

SMW Installation Instructions

- 1 It is important to consult with the Building Regulations and, where the equipment served exceeds 150kW, the Clean Air Memorandum if appropriate.
- 2 To conform with Building Regulations, ensure that either an Inspection Length or an Insulated 90° or 135° Tee is used to provide easy access to the chimney for inspection and cleaning (unless such inspection and cleaning can be achieved through the appliance).
- 3 The internal diameter of the chimney must conform to the requirements of the heating appliance manufacturer's instructions and should not, under any circumstances, be less than the diameter of the appliance outlet. The height of the chimney will depend on the building structure with which it is used. However, not less than 4.5 metres chimney height from the top of the appliance is considered the minimum height for solid fuel appliance use. In any event, SFL have available Technical Data which provides chimney sizing criteria for any configuration.
- 4 Each chimney section and associated fitting shall be used as manufactured for assembly on site without any alteration or cutting. Sections and components are easily secured together with an eighth of a turn twist-lock which provides a sturdy and neat joint. Make sure that the elements are installed the right way up, with the male coupler uppermost. Once assembled, Locking Bands must be fitted to every joint. No special tools or sealing compounds are required.
- 5 Where used with SOLID FUEL or OIL appliances producing flue gas temperatures exceeding 250°C, the clearances at floor/ceiling joists must be established using the **Ventilated Ceiling Support** and the **Ventilated Firestop**.

All of these components incorporate spacers which are designed to provide a minimum 50mm air gap clearance from combustibles. This distance **MUST** be maintained elsewhere in the system between the outer case of the chimney and any combustible materials. Do not place any additional insulation material around any part of the chimney, and in all cases, the system must be designed so that no joints between chimney elements occur within the thickness of a floor space. Where used with GAS appliances, a minimum air gap clearance must be maintained between combustibles and the outside skin. For installation and access reasons, the support components provide a 50mm clearance to adjacent structure, but this can be reduced to 25mm if required.
- 6 Joints between floors. The selection of chimney elements should be made so that no joints occur within the thickness of a floor space.
- 7 Where serving Solid Fuel or Oil appliances, any part of the chimney which passes through any room other than that in which the appliance using the chimney is situated, should be protected to prevent both damage and the accidental location of combustible materials against the outer skin. It is a Building Regulation requirement that ANY factory made insulated chimney should be enclosed where passing through a cupboard, storage space or accessible roof space. Any such enclosure must be constructed of materials and applied in such a way that they can be considered as providing access to the chimney. In the case of SMW, the 50mm air gap clearance applies.
- 8 No part of the system should be constructed at an angle greater than 45° from the vertical. The only permitted exception is where it is necessary to use an angle of 45° to make the connection to an appliance, which can be direct or with the use of a suitable flue pipe. The latter arrangement can be constructed using the 135° Tee as illustrated in these instructions. Where a change of direction or offset is required, 15°, 30° and 45° Elbows should be used within the limitations earlier mentioned. **NOTE.** Building Regulations will not permit more than ONE offset in any chimney run, (ie 2 Elbows). However, that excludes any Elbows used to make the connection to the appliance. Where an offset is used, the length of chimney between two elbows **MUST NOT** exceed 20% of the total length of the chimney.
- 9 The chimney must be adequately supported with the system support elements. Where externally used, the chimney must be supported on a wall or mast. (For latter applications, seek further details from SFL). The external support components must be used at intervals depending on the load-bearing criteria quoted in Table B. Wall Bands are not load-bearing and should be provided at intervals not exceeding 3.5 metres external and 4.0 metres internal for lateral stability only. Where used externally the stainless steel wall band should be used.
- 10 Where an external installation requires the chimney to offset past a roof overhang, Elbows should be used to form an angle as shallow as possible.
- 11 Connection to the appliance can either be direct using the Adaptor or a length of flue pipe can be connected to the Adaptor. In all cases, all joints between flue pipes/appliance outlets/chimney must be securely caulked and sealed with fibre rope (or suitable alternative) and fire cement. ANY flue pipe connection to the chimney **MUST** be made in the same room as the appliance.
- 12 The outlet of the chimney must comply with Building Regulations, where appropriate. Fig 5 indicates the requirements for solid fuel and oil served appliances. See IL Gas Vent Installation Instructions for Gas served appliance termination requirements.

Under most circumstances, the above regulations will permit the normal operation of the chimney. However, should it be necessary to construct the chimney so that it extends beyond 1.5 metres above the roof or last support, such extension must be provided with additional support. A Guy Wire Bracket should be clamped to the chimney for this purpose, to which rigid stays, preferably angle iron, should be connected.
- 13 The terminals illustrated are suitable for all fuels, with the exception of the Gas Vent Terminal. For such applications please refer to separate IL Gas Vent System Installation Instructions for details.
- 14 If painting of the chimney is desired, first thoroughly degrease and then dry and prime the surface; in the case of galvanised components, use a zinc chromate based primer. Apply a finishing coat of external quality paint as required. NB: Do not paint the chimney where it is internally positioned 50mm from combustible materials.

NB: It is strongly recommended that any galvanised components that are externally applied, are thoroughly protected by painting or suitable alternative.

