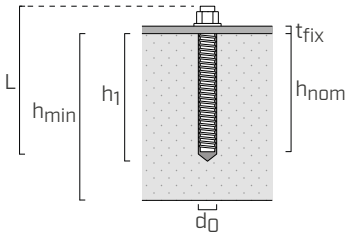
ANCHORS INSTALLATION PARAMETERS | TCP200 - TCP300

installation	anchor type		t_{fix}	h_{ef}	h_{nom}	h_1	d_0	h_{min}
	type	Ø x L [mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
TCP200	VIN-FIX PRO EPO-FIX PLUS 5.8	M12 x 130	3	112	112	120	14	**150**
	SKR-E	12 x 90	3	64	87	110	10	
	AB1	M12 x 100	3	70	80	85	12	
	EPO-FIX PLUS 5.8	M12 x 180	3	161	161	170	14	**200**
TCP300	VIN-FIX PRO EPO-FIX PLUS 5.8	M16 x 190	4	164	164	170	18	**200**
	SKR-E	16 x 130	4	85	126	150	14	
	AB1	M16 x 145	4	85	97	105	16	
	EPO-FIX PLUS 8.8	M16 x 230	4	200	200	205	14	**240**

Precut INA threaded rod, with nut and washer: see page 520
MGS threaded rod class 8.8 to be cut to size: see page 534



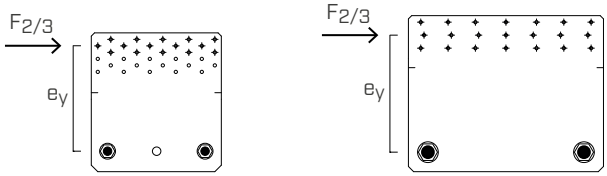
t_{fix} fastened plate thickness
h_{nom} nominal anchoring depth
h_{ef} effective anchor depth
h_1 minimum hole depth
d_0 hole diameter in the concrete support
h_{min} concrete minimum thickness

ANCHORS FOR CONCRETE VERIFICATION | TCP200 - TCP300

Fastening to concrete using anchors must be verified on the basis of the stressing forces of the anchors, which depend on the timber fastening configuration.
The position and number of nails/screws determine the e_y eccentricity value, understood as the distance between the centre of gravity of the nailing and that of the anchors.

The anchor group must be verified for:

$V_{Sd,x} = F_{2/3,d}$
$M_{Sd,z} = F_{2/3,d} \times e_y$



GENERAL PRINCIPLES:

- Characteristic values according to EN 1995-1-1. The design values of the anchors for concrete are calculated in accordance with the respective European Technical Assessments.
  The connection design strength value is obtained from the values on the table as follows:

$$R_d = min \begin{cases} \dfrac{(R_{k,\,timber} \text{ or } R_{k,\,CLT}) \cdot k_{mod}}{\gamma_M} \\ \dfrac{R_{k,\,steel}}{\gamma_{steel}} \\ R_{d,\,concrete} \end{cases}$$

  The coefficients k_{mod}, γ_M and γ_{steel} should be taken according to the current regulations used for the calculation.
- The calculation process used a timber characteristic density of ρ_k = 350 kg/m^3 and C25/30 concrete with a thin reinforcing layer and minimum thickness indicated in the table.
- Dimensioning and verification of timber and concrete elements must be carried out separately.
- The strength values are valid for the calculation hypotheses defined in the table; for boundary conditions different from the ones in the table (e.g. minimum distances from the edge), the anchors-to-concrete can be verified using MyProject calculation software according to the design requirements.
- Seismic design in performance category C2, without ductility requirements on anchors (option a2) elastic design according to EOTA TR045. For chemical anchors it is assumed that the annular space between the anchor and the plate hole is filled (α_{gap}=1).