



Approval body for construction products and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and Laender Governments



European Technical Assessment

ETA-16/0789 of 31 October 2016

English translation prepared by DIBt - Original version in German language

General Part

Technical Assessment Body issuing the Deutsches Institut für Bautechnik **European Technical Assessment:** Trade name of the construction product Absturzsicherung Primo 2 AD Personal Fall-Protection System Primo 2 AD Product family Anchor Devices for Fastening Personal Fall Protection to which the construction product belongs Systems to Concrete Structures Manufacturer Sicherheitskonzepte Breuer GmbH Broekhuysener Straße 40 47638 Straelen DEUTSCHLAND Manufacturing plant Sicherheitskonzepte Breuer GmbH Broekhuysener Straße 40 47638 Straelen DEUTSCHLAND This European Technical Assessment 6 pages including 2 annexes which form an integral part contains of this assessment This European Technical Assessment is European Assessment Document (EAD) 331072-0601, issued in accordance with Regulation (EU) "Anchor Devices for Personal Fall Protection Systems No 305/2011, on the basis of Fastened to Concrete Structures"

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Specific part

1 Technical description of the product

The subject of this assessment is the fall protection system Primo 2 AD. This fall protection system is made of stainless steel. It is fastened to reinforced normal weight concrete (cracked or uncracked), strength classes C20/25 to C50/60 according to EN 206. The fall protection system Primo 2 AD is fastened to the concrete with the anchor bolt FAZ II 12/10 A4¹.

The components and the system setup of the product are given in Annex 1.

2 Specification of the intended use in accordance with the applicable EAD 16-33-1072-06.01 – Anchor Devices for Fastening Personal Fall Protection Systems to Concrete Structures

The fall protection system Primo 2 AD is used to protect operators working at height (max. 3 persons at once), by arresting them in a fall. The operators attach themselves to the eye using e.g. ropes and karabiners. In the case of a fall the fall protection system Primo 2 AD prevents the fall and resulting physical damage assuming the correct usage by the operator. The fall protection system Primo 2 AD is designed for use in all areas of industry, construction and maintenance.

The fall protection system Primo 2 AD is intended to be used, fastened or inserted on flat roofs or other flat planes made of concrete only. The direction of force therefore shall be perpendicular (90° \pm 5 %) to the fastening element. Thus use at a (concrete-) wall is intended only when the direction of force still applies at a 90 ° angle to the fastening axis.

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the fall protection system Primo 2 AD of at least 25 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

3 Performance of the product and references to the methods used for its assessment

3.1 Mechanical resistance and stability (BWR 1)

Essential characteristic	Performance
Not relevant	

3.2 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire	No Performance assessed
Resistance to fire	No Performance assessed



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3.3 Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance
Not relevant	

3.4 Safety and accessibility in use (BWR 4)

Essential characteristic	Performance
Static loading	Level(12 kN), see Annex 2
Dynamic loading	Level (3 users)
Check of deformation capacity in case of constraining forces	Description(9 mm at 0.7 kN)
Durability	No performance assessed

3.5 **Protection against noise (BWR 5)**

Essential characteristic	Performance
Not relevant	

3.6 Energy economy and heat retention (BWR 6)

Essential characteristic	Performance
Not relevant	

3.7 Sustainable use of natural resources (BWR 7)

Essential characteristic	Performance
Not relevant	

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

In accordance with EAD No. 16-33-1072-06.01, the applicable European legal act is: Decision 98/436/EC.

The system to be applied is: 3

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with Deutsches Institut für Bautechnik.

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Uwe Bender Head of Department *beglaubigt:* Hahn

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Design values at impact

 $N_{\mathsf{F},\mathsf{d}} = N_{\mathsf{F},\mathsf{k}} \cdot \gamma_{\mathsf{F}}$

For Germany a partial safety factor γ_F of 1.5 is recommend.

The recommended partial safety factor is used in order to determine the corresponding design resistances, provided no values are given in national regulations of the member state in which the Primo 2 AD is used. That leads to the following values:

 $\begin{array}{ll} \underline{Example}: & \mbox{for one User: } N_{F,d} = N_{F,k} \cdot \gamma_F = 6 \ \mbox{kN} \cdot 1.5 = 9 \ \mbox{kN} \\ & \mbox{for two Users: } N_{F,d} = N_{F,k} \cdot \gamma_F = (6+1) \ \mbox{kN} \cdot 1.5 = 10.5 \ \mbox{kN} \\ & \mbox{for three Users: } N_{F,d} = N_{F,k} \cdot \gamma_F = (6+2) \ \mbox{kN} \cdot 1.5 = 12 \ \mbox{kN} \end{array}$

Design values at impact

Annex 2