

# The Dorset Model

## Thatched Buildings

### New properties and extensions Dorset Building Control Technical Committee

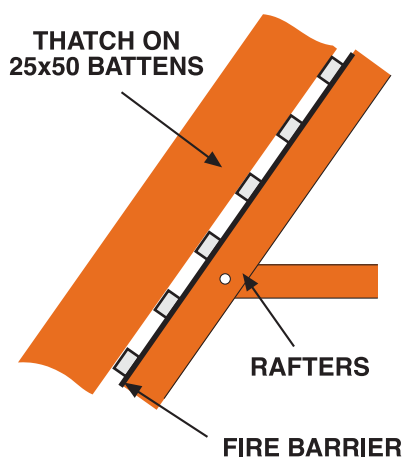
**The following guidelines are to advise you of certain requirements if you are considering extending or constructing a thatched roof building less than 12m from your boundary.**

Each proposal will be considered upon its merits, therefore early consultation with a member of the Building Control staff is recommended.

This uniform approach to thatched buildings is now being advocated where compensatory requirements are considered acceptable to achieve compliance with the Building Regulations.



#### Standard Fixing Detail



#### Requirements

- A. Rafters are to be overdrawn with a minimum 30 minute fire barrier (integrity and insulation) and this barrier should also be water resisting. 50 x 25 battens are recommended on a micro-porous boarding to allow the thatch to breathe. (Dorset Fire and Rescue Service recommend a 60 minute barrier under the thatch for property protection).

**The use of a flexible material or cavity foam as a fire resisting barrier is not considered acceptable for the purposes of the Dorset Model.**

- B. The chimney, including the pot, should terminate at least 1.8m above the height of the ridge. Due to the risk of condensation forming as hot gases cool, the chimney pots should be limited to a maximum height of 600mm.
- C. A domestic mains and battery powered, interlinked smoke alarm system will be required with one smoke alarm fitted in the roof void. The system should generally be in accordance with that specified in Approved Document B to B.S. 5839 Pt. 6: 2004
- D. A terrace may not consist of more than three thatched dwellings together.
- E. The use of intumescent mastic is required to help seal the fire barrier along all its junctions.
- F. The written comments of the adjoining property owner may be requested by the local authority for consideration.

**In addition to the measures that may be required by Building Control there are a number of recommendations that you should carefully consider at an early stage.**

### **Recommendations**

- A. The provision of a loft hatch is recommended for fire fighting purposes. The minimum recommended size is 600mm x 900mm.
- B. Advice should be sought from an approved electrical contractor regarding the most appropriate type of wiring system. Effects from rodent damage and straw debris need to be considered and the National Inspection Council for Electrical Installation Contracting have issued guidance to their members.
- C. It is NOT recommended to install recessed lighting into the ceilings below the thatch. Light fittings within the roof space to be in a bulkhead fitting. External floodlights should not be located under the eaves of the thatch.
- D. Spark arrestors on the flues are NOT recommended because they can clog and restrict the flow of flue gases.
- E. It is recommended that an external water tap supplied from the rising main is fitted with a hose capable of reaching all parts of the roof.
- F. Any metal plumbing in roof space should use compression joints to avoid the use of blow torches.
- G. In order to achieve a 'U' value of 0.2w/m<sup>2</sup>K for thatched roofs, the following was taken from CIBSE Guide A3:

**Reed** = thermal conductivity 0.09 and a resistivity of 11.1

**Straw** = thermal conductivity 0.07 and a resistivity of 14.3

This gives a 'U' value of 0.2/m<sup>2</sup>K for 450mm of reed and 350mm of straw. On this basis ceilings may require additional insulation.

Statistics show that 70% of fires in thatched homes are caused by solid fuel burning appliances. The installation of a woodburner or a multi fuel appliance requires great caution due to the extreme temperatures generated over prolonged periods.

Fire Service personnel may need to consider how best to deal with thatch fires incorporating a fire barrier. The barrier must remain unbroken during fire fighting operations.

In order to identify 'Dorset Model' properties, a national database is being compiled. It would be beneficial if homeowners, builders and thatchers could please register all such properties to assist the emergency services. Please simply email the properties details to the following address: **[dorsetmodel@thatchregister.com](mailto:dorsetmodel@thatchregister.com)**

For comprehensive guidance advice about this traditional craft, please visit the National Society of Master Thatchers website at **[www.nsmtltd.co.uk](http://www.nsmtltd.co.uk)**

*The 'Dorset Model' has been jointly produced by the Local Authorities across Dorset in conjunction with Dorset Fire & Rescue Service, the National Society of Master Thatchers, and after consultation with the National Inspection Council for Electrical Installation Contracting and the Building Research Establishment Ltd on the basis that evidence has shown that thatch can be made sacrificial in the event of fire.*