



EUROPEAN ASSESSMENT DOCUMENT

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**EAVES PROFILES
FOR TERRACES AND BALCONIES**

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This European Assessment Document (EAD) has been developed taking into account available up-to-date technical and scientific knowledge at the time of issue and is established in accordance with the relevant provisions of Regulation (EU) No 305/2011 as a basis for the preparation and issuing of European Technical Assessments (ETA).

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1 SCOPE OF THE EAD

1.1 Description of the construction product

This EAD applies to eaves profiles for terraces and balconies. Eaves profiles are used for finishing edges of terraces and balconies. They are made of aluminium with a polyester coating. Profiles' shape and holes facilitate removing moisture from underneath the floor.

The product is not covered by a harmonised European standard (hEN).

Concerning product packaging, transport, storage, maintenance, replacement and repair it is the responsibility of the manufacturer to undertake the appropriate measures and to advise his clients on the transport, storage, maintenance, replacement and repair of the product as he considers necessary.

It is assumed that the product will be installed according to the manufacturer's instructions or (in absence of such instructions) according to the usual practice of the building professionals.

Relevant manufacturer's stipulations having influence on the performance of the product covered by this European Assessment Document shall be considered for the determination of the performance and detailed in the ETA.

1.2 Information on the intended use(s) of the construction product

1.2.1 Intended use(s)

Eaves profiles are intended to be used in balconies and terraces covered with stone, concrete or ceramic tiles, in waterproofing systems made from sealing mortar, bitumen mortar, PVC, EPDM or resin. The floors should have a slope of $1.5 \div 2$ % formed directly on the structural slab.

1.2.2 Working life/Durability

The assessment methods included or referred to in this EAD have been written based on the manufacturer's request to take into account a working life of eaves profiles for terraces and balconies for the intended use of 25 years when installed in the works (provided that the eaves profiles are subject to appropriate installation (see 1.2.1). These provisions are based upon the current state of the art and the available knowledge and experience.

When assessing the product the intended use as foreseen by the manufacturer shall be taken into account. The real working life may be, in normal use conditions, considerably longer without major degradation affecting the basic requirements for works¹.

The indications given as to the working life of the construction product cannot be interpreted as a guarantee neither given by the product manufacturer or his representative nor by EOTA when drafting this EAD nor by the Technical Assessment Body issuing an ETA based on this EAD, but are regarded only as a means for expressing the expected economically reasonable working life of the product.

¹ The real working life of a product incorporated in a specific works depends on the environmental conditions to which that works is subject, as well as on the particular conditions of the design, execution, use and maintenance of that works. Therefore, it cannot be excluded that in certain cases the real working life of the product may also be shorter than the assumed working life.

2 ESSENTIAL CHARACTERISTICS AND RELEVANT ASSESSMENT METHODS AND CRITERIA

2.1 Essential characteristics of the product

Table 1 shows how the performance of eaves profiles for terraces and balconies is assessed in relation to the essential characteristics.

Table 1 Essential characteristics of the product and methods and criteria for assessing the performance of the product in relation to those essential characteristics

No	Essential characteristic	Method of verification and assessment	Type of expression of product performance
Basic Works Requirement 2: Safety in case of fire			
1	Reaction to fire	See clause 2.2.1	Class
Basic Works Requirement 4: Safety and accessibility in use			
2	Geometry	See clause 2.2.2	Description
3	Corrosion resistance Polyester coating characteristics	See clause 2.2.3	Level, description

2.2 Methods and criteria for assessing the performance of the product in relation to essential characteristics of the product

2.2.1 Reaction to fire

The eaves profiles shall be tested, using the test method(s) relevant for the corresponding reaction to fire class, in order to be classified according to EN 13501-1 and Commission Delegated Regulation (EU) 2016/364.

2.2.2 Geometry

The nominal values of length, width and thickness of aluminium profiles shall be given in the ETA. No test result shall deviate from the nominal value by more than the tolerances given in EN 755-9.

2.2.3 Corrosion resistance. Polyester coating characteristics

2.2.3.1 Coating thickness

Polyester coating thickness shall be determined in accordance with EN ISO 2360. The minimal thickness of the polyester coating shall be equal or greater than 60 µm.

2.2.3.2 Adhesion

The adhesion of the polyester coating shall be determined in accordance with EN ISO 2409. The result of the test of adhesion shall be 0.

2.2.3.3 Indentation

The indentation of the polyester coating shall be determined in accordance with EN ISO 2815. The minimal indentation of the polyester coating shall be equal or greater than 80.

2.2.3.4 Acetic acid salt spray resistance

Acetic acid salt spray resistance of the polyester coating shall be determined in accordance with EN ISO 9227. After 1000 hours of testing no blistering in excess of 2 (S2) according to ISO 4628-2. An infiltration of maximum 16 mm² is allowed over a scratch length of 10 cm but the length of any single infiltration shall not exceed 4 mm.

2.2.3.5 Resistance to humid atmospheres containing sulphur dioxide

Polyester coating's resistance to humid atmospheres containing sulphur dioxide shall be determined in accordance with EN ISO 3231 (0,2 l SO₂ - 24 cycles). No infiltration exceeding 1 mm on both sides of the scratch, and no change in colour or blisters in excess of 2 (S2) according to ISO 4628-2.

3 ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE

3.1 System(s) of assessment and verification of constancy of performance to be applied

For the products covered by this EAD the applicable European legal act is: Decision 1998/436/EC.

The system is: 3.

3.2 Tasks of the manufacturer

The cornerstones of the actions to be undertaken by the manufacturer of the unframed glass doors in the procedure of assessment and verification of constancy of performance are laid down in Table 2.

Table 2 Control plan for the manufacturer; cornerstones

No	Subject/type of control	Test or control method	Criteria, if any	Minimum number of samples	Minimum frequency of control
Factory production control (FPC) including testing of samples taken at the factory in accordance with a prescribed test plan					
1	Dimensions	According to delivery documents	2.2.2		Every delivery
2	Aluminium alloy		EN 573-3		
3	Polyester coating thickness	2.2.3		10	
4	Polyester coating appearance	Visual examination	The organic coating shall not have any scratches through to the base metal. None of the defects listed below shall be visible from a distance of 3 metres: excessive roughness, runs, blisters, inclusions, craters, dull spots, pinholes, pits, scratches or any other unacceptable flaws. The organic coating shall be of even colour and gloss with good hiding power.		

4 REFERENCE DOCUMENTS

As far as no edition date is given in the list of standards thereafter, the standard in its current version at the time of issuing the European Technical Assessment, is of relevance.

EN 573-3	Aluminium and aluminium alloys – Chemical composition and form of wrought products – Chemical composition and form of products
EN ISO 2815	Paints and varnishes – Buchholz indentation test
EN ISO 2360	Non-conductive coatings on non-magnetic electrically conductive basis materials – Measurement of coating thickness – Amplitude-sensitive eddy-current method
EN ISO 2409	Paints and varnishes – Cross-cut test
EN ISO 3231	Paints and varnishes – Determination of resistance to humid atmospheres containing sulphur dioxide
ISO 4628-2	Paints and varnishes – Evaluation of degradation of coatings – Designation of quantity and size of defects, and of intensity of uniform changes in appearance – Assessment of degree of blistering
EN ISO 9227	Corrosion tests in artificial atmospheres – Salt spray tests
EN 13501-1	Fire classification of construction products and building elements – Part 1: Classification using data from reaction to fire tests