the ceiling before the closure of the plaster ceiling. The plenum box should be secured in position with the use of a metal rod or metal wire to a position where is safe above the ceiling. A marking should be made to indicate the location of the adaptor for the ease of future work.

Once the plaster ceiling dries up and is ready for installation work, open the hole using either a manual or electrical cutting tool based on the location of the plenum box. After that, the user can secure the SD to the bracket of the plenum box with the use of an M5 self-tapping screw and tighten it until the surface of the SD is flush with the ceiling or wall.

