

Installation guidelines for **Gas Flue Block**

Flue blocks should be installed in accordance with the requirements of approved document J of the Building Regulations 2002 Edition and the recommendations of the British Standard 1289 Part 1 and BS 5440

Check that the flue blocks are suitable for use with the intended appliance. Recess and deep recess blocks are available.

All flue blocks should be examined before installation and any damaged items must not be used.

Blocks are to be laid with the rebate uppermost and jointed with an 8mm bead of flue jointing compound. Recess and cover blocks are butt jointed using standard mortar mix (1 part opc cement to 6 parts sand)

Flue blocks should be fully compressed to form a completely sealed 3mm joint.

Joints should be pointed and any surplus F J C protruding into the flue should be removed during construction.

Flue blocks should preferably be laid first in every course, if the joints of the surrounding masonry do not line up with the joints of the flue blocks. Do not attempt to adjust or cut the flue blocks but trim the masonry to suit.

Only factory made components should be used i.e. coursing/offset blocks to achieve required height or position of outlet.

Flue construction should be protected against exposure to rain and frost at the end of each day until the Schiedel mortar has fully hardened.

Make regular checks to ensure that the internal flueway is clear of any protrusions or obstructions and remove any excess flue jointing compound, cement mortar and debris.

Flues should be smoke tested at each floor joist level and following installation of the outlet block, in accordance with the following smoke test procedures.

On completion of the flue and installation of the outlet terminal a flue flow test should be carried out as described overleaf.

Smoke testing during construction

As recommended in BS 5440-1:2000 a gas flue block installation should be smoked tested when it reaches each floor joist level and once the last block or transfer (outlet block) is installed.

The test procedure shown overleaf is designed to indicate whether there are any incomplete joints or faults that require remedial action. Testing during construction makes it easier to inspect the front face and back of the flue blocks built in a cavity wall whilst they are still accessible.

(see overleaf)

Test procedure

Place a smoke pellet on a masonry block, stood on end within the starter block or base of the flue and ignite.

When the pellet begins to smoke, close off the flue at joist level and/or outlet and then close off the starter block recess.

Check for any leakages on the face or reverse side of the flue blocks within the cavity. If any major leakage is seen, investigate the point of leakage and carry out any necessary remedial work. A strong plume of smoke escaping through a joint or defect would be considered as a major leakage.

Following any remedial work re-test the flue using the same procedure.

Always follow the manufacturer's safety instructions when using smoke pellets and take the necessary protection to avoid inhalation of the smoke.

Flue flow smoke testing on completion

On completion of the flue, including installation of any metal twin wall flue pipe and connection to the outlet terminal, a visual inspection and flue flow test of the flue should be carried out. The following procedure is based upon the recommendations given in BS 5440-1:2000.

Visual inspection

Check that the appropriate units have been correctly installed and all joints have been sealed. Where metal twin wall flue pipe is used check that the joints are secure and the necessary support and connecting components have been correctly fitted. The angle of the pipe should not fall below 45°. The diameter of the exit block must not be reduced.

Check that the internal flueway is unobstructed, complete and continuous throughout its length and remove any excess joining material, mortar or debris.

Check that the required terminal is correctly sited as required by Building Regulations.

Flue flow smoke test

Close all doors and windows in the room served by the flue.

Place a smoke pellet on a masonry block, stood on end within the starter block or base of the flue and ignite. If the flue is reluctant to draw and there is smoke spillage, Warm the flue for up to 10 minutes using a blowlamp or similar to establish a flue draw and repeat the test.

When the pellet begins to smoke place a board over the opening leaving a 25mm air gap at the base. Do not seal off the terminal during the test.

The test is considered satisfactory if the smoke discharges freely from the correct terminal and there is no significant leakage of smoke from the recess blocks opening into the room or throughout the flueway. If any of these conditions are not satisfied the cause should be investigated and rectified, followed by repeating the test.

Testing following installation of an appliance

Following installation of the appliance a CORGI registered installer or similar qualified person recognised under legislation relating to installation of gas appliances must carry out an Appliance Spillage Test in accordance with BS 5440-1:2000 paragraph 5.3.2.3 and the appliance manufacturer's recommendations.