T-NUX A

T-NUX T

T-NUX A A4

TNUX

T-NUX E

T-FUX E

T-NUX E A4

NON STRUCTURAL FIXINGS ETA 14/0467

FIRE RESISTANCE

CHARACTERISTICS

- Nylon plug with screw for fixing heavy-duty loads.
- Quick installation, assembly through material to be fixed, installed by hammering nylon plug and then threading the screw.
- Wide range of fixing lengths (from 60 mm to 230mm) and thicknesses.
- The nylon plug knots itself on expanding in hollow materials, making it especially suitable for hollow materials or when base material for fixing is unknown.
- High anchor mechanical resistance values.
- Available in zinc-plated screw or A4 Stainless, AISI 316. Variety of screw heads: countersunk, hexagonal and truss. Individual plug available.
- Version of cylindrical head plug.
- Suitable for a wide variety of base materials: concrete, Stone, solid brick, hollow brick, hollow block, etc.
- ETE-14/0467 European Approval, for use in concrete, aerated concrete, solid brick, hollow brick or concrete block.
- SIZES: Ø8 and Ø10

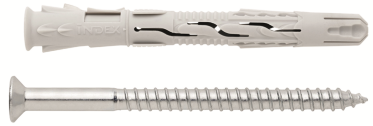
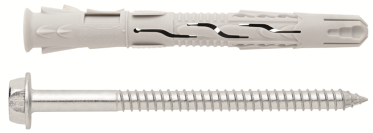
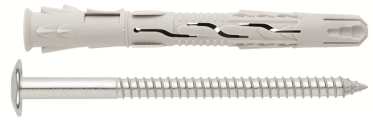
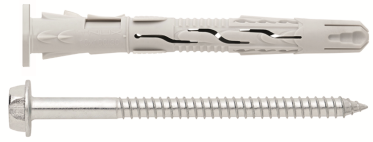
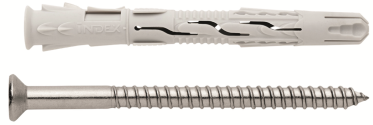
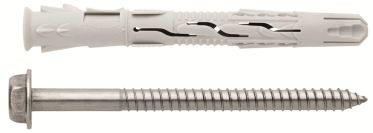
APPLICATIONS

- Fixing window/door frames.
- Garage doors.
- Handrails.
- Façade restoration
- Ventilated façades
- For indoor and outdoor use.
- Fixing stone facing for facade cladding.

BASE MATERIALS

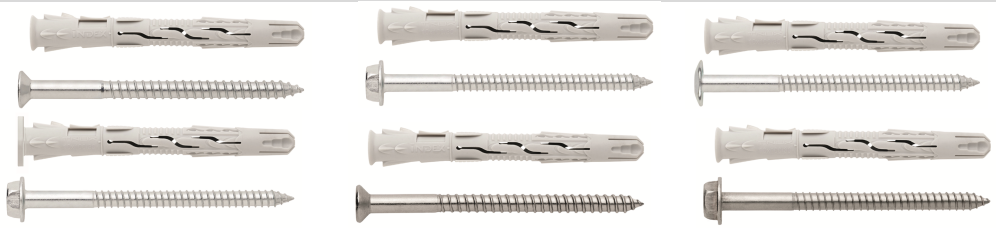
APPLICATION EXAMPLES

1. RANGE

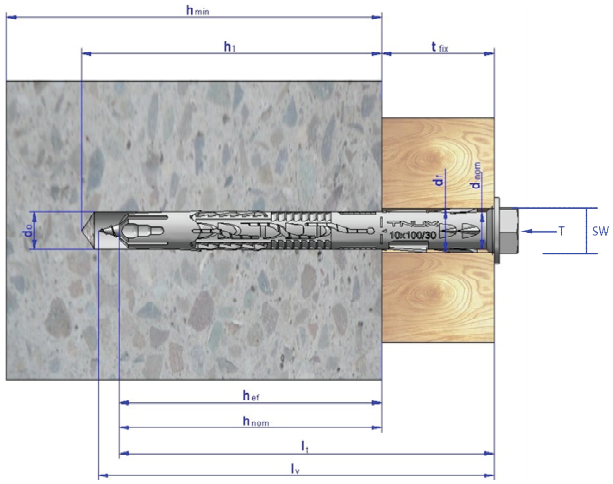
ITEM	CODE	PHOTO	COMPONENT	MATERIAL
1	**TNUXA**		Nylon plug	Polyamide 6
			Screw countersunk head	Zinc-plated steel
2	**TNUXE**		Nylon plug	Polyamide 6
			Screw hexagonal head	Zinc-plated steel
3	**TNUXT**		Nylon plug	Polyamide 6
			Screw truss head	Zinc-plated steel
4	**TFUXE**		Nylon plug cylindrical head	Polyamide 6
			Screw hexagonal head	Zinc-plated steel
5	**TNXA4**		Nylon plug	Polyamide 6
			Screw countersunk head	A4 Stainless steel, AISI 316
6	**TNXEA4**		Nylon plug	Polyamide 6
			Screw hexagonal head	A4 Stainless steel, AISI 316

2. INSTALLATION DATA

T-NUX



nylon plug dimensions d_0 x l_t	[mm]
screw dimensions M x l_v	[mm]
installation wrench	SW / T
d_o: drill hole diameter	[mm]
d_f: drill hole diameter of the fixture	[mm]
d_{nom}: anchor diameter	[mm]
h_{ef} = h_{nom}: minimum effective embedment depth	[mm]
h_1: minimum drill hole depth	[mm]
h_{min}: base material minimum thickness	[mm]
l_v: screw length	[mm]
l_t: anchor length	[mm]
T: hexalobular Tx recess	
SW: nut key	



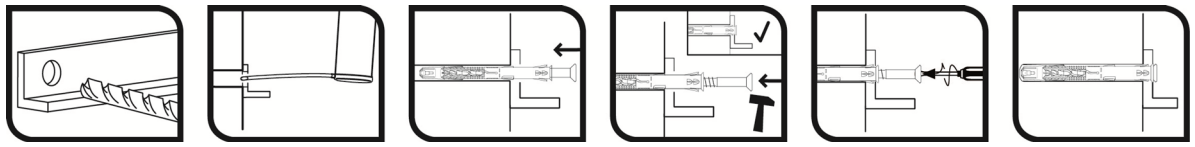
Installation Data

CODE		d_0 x l_t	M x l_v	d_0	d_{nom}	d_f	h_{ef} = h_{nom}	h_1	h_{min}	t_{fix}	SW/T
TNUXA / TNUXE	08060*	8 x 60	6x66	8	8	8,5	50	70	100	10	SW10 / T30
TNUXA / TNUXE / TNXA4 / TNXE4	08080	8 x 80	6x86	8	8	8,5	70	90	100	10	
TNUXA / TNUXE / TNXA4 / TNXE4	08100	8 x 100	6x106							30	
TNUXA / TNUXE / TNXA4	08120	8 x 120	6x126							50	
TNUXA / TNUXE	10060*	10 x 60	7x66	10	10	10,5	50	70	100	10	SW13 / T40
TNUXA / TNUXE / TNUXT / TFUXE / TNXA4 / TNXE4	10080	10 x 80	7x86	10	10	10,5	70	90	100	10	
TNUXA / TNUXE / TNUXT / TFUXE / TNXA4 / TNXE4	10100	10 x 100	7x106							30	
TNUXA / TNUXE / TNUXT / TFUXE / TNXA4 / TNXE4	10120	10 x 120	7x126							50	
TNUXA / TNUXE / TNUXT / TFUXE / TNXA4 / TNXE4	10140	10 x 140	7x146							70	
TNUXA / TNUXE / TNUXT / TNXA4 / TNXE4	10160	10 x 160	7x166							90	
TNUXA / TNUXE	10180	10 x 180	7x186							110	
TNUXA / TNUXE	10200	10 x 200	7x206							130	
TNUXA / TNUXE	10230	10 x 230	7x236							160	

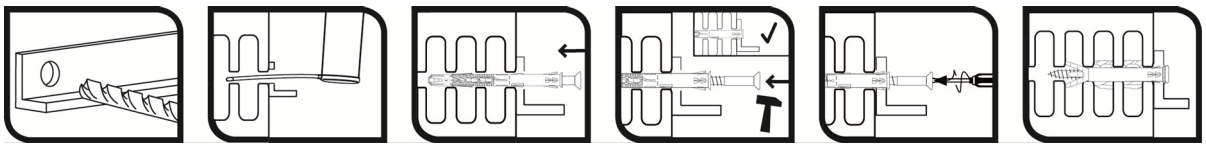
*Not assessed sizes

3. PRODUCT INSTALLATION

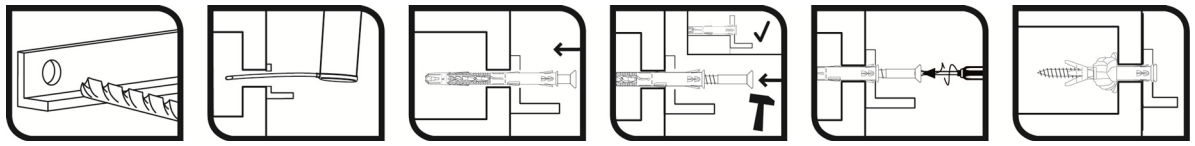
IN SOLID MATERIAL



IN HOLLOW BRICK

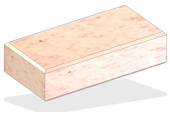
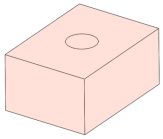
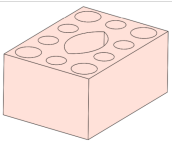
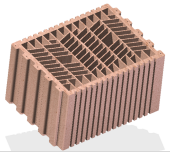
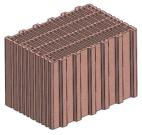
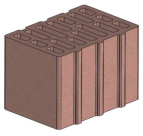
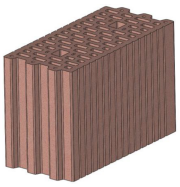
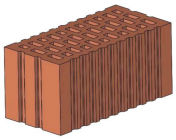


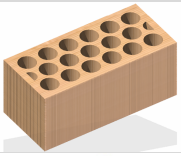
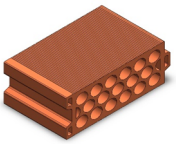
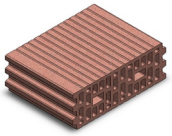
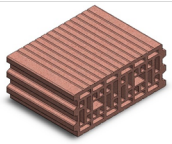
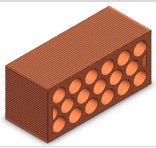
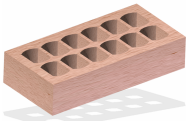
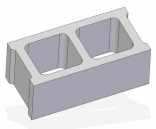
IN CONCRETE BLOCK

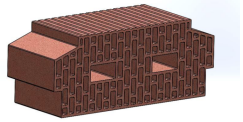


- Drill to the diameter and depth specified in the table. In the case of hollow materials, use the drilling mode. Reduce drilling speed when it is sensed the drill bit is approaching the inside hollow of the base material.
- Clear drill hole of dust and fragments.
- Place material to be fixed.
- Insert and place plug through material to be fixed, setting the screw and hitting on the top of it until the plug head reaches the fixture.
- Tighten screw until screw head rests on material to be fixed in order to ensure the right expansion of the plug.

4. BASE MATERIAL

MATERIAL	SIZE [mm]	FIGURE	DRILLING MODE	DENSITY ρ [kg/m³]	MINIMUM COMPRESSION RESISTANCE (f_b)
Concrete	--		Rotary + Hammer	--	≥16 kN
Solid Brick Nº1	Paving Stone 200 x 100 x 50 mm		Rotary + Hammer	2060	30 N/mm²
Hollow Brick Nº2	KS12-1.8-3DF, 240 x 175 x 113 mm		Rotary + Hammer	1790	12 N/mm²
Hollow Brick Nº3	KS12-1.4-3DF, 240 x 175 x 113 mm		Rotary + Hammer	1390	12 N/mm²
Hollow Brick Nº4	Thermo Clay, 237 x 305 x 191 mm		Rotary	855	12.5 N/mm²
Hollow Brick Nº5	Planziegel-T16-365, 248 x 365 x 249 mm		Rotary	735	10 N/mm²
Hollow Brick Nº6	Poroton S8-365, 248 x 365 x 249 mm		Rotary	720	10 N/mm²
Hollow Brick Nº7	Poroton-FZ9-365 Objekt, 248 x 365 x 249 mm		Rotary	830	10 N/mm²
Hollow Brick Nº8	Schallschutzziegel, 373 x 175 x 249 mm		Rotary	1100	20 N/mm²
Hollow Brick Nº9	Poroton-Kleinformate 2DF-0.9 240 x 115 x 113 mm		Rotary	855	12 N/mm²

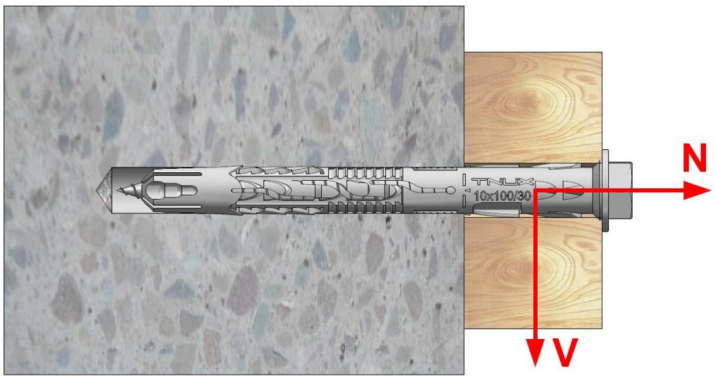
MATERIAL	SIZE [mm]	FIGURE	DRILLING MODE	DENSITY ρ [kg/m³]	MINIMUM COMPRESSSION RESISTANCE (f_b)
Hollow Brick Nº10	Ceramic, 237 x 110 x 100 mm		Rotary + Hammer	1025	20 N/mm²
Hollow Brick Nº11	Hollow brick H20, 300 x 110 x 190 mm		Rotary	815	15 N/mm²
Hollow Brick Nº12	Hollow brick CITY12, 330 x 120 x 249 mm		Rotary	860	15 N/mm²
Hollow Brick Nº13	Hollow brick CITY14, 330 x 140 x 249 mm		Rotary	910	15 N/mm²
Hollow Brick Nº14	Hollow brick PERFORATED 10, 245 x 110 x 100 mm		Rotary	805	15 N/mm²
Hollow Brick Nº15	Hollow brick THERMO CLAY 14, 300 x 140 x 190 mm		Rotary	855	15 N/mm²
Hollow Brick Nº16	Hollow brick THERMO CLAY 19, 300 x 190 x 190 mm		Rotary	790	15 N/mm²
Hollow Brick Nº17	Facebrick 240 x 115 x 50 mm		Rotary	1065	20 N/mm²
Hollow Brick Nº18	Mediterranean 240 x 115 x 90 mm		Rotary + Hammer	1310	40 N/mm²
Hollow Brick Nº19	Gero Brick 240 x 120 x 100 mm		Rotary + Hammer	1180	10 N/mm²
Hollow Brick Nº20	Brick 390 x 190 x 190 mm		Rotary	870	5 N/mm²
Hollow Brick Nº21	Airblock 491 x 241 x 190 mm		Rotary	935	4 N/mm²

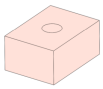
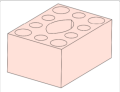
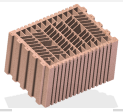
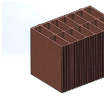
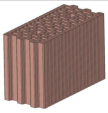
MATERIAL	SIZE [mm]	FIGURE	DRILLING MODE	DENSITY ρ [kg/m³]	MINIMUM COMPRESSION RESISTANCE (f_b)
Hollow Brick Nº22	Poroton Deckenelnhängezlegel h21 530 x 210 x 249 mm		Rotary	680	12 N/mm²
Aerated concrete AAC2	625 x 240 x 250 mm		Rotary	360	2 N/mm²
Aerated concrete AAC6	625 x 240 x 250 mm		Rotary	710	6 N/mm²

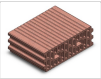
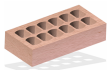
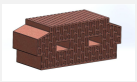
5. RESISTANCES

CHARACTERISTIC RESISTANCES [kN]

Characteristic resistance for an isolated anchor in any direction (without the effects of critical edge distance or critical anchor spacing) is that indicated in the following table:



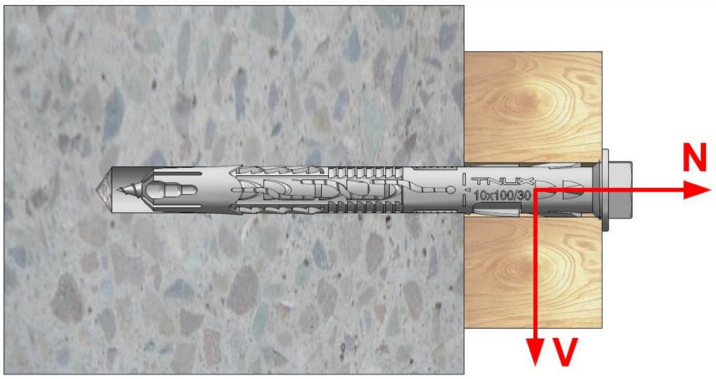
MATERIAL	SIZE	FIGURE	CHARACTERISTIC RESISTANCE		Ø8			Ø10		
					Zn		Inox	Zn		Inox
Concrete	Resistencia ≥16 N/mm²		Tension (24/40ºC) [kN]	N_{Rk}	3,5		3,5	5,0		5,0
			Tension (50/80ºC) [kN]	N_{Rk}	3,5		3,5	4,5		4,5
			Shear [kN]	V_{Rk}	6,5		7,6	9,0		10,5
Solid brick Nº1	Paving stone 200 x 100 x 50 mm		Compression resist [N/mm²]	f_B	30	50	70	30	50	70
			Characteristic resist [kN]	F_{Rk}	1,5	2,5	4,0	2,0	3,5	5,0
Hollow brick Nº2	KS12-1.8-3DF, 240 x 175 x 113 mm		Compression resist [N/mm²]	f_B	12	20	30	12	20	30
			Characteristic resist [kN]	F_{Rk}	3,5	6,0	9,0	3,5	6,0	9,0
Hollow brick Nº3	KS12-1.4-3DF, 240 x 175 x 113 mm		Compression resist [N/mm²]	f_B	12	20	25	12	20	25
			Characteristic resist [kN]	F_{Rk}	0,6	1,2	1,5	0,75	1,2	1,5
Hollow brick Nº4	Thermo Clay, 237 x 305 x 191 mm		Compression resist [N/mm²]	f_B	12,5	15	20	-		
			Characteristic resist [kN]	F_{Rk}	0,75	0,9	1,2			
Hollow brick Nº5	Planziegel-T16-365, 248 x 365 x 249 mm		Compression resist [N/mm²]	f_B	-			10	12	14
			Characteristic resist [kN]	F_{Rk}				0,6	0,6	0,75
Hollow brick Nº6	Poroton S8-365, 248 x 365 x 249 mm		Compression resist [N/mm²]	f_B	10	12	14	10	12	14
			Characteristic resist [kN]	F_{Rk}	1,5	2,0	2,0	1,5	2,0	2,0
Hollow brick Nº7	Poroton-FZ9-365 Objekt, 248 x 365 x 249 mm		Compression resist [N/mm²]	f_B	10	12	14	10	12	14
			Characteristic resist [kN]	F_{Rk}	2,5	3,0	3,5	2,0	2,5	3
Hollow brick Nº8	Schallschutzziegel 373 x 175 x 249 mm		Compression resist [N/mm²]	f_B	20	24	28	20	24	28
			Characteristic resist [kN]	F_{Rk}	1,2	1,2	1,5	0,75	0,9	0,9

MATERIAL	SIZE	FIGURE	CHARACTERISTIC RESISTANCE		Ø8			Ø10		
					Zn		Inox	Zn		Inox
Hollow brick Nº9	Poroton-Kleinformate 2DF-0.9 240 x 115 x 113 mm		Compression resist [N/mm²]	f_B	-			12	16	20
			Characteristic resist [kN]	F_{Rk}				0,4	0,6	0,75
Hollow brick Nº10	Ceramic 237 x 110 x 100 mm		Compression resist [N/mm²]	f_B	20	30	40	-		
			Characteristic resist [kN]	F_{Rk}	0,4	0,6	0,75			
Hollow brick Nº11	Hollow brick H20, 300 x 110 x 190 mm		Compression resist [N/mm²]	f_B	-			15	25	35
			Characteristic resist [kN]	F_{Rk}				0,5	0,9	1,2
Hollow brick Nº12	Hollow brick CITY12, 330 x 120 x 249 mm		Compression resist [N/mm²]	f_B	-			15	25	35
			Characteristic resist [kN]	F_{Rk}				0,6	0,9	1,5
Hollow brick Nº13	Hollow brick CITY14, 330 x 140 x 249 mm		Compression resist [N/mm²]	f_B	-			15	25	35
			Characteristic resist [kN]	F_{Rk}				0,9	1,5	2,5
Hollow brick Nº14	Hollow brick PERFORATED 10, 245 x 110 x 100 mm		Compression resist [N/mm²]	f_B	-			15	25	35
			Characteristic resist [kN]	F_{Rk}				0,6	0,9	1,5
Hollow brick Nº15	Hollow brick THERMO CLAY 14, 300 x 140 x 190 mm		Compression resist [N/mm²]	f_B	-			15	25	35
			Characteristic resist [kN]	F_{Rk}				0,75	1,2	2,0
Hollow brick Nº16	Hollow brick THERMO CLAY 19, 300 x 190 x 190 mm		Compression resist [N/mm²]	f_B	-			15	25	35
			Characteristic resist [kN]	F_{Rk}				0,75	1,2	1,5
Hollow brick Nº17	Facebrick 240 x 115 x 50 mm		Compression resist [N/mm²]	f_B	20	30	40	20	30	40
			Characteristic resist [kN]	F_{Rk}	0,6	0,9	1,2	1,2	1,5	2
Hollow brick Nº18	Mediterranean 240 x 115 x 90 mm		Compression resist [N/mm²]	f_B	40	50	60	40	50	60
			Characteristic resist [kN]	F_{Rk}	0,75	1,2	1,2	1,5	2	2,5
Hollow brick Nº19	Gero Brick 240 x 120 x 100 mm		Compression resist [N/mm²]	f_B	10	12	14	10	12	14
			Characteristic resist [kN]	F_{Rk}	0,75	0,9	1,2	1,5	2	2,5
Hollow brick Nº20	Brick 390 x 190 x 190 mm		Compression resist [N/mm²]	f_B	5			5		
			Characteristic resist [kN]	F_{Rk}	1,5			1,5		
Hollow brick Nº21	Airblock 491 x 241 x 190 mm		Compression resist [N/mm²]	f_B	4			4		
			Characteristic resist [kN]	F_{Rk}	2,0			1,5		
Hollow brick Nº22	Poroton Deckenelnhängezlegel h21 530 x 210 x 249 mm		Compression resist [N/mm²]	f_B	12	16	20	12	16	20
			Characteristic resist [kN]	F_{Rk}	0,3	0,4	0,5	0,6	0,9	1,2
Temperature Range					**24/40ºC**		**50/80ºC**	**24/40ºC**		**50/80ºC**
Aerated Concrete AAC2	625 x 240 x 250 mm		Compression resist [N/mm²]	f_B	2			2		
			Characteristic resist [kN]	F_{Rk}	0,4		0,3	0,3		0,3
Aerated Concrete AAC6	625 x 240 x 250 mm		Compression resist [N/mm²]	f_B	6			6		
			Characteristic resist [kN]	F_{Rk}	0,9		0,9	1,5		1,2

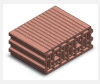
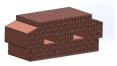
*For sizes not included in the approval, multiply resistance values by 0.7.

MAXIMUM LOADS RECOMMENDED [kN]

Maximum recommended load for an isolated anchor in any direction (without the effects of critical edge distance or critical anchor spacing) is that indicated in the following table ($\gamma_F = 1{,}4$):



MATERIAL	SIZE	FIGURE	MAXIMUM RECOMMENDED LOADS		Ø8			Ø10		
					Zn		Inox	Zn		Inox
Concrete	Resistance ≥16 N/mm²		Tension (24/40ºC)	N_{rec}	1,39		1,39	1,98		1,98
			Tension (50/80ºC)	N_{rec}	1,39		1,39	1,79		1,79
			Shear	V_{rec}	2,58		3,02	3,57		4,17
Solid brick Nº1	Paving stone 200 x 100 x 50		Compression resist [N/mm²]	f_B	30	50	70	30	50	70
			Max recommended load [kN]	F_{rec}	0,43	0,71	1,14	0,57	1,00	1,43
Hollow brick Nº2	KS12-1.8-3DF, 240 x 175 x 113		Compression resist [N/mm²]	f_B	12	20	30	12	20	30
			Max recommended load [kN]	F_{rec}	1,00	1,71	2,57	1,00	1,71	2,57
Hollow brick Nº3	KS12-1.4-3DF, 240 x 175 x 113		Compression resist [N/mm²]	f_B	12	20	25	12	20	25
			Max recommended load [kN]	F_{rec}	0,17	0,34	0,43	0,21	0,34	0,43
Hollow brick Nº4	Thermo clay 237 x 305 x 191		Compression resist [N/mm²]	f_B	12,5	15	20	-		
			Max recommended load [kN]	F_{rec}	0,21	0,26	0,34			
Hollow brick Nº5	Planziegel-T16-365, 248 x 365 x 249		Compression resist [N/mm²]	f_B	-			10	12	14
			Max recommended load [kN]	F_{rec}				0,17	0,17	0,21
Hollow brick Nº6	Poroton S8-365, 248 x 365 x 249		Compression resist [N/mm²]	f_B	10	12	14	10	12	14
			Max recommended load [kN]	F_{rec}	0,43	0,57	0,57	0,43	0,57	0,57
Hollow brick Nº7	Poroton-FZ9-365 Objekt, 248 x 365 x 249		Compression resist [N/mm²]	f_B	10	12	14	10	12	14
			Max recommended load [kN]	F_{rec}	0,71	0,86	1,00	0,57	0,71	0,86
Hollow brick Nº8	Schallschutzziegel 373 x 175 x 249		Compression resist [N/mm²]	f_B	20	24	28	20	24	28
			Max recommended load [kN]	F_{rec}	0,34	0,34	0,43	0,21	0,26	0,26
Hollow brick Nº9	Poroton-Kleinformate 2DF-0.9 240 x 115 x 113		Compression resist [N/mm²]	f_B	-			12	16	20
			Max recommended load [kN]	F_{rec}				0,11	0,17	0,21
Hollow brick Nº10	Ceramic 237 x 110 x 100		Compression resist [N/mm²]	f_B	20	30	40	-		
			Max recommended load [kN]	F_{rec}	0,11	0,17	0,21			
Hollow brick Nº11	Hollow brick H20, 300 x 110 x 190 mm		Compression resist [N/mm²]	f_B	-			15	25	35
			Max recommended load [kN]	F_{rec}				0,14	0,26	0,34
Hollow brick Nº12	Hollow brick CITY12, 330 x 120 x 249 mm		Compression resist [N/mm²]	f_B	-			15	25	35
			Max recommended load [kN]	F_{rec}				0,17	0,26	0,43

MATERIAL	SIZE	FIGURE	MAXIMUM RECOMMENDED LOADS		Ø8			Ø10		
					Zn		Inox	Zn		Inox
Hollow brick Nº13	Hollow brick CITY14, 330 x 140 x 249 mm		Compression resist [N/mm²]	f_B	-			15	25	35
			Max recommended load [kN]	F_{rec}				0,26	0,43	0,71
Hollow brick Nº14	Hollow brick PERFORATED 10, 245 x 110 x 100 mm		Compression resist [N/mm²]	f_B	-			15	25	35
			Max recommended load [kN]	F_{rec}				0,17	0,26	0,43
Hollow brick Nº15	Hollow brick THERMO CLAY 14, 300 x 140 x 190 mm		Compression resist [N/mm²]	f_B	-			15	25	35
			Max recommended load [kN]	F_{rec}				0,21	0,34	0,57
Hollow brick Nº16	Hollow brick THERMO CLAY 19, 300 x 190 x 190 mm		Compression resist [N/mm²]	f_B	-			15	25	35
			Max recommended load [kN]	F_{rec}				0,21	0,34	0,43
Hollow brick Nº17	Facebrick 240 x 115 x 50		Compression resist [N/mm²]	f_B	20	30	40	20	30	40
			Max recommended load [kN]	F_{rec}	0,17	0,26	0,34	0,34	0,43	0,57
Hollow brick Nº18	Mediterranean 240 x 115 x 90		Compression resist [N/mm²]	f_B	40	50	60	40	50	60
			Max recommended load [kN]	F_{rec}	0,21	0,34	0,34	0,43	0,57	0,71
Hollow brick Nº19	Gero brick 240 x 120 x 100		Compression resist [N/mm²]	f_B	10	12	14	10	12	14
			Max recommended load [kN]	F_{rec}	0,21	0,26	0,34	0,43	0,57	0,71
Hollow brick Nº20	Brick 390 x 190 x 190		Compression resist [N/mm²]	f_B	5			5		
			Max recommended load [kN]	F_{rec}	0,43			0,43		
Hollow brick Nº21	Airblock 491 x 241 x 190		Compression resist [N/mm²]	f_B	4			4		
			Max recommended load [kN]	F_{rec}	0,57			0,43		
Hollow brick Nº22	Poroton Deckenelnhängezlegel h21 530 x 210 x 249		Compression resist [N/mm²]	f_B	12	16	20	12	16	20
			Max recommended load [kN]	F_{rec}	0,09	0,11	0,14	0,17	0,26	0,34
Temperature Range					**24/40ºC**		**50/80ºC**	**24/40ºC**		**50/80ºC**
Aerated Concrete AAC2	625 x 240 x 250		Compression resist [N/mm²]	f_B	2			2		
			Max recommended load [kN]	F_{rec}	0,14		0,11	0,11		0,11
Aerated Concrete AAC6	625 x 240 x 250		Compression resist [N/mm²]	f_B	6			6		
			Max recommended load [kN]	F_{rec}	0,32		0,32	0,54		0,43

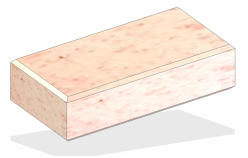
6. MINIMUM DISTANCES

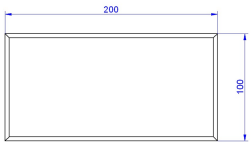
CATEGORY "A": FIXING IN CONCRETE

CHARACTERISTIC RESISTANCE FOR CRACKED AND NON CRACKED CONCRETE			PERFORMANCE			
			TNUX08		TNUX10	
Concrete type			**C12/15**	**≥C16/20**	**C12/15**	**≥C16/20**
h_{min}	Minimum thickness of concrete member	[mm]	100			
$c_{cr,N}$	Critical edge distance	[mm]	140	100	140	100
s_{min}	Minimum spacing	[mm]	85	60	100	70
c_{min}	Minimum edge distance	[mm]	85	60	100	70

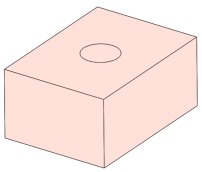
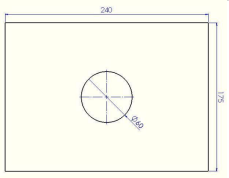
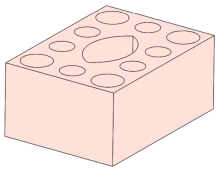
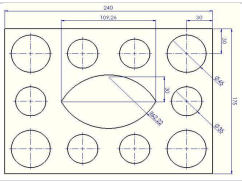
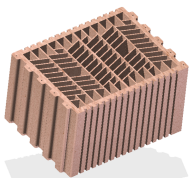
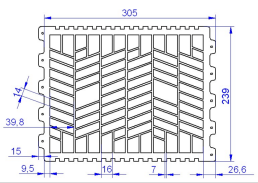
CATEGORY "B" : FIXING IN SOLID BRICKS

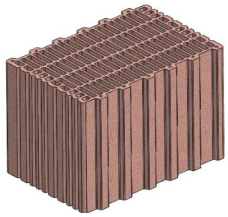
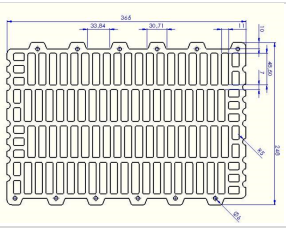
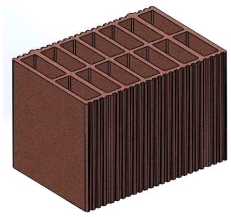
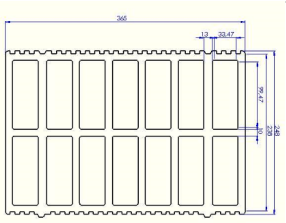
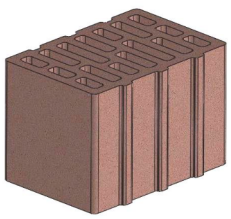
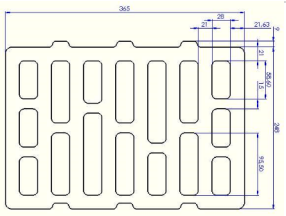
CHARACTERISTIC RESISTANCE FOR SOLID PARTITIONING WALLS			PERFORMANCE	
			TNUX08	TNUX10
Brick nº1: Paving stone 200 x 100 x 50 mm. Technical brickwork				
h_{min}	Minimum thickness of concrete member	[mm]	100	
Isolated anchor				
s_{min}	Minimum spacing	[mm]	250	
c_{min}	Minimum edge distance	[mm]	100	
Group of anchors				
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	200	
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	400	
c_{min}	Minimum edge distance	[mm]	100	

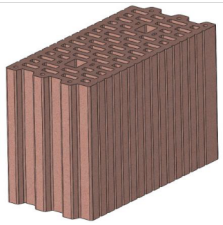
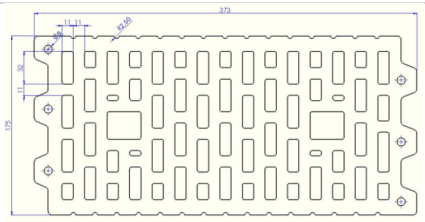
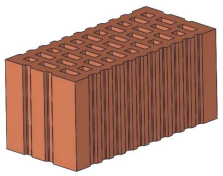
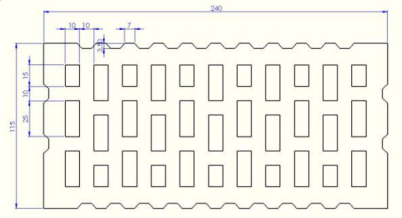
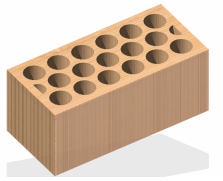
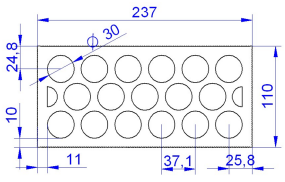


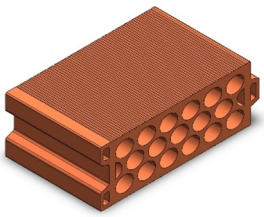
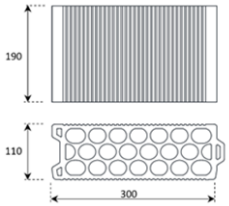
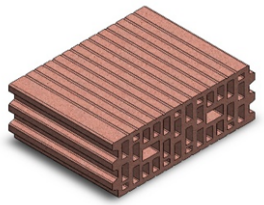
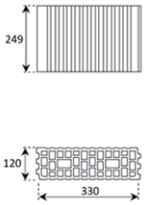
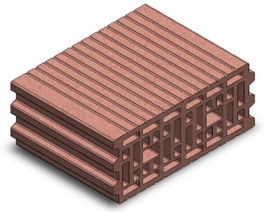
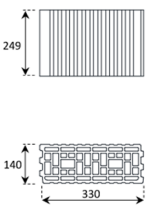


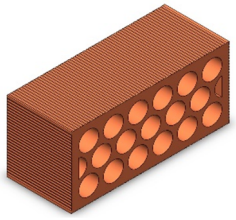
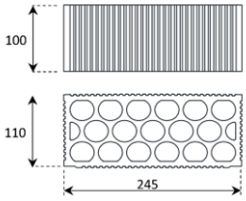
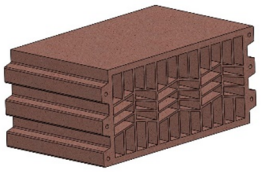
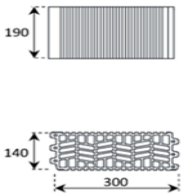
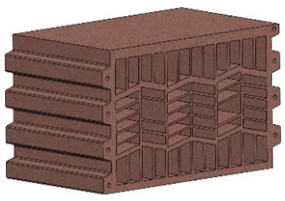
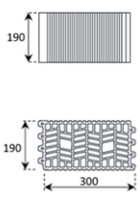
CATEGORY "C" : FIXING IN HOLOW BRICKS

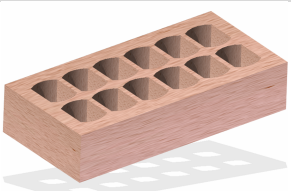
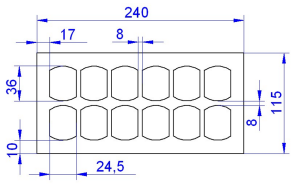
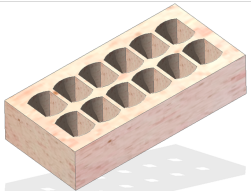
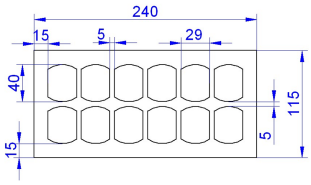
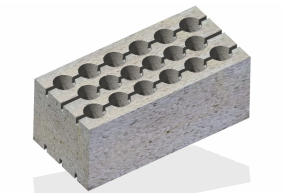
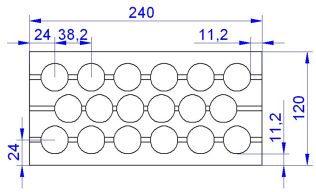
CHARACTERISTIC RESISTANCE FOR PERFORATED OR HOLLOW PARTITIONING WALLS			PERFORMANCE	
			TNUX08	TNUX10
Brick nº2: KS12-1.8-3DF, 240 x 175 x 113 mm. Wemdinger Kalksandstein. Calcium silicate brick KS 12				
Minimum thickness of concrete member		[mm]	175	
Isolated anchor				
Minimum spacing		[mm]	250	
Minimum edge distance		[mm]	100	
Group of anchors				
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	200	
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	400	
c_{min}	Minimum edge distance	[mm]	100	
				
Brick nº3: KS12-1.4-3DF, 240 x 175 x 113 mm. Wemdinger Kalksandstein. Calcium silicate brick KSL 12				
h_{min}	Minimum thickness of concrete member	[mm]	113	
Isolated anchor				
s_{min}	Minimum spacing	[mm]	250	
c_{min}	Minimum edge distance	[mm]	100	
Group of anchors				
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	200	
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	400	
c_{min}	Minimum edge distance	[mm]	100	
				
Brick nº4: Thermo clay de 24: 237 x 305 x 191 mm. Cerabrick				
h_{min}	Minimum thickness of concrete member	[mm]	237	
Isolated anchor				
s_{min}	Minimum spacing	[mm]	250	
c_{min}	Minimum edge distance	[mm]	100	
Group of anchors				
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	200	
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	400	
c_{min}	Minimum edge distance	[mm]	100	
				

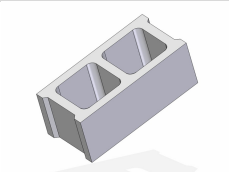
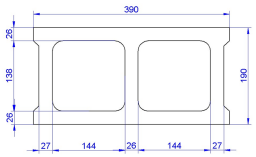
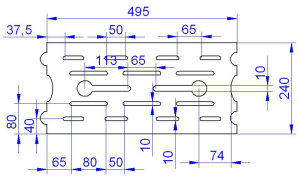
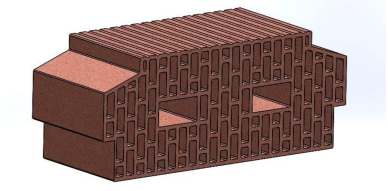
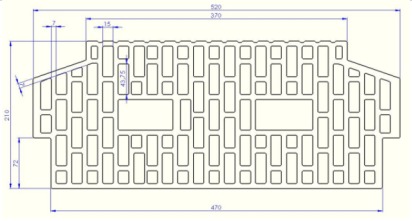
Brick nº5: Planziegel-T16-365, 248 x 365 x 249 mm. Hollow brick POROTON®-T16			
h_{min}	Minimum thickness of concrete member	[mm]	249
Isolated anchor			
s_{min}	Minimum spacing	[mm]	250
c_{min}	Minimum edge distance	[mm]	100
Group of anchors			
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	200
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	400
c_{min}	Minimum edge distance	[mm]	100
			
Brick nº6: Poroton S8-365, 248 x 365 x 249 mm. Hollow brick POROTON®-S8			
h_{min}	Minimum thickness of concrete member	[mm]	249
Isolated anchor			
s_{min}	Minimum spacing	[mm]	250
c_{min}	Minimum edge distance	[mm]	100
Group of anchors			
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	200
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	400
c_{min}	Minimum edge distance	[mm]	100
			
Brick nº7: Poroton-FZ9-365 Objekt, 248 x 365 x 249 mm. Hollow brick POROTON®-FZ9			
h_{min}	Minimum thickness of concrete member	[mm]	249
Isolated anchor			
s_{min}	Minimum spacing	[mm]	250
c_{min}	Minimum edge distance	[mm]	100
Group of anchors			
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	200
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	400
c_{min}	Minimum edge distance	[mm]	100
			

Brick nº8: Schallschutzziegel 373 x 175 x 249 mm. Poroton Clay brick HLz 20			
h_{min}	Minimum thickness of concrete member	[mm]	175
Isolated anchor			
s_{min}	Minimum spacing	[mm]	250
c_{min}	Minimum edge distance	[mm]	100
Group of anchors			
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	200
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	400
c_{min}	Minimum edge distance	[mm]	100
			
Brick nº9: Poroton-Kleinformate 2DF-0.9 240 x 115 x 113 mm. Poroton Clay brick HLz 12			
h_{min}	Minimum thickness of concrete member	[mm]	115
Isolated anchor			
s_{min}	Minimum spacing	[mm]	250
c_{min}	Minimum edge distance	[mm]	100
Group of anchors			
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	200
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	400
c_{min}	Minimum edge distance	[mm]	100
			
Brick nº 10: Ceramic de 10. 237 x 110 x 100 mm. Jumisa			
h_{min}	Minimum thickness of concrete member	[mm]	110
Isolated anchor			
s_{min}	Minimum spacing	[mm]	250
c_{min}	Minimum edge distance	[mm]	100
Group of anchors			
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	200
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	400
c_{min}	Minimum edge distance	[mm]	100
			

Brick nº11: Hollow brick H20 Cerámica Sampedro			
h_{min}	Minimum thickness of concrete member	[mm]	110
Isolated anchor			
s_{min}	Minimum spacing	[mm]	100
c_{min}	Minimum edge distance	[mm]	100
Group of anchors			
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	100
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	100
c_{min}	Minimum edge distance	[mm]	100
			
Brick nº12: Hollow brick CITY12 Cerámica Sampedro			
h_{min}	Minimum thickness of concrete member	[mm]	120
Isolated anchor			
s_{min}	Minimum spacing	[mm]	100
c_{min}	Minimum edge distance	[mm]	100
Group of anchors			
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	100
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	100
c_{min}	Minimum edge distance	[mm]	100
			
Brick nº13: Hollow brick CITY14 Cerámica Sampedro			
h_{min}	Minimum thickness of concrete member	[mm]	140
Isolated anchor			
s_{min}	Minimum spacing	[mm]	100
c_{min}	Minimum edge distance	[mm]	100
Group of anchors			
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	100
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	100
c_{min}	Minimum edge distance	[mm]	100
			

Brick nº14: Hollow brick PERFORATED 10 Cerámica Sampedro			
h_{min}	Minimum thickness of concrete member	[mm]	110
Isolated anchor			
s_{min}	Minimum spacing	[mm]	100
c_{min}	Minimum edge distance	[mm]	100
Group of anchors			
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	100
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	100
c_{min}	Minimum edge distance	[mm]	100
			
Brick nº15: Hollow brick THERMO CLAY 14 Cerámica Sampedro			
h_{min}	Minimum thickness of concrete member	[mm]	140
Isolated anchor			
s_{min}	Minimum spacing	[mm]	100
c_{min}	Minimum edge distance	[mm]	100
Group of anchors			
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	100
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	100
c_{min}	Minimum edge distance	[mm]	100
			
Brick nº16: Hollow brick THERMO CLAY 19 Cerámica Sampedro			
h_{min}	Minimum thickness of concrete member	[mm]	190
Isolated anchor			
s_{min}	Minimum spacing	[mm]	100
c_{min}	Minimum edge distance	[mm]	100
Group of anchors			
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	100
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	100
c_{min}	Minimum edge distance	[mm]	100
			

Brick nº 17: Waterproof facebrick 240 x 115 x 50 mm. Ladritec			
h_{min}	Minimum thickness of concrete member	[mm]	115
Isolated anchor			
s_{min}	Minimum spacing	[mm]	250
c_{min}	Minimum edge distance	[mm]	100
Group of anchors			
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	200
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	400
c_{min}	Minimum edge distance	[mm]	100
			
Brick nº 18: Clinker Mediterranean 240 x 115 x 90. Technical brickwork			
h_{min}	Minimum thickness of concrete member	[mm]	115
Isolated anchor			
s_{min}	Minimum spacing	[mm]	250
c_{min}	Minimum edge distance	[mm]	100
Group of anchors			
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	200
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	400
c_{min}	Minimum edge distance	[mm]	100
			
Brick nº 19: Gero block 240 x 120 x 100 mm. Gilva			
h_{min}	Minimum thickness of concrete member	[mm]	120
Isolated anchor			
s_{min}	Minimum spacing	[mm]	250
c_{min}	Minimum edge distance	[mm]	100
Group of anchors			
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	200
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	400
c_{min}	Minimum edge distance	[mm]	100
			

Brick nº 20: Facebrick block 390 x 190 x 190 mm. Gallizo			
h_{min}	Minimum thickness of concrete member	[mm]	190
Isolated anchor			
s_{min}	Minimum spacing	[mm]	250
c_{min}	Minimum edge distance	[mm]	100
Group of anchors			
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	200
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	400
c_{min}	Minimum edge distance	[mm]	100
			
Brick nº 21: Airblock. 491 x 241 x 190 mm. Viguetas Navarra.			
h_{min}	Minimum thickness of concrete member	[mm]	241
Isolated anchor			
s_{min}	Minimum spacing	[mm]	250
c_{min}	Minimum edge distance	[mm]	100
Group of anchors			
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	200
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	400
c_{min}	Minimum edge distance	[mm]	100
			
Brick nº 22: Poroton Deckenelnhängezlegel h21 530 x 210 x 249 mm			
h_{min}	Minimum thickness of concrete member	[mm]	210
Isolated anchor			
s_{min}	Minimum spacing	[mm]	250
c_{min}	Minimum edge distance	[mm]	100
Group of anchors			
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	200
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	400
c_{min}	Minimum edge distance	[mm]	100
			

CATEGORY "D" : FIXATION IN AERATED CONCRETE				
CHARACTERISTIC RESISTANCE IN BLOCKS			PERFORMANCES	
			TNUX08	TNUX10
AAC2: 625 x 240 x 250 mm				
h_{min}	Minimum thickness of concrete member	[mm]	100	
Isolated anchor				
s_{min}	Minimum spacing	[mm]	250	
c_{min}	Minimum edge distance	[mm]	100	
Group of anchors				
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	200	
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	400	
c_{min}	Minimum edge distance	[mm]	100	
AAC6: 625 x 240 x 250 mm				
h_{min}	Minimum thickness of concrete member	[mm]	100	
Isolated anchor				
s_{min}	Minimum spacing	[mm]	250	
c_{min}	Minimum edge distance	[mm]	100	
Group of anchors				
$s_{1,min}$	Minimum spacing perpendicular to edge	[mm]	200	
$s_{2,min}$	Minimum spacing parallel to edge	[mm]	400	
c_{min}	Minimum edge distance	[mm]	100	

7. OFFICIAL DOCUMENTATION

The following official documentation is available through our Sales Department or directly from our website www.indexfix.com :

- European Technical Assessment ETA-14/0467 Plastic anchor diameter 8 & 10 for multiple fixings in concrete and masonry in non-structural applications.
- Certification AVCP 1219-CPR-0088.
- TNUX-en DoP Declaration of performance.