

## LOADS

### Nail anchor FNA II

Highest permissible loads<sup>1)</sup> for one fixing point<sup>5)</sup> for multiple use for non-structural applications in concrete C20/25 up to C50/60<sup>4)</sup>. For the design the complete approval ETA - 06/O175 has to be considered.

Type	Cracked or Non-cracked concrete					
	Effective anchorage depth	Min. member thickness	Installation torque	Permissible load	Min. spacing	Min. edge distance
	$h_{ef}$ [mm]	$h_{min}$ [mm]	$T_{inst}$ [Nm]	$F_{perm}^{3)}$ [kN]	$s_{min}^{2)}$ [mm]	$c_{min}^{2)}$ [mm]
<b>FNA II 6 x 25</b>	25	80	-	1,4	40	40
<b>FNA II 6 x 30</b>	30	80	-	2,4	40	40
<b>FNA II 6 x 25 M6</b>	25	80	4,0	1,4	40	40
<b>FNA II 6 x 30 M6</b>	30	80	4,0	2,4	40	40
<b>FNA II 6 x 30 M8</b>	30	80	4,0	2,4	40	40
<b>FNA II 6 x 25 OE</b>	25	80	-	0,7	40	40

<sup>1)</sup> The partial safety factors for material resistance as regulated in the approval as well as a partial safety factor for load actions of  $\gamma_L = 1,4$  are considered.

<sup>2)</sup> Minimum possible axial spacings resp. edge distance while reducing the permissible load.

<sup>3)</sup> Valid for tensile load, shear load and oblique load under any angle. For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see approval.

<sup>4)</sup> Loads for concrete strength class C12/15 see approval.

<sup>5)</sup> A fixing point is defined as a single anchor or a group of 2 or 4 anchors.

## LOADS

### Nail anchor FNA II A4

Highest permissible loads<sup>1)</sup> for one fixing point<sup>5)</sup> for multiple use for non-structural applications in concrete C20/25 up to C50/60<sup>4)</sup>. For the design the complete approval ETA - 06/O175 has to be considered.

Type	Cracked or Non-cracked concrete					
	Effective anchorage depth	Min. member thickness	Installation torque	Permissible load	Min. spacing	Min. edge distance
	$h_{ef}$ [mm]	$h_{min}$ [mm]	$T_{inst}$ [Nm]	$F_{perm}^{3)}$ [kN]	$s_{min}^{2)}$ [mm]	$c_{min}^{2)}$ [mm]
<b>FNA II 6 x 30 A4</b>	30	80	-	2,4	40	40
<b>FNA II 6 x 30 M6 A4</b>	30	80	4,0	2,4	40	40

<sup>1)</sup> The partial safety factors for material resistance as regulated in the approval as well as a partial safety factor for load actions of  $\gamma_L = 1,4$  are considered.

<sup>2)</sup> Minimum possible axial spacings resp. edge distance while reducing the permissible load.

<sup>3)</sup> Valid for tensile load, shear load and oblique load under any angle. For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see approval.

<sup>4)</sup> Loads for concrete strength class C12/15 see approval.

<sup>5)</sup> A fixing point is defined as a single anchor or a group of 2 or 4 anchors.

## LOADS

### Nail anchor FNA II C

Highest permissible loads<sup>1)</sup> for one fixing point<sup>5)</sup> for multiple use for non-structural applications in concrete C20/25 up to C50/60<sup>4)</sup>. For the design the complete approval ETA - 06/O175 has to be considered.

Type	Cracked or Non-cracked concrete					
	Effective anchorage depth	Min. member thickness	Installation torque	Permissible load	Min. spacing	Min. edge distance
	$h_{ef}$ [mm]	$h_{min}$ [mm]	$T_{inst}$ [Nm]	$F_{perm}^{3)}$ [kN]	$s_{min}^{2)}$ [mm]	$c_{min}^{2)}$ [mm]
<b>FNA II 6 x 30 C</b>	30	80	-	2,4	40	40
<b>FNA II 6 x 30 M6 C</b>	30	80	4,0	2,4	40	40

<sup>1)</sup> The partial safety factors for material resistance as regulated in the approval as well as a partial safety factor for load actions of  $\gamma_L = 1,4$  are considered.

<sup>2)</sup> Minimum possible axial spacings resp. edge distance while reducing the permissible load.

<sup>3)</sup> Valid for tensile load, shear load and oblique load under any angle. For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see approval.

<sup>4)</sup> Loads for concrete strength class C12/15 see approval.

<sup>5)</sup> A fixing point is defined as a single anchor or a group of 2 or 4 anchors.