## **Expandet 8 mm Super Frame Fixing**

Expandet 8 mm Super Frame Fixing for fixing of door and window frames, wooden laths, substructures, cladding etc. in concrete, aerated concrete, solid and hollow brick.





### **ADVANTAGES**

- Through fixing.
- High load capacities.
- All-round use.
- Resistant to vibrations.
- No thermal bridge.
- Especially designed for aerated concrete.

### **ACCESSORIES**

Self-adhesive FastCap covercaps.

Covercaps.



## **INSTALLATION:**

Drill a 8 mm hole through fixture and into the wall. Use HSS-drill in aerated concrete and other solid low density base-materials. In hollow brick, only use rotary drilling



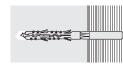
Clean the drilled hole thoroughly



Insert 8 mm Super Frame Fixing as through fixing



Tighten the screw



5]

The installation is finished

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TYPE DIMENSION	DRILL DIA. MM	DRILL DEPTH MM	THICKNESS OF FIXTURE (MAX.) MM	EXPANDET ARTICLE NO.	PCS. PER BOX	Part No	EAN 13 PER BOX
				22222		NEL 400000	
8 x 80	8	90	20	988080	50	N5L1608080	5708620202099
8 x 100	8	110	40	988100	50	N5L1608100	5708620202105
8 x 120	8	130	60	988120	50	N5L1608120	5708620202112

Туре	Load capacities										
	Aerated concrete PP4		Aerated concrete PP2		Leca 3 N/mm²	Hollow brick 22 N/ mm2	N/ Solid brick		Concrete		
DIMENSION	Design tension load <sup>▼</sup>	Design shear load <sup>▼</sup>	Design tension load <sup>▼</sup>	Design shear load <sup>▼</sup>	Design tension load <sup>▽</sup>			Design shear load <sup>⋄</sup>	Design tension load	Design shear load <sup>◊</sup>	
	N <sub>Rd</sub>	$\mathbf{V}_{Rd}$	N <sub>Rd</sub>	$\mathbf{V}_{Rd}$	F <sub>Rd</sub>	F <sub>Rd</sub>	N <sub>Rd</sub>	$\mathbf{V}_{Rd}$	N <sub>Rd</sub>	V <sub>Rd</sub>	
8 x 80	0,60	0,50	0,27	0,35	0,37	0,65	1,44	1,20	1,64	1,80	
8 x 100	0,60	0,50	0,27	0,35	0,37	0,65	1,44	1,20	1,64	1,80	
8 x 120	0,60	0,50	0,27	0,35	0,37	0,65	1,44	1,20	1,64	1,80	

- Design resistance in aerated concrete PP2 and PP4 is valid for a single anchor not influenced by edge distance and/or spacing:

  Minimum edge distance PP4 ≥ 50 mm and minimum spacing ≥ 100 mm

  Minimum edge distance PP2 ≥ 100 mm and minimum spacing ≥ 100 mm
- Design resistance independent of load direction in Leca with a minimum compressive strength of 3 N/mm2 is valid for a single anchor not influenced by edge distance and/or spacing: Minimum edge distance ≥ 100 mm and minimum spacing ≥ 100 mm.
- Design resistance independent of load direction in hollow brick with a minimum compressive strength of 15 N/mm2 is valid for a single anchor not influenced by edge distance and/or spacing: Minimum edge distance ≥ 100 mm and minimum spacing ≥ 100 mm.
- Design resistance in solid brick with a minimum compressive strength of 15 N/mm2 is valid for a single anchor not influenced by edge distance and/or spacing: Minimum edge distance ≥ 100 mm and minimum spacing ≥ 100 mm.
- Design resistance in concrete C20/25 is valid for a single anchor not influenced by edge distance and/ or spacing: Minimum edge distance ≥ 50 mm and minimum spacing ≥ 100 mm

Combined resistance shall be verified if both tension and shear actions are applied:

$$\left(\frac{N_{Sd}}{N_{Sd}}\right) + \left(\frac{V_{Sd}}{V_{Sd}}\right) \le 1.2$$

 $Partial\ safety\ factor\ for\ material\ (\gamma m)\ is\ included.\ Partial\ safety\ factor\ for\ actions\ (\gamma f)\ must\ be\ applied\ according\ to\ national\ building\ code.$ 

If no guidance for yf exists Expandet recommend a partial safety factor for actions of minimum 1,5.

 $1 \text{ kN} \approx 100 \text{ kg}.$