

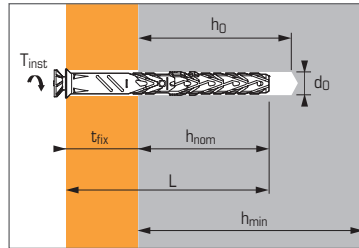


Frame anchor for fixings in concrete, solid masonry, hollow block and aerated concrete



ETA 13/1068  
ETAG 020

ETA 20/0542 (Ø10)  
EAD 16-33-1151-0604



## APPLICATION

- Roofing clamps
- Sanitary equipment
- Fixing wall plates
- Timbers
- Insulation
- Facade bracketing

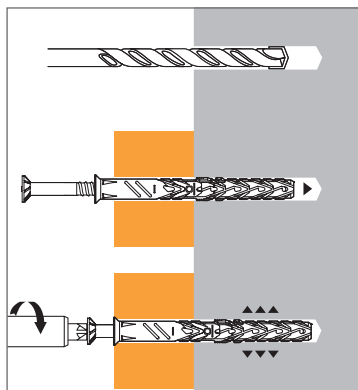
## MATERIAL

- Body:** polyamid 6
- Screw:**
  - zinc coated steel: grade 6.8 (5 µm)
  - stainless steel: A4-80
- Head type:**

F : Countersunk head  
TORX 30 (Ø8)  
TORX 40 (Ø10)

HS : Hexagonal head  
+ integrated washer

## INSTALLATION



## Spacing data

### IN CONCRETE

Mini. distance between anchors and from edge (mm)					
	$h_{nom}$	$S_{cr,N}$	$C_{cr,N}$	$S_{min}$	$C_{min}$
Ø8	50	60	50	50	50
Ø10	40	65	80	60	50
Ø10	50	90	100	70	60

### IN HOLLOW MASONRIES

The anchor must be installed at the minimum distance of:

- 100 mm from one edge.
- 200 mm from another anchor, with spacing parallel to the edge.
- 400 mm from another anchor with spacing perpendicular to the edge.

## Technical data

Anchor size	Concrete		Structural clay block		Hollow clay brick/ Aerated concrete		Setting data and Anchor size					Code			
	Embed. depth (mm)	Max. thickness to fix (mm)	Embed. depth (mm)	Max. thickness to fix (mm)	Embed. depth (mm)	Max. thickness to fix (mm)	Base material thickness (mm)	Drilling depth (mm)	Drilling diameter (mm)	Total anchor length (mm)	Tighten torque	Head version F	Head version HS	Head version F - A4	Head version HS - A4
	$h_{nom}$	$t_{fix}$	$h_{nom}$	$t_{fix}$	$h_{nom}$	$t_{fix}$	$h_{min}$	$h_0$	$d_0$	L	$T_{inst}$				
8X60/10		10		10						60					
8X80/30		30		30						80					
8X100/50	50	50	50	50	50	50				100	12				
8X120/70		70		70						120					
8X150/100		100		100						150					
10X60/10		20		10						60			567969	-	567986
10X80/30		40		30						80			567957	567970	567981
10X100/50		60		50						100			567958	567971	567982
10X120/70		80		70						120			567959	567972	-
10X140/90		100		90						140			567960	567973	-
10X160/110	40	120	50	110	70					160		16°	567961	567974	-
10X180/130		140		130						180			567962	567975	-
10X200/150		160		150						200			567963	567976	-
10X230/180		190		180						230			567964	567977	-
10X260/210		220		210						260			567965	567978	-
10X280/230		240		230						280			567966	567979	-
10X300/250		260		250						300			567967	567980	-

\* In aerated concrete apply torque at 50% of nominal value

Products on special orders

## Characteristic loads ( $N_{Rk}$ , $V_{Rk}$ ) in kN

TENSILE (Temperature :  $-40^{\circ}C < T < +50^{\circ}C^{(2)}$ )

Base material <sup>(1)</sup>	Anchor size	Ø8	Ø10	Ø10	Ø10
	$h_{nom}$	50	40	50	70
<b>Concrete (C20/25)</b>					
$N_{Rk}$		3,0	3,5	5,5	-
<b>Solid clay brick Wienerberger MZ 28-1,8 (fbk = 20 MPa)<sup>(1)</sup></b>					
$N_{Rk}$		3,0	-	3,0	-
<b>Hollow clay brick Wienerberger Porotherm BIOPLAN (fbk = 12 MPa)<sup>(1)</sup></b>					
$N_{Rk}$		2,0	-	2,0	-
$N_{Rk, sis}$ <sup>(3)</sup>		NA	NA	1,66	NA
<b>Hollow clay brick DANESI/Poroton P800 (fbk = 10,5 MPa)<sup>(1)</sup></b>					
$N_{Rk}$		-	-	1,2	-
$N_{Rk, sis}$ <sup>(3)</sup>		NA	NA	0,66	NA
<b>Hollow concrete block B40 (fbk = 4 MPa)<sup>(1)</sup></b>					
$N_{Rk}$		1,5	-	1,2	-
<b>Autoclaved aerated concrete type low strength YTONG «Clima» Block (fbk = 2,4 MPa)</b>					
$N_{Rk}$		-	-	0,6	0,6
<b>Autoclaved aerated concrete type high strength YTONG «Sismico» Block (fbk = 5 MPa)</b>					
$N_{Rk}$		-	-	1,5	2,0

<sup>(1)</sup> Other material references are specified in the ETA. <sup>(2)</sup> Suitable for «range b» temperatures ( $-40^{\circ}C < T < +80^{\circ}C$ ) : figures above must be reduced, refer to ETA for data. <sup>(3)</sup> Characteristic loads under seismic actions for fixings facade claddings through angle brackets according to ETA 20/0542.

## SHEAR

$h_{nom}$	Ø8	Ø10	Ø10	Ø10
	50	40	50	70
$V_{Rk}$	6,9	9,1	9,1	9,1
$V_{Rk}$	3,0	-	3,0	-
$V_{Rk, sis}$	2,0	-	2,0	-
$V_{Rk, sis}$	NA	NA	1,66	NA
$V_{Rk}$	-	-	1,2	-
$V_{Rk, sis}$	NA	NA	0,66	NA
$V_{Rk}$	1,5	-	1,2	-
$V_{Rk}$	-	-	0,6	0,6
$V_{Rk}$	-	-	1,5	2,0

## Design loads ( $N_{Rd}$ , $V_{Rd}$ ) and recommended loads ( $N_{rec}$ , $V_{rec}$ ) in kN

TENSILE (Temperature :  $-40^{\circ}C < T < +50^{\circ}C^{(2)}$ )

Base material <sup>(1)</sup>	Anchor size	Ø8	Ø10	Ø10	Ø10
	$h_{nom}$	50	40	50	70
<b>Concrete (C20/25)</b>					
$N_{Rd}$		1,7	1,9	3,1	-
$N_{rec}$		1,2	1,4	2,2	-
<b>Solid clay brick Wienerberger MZ 28-1,8 (fbk = 20 MPa)<sup>(1)</sup></b>					
$N_{Rd}$		1,2	-	1,2	-
$N_{rec}$		0,9	-	0,9	-
<b>Hollow clay brick Wienerberger Porotherm BIOPLAN (fbk = 12 MPa)<sup>(1)</sup></b>					
$N_{Rd}$		0,8	-	0,8	-
$N_{rec}$		0,6	-	0,6	-
<b>Hollow concrete block B40 (fbk = 4 MPa)<sup>(1)</sup></b>					
$N_{Rd}$		0,6	-	0,5	-
$N_{rec}$		0,4	-	0,3	-
<b>Autoclaved aerated concrete type low strength YTONG «Clima» Block (fbk = 2,4 MPa)</b>					
$N_{Rd}$		-	-	0,30	0,30
$N_{rec}$		-	-	0,21	0,21
<b>Autoclaved aerated concrete type high strength YTONG «Sismico» Block (fbk = 5 MPa)</b>					
$N_{Rd}$		-	-	0,75	1,00
$N_{rec}$		-	-	0,54	0,71

## SHEAR

$h_{nom}$	Ø8	Ø10	Ø10	Ø10
	50	40	50	70
$V_{Rd}$	4,6	6,0	6,0	6,0
$V_{rec}$	3,3	4,3	4,3	4,3
$V_{Rd}$	1,1	-	1,2	-
$V_{rec}$	0,8	-	0,9	-
$V_{Rd}$	0,8	-	0,8	-
$V_{rec}$	0,6	-	0,6	-
$V_{Rd}$	0,6	-	0,5	-
$V_{rec}$	0,4	-	0,3	-
$V_{Rd}$	-	-	0,30	0,30
$V_{rec}$	-	-	0,21	0,21
$V_{Rd}$	-	-	0,75	1,00
$V_{rec}$	-	-	0,54	0,71