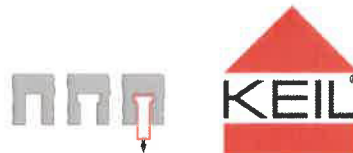




## Declaration of Performance

DoP Nr. 0793-CPR-8.1-17



1. Unique Identification code of the product-type: **Panaria KEIL undercut anchor KH**
2. Type number: **KH 5,5; KH 7; KH 8,5**
3. Intended use or uses of the construction product: **Fastener for the rear fixing of facade panels made of ceramic plates (stoneware) in according to EN 14411:2012**
4. Manufacturer: **Panariagroup Industrie Ceramiche S.p.A., via Panaria bassa n. 22/A, 41034 Finale Emilia (MO), ITALY**
5. Authorised representative: -
6. System or systems of assessment and verification of constancy of performance: **System 2+**
7. Harmonised Standard: -
8. European evaluation document: **EAD 330030-00-0601**  
European Technical Assessment: **ETA-18/1109**  
Technical Assessment Body: **DIBt**  
Notified Body: **0793 – Güteschutz Beton**

9. Declared Performance:

**Mechanical resistance and stability (BWR 1)**

| Essential characteristic                             | Performance                                                              |
|------------------------------------------------------|--------------------------------------------------------------------------|
| Characteristic resistance for tension and shear load | See Annex C 1                                                            |
| Fastener distances and spacing                       | See Annex C 1                                                            |
| Durability                                           | Corrosion Resistance Class (CRC) III in accordance with EN 1993-1-4:2015 |

**Safety in case of fire (BWR 2)**

| Essential characteristic | Performance             |
|--------------------------|-------------------------|
| Reaction to fire         | Class A 1               |
| Resistance to fire       | No performance assessed |

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4. Signed for and on behalf of the manufacturer by:

**KEIL Befestigungstechnik GmbH**

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**Christian Schmidt**

Managing Director

Engelskirchen, 10.10.2019

**KEIL Befestigungstechnik GmbH**

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**Dipl.-Ing. Georg Miebach**

Product Manager

**Table C1: Characteristic values for the design of the anchor**

|                                           |            |            |      |     |      |     |
|-------------------------------------------|------------|------------|------|-----|------|-----|
| Embedment depth                           | $h_s =$    | [mm]       | 5,5  | 7,0 | 8,5  |     |
| Panel thickness                           | $h \geq$   | [mm]       | 8,0  | 9,5 | 11,0 |     |
| Characteristic resistance to tension load | Class A    | $N_{Rk} =$ | [kN] | 1,0 | 1,5  | 2,7 |
|                                           | Class B    |            |      | 1,1 | 1,6  | 2,8 |
|                                           | Class C    |            |      | 1,2 | 1,7  | 3,0 |
| characterisitc resistance to shear load   | Class A    | $V_{Rk} =$ | [kN] | 2,0 | 2,2  | 2,4 |
|                                           | Class B    |            |      | 2,1 | 2,3  | 2,5 |
|                                           | Class C    |            |      | 2,2 | 2,4  | 2,6 |
| edge distance <sup>1)</sup>               | $a_r \geq$ | [mm]       | 100  |     |      |     |
| spacing                                   | $a \geq$   | [mm]       | 200  |     |      |     |

<sup>1)</sup> The edge distance may be reduced to 50 mm. For edge distances  $50 \text{ mm} \leq a_r \leq 100 \text{ mm}$  the characteristic values of resistance for shear loads shall be reduced by the factor  $a_r/100$  [ $a_r$  in mm]; in case of different edge distances the smaller value is decisive

Panaria KEIL undercut anchor KH

**Performance**  
Characteristic values for the design of the anchor

Annex C 1