

# LOADS

## Permissible loads<sup>1) 4)</sup> for a single anchor for fixing of external thermal insulation composite systems

For the design the complete approval ETA-02/0019 has to be considered.

Base material <sup>3)</sup>	min. raw density class $\rho$ [kg/dm <sup>3</sup> ]	min. compressive brick strength $f_b$ [N/mm <sup>2</sup> ]	Drilling method <sup>2)</sup> [-]	Permissible loads according ETA-approval [kN]
Concrete		C12/15	H	0,50
Concrete		C16/20	H	0,50
Concrete		C50/60	H	0,50
Solid sand-lime brick KS	1,6	12	H	0,50
Solid brick Mz	1,6	12	H	0,50
Perforated sand-lime brick KSL	1,4	12	H	0,25
Vertically perforated brick Hlz	1,2	12	R	0,25
Hollow blocks made from lightweight concrete Hbl	0,5	2	R	0,13
Solid blocks made from lightweight concrete Vbl	0,5	4	R	0,20
Aerated concrete PP	0,5	4	R	0,40
Triple-skin outer wall panels made of concrete		C20/25	H	0,50

<sup>1)</sup> The required partial safety factors for material resistance as well as a partial safety factor for load actions  $\gamma_f = 1,5$  are considered.

<sup>2)</sup> H = Hammer drilling; R = Rotary drilling

<sup>3)</sup> Restrictions concerning each producer and the possible hole pattern resp. web thickness please see approval. The characteristic tension resistance of the anchor may be determined by means of job site pullout tests carried out on the material actually used, if a characteristic resistance of the base material does not exist.

<sup>4)</sup> Tensile loads only