## Declaration of Perfomances DoP HC-en



Product type: HC; hollow core slab anchor

**2.** Identification: HCM06

HCM08 HCM10

3. Intended use: Generic type: Torque controlled expansion for multiple use in non-

structural applications

Base material: Precast prestressed hollow core concrete slabs ≥ C40/50

Material: Carbon steel, ISO 4042 A2
Durability: Dry internal conditions
Loading: Static, quasi static loads

Fire resistance: FR120 Assumed working life: 50 years

4. Manufacturer: Index Fixing Systems. Técnicas Expansivas S.L.

Segador, 13

26006 Logroño, La Rioja, SPAIN

Authorised No applicable

representative:

**6.** System of 1 assessment of

assessment of performance:

7. Harmonised standard:

No applicable

8. European Tech. assessment IETcc; Instituto Eduardo Torroja de ciencias de la

technical body: construcción. Notified body 1219.

assessment: issued: ETAs 15/0912

on the basis of: ETAG 001, parts 1 and 6

performed: Determination of product type, initial inspection of the

manufacturing plant and continuous surveillance of FPC

under system: 1

and issued: Certificate CE 1219-CPR-0117

## 9. Declared performances

Characteristic values of resistance to loads of design method B					Performances					
					M8	M10				
All load directions										
F <sup>0</sup> <sub>Rk</sub>	Characteristic resistance in ≥ C40/50 prestressed hollow core slab:	d <sub>b</sub> ≥25; <30 mm	[kN]	3,5	5,0	8,0				
		d <sub>b</sub> ≥30; <40 mm	[kN]	7,0	10,0	10,0				
		d <sub>b</sub> ≥40 mm	[kN]	8,5	11,5	14,0				
γм	Partial safety factor: 1)		[-]	1,8	1,5	1,8				
S <sub>cr</sub>	Characteristic spacing:		[mm]	200	200	200				
C <sub>cr</sub>	Characteristic edge distance:		[mm]	100	100	100				
Shear load with lever arm										
$M^0_{Rk,s}$	Characteristic bending moment, steel class 6.8:		[Nm]	9,1	22,5	44,9				
γMs	Partial safety factor: 1)		[-]	1,25	1,25	1,25				
$M^0_{Rk,s}$	Characteristic bending moment, steel class 8.8:		[Nm]	12,2	30,0	59,9				
γMs	Partial safety factor: 1)	_	[-]	1,25	1,25	1,25				

<sup>1)</sup> In absence of other national regulations

Characteristic resistance under fire exposure in ≥C40/50 prestressed hollow			Performances							
core slabs for use in non structural applications in concrete			M6	M8	M10					
d <sub>b</sub>	Minimum slab bottom thickness for fire resistance:	[mm]	30	30	40					
Any load direction										
R30	Characteristic resistance F <sup>0</sup> <sub>Rk,fi30</sub> 1):	[kN]	0,20	0,37	0,87					
R60	Characteristic resistance F <sup>0</sup> <sub>Rk,fi60</sub> 1):	[kN]	0,18	0,33	0,75					
R90	Characteristic resistance F <sup>0</sup> <sub>Rk,fi90</sub> 1):	[kN]	0,14	0,26	0,58					
R120	Characteristic resistance F <sup>0</sup> <sub>Rk,fi120</sub> 1):	[kN]	0,10	0,18	0,46					
R30 to	Spacing s <sub>cr,fi</sub> :	[mm]	160	160	160					
R120	Edge distance c <sub>cr,fi</sub> :	[mm]	80	80	80					
Shear load with lever arm										
R30	Characteristic bending moment M <sup>0</sup> <sub>Rk,s,fi30</sub> :	[Nm]	0,15	0,38	1,12					
R60	Characteristic bending moment M <sup>0</sup> <sub>Rk,s,fi60</sub> :	[Nm]	0,14	0,34	0,97					
R90	Characteristic bending moment M <sup>0</sup> <sub>Rk,s,fi90</sub> :	[Nm]	0,11	0,26	0,75					
R120	Characteristic bending moment M <sup>0</sup> <sub>Rk,s,fi120</sub> :	[Nm]	0,08	0,19	0,60					

<sup>1)</sup> In absence of other national regulations the partial safety factor for resistance under fire exposure  $\gamma_{M,fi} = 1,0$  is recommended. Design under fire exposure is according to the design method given in TR020. The design equations are given in TR020, section 2.2.1.

**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 <sup>4</sup>

Signed on behalf of the manufacturer by:

Santiago Reig. Technical manager

Logroño, 26.05.2016

TR020 covers the design for fire exposure from one side. If fire attached is from more than one side , the design method may be taken if edge distance of the anchor is  $c \ge 300$  mm.