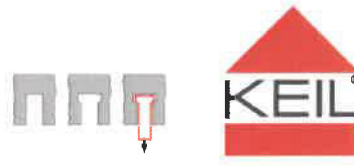




Declaration of Performance

DoP no. 0793-CPR-8.1-3



1. Unique Identification code of the product-type: **KEIL undercut anchor KH for glass fibre concrete skin panels "fibreC"**
2. Type number: **KH 8,5**
3. Intended use or uses of the construction product: **Fastener for rear fixing for facade panels made of glass fibre concrete skin panels according to EN 12467:2012**
4. Manufacturer: **Rieder Faserbeton-Elemente GmbH, Bergstraße 3a, 83059 Kolbermoor, GERMANY**
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-06/0220**
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
Characteristic resistance for wind loads	See Annex C 2 and C 3

Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire	Fasteners satisfy requirements for Class A 1
Resistance to fire	No performance determined

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

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Dipl.-Ing. Georg Miebach
Product Manager

Table 3: characteristic values of the anchor and the façade panel

characteristic value of glass fibre concrete panel "fibreC"	panel thickness	h =	[mm]	13	
	resistance to bending stress	σ_{RK} =	[N/mm ²]	16,2	
	partial safety factor ¹⁾	γ_M =	[-]	2,0	
	E-Modul	E =	[N/mm ²]	20.000 (10.000 ²⁾)	
	Poisson's ratio	ν =	[-]	0,2	
	heat coefficient	α_T =	[1/K]	10 x 10 ⁻⁶	
	dead load	g =	[kN/m ²]	0,27	
characteristic value of anchor KEIL - undercut anchor KH	resistance to ³⁾	tension load	N_{RK} =	[kN]	1,2
		shear load	V_{RK} =	[kN]	3,2
	partial safety factor ¹⁾	γ_M =	[-]	2,0	
	setting depth	$h_s \geq$	[mm]	8,5	
	edge distance	a_{rx} oder $a_{ry} \geq$	[mm]	60	
				0,1 x a	
	spacing	$a \leq$	[mm]	800	

¹⁾ in absence of other national regulations

²⁾ for verification in the serviceability state: $E = 10.000 \text{ N/mm}^2$

³⁾ in case of coincident stress of an anchor due to tension and shear load the following equation shall be

observed:
$$\frac{N_{Sd}}{N_{Rd}} + \frac{V_{Sd}}{V_{Rd}} \leq 1,1$$

KEIL undercut anchor KH for glass fibre concrete skin panels "fibreC"

Performances

characteristic values of the anchor and the façade panel

Annex C 1