



Can anyone install IL?

Connection to an appliance which is not connected to the gas supply should be carried out by a competent person. However, connection to an appliance that is connected to the gas supply MUST be carried out by a GAS SAFE registered installer.

Do I need any special tools?

No, IL is very easy to install, the basic tools would be a screwdriver, drill, hammer and an adjustable spanner.

How do the components fit together?

Pipes, bends, tees and flue gas carrying components are joined together by a simple push and twist system. The direction arrows on the product label should be pointing in the direction of the terminal.

What other materials do I need?

The only materials required are fibre rope and fire cement to seal the appliance connector to the appliance, plus nails/screws and wall plugs for components and fire stops.

Do I need to tape the joints?

No this is unnecessary. IL works on the principle of negative pressure. When the flue system is primed and working at normal operating temperatures, a negligible quantity of air is drawn into the flue via the joints, which does not interfere with the safe evacuation of the flue gases.

Do I need to cut any flue sections?

No, within the range are two adjustable lengths which are used to telescope over standard pipe lengths to provide the exact flue lengths required. They are, however, not to be used directly after a bend.

What if I want to remove the appliance later?

No problem, by using a short pipe length and an adjustable length immediately above the appliance, provides the facility to remove the appliance later without dismantling the flue system.

I want to fit a gas fire into a house with no chimney, what do I need?

SFL produces a range of flue boxes suitable for a variety of gas fires to BS5258, Parts 5/8 and 16 that are suitable for 125mm IL. In all cases, consultation with appliance manufacturer's recommendations and Installation Instructions is essential.

How do I connect to a ridge terminal?

This can be easily done, by connecting a Ridge Tile Adaptor, bolted to the ridge terminal, and using either a gasket (supplied by the terminal manufacturer), or silicone sealant to provide a gas tight seal. Extension boxes are also available for high pitched roofs where standard connection may be impeded.



A twin wall insulated pre-fabricated domestic gas vent that has been used in the UK for over 25 years, having built a reputation for quality and reliability.

I need to install IL on an external wall that is exposed to cold winds - is this OK?

Although IL is suitable for external use, it is only recommended for short runs, approx. 3.0 metres. ILS, an insulated venting system, is interchangeable with IL and is recommended for such situations. In addition, in most modern properties that have ventilated roof spaces, ILS should be used to overcome any potential condensation problems in cold conditions, particularly when used on high efficiency appliances.

How often will I need to fit supports to the flue system?

Wall bands must be fitted every 2.5 metres on the IL system, and should be used at an offset to ensure the system is rigidly supported. On internal systems, support assemblies, when used, provide lateral supports as well as Firestop qualities.

Will the flue system get hot?

This is dependent mainly on the appliances operating flue gas temperature (f.g.t) and flue location. The maximum flue gas temperature for IL is 260°C, and at this temperature, the outer case will be in the region of 75-85°C. A minimum of 25mm clearance from the inner liner to combustible materials MUST be maintained. IL support components provide a 50mm clearance.

Can IL be used on condensing appliances?

No, Nova and Supra are additional products in the SFL range that are specifically designed for condensing applications.

What size flue system do I need?

IL is available in a range of sizes. The flue must be as recommended by the appliance manufacturer and must not be reduced, and never smaller than the appliance spigot.

Is it necessary to provide an air supply?

Yes, ventilation is required as described in the appliance manufacturer's instructions to ensure correct venting and to avoid spillage of the flue gases. Further information can be found in BS 5440: Part 2. Installation and maintenance of flues and ventilation for gas appliances of rated input not exceeding 70kW net (1st, 2nd and 3rd family gases) – Part 2: Specification for installation and maintenance of ventilation for gas appliances.

How many bends can I use in the system?

The IL range includes for 0 - 90° fully adjustable bends which can be used where the flue system needs to be offset (to avoid trusses and terminate to a ridge terminal). These bends can be ro-tated 360° after the angle has been set, to achieve correct direction of flue path. Flues should be vertical as far as possible, and must not exceed 45° from the vertical; otherwise resistance to flue gas flow will result and the system will not comply with Building Regulations. Bends should be kept to a minimum and a vertical rise of 600mm minimum should be allowed for immediately above the appliance, or a Gas Flue Box if used.

2



Can IL be painted?

If necessary, yes, simply by cleaning the surface with a solvent cleaner (white spirit), and applying a coat of etch primer and a top coat of high quality paint.

Is IL approved to all necessary standards?

IL is manufactured under the requirements of BS EN ISO 9002 Quality Assurance. It is also CE Marked to BS EN 1856-1 T250 N1 D VmL11030 O(50).

Before the appliance is used, do I need to test the flue system?

Yes, under current codes of practice, this is done by means of a flow test as described in BS5440. This can be summarised as follows: - After a visual and physical check of the joints in the system and ensuring an adequate air supply for combustion has been provided, close all doors and windows in the room in which the appliance is to be installed. It will be necessary to introduce heat to the flue system for minimum of 10 minutes and possibly up to 30 minutes using a blow torch or similar. Position a smoke pellet (providing a performance of 5m³ of smoke in 30 seconds burn time) at the intended position of the appliance. The test is satisfactory if there is no significant spillage from the appliance, no seepage over the length of the system, and discharge only from the terminal. If these conditions are not met, the test has failed and all faults must be rectified before connection of the appliance to the gas supply, and further reference to BS5440 must be made. However it must be remembered that by the manufacturing standard to which the product is manufactured, a degree of leakage is allowed from the product.

In respect to smoke testing, Appendix E clause E21 of Building Regulations Part J makes the following statement.

" It should be noted that smoke pellets create a pressure significantly higher than the pressure required in the product standards for natural draught chimneys and for flues having a gas-tightness designation of N1. Flues to this designation are permitted to have a leakage rate of up to 2 litres/s/m2 flue wall area. Some leakage may therefore be seen during the test and it can be a matter of expert judgement of whether leakage indicates failure."

Does the flue require servicing?

Yes, the flue must be kept clear at all times in the interests of good practice and health and safety. The system should be checked regularly during the appliance maintenance, (Refer appliance manufacturer's instructions).

I have an existing chimney, can I use IL?

No, IL is not for use as a chimney liner, however, it can be used to connect to and from a stainless steel flexible flue liner that may be lining an existing chimney. If a liner is used, the appliance manufacturer may on occasion ask that the liner be insulated or where the existing chimney is very large and/or on an external wall.