e-slide - Load Transfer Capacity

The follow table shows the load transfer capacity in [kN/m] of the **e-slide** construction joint at ULS for plain concrete and a joint opening of 15 mm. The values are based on the following formula which is derived from laboratory testing results in accordance with EN 1990 (EC0).



$V_{\textrm{Rd},\textrm{c}}=0,0525\;/\;\gamma_{\textrm{c}}$. $k^{3/2}$. $f_{\textrm{ck}}^{1/2}$. 0,60 . h / 1,4 [kN/m]

with: $\gamma_c =$ 1,50 [-]; k = 1 + (200 / d)^{0.5} \leq 2,0; d = h - 60mm

e-slide load transfer capacity in [kN/m] (kips/ft)			
Slab height	unreinforced (plain) concrete		
h [mm] (inch)	C25/30 (3600 PSI)	C30/37 (4350 PSI)	C35/45 (5000 PSI)
140	29,70	32,53	35,14
(5 1/2)	(2.03)	(2.23)	(2.41)
150	31,82	34,86	37,65
(6)	(2.18)	(2.39)	(2.58)
160	33,94	37,18	40,16
(6 3/8)	(2.33)	(2.55)	(2.75)
170	36,06	39,50	42,67
(6 3/4)	(2.47)	(2.71)	(2.92)
180	38,18	41,83	45,18
(7)	(2.62)	(2.87)	(3.10)
190	40,31	44,15	47,69
(7 1/2)	(2.76)	(3.03)	(3.27)
200	42,43	46,48	50,20
(8)	(2.91)	(3.18)	(3.44)
210	44,55	48,80	52,71
(8 1/4)	(3.05)	(3.34)	(3.61)
220	46,67	51,12	55,22
(8 3/4)	(3.20)	(3.50)	(3.78)

The table only provides the material capacity at ULS (safety: $\gamma = 1,5$). This table does not replace the necessary design check. The design check is available for each project upon request.

The e-slide construction joint is recommended for use in light and medium loaded floors and for floor thickness' between 140 and 220 mm (5.5" - 8 3/4"). Higher joints for floor thicknesses above 220 mm (8 3/4") are available on request and function of the corresponding design check. For further information with regards to the installation, please consult the e-slide installation guide.

ATTENTION: The load transfer capacity of e-slide is reduced when compared to Cosinus Slide[®] but is still considerably greater than discontinued plate- or doweled joints. For calculations, validations and optimal use of the joints for your respective projects, please contact your local dealer or send a request to info@hcjoints.be.

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