Loads

Weather facing reconstruction system FWS II

Permissible shear loads[1) 2)] for a single anchor in a load-bearing skin made of concrete ≥ C12/15.
For the design the complete approval decision Z-21.8-2029 of 13.11.2024 must be considered.

						Cracked and non-cracked concrete	
	Effective anchorage depth in the load-bearing skin	Thickness of load-bearing layer	Thickness of thermal insulation[3)]	Thickness of outer leaf	Permissible bending moment	Permissible shear load[4)]	Minimum edge distance[5)]
Type	$h_{ef} \geq$ [mm]	$h_1 \geq$ [mm]	$h_D \leq$ [mm]	$h_w \geq$ [mm]	M_{zul} [Nm]	V_{zul} [kN]	c_{min} (c_W, c_T) [mm]
FWS II - A 180	70	80	70	40	1310	11.5	150
FWS II - A 205	70	80	95	40	1310	9.5	150
FWS II - A 230	70	80	120	40	1310	8.0	150
FWS II - A 255	70	80	145	40	1310	7.0	150
FWS II - A 280	70	80	170	40	1310	6.0	150

1) Required safety factors are considered. The given loads are valid under the pre-condition that an additional thermal insulation will be applied on the weather facing.
2) The given loads are valid for fixations in dry and humid concrete for temperatures in the substrate up to +50 °C (resp. short term up to 80 °C) and drill hole cleaning according to approval.
3) For bigger insulation thicknesses special lengths are possible.
4) The determination of the permissible shear load for special lengths is carried out in accordance with the approval.
5) For exact arrangement of the bolts as well as for eventually needed additional proofs see approval.