



TECHNICAL REPORT

**Exposure procedure
for accelerated ageing of
glass reinforced unsaturated
polyester resins by two-hour
water boil**

TR 014
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Foreword

EOTA Technical Reports are developed as supporting reference documents to European Technical Approval Guidelines and can also be applicable to a Common Understanding of Assessment Procedures, an EOTA Comprehension Document or an European Technical Approval, as far as reference is made therein.

EOTA Technical Reports go into detail in some aspects and express the common understanding of existing knowledge and experience of the EOTA bodies at a particular point in time.

Where knowledge and experience is developing, especially through approval work, such reports can be amended and supplemented.

When this happens, the effect of the changes upon the European Technical Approval Guidelines will be laid down in the relevant comprehension documents, unless the European Technical Approval Guideline is revised.

This EOTA Technical Report has been prepared by the EOTA Working Group 04.02/01 – “Liquid applied roof waterproofing Kits” and endorsed by EOTA.

1 Scope

This EOTA Technical Report specifies the method for accelerated ageing by two-hour water boil of glass reinforced unsaturated polyester resins, to determine the possible effect of this exposure on various characteristics by comparative testing.

2 Principle

The conditioning of samples is performed by exposure to boiling water for a period of two hours.

3 Apparatus

3.1 Flask

A five-litre glass round bottomed flange flask.

3.2 Connector

A socketed flat flanged lid for connecting between flask and condenser.

3.3 Condenser

To condense water vapour driven off by boiling to ensure a constant volume of water.

3.4 Heater

An electric heating mantle to provide uniform heating to the flask.

3.5 Timer

A suitable timer capable of measuring a two-hour time period.

4 Test specimen

The test specimen is a free sample of the installed, cured roof waterproofing kit of sufficient size to enable the test specimen required by the specific test method to be produced after exposure.

5 Procedure

5.1 Fill flask to 2/3 full using distilled or deionised water.

5.2 Heat water to boiling using heating mantle.

5.3 Add prepared specimens to water, start timer, connect condenser and start condenser.

5.4 After two-hour water boil remove lid, remove specimens, remove surface water from the specimens and allow them to cool.

5.5 Prepare appropriate test specimens for specified test method(s) for evaluation of effects of exposure on the cured roof waterproofing kits as specified in Part 3 of ETAG 005.

6 Test report

The test report shall include the following information:

- a. reference to this EOTA Technical Report;
- b. the name of the testing laboratory;
- c. date / period of exposure;
- d. a description of the installed product, including shape/dimensions and substrate(s);
- e. type of exposure. Temperature and period of time;
- f. all visual observations;
- g. results of evaluation of exposure effects;
- h. all operating details, not specified in this Technical Report, as well as incidents likely to have influenced the process.