

# LTZ

March 1997



## Description

***LTZ* is a high quality, prefabricated chimney system suitable for 28 second oil, or gas fired appliances with flue gas temperatures up to 250 C continuous firing.**

**The system consists of straight lengths and associated fittings and is available in three different internal diameters, 100mm, 125mm and 150mm.**



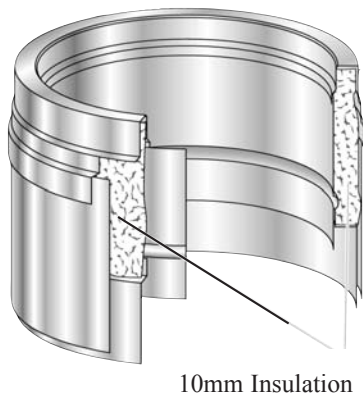
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# Construction

*LTZ* is manufactured under the strict control of BS5750, 1S09000 and is manufactured to the requirements of BS715 - the British Standard for the specification for metal flues, fittings and terminals for gas fired appliances with a rated input not exceeding 60kw.

All lengths and fittings are of twin wall format with a 10mm insulated cavity. The vertical seams of the flue lining and outer casing are lock formed. The 10mm insulated cavity is maintained by a male spigot end cap at the top, and a female socket end cap at the bottom. This construction allows the liner to expand and contract with varying temperature without affecting the outer casing.



## Material Specification

The inner liner is manufactured from stainless steel grade 304, SiS, 0.40mm and the outer casing is manufactured from zalutite, 0.40mm, to BS6830. The 10mm cavity is insulated with a high quality insulating medium. The male & female end caps are manufactured from grade 316, S31 stainless steel.

## Application

*LTZ* is suitable for 28 second oil, or gas fired appliances with a rated input not exceeding 60kw, such as domestic fires, boilers, heaters and small commercial boilers. suitable for 28 second oil, or gas fired appliances with a rated input not exceeding 60kw, such as domestic fires, boilers, heaters and small commercial boilers.

**Table 1:**

Size Nominal Bore (mm)	Outer Diameter (mm)	Bore Cross Sectional Area (mm <sup>2</sup> )
100	123	8105
125	148	12585
150	173	18047

# Installation

Installation must be in accordance with local and national building regulations, and where appropriate, BS5440: The British Standard for the installation of flues and ventilation for gas appliances of rated input not exceeding 60kw.

It is important to ensure that the required components are ordered correctly as assembly is completed with no on site fabrication.

**Table 2:**

Flue Dia	100	125	150
Weight kg/m	3.0	3.8	4.5

## Jointing

All lengths and fittings are provided with spigot and socket ends which twist fit together; locking bands are not required. The components are designed to be installed with spigots facing upwards.

## Clearances

Under normal operating conditions, the low outer casing temperature permits installation with a clearance of 50mm to combustible materials. Where a chimney passes through a floor, a firestop spacer should be fitted top and bottom to maintain this 50mm clearance; no joint should be made between these spacers.

## Support

*LTZ* must be independently supported with none of the weight being taken by the components or by the appliance. Dependent on the total height and the configuration of the flue a number of supports will be required.

Wall support brackets, supplied with support plate and clamp, are designed for internal and external use; they are provided for either initial or intermediate support giving 50mm clearance to supporting walls. Support plates and clamps are designed to support the flue when it penetrates an internal floor.

Wall fixing brackets offer lateral support giving an adjustable clearance of 50mm - 300mm. Wall bands are provided to suspend horizontally installed components from a plant room ceiling, or alternatively to offer lateral support, giving a fixed clearance of 50mm; they should be used at intervals not exceeding 3m.

Where the flue is free standing above a roof and its height exceeds 1.5m beyond the last support, a guy wire bracket, preferably in conjunction with bracing rods, must be used. The following table gives the load bearing performances of the standard support brackets available.

**Table 3:**

Support	Max Supported Height
Wall Support Bracket	15m
Support Plate	15m
Wall Fixing Bracket	Not Loadbearing
Wall Band	Not Loadbearing

## Typical Installation

### Lengths

Installed lengths of 1000mm, 450mm and 300mm are available as standard.

An adjustable length of 50mm to 480mm is available where it is necessary to provide a flexible intermediate section or to facilitate the removal of the appliance.

### Components

Elbows of 450 and 300 are available where it is necessary to alter the route of the flue, or alternatively, to offer a variable offset.

90° tees are available to make up modular headers or to facilitate tee caps and tee caps with drain. Special or modular tees are available upon request.

Tee caps are supplied to close off tee openings and offer ideal access for inspection and maintenance. Tee caps with drain are normally situated at the base of the flue system and prevent build up of condensation and rain water within.

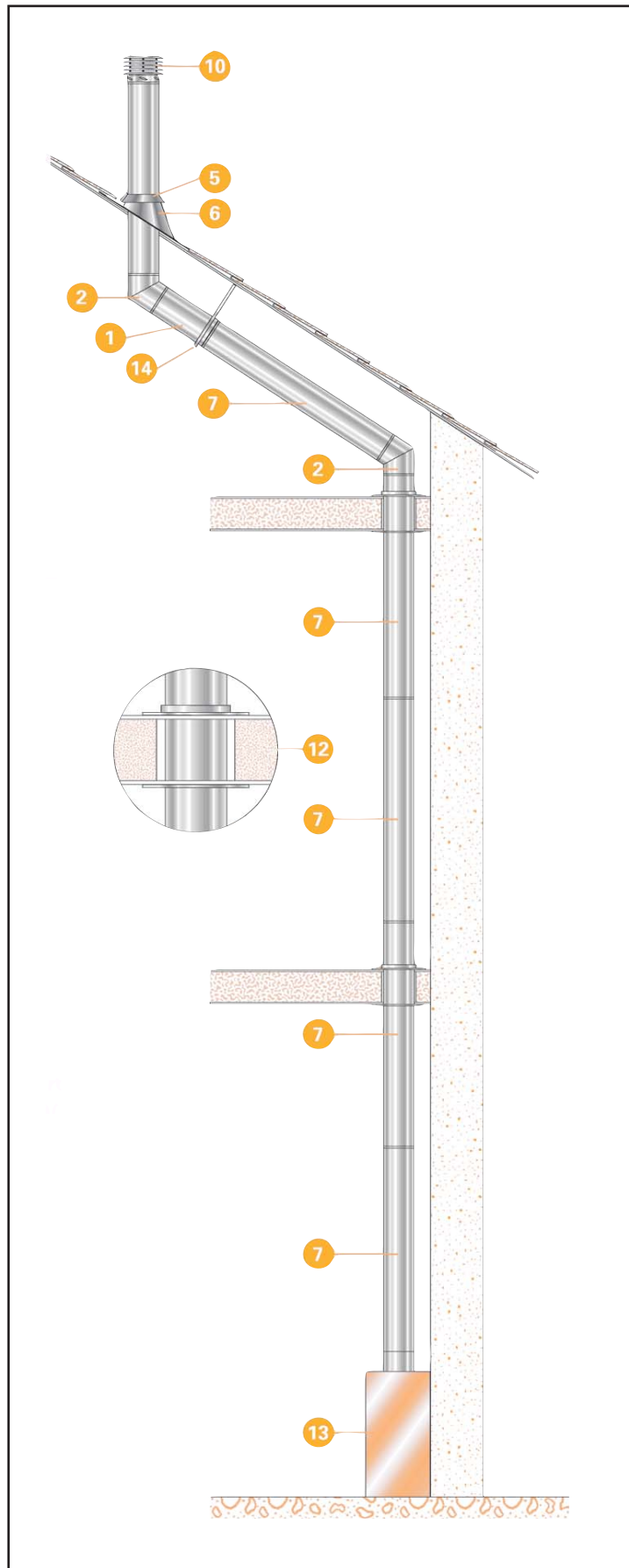
Appliance adaptors must be used on all systems and facilitate the fitting of **LTZ** to single wall appliance connections of the same nominal bore.

### Flashing

Where a chimney penetrates a roof a suitable flashing must be used. The standard **LTZ** flashing is universal and suits most applications. A storm collar must be fitted immediately above the flashing which must be sealed to the outer casing using a waterproof sealant.

### Termination

GC1 terminals are designed for use on atmospheric gas fired appliances. Standard cowls are designed for appliances fired by 28 second oil.



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