

Weather facing reconstruction system FWS II

Permissible shear loads^{1) 2)} for a single anchor in a load-bearing skin made of concrete \geq C12/15.
For the design the complete approval Z-21.8-2029 has to be considered.

Type	Effective anchorage depth in the load-bearing skin $h_{ef} \geq$ [mm]	Thickness of load-bearing layer $h_T \geq$ [mm]	Thickness of - thermal insulation ³⁾ $h_D \leq$ [mm]	Thickness of- outer leaf $h_w \geq$ [mm]	Permissible bending moment M_{zul} [Nm]	Cracked and non-cracked concrete	
						Permissible shear load ⁴⁾ V_{zul} [kN]	Mindestrand-abstand ⁵⁾ $c_{min} (c_w, c_T)$ [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	8.1	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 drillhole 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 done according Annex 3 and 4 of the approval.

⁵⁾ For exact arrangement of the bolts as well as for eventually needed additional proofs see approval.