The Loss Prevention Council
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The Loss Prevention Council

Tecroc Products Ltd.,
Holly Lane Industrial Estate,
Atherstone,
Warwickshire,
CV9 2RN.

Attention Mr P Bradnam

Our ref: RAJ/MB
TE 84257

Date: 10 December 1993

Dear Sir,

We have pleasure in enclosing our Technical Evaluation report TE 84257 and trust that it meets your requirements. If you have any queries please let me know.

We should emphasise that this report applies only to the specimen detailed therein and also draw your attention to the restriction set out on the title page regarding reproduction of the report.

Yours faithfully,

Richard A. Jones.

R.A. Jones
Head of Building Section

TE 84257

Non-combustibility test

Tecroc Products Ltd.

Non-combustibility test to B.S. 476 : Part 4 : 1970 on Tecgrout CS

Tecroc Products Ltd., Holly Lane Industrial Estate, Atherstone, Warwickshire, CV9 2RN

November 1993

SUMMARY

A sample of Tecgrout CS, was submitted to a non-combustibility test in accordance with B.S. 476 : Part 4 : 1970 on 16 November 1993. The material is deemed to be non-combustible.

1 OBJECTIVE

To classify Tecgrout CS, as combustible or non-combustible when submitted to the non-combustibility test specified in British Standard 476 : Part 4 : 1970[1], at the request of Tecroc Products Ltd.

2 SAMPLE

2.1 The material was stated by the sponsor to be Tecgrout CS, a high strength, non shrink, cementitious grout.

2.2 No further details of the composition of the material have been given by the sponsor.

2.3 The sample was received on 9 November 1993.

2.4 The material was supplied as six specimens each measuring approximately 40mm x 40mm x 50mm.

3 CONDITIONING

3.1 The specimens were dried in a ventilated oven for 24 hours at 60 $\pm$ 5°C and then cooled to ambient temperature in a desiccator containing anhydrous calcium chloride.

3.2 The dry densities of the specimens immediately prior to the test were:

Specimen	Density kg/m^3
1	2003
2	2005
3	2031

4 PROCEDURE

4.1 The test was carried out on 16 November 1993.

4.2 The ambient temperature at the time of test was 18°C.

4.3 Three specimens were subjected to the test.

4.4 Temperatures were determined by two thermocouples one of which was located at mid-height in the furnace 10mm from the furnace wall, and the other inserted in the centre of the specimen. The temperatures were plotted continuously throughout the test.

4.5 The occurrence and duration of any flaming in the furnace was noted.

5 RESULTS

The following table shows the maximum temperature and temperature rise in the furnace and in the specimen, and the period of flaming for each specimen.

Specimen	Furnace temperature before test	Maximum temperature		Temperature rise		Flaming
		Furnace	Specimen	Furnace	Specimen	
	°C	°C	°C	°C	°C	s
1	745	748	674	3	-	0
2	744	753	679	9	-	0
3	751	759	680	8	-	0

6 CLASSIFICATION

The material is deemed to be non-combustible if, during the test, none of the three specimens either:

a) causes the temperature reading from either of the two thermocouples to rise by 50°C or more above the initial furnace temperature, or

b) is observed to flame continuously for 10s or more inside the furnace.

Otherwise the material is said to be combustible.

7 CONCLUSION

A sample of Tecgrout CS, as described in this report, when tested and classified in accordance with B.S. 476 : Part 4 : 1970 did not exceed the limits imposed by the standard for flaming and temperature rise, the material is therefore deemed to be non-combustible.

8 REFERENCE

1 Fire tests on building materials and structures. Part 4. Non-combustibility test for materials. British Standard 476 : Part 4 : 1970. British Standards Institution, London, 1970.

Test and report by:

S. Warbus (Miss)
Technical Officer

SW/MB
24 November 1993

Approved by:

R.A. Jones
Head of Building Section

P.J. Field
Laboratory Manager