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

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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;

h. 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.