

Your ref: Q 577/ 07
Our ref: 17/3/21/3
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Report No: FPE/ 84830/ 07
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Date: 24 October 2007

Blus Pro (Pty) Ltd

Attention: Mr H v Rensburg

PO Box 14879

SINOVILLE

0129

SPREAD OF FLAME TEST ON THATCH ROOF SPRAYED WITH "BLUS PRO FR 100"

NOTES:-

- SABS's Conditions of test are on overleaf of page 1.
- Terminology between quotation marks are as given by the sponsor
- All dimensions given under section 1 of this report are nominal
- It is recommended that the user obtains confirmation from the South African Bureau of Standards that the contents of this report are valid in respect of a given lot of material
- Photograph references are in square brackets []

1. DESCRIPTION OF SAMPLE

The sample consisted of two thatch roof specimens, spray treated with "Blus Pro FR 100" fire retardant chemical by means of a spray gun and compressor at the Fire Protection Engineering laboratory of the SABS in Pretoria on 11 October 2007 [1];[2]

A single page application procedure was also submitted by the client.

Measurement done on the thatch roof specimens were recorded as follows:

Length	:	4 000 mm
Width	:	1 100 mm
Thickness	:	200 mm
Nozzle diameter	:	1 mm "Diagonal"
Pressure on gauge	:	20 bar
Application Rate:	:	1 l/m ² approximate

A single coating of "Blus Pro FR 100" was sprayed on the entire thatch roof from the top, bottom and underside. The application procedure was followed by the sponsor during the spraying of the thatch and is attached to this report.

2 DATE OF RECEIPT

10 October 2007.

3 NATURE AND METHOD OF TEST

A spread of flame test was conducted to section 8 of ASTM E108" Standard Test Methods for Fire Tests on Roof Coverings" as required by section 8.2.3 of SANS 10407:2006 "Thatched roof construction."

The gas flame was applied to the thatch for 10 min, as required by Class A and B roof coverings.

4 DATE OF TEST

17 October 2007.

5 RESULTS

The following results were calculated from the data obtained during the 2 tests:

Specimen No	Results Spread of flame, m	Criteria for Flame Spread Test sec 12.4 of ASTM E108			Classify - fication
		Class A	Class B	Class C	Class
1	1, 2 m	< 1,8 m	< 2,4 m	< 4,0 m	A
2	1,1 m	< 1,8 m	< 2,4 m	< 4,0 m	A

Both specimens burnt less than 1,2 m and the thatch roofs treated with "Blus Pro FR 100" is classified as Class A fire protection system.

6 PHOTOGRAPHS



Photo 1 – Thatch roof specimens as supplied



Photo 2 – Panel during spraying with Blus Pro FR 100

6 PHOTOGRAPHS Continued



Photo 3 – Spraying equipment and Blues Pro in blue drum



Photo 4 – Panel at onset of test

6 PHOTOGRAPHS Continued



Photo 5 – Flame was ignited: 0 min



Photo 6 – Panel No 2 : 2 min

6 PHOTOGRAPHS Continued



Photo 7 – Panel No 2 : 5 min



Photo 8 – Panel No 2 : On Completion of 10 min Flame Application

6 PHOTOGRAPHS Continued



Photo 9 – Panel No 2 : 13 min No Flaming was observed on thatch panel

E Seeger
MANAGER: BUILDING AND CONSTRUCTION

ASW v Rensburg
TEST OFFICER: FIRE PROTECTION ENGINEERING

WA vd Hoogt
TEST OFFICER: FIRE PROTECTION ENGINEERING