

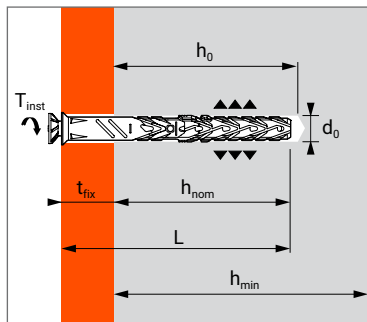
B-LONG XTREM



ZINC COATED & STAINLESS STEEL A4



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



CHARACTERISTICS



APPLICATION

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

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

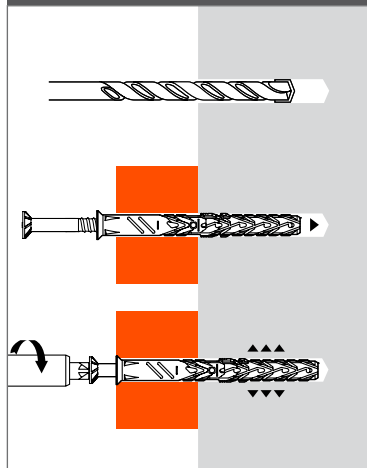
HS : Hexagonal head
+ integrated washer

CARACTÉRISTIQUES TECHNIQUES

GAMME	Concrete		Structural clay block		Hollow clay bricks / Aerated concrete		Setting data and anchor size					Code	
	Min. embed. depth	Max. thick. to fix	Min. embed. depth	Max. thick. to fix	Min. embed. depth	Max. thick. to fix	Drilling depth	Drilling Ø	Min. thick. of base material	Total anchor length	Tighten torque	Head version F	Head version HS
	(mm) h _{nom}	(mm) t _{fix}	(mm) h _{nom}	(mm) t _{fix}	(mm) h _{nom}	(mm) t _{fix}	(mm) h ₀	(mm) d ₀	(mm) h _{min}	(mm) L	(mm) T _{inst}		
ZINC COATED STEEL VERSION													
8X60/10		10		10		10				60		567950	-
8X80/30		30		30		30				80		567951	-
8X100/50	50	50	50	50	50	50	60	8	100	100	12	567952	-
8X120/70		70		70		70				120		567953	-
8X150/100		100		100		100				150		567954	-
10X60/10		20		10		-				60		-	567969
10X80/30		40		30		10				80		567957	567970
10X100/50		60		50		30				100		567958	567971
10X120/70		80		70		50				120		567959	567972
10X140/90		100		90		70				140		567960	567973
10X160/110		120		110		90	h _{nom} +10 mm	10	h _{nom} X2	160	16*	567961	567974
10X180/130	40	140	50	130	70	110				180		567962	567975
10X200/150		160		150		130				200		567963	567976
10X230/180		190		180		160				230		567964	567977
10X260/210		220		210		190				260		567965	567978
10X280/230		240		230		210				280		567966	567979
10X300/250		260		250		230				300		567967	567980
STAINLESS STEEL A4 VERSION													
8X80/30	50	30	50	30	50	30	60	8	100	80	12	567942	-
8X100/50		50		50		50				100		567943	-
10X60/10		20		10		-	h _{nom} +10 mm	10	h _{nom} X2	60	16*	-	567986
10X80/30	40	40	50	30	70	10				80		567981	567987
10X100/50		60		50		30				100		567982	567988

* In aerated concrete apply torque at 50% of nominal value
Products on special orders

INSTALLATION



MINIMUM THICKNESS OF CONCRETE, CHARACTERISTIC & MINIMUM DISTANCES FOR SPACING, EDGE

SIZE		Ø8	Ø10	Ø10
Anchor depth	h _{nom} [mm]	50	40	50
Minimum thickness of concrete	h _{min} [mm]	100	80	100
Characteristic edge and spacing distance for full anchor capacity	NON CRACKED CONCRETE	C _{cr} ≥ [mm]	50	80
		S _{cr} ≥ [mm]	60	65
	MASONRIES	C _{cr} ≥ [mm]	100	100
		S _{cr} ≥ [mm]	200	200
Minimum distances	NON CRACKED CONCRETE	C _{min} [mm]	50	50
		S _{min} [mm]	50	60
	MASONRIES	C _{min} [mm]	100	100
		S _{min} [mm]	200	200



ZINC COATED & STAINLESS STEEL A4

B-LONG XTREM

CHARACTERISTIC RESISTANCES [kN]

Characteristic resistances are shown as informative, and have to be used by application of safety factors.

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

NON-CRACKED CONCRETE - C20/25

SIZE	Ø8	Ø10	Ø10	Ø10
h_{nom} [mm]	50	40	50	70
N_{Rk} [kN]	3,00	3,50	5,50	-

MASONRIES⁽¹⁾

SIZE	Ø8	Ø10	Ø10	Ø10
h_{nom} [mm]	50	40	50	70
Solid clay bricks Wienerberger MZ 28-1,8 (fb = 20 MPa)				
N_{Rk} [kN]	3,00	-	3,00	-
Hollow clay bricks Wienerberger Porotherm BIOPLAN (fb = 12 MPa)				
N_{Rk} [kN]	2,00	-	2,00	-
Hollow clay bricks DANESI/Poroton P800 (fb = 10,5 MPa)				
N_{Rk} [kN]	-	-	1,20	-
Hollow concrete block B40 (fb = 4 MPa)				
N_{Rk} [kN]	1,25	-	1,20	-
Autoclaved aerated concrete YTONG «Clima» Block (fb = 2,4 MPa)				
N_{Rk} [kN]	-	-	0,60	0,60
Autoclaved aerated concrete YTONG «Clima» Block (fb = 5 MPa)				
N_{Rk} [kN]	-	-	1,50	2,00

SHEAR

NON-CRACKED CONCRETE - C20/25

SIZE	Ø8	Ø10	Ø10	Ø10
h_{nom} [mm]	50	40	50	70
V_{Rk} [kN]	6,90	9,10	9,10	9,10

MASONRIES⁽¹⁾

SIZE	Ø8	Ø10	Ø10	Ø10
h_{nom} [mm]	50	40	50	70
Solid clay bricks Wienerberger MZ 28-1,8 (fb = 20 MPa)				
V_{Rk} [kN]	3,00	-	3,00	-
Hollow clay bricks Wienerberger Porotherm BIOPLAN (fb = 12 MPa)				
V_{Rk} [kN]	2,00	-	2,00	-
Hollow clay bricks DANESI/Poroton P800 (fb = 10,5 MPa)				
V_{Rk} [kN]	-	-	1,20	-
Hollow concrete block B40 (fb = 4 MPa)				
V_{Rk} [kN]	1,25	-	1,20	-
Autoclaved aerated concrete YTONG «Clima» Block (fb = 2,4 MPa)				
V_{Rk} [kN]	-	-	0,60	0,60
Autoclaved aerated concrete YTONG «Clima» Block (fb = 5 MPa)				
V_{Rk} [kN]	-	-	1,50	2,00

RECOMMENDED LOADS OF ONE ANCHOR WITHOUT INFLUENCE OF SPACING & CONCRETE EDGE [kN]

Recommended values are determined from performances given in the ETA, and are guaranteed for spacing $\geq S_{Cr}$ and edge distance $\geq C_{Cr}$.

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

NON-CRACKED CONCRETE - C20/25

SIZE	Ø8	Ø10	Ø10	Ø10
h_{nom} [mm]	50	40	50	70
N_{Rec} [kN]	1,20	1,40	2,20	-

MASONRIES⁽¹⁾

SIZE	Ø8	Ø10	Ø10	Ø10
h_{nom} [mm]	50	40	50	70
Solid clay bricks Wienerberger MZ 28-1,8 (fb = 20 MPa)				
N_{Rec} [kN]	0,90	-	0,90	-
Hollow clay bricks Wienerberger Porotherm BIOPLAN (fb = 12 MPa)				
N_{Rec} [kN]	0,60	-	0,60	-
Hollow clay bricks DANESI/Poroton P800 (fb = 10,5 MPa)				
N_{Rec} [kN]	-	-	0,43	-
Hollow concrete block B40 (fb = 4 MPa)				
N_{Rec} [kN]	0,40	-	0,30	-
Autoclaved aerated concrete YTONG «Clima» Block (fb = 2,4 MPa)				
N_{Rk} [kN]	-	-	0,21	0,21
Autoclaved aerated concrete YTONG «Clima» Block (fb = 5 MPa)				
N_{Rec} [kN]	-	-	0,54	0,71

SHEAR

NON-CRACKED CONCRETE - C20/25

SIZE	Ø8	Ø10	Ø10	Ø10
h_{nom} [mm]	50	40	50	70
V_{Rec} [kN]	3,30	4,30	4,30	4,30

MASONRIES⁽¹⁾

SIZE	Ø8	Ø10	Ø10	Ø10
h_{nom} [mm]	50	40	50	70
Solid clay bricks Wienerberger MZ 28-1,8 (fb = 20 MPa)				
V_{Rec} [kN]	0,80	-	0,90	-
Hollow clay bricks Wienerberger Porotherm BIOPLAN (fb = 12 MPa)				
V_{Rec} [kN]	0,60	-	0,60	-
Hollow clay bricks DANESI/Poroton P800 (fb = 10,5 MPa)				
V_{Rec} [kN]	-	-	0,43	-
Hollow concrete block B40 (fb = 4 MPa)				
V_{Rec} [kN]	0,40	-	0,30	-
Autoclaved aerated concrete YTONG «Clima» Block (fb = 2,4 MPa)				
V_{Rec} [kN]	-	-	0,21	0,21
Autoclaved aerated concrete YTONG «Clima» Block (fb = 5 MPa)				
V_{Rec} [kN]	-	-	0,54	0,71

⁽¹⁾ Other material references are specified in the ETA.

⁽²⁾ Suitable for «range b» temperatures ($-40^{\circ}\text{C} < T < +80^{\circ}\text{C}$) : figures above must be reduced, refer to ETA for data.



Design resistances for static and seismic loads are determined from performances given in the ETA, and are guaranteed for spacing $\geq S_{cr}$ and edge distance $\geq C_{cr}$. For project with reduced spacing and edge distance, we recommend to use SPIT i-Expert software to design your project according to EN 1992-4.

DESIGN RESISTANCE FOR STATIC LOADS IN NON-CRACKED CONCRETE [kN]

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

NON-CRACKED CONCRETE - C20/25

SIZE	Ø8	Ø10	Ø10	Ø10
h_{nom} [mm]	50	40	50	70
N_{Rd} [kN]	1,70	1,90	3,10	-

Distances S_{cr} and C_{cr} must be fulfilled

$N_{Rd} = N_{Rk} / \gamma_M$; $\gamma_M = 2,0$

SHEAR

NON-CRACKED CONCRETE - C20/25

SIZE	Ø8	Ø10	Ø10	Ø10
h_{nom} [mm]	50	40	50	70
V_{Rd} [kN]	4,60	6,00	6,00	6,00

$V_{Rd} = V_{Rk} / \gamma_M$; $\gamma_M = 2,0$

DESIGN RESISTANCE FOR STATIC LOADS IN MASONRIES [kN]

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

MASONRIES⁽¹⁾

SIZE	Ø8	Ø10	Ø10	Ø10
h_{nom} [mm]	50	40	50	70

Solid clay bricks Wienerberger MZ 28-1,8 (fb = 20 MPa)

N_{Rd} [kN]	1,20	-	1,20	-
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Hollow clay bricks Wienerberger Porotherm BIOPLAN (fb = 12 MPa)

N_{Rd} [kN]	0,80	-	0,80	-
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Hollow clay bricks DANESI/Poroton P800 (fb = 10,5 MPa)

N_{Rd} [kN]	-	-	0,60	-
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Hollow concrete block B40 (fb = 4 MPa)

N_{Rd} [kN]	0,60	-	0,50	-
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Autoclaved aerated concrete YTONG «Clima» Block (fb = 2,4 MPa)

N_{Rd} [kN]	-	-	0,30	0,30
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Autoclaved aerated concrete YTONG «Clima» Block (fb = 5 MPa)

N_{Rd} [kN]	-	-	0,75	1,00
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Distances S_{cr} and C_{cr} must be fulfilled

$N_{Rd} = N_{Rk} / \gamma_M$; $\gamma_M = 2,0$

SHEAR

MASONRIES⁽¹⁾

SIZE	Ø8	Ø10	Ø10	Ø10
h_{nom} [mm]	50	40	50	70

Solid clay bricks Wienerberger MZ 28-1,8 (fb = 20 MPa)

V_{Rd} [kN]	1,10	-	1,20	-
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Hollow clay bricks Wienerberger Porotherm BIOPLAN (fb = 12 MPa)

V_{Rd} [kN]	0,80	-	0,80	-
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Hollow clay bricks DANESI/Poroton P800 (fb = 10,5 MPa)

V_{Rd} [kN]	-	-	0,60	-
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Hollow concrete block B40 (fb = 4 MPa)

V_{Rd} [kN]	0,60	-	0,50	-
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Autoclaved aerated concrete YTONG «Clima» Block (fb = 2,4 MPa)

V_{Rd} [kN]	-	-	0,30	0,30
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Autoclaved aerated concrete YTONG «Clima» Block (fb = 5 MPa)

V_{Rd} [kN]	-	-	0,75	1,00
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$V_{Rd} = V_{Rk} / \gamma_M$; $\gamma_M = 2,0$

DESIGN RESISTANCE FOR SEISMIC LOADS IN MASONRIES [kN]

Design loads under seismic actions for fixings facade claddings through angle brackets according to ETA 20/0542.

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

MASONRIES

SIZE	Ø10
h_{nom} [mm]	50

Hollow clay bricks Wienerberger Porotherm BIOPLAN (fb = 12 MPa)

$N_{Rd,seis}$ [kN]	0,83
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Hollow clay bricks DANESI/Poroton P800 (fb = 10,5 MPa)

$N_{Rd,seis}$ [kN]	0,33
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$N_{Rd,seis} = N_{Rk,seis} / \gamma_M$; $\gamma_M = 2,0$

SHEAR

MASONRIES

SIZE	Ø10
h_{nom} [mm]	50

Hollow clay bricks Wienerberger Porotherm BIOPLAN (fb = 12 MPa)

$V_{Rd,seis}$ [kN]	0,48
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Hollow clay bricks DANESI/Poroton P800 (fb = 10,5 MPa)

$V_{Rd,seis}$ [kN]	0,38
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$V_{Rd,seis} = V_{Rk,seis} / \gamma_M$; $\gamma_M = 2,0$

⁽¹⁾ Other material references are specified in the ETA.

⁽²⁾ Suitable for «range b» temperatures ($-40^{\circ}\text{C} < T < +80^{\circ}\text{C}$): figures above must be reduced, refer to ETA for data.