



BD Damper Installation, Operating and Maintenance Instructions

1 Health and Safety

- 1.1 Only competent personnel may carry out the work outlined within this document.
- 1.2 The wearing of appropriate Personal Protective Equipment (gloves, footwear, safety glasses etc.) is required for safe working and as the site dictates.
- 1.3 Dampers may be heavy. Large dampers will require suitable lifting and supporting equipment, with due consideration given for manual handling.
- 1.4 Dampers may close without warning. Do not introduce limbs/fingers in the path of blade travel.
- 1.5 Where dampers are only accessible with the need for additional elevation, any equipment used should be done so with due consideration to the Work at Height regulations 2005 and current site rules.
- 1.6 All work should be carried out in accordance with HSE guidelines and regulations and any specific local site rules.

2 Pre-Installation Notes

- 2.1 These instructions should be read in its entirety before installing or servicing this equipment. Improper installation, alteration or lack of servicing/maintenance may impact on the correct product function.
- 2.2 Ensure that all packing materials are removed, as failure to complete could result in permanent damage to this product.
- 2.3 Check the damper schedules for damper size and locations within the building.
- 2.4 Inspect the dampers for damage and record where found.
- 2.5 Dampers must be installed square without twisting to the frame.
- 2.6 Do not force the damper into position or use fixings to apply compression or stretching.
- 2.7 Do not lift the damper by the blades. Dampers should be handled by the case only.
- 2.8 The damper must be protected from damp, dirt and other foreign material prior to and post installation in readiness for hand over.
- 2.9 It is not recommended that dampers are painted or have a protective coating. Please refer to the BSB sales office for advice.
- 2.10 Screws or fasteners must not penetrate the damper case where the linkage and blade bearings could be impeded.
- 2.11 The damper must be protected prior to and post installation in readiness for hand over.
- 2.12 Care must be taken, that any installation material wet or dry does not come into contact with any moving parts.

Equipment Required

- 3.1 Equipment and tools will vary dependent upon the construction element/application that the damper is being installed within. Standard equipment that is normally used for ducted installations should suffice.
- 3.2 Access equipment as necessary
- 3.3 Temporary support equipment to retain damper in position whilst being installed.

3 Preparation for Installation

- 4.1 For each damper installation type, refer to the relevant installation detail below.
- 4.2 Before installation, the damper should be inspected to ensure that it has not been damaged and is in good condition.
- 4.3 Ensure that all packing materials are removed, as failure to complete could result in permanent damage to this product. Check damper (label) reference, and damper size.
- 4.3 Ensure that the blades open correctly to suit the air flow direction.
- 4.4 Are the dampers for horizontal or vertical installation? Dampers for horizontal installation, the damper must have a blade limiter fitted to stop the blades from locking open

4. Flangefit

- 4.1 Flangefit BD series dampers are designed to match the mating ductwork flange.
- 4.2 Use the four corner alignment holes to position the damper.
- 4.3 Fix the damper flange frame to the mating ductwork flange using ductwork cleats. Where intermediate fixing bolts are used, these should be in accordance with DW144.

Note: Flangfit BD series dampers can be fitted within ductwork if required. The ductwork must be framed out internally where the damper is to be installed. The damper should then be pushed inside the ductwork up to the internal frame. A second frame work should then be placed in front of the damper. This will sandwich the BD damper in place. The suggested size for the angle support stop is 25mm x 25mm.

5. Framefit

- 5.1 Framefit BD series dampers are designed for the damper body to sit within ductwork end aperture or a wall structure. A cover grille can be fitted if required, as the damper blades move within the depth of the damper body only.

6. Spigotfit

- 6.1 Spigotfit BD series dampers are designed to be included within ductwork runs.

7 Instruction for testing Damper

- 7.1 Once the damper has been installed, check that the blades move freely and smoothly by lifting by hand. The blades should move fully open to fully closed.
- 7.2 Where a grille is to be additionally fitted, check that this does not interfere with the BD series blade operation.

4 Routine Inspection, Testing and Maintenance

- 4.1 Refer to Health and safety procedure (section 1)
- 4.2 In accordance with BS 9999 Annex W.1, inspection should be undertaken annually. Local regulations/conditions may override this with periodic inspection being carried out more frequently where corrosive or dirty conditions prevail.
The maintenance log should be reviewed at each inspection and the frequency adjusted as required dependent upon findings. (BSB recommend a maximum of 1 year between inspections and to start more frequently initially and reduce frequencies only if conditions are proven to allow).
- 4.3 Remove access door or grille if fitted to reveal damper's internal elements.
- 4.4 Manually lift the blades and ensure free movement and the blades drop by gravity alone. Visually inspect the Internal damper elements for signs of corrosion, obstruction or accumulated dirt/dust.
- 4.5 If there are any obstructions or if the damper blades, case sides are dirty, they need to be cleaned.
- 4.6 Use a soft cloth with a light application of light lubricant. (Connect Duck Oil recommended).
- 4.7 There should be no more than a thin film of lubricant applied. Remove all excess lubricant. It is particularly important as excess oil will tend to collect dirt and dust which will have a negative effect on dampers remaining clean.
- 4.8 Replace access doors and/or grille.
- 4.9 Record all work that has been undertaken in the maintenance log.
- 4.10 It is important to record, and review maintenance frequency based on inspections and test history.

5 Fault finding

Symptom	Fault	Action
Damper does not open or close fully	Foreign object impeding blades	Remove item
	Buildup of dirt / dust / corrosion impeding blades	Remove / clean case & blades as required.
	Blades damaged	Please contact BSB Sales Office.

Installation Check List

Damper Reference No:	Damper Location		
Damper Size:			
Width	Height		
Wall/Floor Aperature Size (opening size).			
Width	Height		
Damper Installed By:			
	<small>Print Name</small>		
Signature	Company	Date	
Final Inspection By:			
	<small>Print Name</small>		
Signature	Company	Date	

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