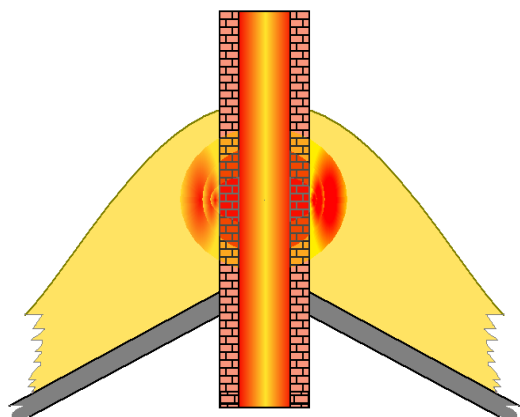


Of the 50,000 thatched homes in the UK and Ireland, insurance statistics show that some 1.5% suffer thatch fires each year, 50 are totally destroyed and that 70% of such fires involve solid fuel heating appliances.



It is now known that the commonest cause is not, as often assumed, stray sparks but internal chimneys, heating as they pass through the highly insulating thatch to a point where reeds or straw can ignite. This has been made worse by the practice of laying ever-thicker new thatch over old, while modern sealed solid fuel appliances may generate flue temperatures of 400°C+ - way above the temperatures from original open fires and the 180°C ignition temperature of thatch.



Image supplied by Playle-Russell (Special Risks) Ltd

New buildings should have chimneys constructed according to the 'Dorset Model' details of which are available from Dorset County Council at [www.dorset-technical-committee.org.uk](http://www.dorset-technical-committee.org.uk). Where it is intended to install a closed solid fuel heating appliance in an existing property with a thatched roof, very special care is needed to ensure that it becomes impossible for the thatch to ever reach the critical 180°C.

One possible method of reducing the risk of thatch overheating is the construction of a completely sealed and insulated prefabricated metal flue *inside* an existing masonry flue and separated from it so that air can freely circulate between the two.

In such an installation:

- 1: The inner flue should be of rigid construction.
- 2: The inner flue must be held central, and remain central, throughout the chimney and have adequate support along its entire length.
- 3: The inner flue system must be adequately insulated along its entire length.
- 4: The annular space between the inner and the masonry flues must be adequately vented to free air both at the top and bottom.
- 5: The terminal should have no spark arrestor, cowl or restriction.
- 6: The outlet height above thatch must conform to 'Flue outlet positions for solid fuel appliances - clearances to easily ignited roof coverings', Building Regulations, England & Wales, Approved Document J Sec.2 Diagrams 17 & 18.
- 7: The appliance and flue system must be installed by a Competent Person registered to carry out such work.
- 8: Provision must be made for the flue to be cleaned throughout its entire length. While some installations may be swept through the appliance, in the majority of cases it will be necessary to fit access hatches in the inner flue.
- 9: The internal free air space must satisfy the clearance requirements laid down by the inner flue system manufacturers. Where this requirement cannot be met, an alternative form of heating should be sourced.
- 10: Scrupulous attention must be paid to regular chimney sweeping by a competent sweep, including checking that the free air space is clear.
- 11: The appliance must be operated and maintained very strictly in accordance with the manufacturers instructions.

**Every professional who attends to a thatched property with solid fuel heating has a duty to ensure that the entire installation, not just the part they attend to, is safe and will remain safe. Thatchers are especially reminded of the need to maintain flue outlet heights when re-thatching, and chimney sweeps to ensure that the free air space is clear.**

Research continues into the ventilation requirements for the free air space and into the use of draught stabilisers to reduce flue temperature. Updates will be sent to SOLIFTEC subscribers.

### FURTHER INFORMATION

- National Society of Master Thatchers [www.nsmthd.co.uk](http://www.nsmthd.co.uk)
- Devon County Council provide a useful advice leaflet at <http://www.devon.gov.uk/thatching.pdf>
- Dorset Fire & Rescue Service - [www.dorsetfire.co.uk](http://www.dorsetfire.co.uk)
- National Association Of Chimney Sweeps [www.chimneyworks.co.uk](http://www.chimneyworks.co.uk)
- Guild Of Master Sweeps [www.guild-of-master-sweeps.co.uk](http://www.guild-of-master-sweeps.co.uk)
- National Association Of Chimney Engineers [www.nace.org.uk](http://www.nace.org.uk)
- British Flue & Chimney Manufacturers Association [www.feta.co.uk/bfcoma](http://www.feta.co.uk/bfcoma)
- Playle-Russell (Special Risks) Ltd [www.thatchline.com](http://www.thatchline.com)

