## HC

Denomination: HC SLAB ANCHOR
Reference: FT HC-en


HC

## CHARACTERISTICS

- European approval for interior non-structural applications in hollow slabs.
- CE Certification.
- R60 to R120 Fire Approval.
- The anchor collar stops it from entering the hole, making installation easy.
- Suitable for installations with reduced distances.
- Suitable for the use of volts or threaded rods with metric threads.

Codes: HC
Date: 09/11/16 Revision: $2 \quad$ Page: 1 of 4

## APPLICATIONS

- Suspended ceiling fixings, sprinkler systems and ventilation systems.
- Pipe work installations
- Cable ducts
- Suspended ceilings

See Web profile:



FIRE


RECOMMENDED LOADS IN HOLLOW SLABS [kg]

HC

|  |  |  |
| :--- | :--- | :--- |
| 142 | 243 |  |
| M6 | M8 | M10 |

APPLICATION EXAMPLES


| Date: 09/11/16 | Revision: 2 | Page: $\mathbf{2}$ of $\mathbf{4}$ |
| :--- | :--- | :--- |

## 1. RANGE

| ITEM | CÓDE | SZIES | PICTURE | COMPONENT | MATERIAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | HC | M 6 to | Sleeve | Carbon steel |  |
|  | M 10 |  | Cone | Carbon steel |  |

## 2. INSTALLATION DETAILS



| SZIES |  | M6 | M8 | M10 |
| :--- | :---: | :---: | :---: | :---: |
| $\mathrm{d}_{0}:$ drill diameter | $[\mathrm{mm}]$ | 10 | 12 | 16 |
| $\mathrm{~d}_{\mathrm{f}}:$ anchor plate diameter $\leq$ | $[\mathrm{mm}]$ | 7 | 9 | 12 |
| $\mathrm{~T}_{\text {ins }}:$ installation torque | $[\mathrm{Nm}]$ | 10 | 20 | 30 |
| $\mathrm{~h}_{1}:$ drillhole depth | $[\mathrm{mm}]$ | 45 | 50 | 60 |
| $\mathrm{~h}_{\text {nom: }}$ : installation depth | $[\mathrm{mm}]$ | 38 | 44 | 53 |
| e: minimum bolt length* | $[\mathrm{mm}]$ | $\mathrm{t}_{\mathrm{fix}}+40$ | $\mathrm{t}_{\mathrm{fix}}+46$ | $\mathrm{t}_{\text {fix }}+55$ |
| $\mathrm{~s}_{\mathrm{cr}, \mathrm{N}}:$ critical spacing between anchors | $[\mathrm{mm}]$ | 200 | 200 | 200 |
| $\mathrm{C}_{\mathrm{cr}, \mathrm{N}}:$ critical edge distance | $[\mathrm{mm}]$ | 100 | 100 | 100 |
| $\mathrm{~s}_{\text {min }}:$ min. spacing between anchors | $[\mathrm{mm}]$ | 100 | 100 | 100 |
| $\mathrm{c}_{\text {min }}:$ min. edge distance | $[\mathrm{mm}]$ | 60 | 70 | 90 |

$\left(^{*}\right) \mathrm{t}_{\mathrm{fix}}=$ thickness of material to be fixed.
Critical distances are those in which the anchors of a group of anchors do not influence each other for purposes of tensile loads. However, an anchor may not be installed at a value lower than the critical distance.

## 3. PRODUCT INSTALLATION



1. DRILL

Check concrete is well compacted and without significant pores.
Suitable for dry, humid or flooded drillholes.
Drill using percussion or hammer setting.
Drill to the specified diameter and depth.


## 2. INSTALL

Insert the anchor to the bottom of the drillhole. Use a hammer if necessary. The anchor must be flat on the surface of the base material.


## 3. PLACE MATERIAL TO BE FIXED

Place the material to be fixed, threading the bolt or stud through the drillhole. Use the required bolt length. The use of wide series washers (DIN 9021) is recommended. Do not apply any type of intermediate layer (sealants, etc.) between the material to be fixed and the washer.


## 4. APPLY TORQUE

Apply nominal torque using a torque wrench.

## 4. RESISTANCES

Characteristic resistances for non-structural applications in hollow concrete slabs type $d_{b} \geq 25 ;<30 \mathrm{~mm}$ with minimum thickness of 30 mm and for an isolated anchor (without consideration of edge distances or distances between anchors), with bolt class 6.8

| MEASUREMENTS |  |  |  | M6 | M8 | M10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Code |  |  | [-] | HC06 | HCO | HC10 |
| ETE 15/0912 Approval |  |  | [-] | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Characteristic resistance in hollow concrete slabs db $\geq 25$; $<30 \mathrm{~mm}$ | $\mathrm{F}_{\mathrm{Rk}}$ | $d_{b} \geq 25 ;<30 \mathrm{~mm}$ | [kN] | 3.5 | 5.0 | 8.0 |
|  |  | $\mathrm{d}_{\mathrm{b}} \geq 30 ;<40 \mathrm{~mm}$ | [kN] | 7.0 | 10.0 | 14.0 |
|  |  | $\mathrm{d}_{\mathrm{b}} \geq 40 \mathrm{~mm}$ | [kN] | 8.5 | 11.5 | 14.0 |
| Partial safety coefficient $\quad \mathrm{Y}_{\mathrm{M}}$ |  |  | [-] | 1.8 | 1.5 | 1.8 |

$1 \mathrm{KN} \approx 100 \mathrm{~kg}$

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The safe load coefficient recommended is $\gamma_{F}=1,4$
Calculation example:
Fixing a 400 kg tensile load ( $=3,92 \mathrm{kN}$ ) on a C40/50 hollow concrete slab with 43 mm thickness with an
HC10 anchor and bolt class 6.8
Verification to be performed: Load calculation < Resistance of calculation
Load calculation $=$ service load * safe load coefficient $=3,92$ * $1,4=5,49 \mathrm{kN}$
Resistance of calculation = characteristic resistance $/$ partial safety coefficient $=14,0 / 1,8=7,78 \mathrm{kN}$ Verification: $5.49 \mathrm{kN}<7,78 \mathrm{kN}$ : the fixing is safe.

For more complex calculations, you may use our INDEXcal anchor calculation program.

## 5. OFFICIAL DOCUMENTATION

The following documents may be obtained through our sales department or on our website www.indexfix.com :

- European Approvals:
- ETE 15/0912 for the use of hollow slabs for multiple fixings in non-structural applications, from M6 to M10
- Certifications on performance evidence EVCP 1219-CPR-0117
- Performance Declaration DoP HC-es
- INDEXcal anchor calculation program.

