



ASTMS E-108 in accordance with Sans 10407 for Fire protection

In accordance with the SANS 10407:2006 section 8.2.3 and 8.2.4 Fire protection has the following system in place Sans Section 8.2.3

- (a) Durability of the product when applied to the thatch or reed: Thatch Marshal 8000 uses a chemical polymer that is U/V resistant and waterproof. The SABS department has agreed that Fire Protection may use a third party to commence weather tests on Thatch Marshal 8000 until the SABS fire engineering department has the facilities ready to commence the weather tests themselves .
- (b) Effects and requirements of maintenance: It is advisable that roof to be treated are properly brushed and tidied up - once the product has been applied, the roof cannot be brushed again. No maintenance is required after treatment.
- (c) Behaviour when subject to fire: When the treated roof is exposed to fire, the thatch will char and smoulder. If there is no wind present, the thatch will char to a halt. Advise clients that Thatch Marshal 8000 is a *retardant* and will not make the thatch *fireproof*. It will still burn if subject to fire, however, slowly. Advise clients to also have fire extinguisher/s in the thatched area.
- (d) Provision and precaution to be taken into account before the application of the product. Ensure thatch is clear of loose grass, leaves, bird nests, spider webs and other foreign objects. Make sure it is sunny day with no chance of rain. Clear out thatched area to be treated, mask floors, windows and other objects that could damage. Do not apply Thatch Marshal 8000 on wet thatch. Make sure there is no oil or dust on thatch before applying Thatch Marshal 8000.

SANS Section 8.2.4

(a) Method of production and the quality assurance thereof:

Quality control is done on each batch to the standard required to proof the effectiveness. Lab tests are performed and batch samples are accordingly stored.

(b) The application and the quality assurance thereof:

For professional roof sprayers (after dipping the thatch):

Use an airless spray machine at a PSI between 2500psi to 3000psi. If thatch is dense, make use of the thatch opening tool (recommended) to ensure proper intake of retardant chemical. Nozzle of gun can be kept at a distance of around 50mm from area of service. Keep gun position horizontal to the ground. Nozzle description: 1/17000 inch in size. A penetration of plus minus 75mm is required on the outside and a penetration of plus minus 10mm on the inside. Volume of intake may vary from roof to roof. The quality of application should be monitored by using the thatch opening tool. The tool has marking of 75mm on the one side and markings of 10mm on the other side. The 75mm side is used to control penetration of at least 75mm for outside and the 10mm marker are used for checking for penetration of 10mm on the inside.

For DIY packages:

Since home owners do not always have an airless spray machines, a method of application is designed. Home owners can use normal tank air compressor, small bucket and building brush. This process takes much longer compared to an airless spray machine, but is also very effective.

Mark out the section to be treated, use thatch opening tool to open thatch section and pour chemical inside by using either a small bucket or tank air compressor or building brush, move in 10 cm spaces between treatments. Make sure that penetration is at least 75mm on outside and 10 mm on inside.

Home owner can request that we do an inspection and quality check to certify application.

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(c) The certification of the applied system once completed: after the completion of the fire retardant treatment, a certificate of completion is issued with the following information:

Date, address, contact person, rate of application, method of application, registered name of product and batch number, next date of application. This certificate is signed by approved applicator or designated inspector. This person has to take on the following responsibilities: He has to ensure that the correct volume of Thatch Marshal 8000 has been applied to the thatch. He has to ensure that Thatch Marshal 8000 has not been diluted. He has to ensure that proper safety precautions are used: goggles and gas masks with special filters for chemicals must be used at all times. He has to prevent spillages and must be familiar with the safety data sheets of Thatch Marshal 8000. The responsible person has to keep proper records of all work done for future reference. Fire protection will not be held responsible for any damages what so ever caused when Thatch Marshal 8000 is used outside our control. Responsible person or applicator has to comply with the OHS Act 85 of 1993.

(d) Whether or when re application is required: Re-application is required after 30 months or after brushing.

If treated thatch is brushed or re thatching, treatment has to be re-applied