

# GRESPANIA TECHNICAL SOLUTIONS

VENTILATED FACADE  
PORCELAIN TILES- CONCEALED CLAMPS



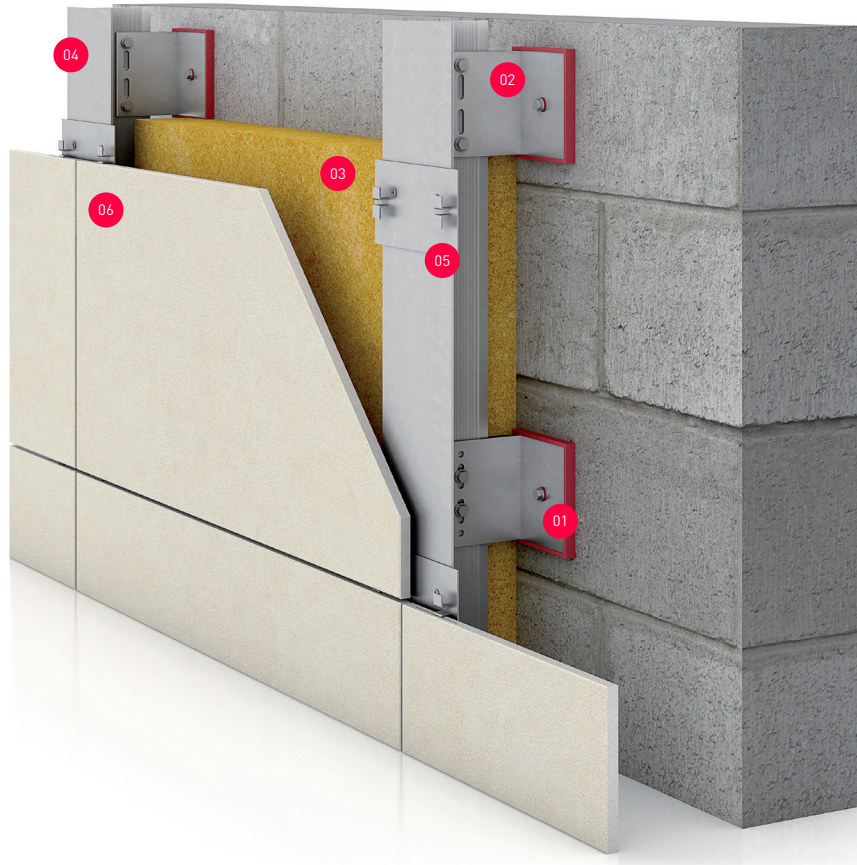
**GRESPANIA**  
CERAMICA



# 1. TECHNICAL PROPOSAL

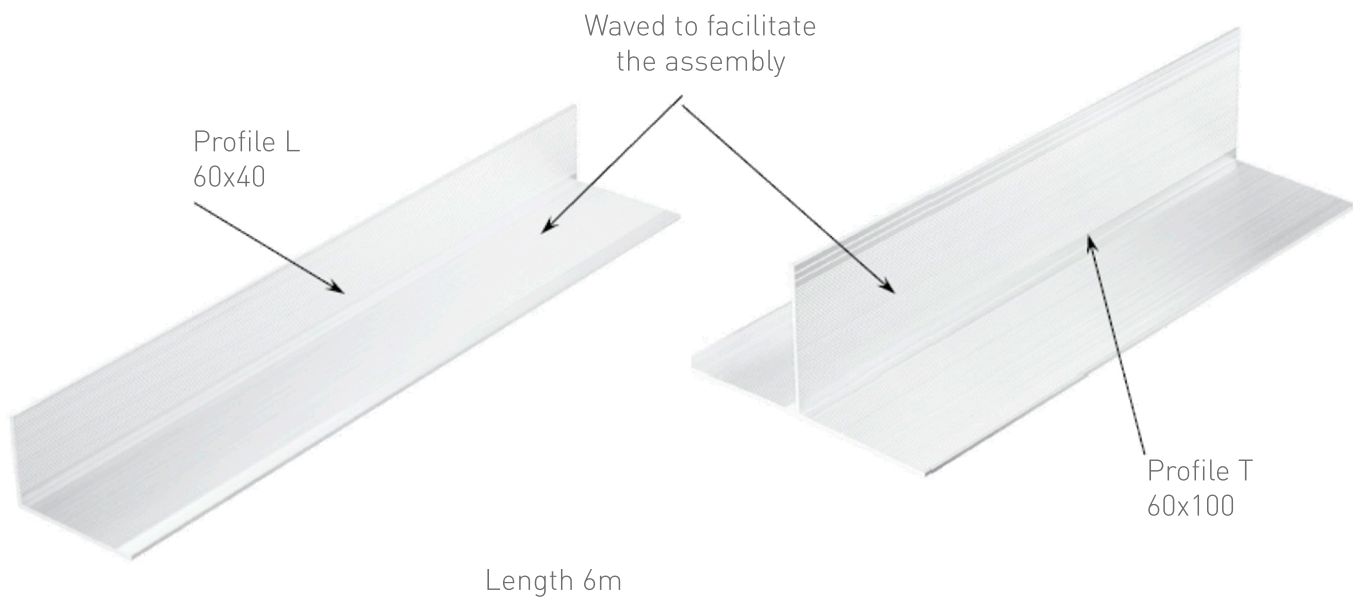
## 1.1 System of anchorage with vertical profile

- 01 ANCHORAGE
- 02 BRACKET
- 03 INSULATION
- 04 "T" PROFILE
- 05 FIXING CLIP
- 06 PORCELAIN TILE



### PROFILES

L and T profiles are waved to facilitate the assembly.

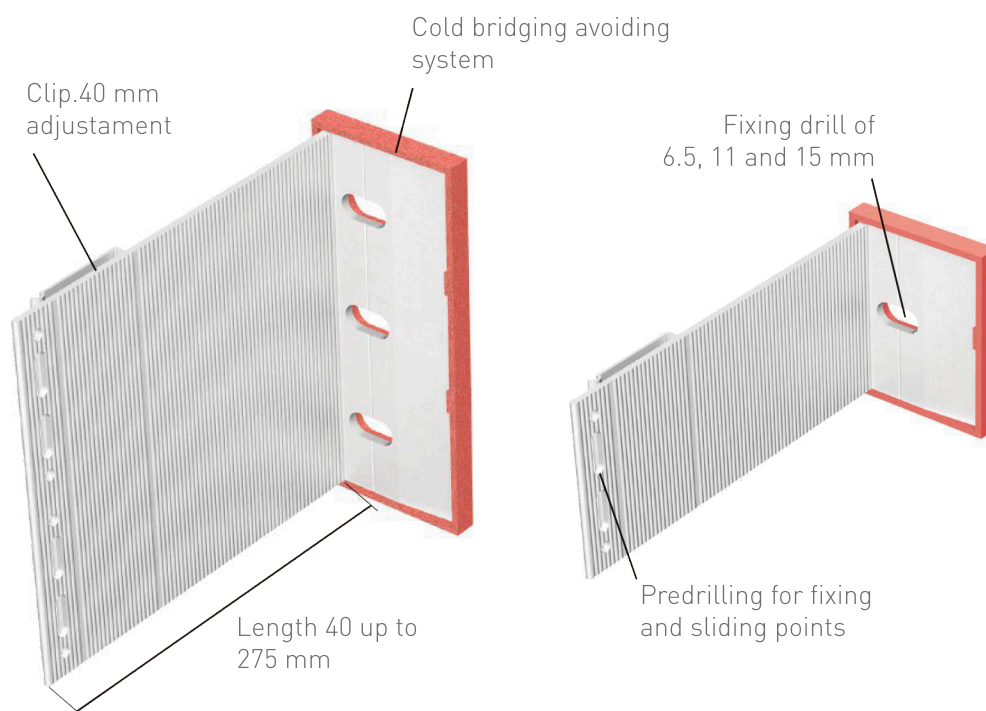




## 1. TECHNICAL PROPOSAL

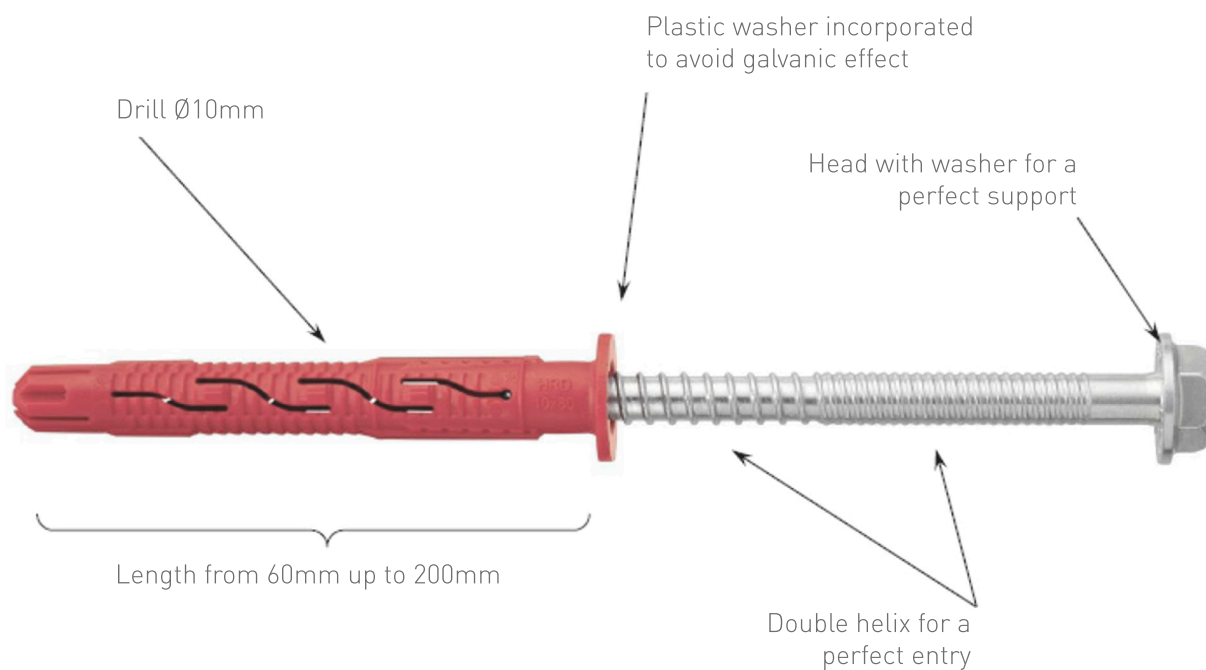
### 1.1 System of anchorage with vertical profile

#### BRACKET



#### ANCHORAGE

Anchorage with ETA homologation for different materials (both brick and concrete). Complete façade with one type of anchorage.



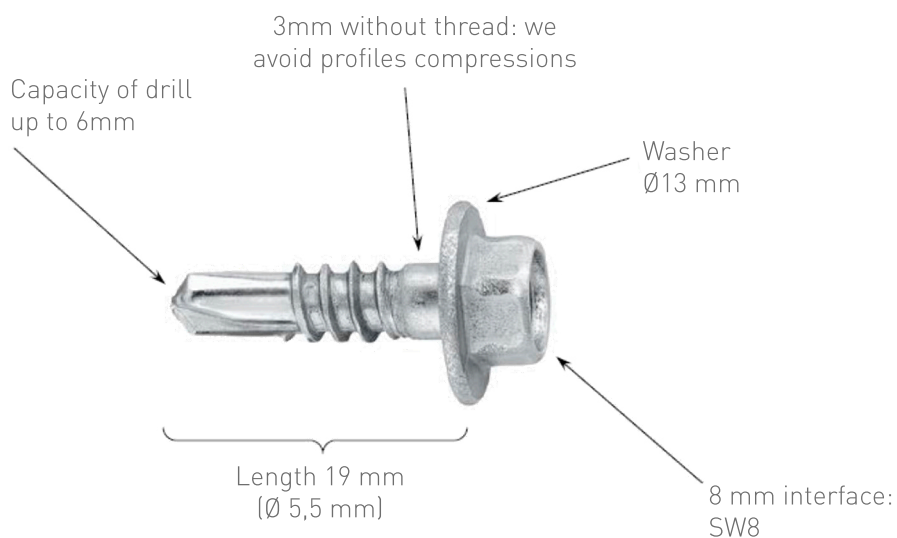


## 1. TECHNICAL PROPOSAL

### 1.1 System of anchorage with vertical profile

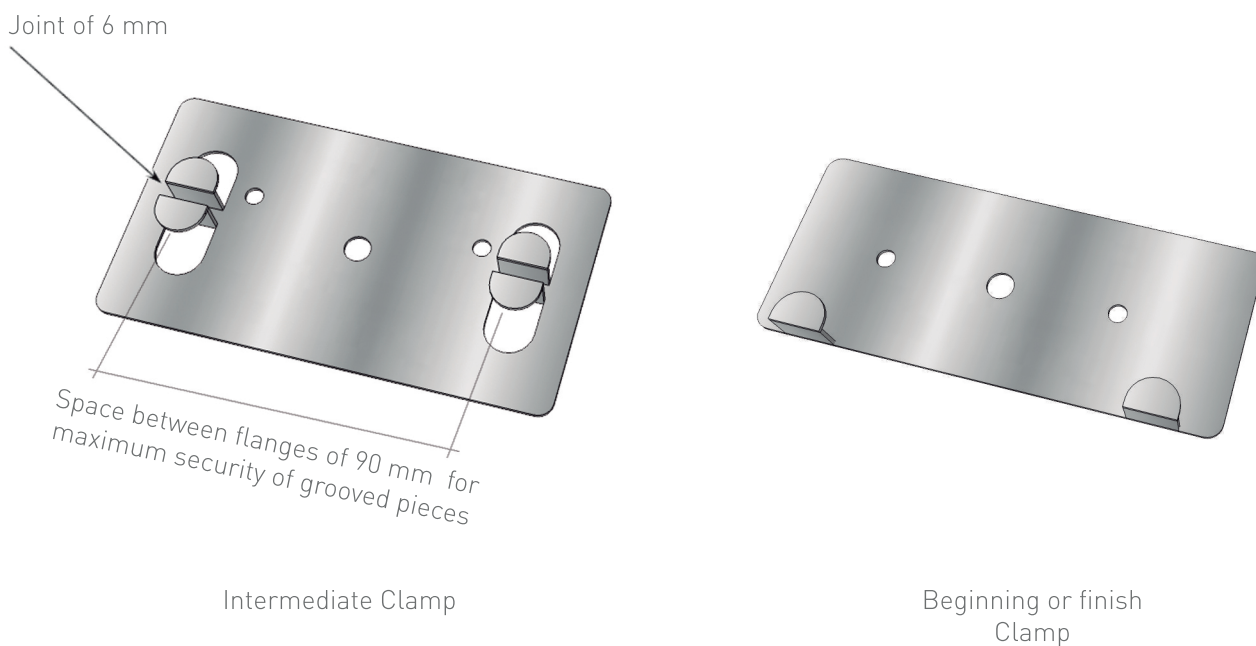
#### SELF-DRILLING SCREW

Self-drilling screw with homologation for connections aluminium-aluminium.



#### CONCEALED CLAMPS

Clamps of stainless steel, specially designed for ceramic pieces with possibility of lacquer to avoid sheens and to hide the clamp.

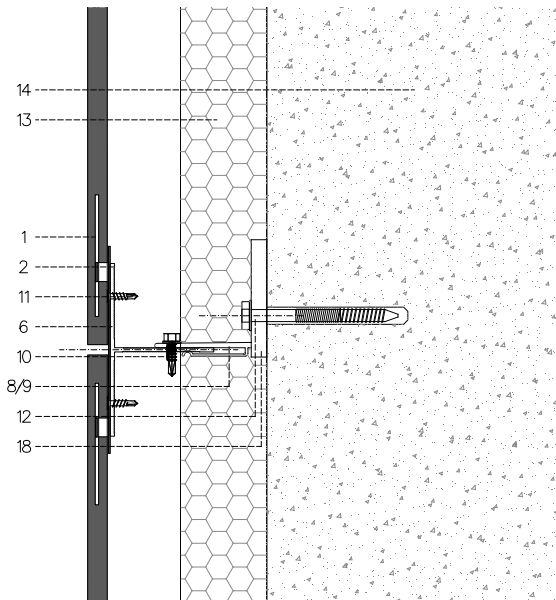




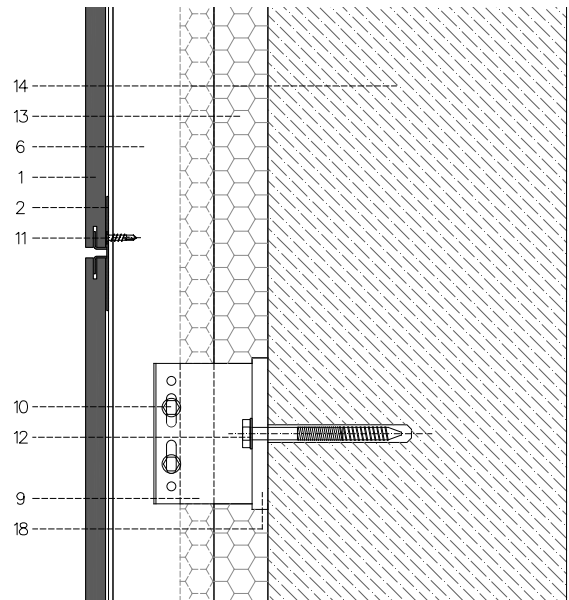
# 1. TECHNICAL PROPOSAL

## 1.2 Constructive details System Clamp Conceals

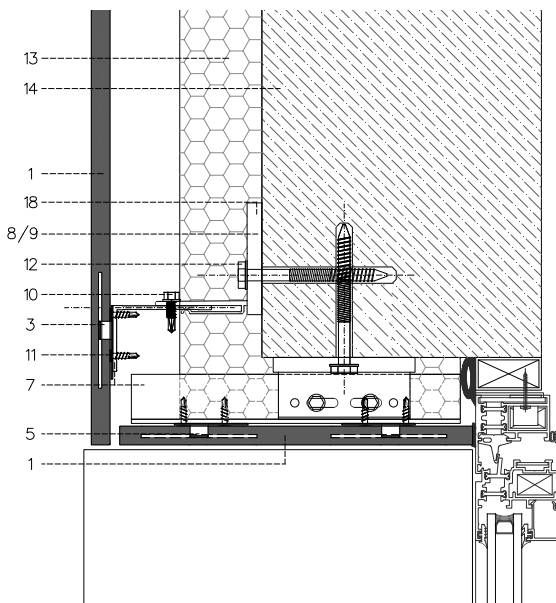
PLANT



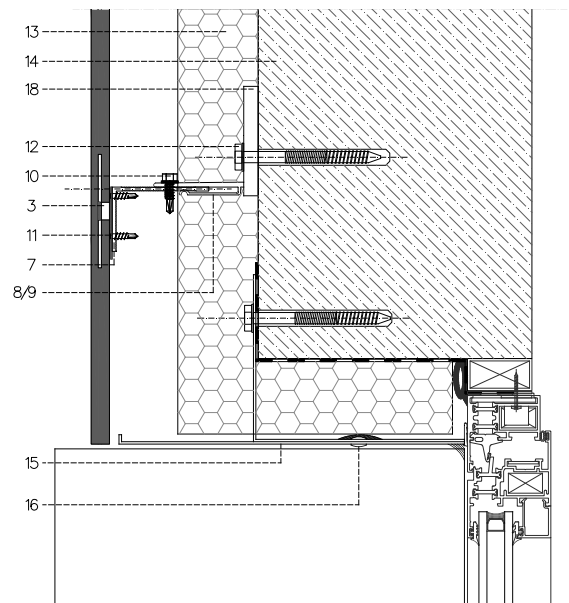
SECTION



CERAMIC JAMB



METAL JAMB



- 01 GRESPIAN PORCELAIN TILE
- 02 STAINLESS STEEL CENTRAL DOUBLE CLIP
- 03 STAINLESS STEEL CENTRAL SINGLE CLIP
- 04 STAINLESS STEEL DOUBLE MOUNTING CLIP
- 05 STAINLESS STEEL DOUBLE MOUNTING CLIP

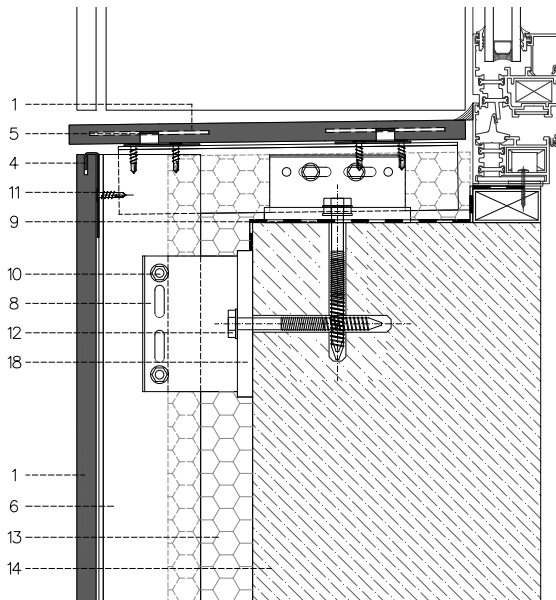
- 06 ALUMINIUM T-PROFILE
- 07 ALUMINIUM L-PROFILE
- 08 ALUMINIUM RETAINING BRACKET, FIXED POINT
- 09 ALUMINIUM RETAINING BRACKET, SLIDING
- 10 STAINLESS STEEL OCTAGONAL-HEAD SELF-TAPPING SCREW



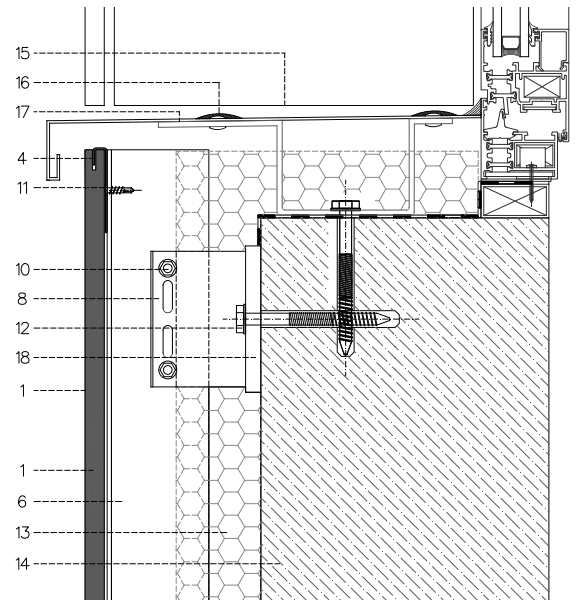
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## 1.2 Constructive details System Clamp Conceals

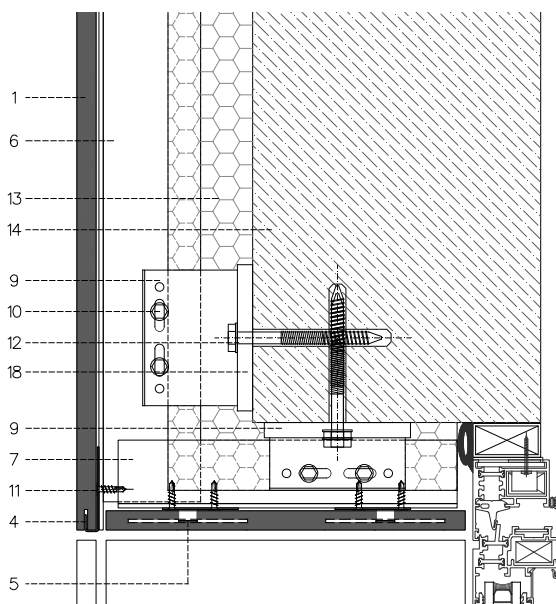
CERAMIC FLASHING



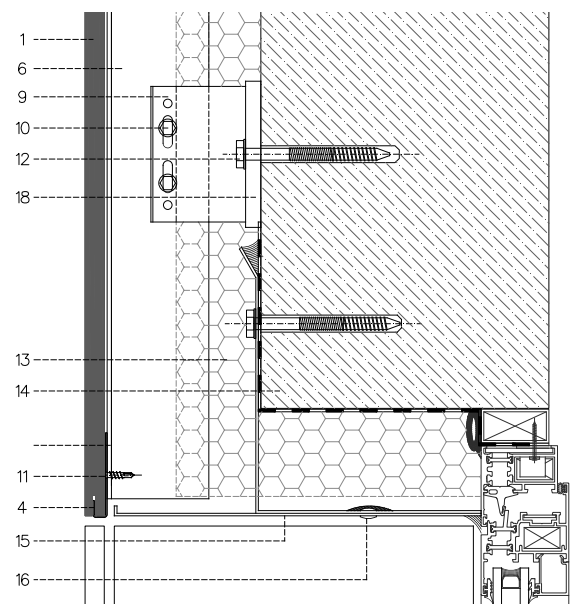
METAL FLASHING



CERAMIC LINTEL



METAL LINTEL



- 11 STAINLESS STEEL FLAT-HEAD SELF-TAPPING SCREW
- 12 ETA-APPROVED ANCHOR
- 13 THERMAL INSULATION
- 14 LOAD-BEARING WALL
- 15 METALLIC BORDER

- 16 RIVET + SEALANT
- 17 OMEGA BRACKET
- 18 THERMAL BRIDGE BREAK



## 2. ANNEXES

### 2.1 Referent Projects

Residential Building  
Santiago de Compostela  
Model Homestone 45x90 Negro



Hospital in Almería  
Model Homestone 45x90  
Blanco y Negro





2. ANNEXES

2.2 Certificates

**Deutsches Institut für Bautechnik**  
 Institut für Bautechnik  
 Akkreditiert nach DIN EN ISO 9001  
 Akkreditiert nach DIN EN ISO 14001  
 Akkreditiert nach DIN EN ISO 45001  
 Mitglied der EOTA

**European Technical Approval ETA-07/0219**  
 English translation prepared by DIBt - Original version in German language

**Handelsbezeichnung**  
 Produktname: HSB Rahmenlöcher HRO  
 HSB frame anchors HRO

**Zulassungsinhaber**  
 Hersteller: HSB Aktiengesellschaft  
 Business Unit Anchor  
 3434 SÜLEN  
 FÜRSTENTUM LIECHTENSTEIN

**Zulassungsgegenstand und Verwendungszweck**  
 Gegenstand: Kunststoffanker als Mehrfachbefestigung von nichttragenden Systemen zur Verankerung im Beton- und Mauerwerk  
 Verwendungszweck: Plastic anchor for multiple use in concrete and masonry for non-structural applications

**Geltungsdauer**  
 vom: 1 February 2011  
 bis: 17 September 2012

**Herstellertechnik**  
 Manufacturing plant: HSB Werke

Diese Zulassung umfasst 25 Seiten einschließlich 14 Anhänge  
 This approval consists of 25 pages including 14 annexes

Diese Zulassung ersetzt ETA-07/0219 mit Geltungsdauer vom 12.08.2010 bis 17.09.2012  
 This approval replaces ETA-07/0219 with validity from 12.08.2010 to 17.09.2012

**EOTA**  
 Europäische Organisation für Technische Zulassungen  
 European Organisation for Technical Approvals

European Technical Approval  
ETA-07/0219

Technical European homologation of the fixation system

**KIT**  
 Karlsruher Institut für Technologie  
 Versuchsanstalt für Stahl, Holz und Steine  
 (amtliche Materialprüfungsanstalt)  
 Karlsruher Institut für Technologie (KIT)  
 Leitung: Univ.-Prof. Dr.-Ing. H. J. Baus und Univ.-Prof. Dr.-Ing. T. Ummenhofer

**Allgemeines bauaufsichtliches Prüfzeugnis**  
 - informative translation -

**No.: P-BWU02-128002-a**

**Object:**  
 Self-drilling screws  
 HSB S-AD D1 0 S,5xL  
 HSB S-AD D1 05 S,5xL

**Intended use:**  
 external wall cladding made of aluminium according to DIN 18516-1

**Customer:**  
 HSB AG  
 Feinkornstraße 100  
 76183 Ostheim  
 Improparty of Liechtenstein

**Date of issue:**  
 February 28, 2012

**Period of validity until:**  
 February 28, 2017

Based on this „Allgemeines bauaufsichtliches Prüfzeugnis“, the above object can be used according to the „Anforderungen“.

This „Allgemeines bauaufsichtliches Prüfzeugnis“ includes 8 pages and 4 annexes.  
 This „Allgemeines bauaufsichtliches Prüfzeugnis“ replaces the „Allgemeines bauaufsichtliches Prüfzeugnis“ issued on February 20, 2012.

KIT (Steel and Timber) Versuchsanstalt für Stahl, Holz und Steine  
 Karlsruhe Institute of Technology (KIT), D-76128 Karlsruhe, Deutschland  
 Tel: +49 (0)71 438 4226  
 Fax: +49 (0)71 438 4478

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Karlsruher Institut für Technologie  
(KIT) P-BWU02-128002-a

Homologation for fixings  
Aluminium - aluminium

**EUROFOX GmbH**  
 Compagnie 10  
 A-1201 Grottohofstrasse  
 Austria  
 Tel: +43 2627 40400 Fax: +43 2627 404040  
 e-mail: eurofox@eurofox.com  
 website: www.eurofox.com

**BBA**  
 British Board of Agreement  
 Agreement Certificate  
 13/5063  
 Product Sheet 1

**HELIX EUROFOX RAINSCREEN SYSTEMS**  
**HELIX EUROFOX RAINSCREEN CLADDING SUPPORT SYSTEMS**

This Agreement Certificate (Product Sheet) refers to the HELIX Eurofox Rainscreen Cladding Support System, comprising a range of aluminium brackets and self-drilling screws used in a substrate to support cladding on the exterior or internal wall structure of new or existing buildings.

**CERTIFICATION INCLUDES:**

- System relating to compliance with Building Regulations where applicable
- System relating to additional non-regulatory information where applicable
- Independently verified technical specification
- Assessment criteria and technical investigations
- Design considerations
- Installation guidance
- Regular surveillance of production
- Limited responsibility system

**KEY FACTORS ASSESSED:**

- Mechanical resistance and stability** – The system can be designed to support the cladding and to transfer the design loads to the substrate and structure (see section 6).
- Behaviour in relation to fire** – In respect of reaction to fire, the support systems may be regarded as having a class 0 surface or low risk – in accordance with the national building regulations (see section 7).
- Drainage and ventilation** – An amount of water entering the cavity depends on the cladding and the joint type. Provided the provision of drainage and ventilation is made, the system will remove any water collecting in the cavity due to rain and condensation (see section 8).
- Durability** – The support systems will have a service life commensurate with that of the cladding panels they are supporting (see section 10).

The BBA has provided this Certificate to the company named above for the systems described herein. These systems have been assessed by the BBA on being fit for their intended use provided they are installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agreement  
 Date of first issue: 28 October 2013  
 Brian Chamberlain Head of Approvals – Engineering  
 Chris Curtis Thomas Chief Executive

The BBA is a UKAS accredited certification body – Number 111. For details of the current scope of accreditation to product certification, visit us at [www.bba.org.uk](http://www.bba.org.uk) or call 0800 900 0000.

**British Board of Agreement**  
 10 South Lane  
 Woking, Surrey GU24 0PU  
 United Kingdom  
 Tel: 01753 663301  
 Fax: 01753 663301  
 e-mail: [info@bba.org.uk](mailto:info@bba.org.uk)  
 website: [www.bba.org.uk](http://www.bba.org.uk)

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BBA Agreement Certificate  
13/5063

Homologation of the systems of structure supports

# GRESPANIA

CERAMICA

GRESPANIA S.A.  
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12080 Castellón  
tel +34 964 34 44 11  
fax +34 964 34 44 01  
mail@grespania.com

GRESPANIA S.A dispone de un sistema de gestión certificado de acuerdo a las normas ISO 9001:2008 certificado N° 44 100 127697 e ISO 14001:2004 certificado N° 44 104 127697 en sus plantas de NULES y CASTELLÓN

GRESPANIA S.A. uses a managment system within its facilities of Nules and Castellón in accordance with ISO 9001:2008 certificate N° 44 100 127697 and ISO 14001:2004 certificate N° 44 104 127697