

## Technical Annex to RAL-GZ 716 Edition January 2023

### Ongoing amendments to the Quality and Test requirements for immediate implementation; Issue status: November 2024

#### A.2.2.10 or A.4.3 Repeat testing in external monitoring

Impact resistance at low temperature: In the event of a negative test as part of external monitoring, a Charpy notched impact strength test procedure C can be carried out at the request of the profile manufacturer as a validation test to prove sufficient plasticization.

#### A.3.2.2 Formulation of PVC virgin material type test

Provisional temporary approval of a new formulation for climate S is possible if the following points are proven:

- In-house proof of positive weather fastness and weather resistance after artificial weathering S12;
- Commissioning of a testing laboratory for S12 weathering;

As well as either

- Resistance to artificial weathering for climate M8 in accordance with A.2.2.14 by an external testing laboratory (e.g. CSTB, SKZ, PSM);

or

- Resistance to natural weathering according to QB 34.03 (24 months Bandol) by CSTB.

#### A.3.3.2 Coating for KAT.5 type testing

The option of clustering (achromatic) colors has been removed (the corresponding text from A.3.3.2 has been deleted). Each color must be tested ("chromatic" colors and metallic anyway, now also "achromatic" colors).

Weather fastness must be verified once for each type (coatings with the same structure) after exposure to 20 GJ/m<sup>2</sup> in climate M (M20). The selection of a "critical color" is made in consultation between GKFP, profile manufacturer and paint manufacturer.

#### A.3.4 Profiles KAT.4 type testing

The scope of the test is based on Table A-12 including weldability (corner breaking strength) and plus change in dimensions after exposure to heat and impact resistance at low temperature. If no impact point is defined on the non-laminated side of the profile, a profile suitable for this test must also be presented. This can be a profile laminated on the inside only or an unlaminated base profile.

#### A.4.2 External monitoring

d2) is omitted, i.e. there is no color measurement of the non-white formulation with limited UV resistance (also omitted in Table A-12).

Table A-11 The ash content test is omitted for colored formulations.

Table A-12 The Vicat softening temperature can alternatively be determined on a press plate.

#### D.5.1 Solar direct reflectance of the foil

C2) The validation of the test device is carried out by a testing laboratory designated by the GKFP.

#### E.5.2 FPC of the adhesive manufacturer

Table E-1 For low-viscosity primers, the viscosity can alternatively be measured using the DIN 4 cup according to DIN EN ISO 2431:2020-02.

#### New Annex K for statically effective cover profiles

The text will be sent by the office on request. Annex K will be integrated into the Technical Annex in the next publication.

#### P.3.14 Weldability

The body carrying out the test is responsible for producing the test specimens.

#### P.3.21 Solar direct reflectance

The PMMA layer must be applied to the original PVC formulation (no alternative substrate). The solar direct reflectance is only to be determined on a white base profile if the coextrusion is also only carried out on a white base profile.