

Performance data SIMPLEXanchor B-SN / B-SN A4

(B-SN zinc plated steel / B-SN stainless steel)



Hints

Maximum loads of an anchor in standard concrete C20/25¹.

When measuring, follow the complete European Technical Assessment ETA-24/0798 from August, 19th 2024

precisely and use Berner Calculation Software

The partial safety factors for resistance and the partial safety factor for load with $\gamma_F 1,4$ are considered

¹) The concrete is considered to be normally reinforced or non-reinforced.

For higher concrete strength classes an increase in performance

of up to 55 % is possible

²) Use restricted to anchoring of structural components,

which are statically indeterminate

³) Without simultaneous effective influence of concrete edges



Anchor size					M 6	M 8		M 10		M 12		M 16		M 20	
Approved value of a single anchor															
Red./Stand. anchorage depth		red./h _{ef}	[mm]		-/ 40 ²	35 ²	48	42	55	50	65	65	84	75	103
Approved tensile load	C20/25 ¹ in non-cracked concrete	app N	[kN]	B-SN	-/ 3,8	4,8	6,6	6,4	9,1	8,3	12,3	12,3	18	15,2	24,5
				B-SN A4	-	3,6	5,7	4,8	6,4	6,4	9,9	-	-	-	-
Approved shear load	C20/25 ¹ in non-cracked concrete	app. V	[kN]	B-SN	-/ 2,9	3,6	5,3	6,4	8,4	8,3	11,8	21,9	21,9	30,4	32,2
				B-SN A4	-	4,9	5,1	6,4	8,2	8,3	11,8	-	-	-	-
Fixture measurements															
Characteristic spacing ³⁾	concrete cone	s _{cr, N}	[mm]	B-SN	-/120	105	144	126	165	150	195	195	252	225	309
	splitting	s _{cr, sp}	[mm]		-/160	140	192	168	220	200	260	260	280	336	412
Minimum allowable spacing		s _{min}	[mm]	B-SN	-/ 35	40		50		70		90		135	
				B-SN A4	-	65		70		85		-		-	
Characteristic edge distance	concrete cone	C _{cr, N}	[mm]	B-SN	-/ 60	53	72	63	83	75	98	98	126	113	155
	splitting	C _{cr, sp}	[mm]	B-SN	-/ 80	70	96	84	110	100	130	130	140	150	180
Minimum allowable edge distance		c _{min}	[mm]	B-SN	-/ 35	40		50		70		90		135	
				B-SN A4	-	65		70		85		-		-	
Min. concrete member thickness		h _{min}	[mm]		-/ 100	100	100	100	110	100	130	130	168	150	206
Installation parameters															
Nominal drill diameter		d ₀	[mm]		6	8	8	10	10	12	12	16	16	20	20
Clearance-hole in fixture to be attached		d _{f<=}	[mm]		7	9	9	12	12	14	14	18	18	22	22
Drill hole depth		h _{1>=}	[mm]		-/ 55	50	65	60	75	70	85	90	110	107	135
Installation torque		T _{inst}	[Nm]		7	20	20	35	35	60	60	120	120	240	240