

related test method	ETAG 018-3: GUIDELINE FOR EUROPEAN TECHNICAL APPROVALS OF FIRE PROTECTIVE PRODUCTS PART 3: RENDERINGS AND RENDERING KITS INTENDED FOR FIRE RESISTING APPLICATIONS
subject	Fire protective products - evaluation of primers
reference of original query	TC2 N705, Helpdesk 2013-11 & N714rev2

Problem

How shall the evaluation of alternative primers for product covered by ETAG 18-03 be performed?

The requirements of ETAG 18 part “: Fire protective products – renderings and rendering kits intended for fire resisting application required the evaluation of the primer. The way to evaluate primer is defined but can be subject to interpretation. The revised version of the ETAG 18 part 3 involves a modification on the evaluation of primers. But the new text still does allow interpretation.

In section 5.0.5.2.2:

“All tests/assessments according to 5.2 to 5.7 shall be carried out with a primer chosen by the applicant. However, where the rendering is intended to be used with more than one primer, or with no primer, an insulation efficiency test (as specified in Annex, E9) is necessary for the additional primers. When fire tests are carried out without a primer, the efficiency test can be also used to assess the use of primers. Only one primer from a primer family is subjected to testing. ”

The first sentence of the new version specifies “all tests ...5.7 shall be carried out with a primer..etc”

And afterwards another sentence specifies “when fire tests are carried out without a primer, the efficiency test can be also used to assess the use of primers”.

These two sentences are specifying opposite instructions.

The two interpretations are:

1- If the manufacturer wants to declare primers. The Fire resistance test (EN 13381-4) shall be performed with one primer chosen by the applicant. The other primers and the bare metal can be

accessed via the insulation tests. If the manufacturer has assessed the product without primer, the validation of primers cannot be performed with only insulation tests.

2- The manufacturer chooses to perform the 1st test (fire resistance test : EN 13381-4) with or without primer and all other possibilities are assessed via the insulation efficiency test

Recommendation

The ETAG 018-3, clause 5.0.5.2.2, should read as follows:

5.0.5.2.2 Corrosion protection primers, specific or generic

[...]

All tests/assessments according to 5.2 to 5.7 shall be carried out with a primer chosen by the applicant. However, where the rendering is intended to be used with more than one primer, or with no primer, an insulation efficiency test (as specified in Annex, E9) is necessary for the additional primers. Only one primer from a primer family is subjected to testing.

That means:

1- If the initial test was performed on bare steel: a fire test is required (EN 13381-4 including loaded element and its reference section at least for maximum thickness of rendering) for at least one primer in order to determine a new correction factor for stickability when using a primer and the other primers can be assessed with an insulation efficiency test.

2 - If the initial test was performed with a primer: an insulation efficiency test is required to assess other primers and bare steel