

# FDV and FRH Fire Damper/Exhaust Valve

## Plasterboard Ceiling Installation Instructions

**IMPORTANT: FDV/FRH is not suitable for highly aggressive, salt-laden or humid environments\***

**\*Bathrooms installations are generally acceptable but contact Ravenscroft for advice.**

The following instructions refer to mounting the FDV and FRH fire dampers in plasterboard ceilings. AS1682.2 requires fire dampers to be installed in the same method as tested. These installation details are derived from the test.

The Australian & NZ Building Codes require fire dampers to comply with AS1682 and AS1530.4 as the Acceptable solution. The FDV complies with the Australian & NZ Building Codes as an Alternative solution (incorporating AS1682 as a guide-line). Verification as follows: **BRANZ Assessment FAR3668 dated 18 February 2011, BRANZ Fire Resistance Test FP2376 dated 31.07.1997. Assessment FAR3668 confirms the plasterboard mounting system for the FDV will satisfy AS1530.4 for 120 minutes.**

Halton FDV fire dampers have been tested for installation in masonry walls and floors overseas and have achieved a fire rating of 2 hours. Refer to Malcolm Ravenscroft Ltd for further detail. Separate installation instructions are available for concrete/masonry wall options.

### ***Damper Installation:***

1. Refer to the drawing on the reverse side of this page.
2. The best time to commence installation of the FDV or FRH is after the ceiling joists have been installed and before the plasterboard ceiling panels are installed.
3. Fit a sheet of plasterboard (Use the same type and FRR rating as is being used for the ceiling) over the top of the ceiling joists. This should be square, so if the joists are 600mm apart, then it will be 600x600mm.
4. Fit an 800x800mm square sheet of plasterboard (same type and FRR rating as being used for the ceiling) onto the underside of the floor that forms the top of the ceiling space. This is only required if the ceiling space is less than 400mm deep, or the floor above is constructed from timber or combustible materials.
5. Cut a hole in the plasterboard (that is fixed to the top of the ceiling joists), large enough to accommodate the duct spigot and mount two steel support angles, supplied by others (as a minimum, 1.2mm galvanised sheet bent to form a 50x50 angle) on top of the plasterboard.
6. Fit the duct spigot flange so that the bottom flange is flush with the bottom of the ceiling joists, fix it in position using rivets into the steel support angles. **This is critical, as the FDV must be supported by these steel angles and not by the plasterboard ceiling panel.**
7. Connect the ducting to the duct spigot protruding through the plasterboard mounted above the ceiling joists.
8. The plasterboard ceiling can now be installed.
9. Cut a hole through the plasterboard ceiling the same diameter as the fastening installation ring.
10. Push/screw the fastening ring into the already installed duct spigot. Secure this to the under side of the plasterboard with PK screws that should be long enough to go through the bottom flange of the duct spigot, thus sandwiching the plasterboard between the two flanges.
11. Screw the FRH into the fastening ring until the lips of the flange fit snugly against the ceiling.

### ***Airflow Adjustment***

The airflow through the FDV can be adjusted by rotating the inner cone of the FD in and out on its threaded adjustment rod.

