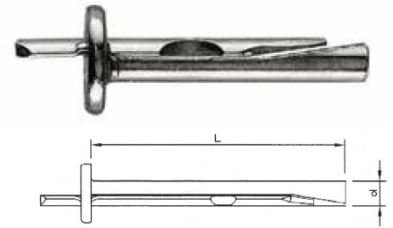


GCA

CEILING ANCHOR



PRODUCT DESCRIPTION

The anchors are made of ordinary carbon steel, covered with an electrolytic zinc coating.

APPLICATION

They are designed for making multi-point non-structural fastenings, in reinforced or unreinforced ordinary concrete, cracked or uncracked. They can be used in solid substrates or substrates made of trough plates and corrugated plates (ceiling elements).

LENGTH

Type	Dimensions d x L [mm]
40	6 x 40
65	6 x 65

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PARAMETERS OF INSTALLATION AND ARRANGEMENT OF GCA CONNECTORS IN CONCRETE SUBSTRATE

No.	Parameters	GCA
1	Diameter of the pre-hole d_{nom} , [mm]	6
2	Minimal pre-hole depth h_o , [mm]	38
3	Effective anchorage depth h_{ef} , [mm]	32
4	Minimal substrate thickness h_{min} , [mm]	80 ¹⁾ / 50 ²⁾
5	Minimal distance between the connectors s [mm]	200
6	The minimum distance between the connector and the edge of the substrate c [mm]	150

¹⁾ In the case of a solid concrete substrate

²⁾ In the case of substrates made of trough plates or corrugated plates (ceiling elements).

CHARACTERISTIC CAPACITY OF GCA CONNECTORS FOR PULL OUT AND SHEAR FROM CONCRETE SUBSTRATE

Type	The depth of the drilled hole h_1 [mm]	Effective anchorage depth h_{ef} [mm]	Characteristic resistance $N_{Rk} = V_{Rk}$, [kN]
			Normal concrete*
GCA	38	32	2,00

* Normal concrete, cracked or uncracked, grades C20 / 25 to C50 / 60 according to PN-EN 206 + A1: 2016

CHARACTERISTIC CAPACITY FOR DRAGING A GCA CONNECTOR THROUGH A STEEL SHEET

Type	Characteristic resistance for dragging * [kN]
GCA	0,55

* steel sheet with a thickness of 0.5 mm, grade S280GD according to PN-EN 10346: 2015

CHARACTERISTIC CAPACITY FOR FASTENING OF GCA CONNECTORS FOR PULL-OUT FROM SUBSTRATE AND SHEAR IN CASE OF FIRE ACCORDING TR020 IN CONCRETE SUBSTRATE GRADES C20/25 TO C50/60 ACCORDING TO PN-EN 206+A1:2016

Fire resistance class	Characteristic resistance $N_{Rk} = V_{Rk}$, [kN]
R30	0,50
R60	0,50
R90	0,50
R120	0,40

In the case of fire exposure from more than one side, the distance between fasteners and the edge of the ground should be not less than 300 mm.

Distance between connectors from the edge of the substrate $c_{cr,fi} = 2 \times h_{ef}$

Spacing of connectors $s_{cr,fi} = 4 \times h_{ef}$

OTHER FEATURES

BASE MATERIAL: *CONCRETE*

PRE-HOLE DIAMETER: *6 mm*

THICKNESS OF ZINC COATED: *5 μ m*



KDWU



ZKP