

- b. a cast in situ liner that significantly alters the *flue's* internal dimensions.

Anyone in doubt about whether or not any renovation, refurbishment or repair work involving a *flue* is notifiable 'building work', could consult the building control department of their local authority, or an approved inspector.

Re-use of existing flues

1.36 Where it is proposed to bring a *flue* in an existing *chimney* back into use or to re-use a *flue* with a different type or rating of appliance, the *flue* and the *chimney* should be checked and, if necessary, altered to ensure that they satisfy the requirements for the proposed use. A way of checking before and/or after remedial work would be to test the *flue* using the procedures in Appendix E.

1.37 A way of refurbishing defective *flues* would be to line them using the materials and components described in Sections 2, 3, and 4 dependent upon the type of *combustion appliance* proposed. Before relining *flues*, they should be swept to remove deposits.

1.38 A *flue* may also need to be lined to reduce the flue area to suit the intended appliance. Oversize *flues* can be unsafe.

1.39 If a *chimney* has been relined in the past using a metal lining system and the appliance is being replaced, the metal liner should also be replaced unless the metal liner can be proven to be recently installed and can be seen to be in good condition.

Use of flexible metal flue liners for the relining of chimneys

1.40 A way of relining a *chimney* would be to use a flexible metal *flue liner*, appropriately designated in accordance with BS EN1856-2:2004 to suit the appliance, fuel and flue gas characteristics. Flexible *flue liners* should be used only to reline a *chimney* and should not be used as the primary liner of a new *chimney*. They can be used to connect gas back boilers to *chimneys* where the appliance is located in a *fireplace recess*.

Use of plastic fluepipe systems

1.41 A way of using plastic flue systems and liners would be to use a plastic *flue*, appropriately designated in accordance with BS EN 14471:2005 to suite the appliance, fuel and *flue* characteristics. Plastic fluepipe systems can be acceptable in some cases, for example with condensing boiler installations, where the *fluepipes* are supplied by or specified by the appliance manufacturer as being suitable for purpose.

Factory-made metal chimneys

1.42 Ways of meeting the requirements when proposing *factory-made metal chimneys* include:

- a. using component systems appropriately designated in accordance with BS EN1856-1:2003 to suit the appliance and types of fuels to be burnt and installing them in accordance with the relevant recommendations of BS EN 15287-1:2007;
- b. for gas and for oil appliances where flue temperatures will not normally exceed 250°C, using twin-walled component systems (and, for gas, single-walled component systems) appropriately designated in accordance with BS EN1856-1:2003 to suit the appliance and types of fuels to be burnt and installing gas appliances in accordance with BS 5440-1:2008;
- c. using any other *chimney* system that is suitable for the intended purpose and installed in accordance with the relevant recommendations in BS EN 15287-1:2007 or BS 5440-1:2008, as appropriate to the type of appliance being installed.

1.43 Where a *factory-made metal chimney* passes through a wall, sleeves should be provided to prevent damage to the *flue* or building through thermal expansion. To facilitate the checking of gas-tightness, joints between *chimney* sections should not be concealed within ceiling joist spaces or within the thicknesses of walls without proper access being provided (see paragraph 1.47).

1.44 When providing a *factory-made metal chimney*, provision should be made to withdraw the appliance without the need to dismantle the *chimney*.

1.45 *Factory-made metal chimneys* should be kept a suitable distance away from combustible materials. Ways of meeting the requirement for *chimneys* designated to BS EN 1856-1:2003 comprise:

- a. locating the *chimney* not less than distance 'xx' from combustible material, where 'xx' is defined in BS EN 1856-1:2003 as shown in Diagram 13;
- b. where a *chimney* passes through a cupboard, storage space or roof space, providing a guard placed no closer to the outer wall of the *chimney* than the distance in a) above.

1.46 Where a *factory-made metal chimney* penetrates a *fire compartment* wall or floor, it must not breach the fire separation requirements of Part B. See Approved Document B for more guidance but the requirements may be met by:

- a. using a *factory-made metal chimney* of the appropriate level of *fire resistance* installed in accordance with BS EN 1856-1:2003 Annex NA; or
- b. casing the *chimney* in *non-combustible material* giving at least half the *fire resistance* recommended for the *fire compartment* wall or floor.