

Työn nro		Rakennelaskelmat
Tekijä	HH	Pos.
Päiväys	27.12.16	Sivu
Rakennuskohde	Sisältö	

Lähde SFS-EN 1992-1-1 + FIN NA, FIB Model Code 2010, by 210 2008

Laatija Henri Huoso

LEIKKAUSTAPPIEN KESTÄVYYS, B500B teräs

Pienennetyt osavarmuuskertoimet [kN]

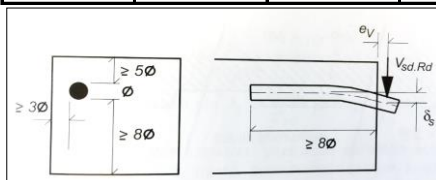
	T6	T8	T10	T12	T16	T20	T25	T32
C12/15	2.5	4.4	6.9	9.9	17.7	27.6	43.2	70.8
C16/20	2.9	5.1	8.0	11.5	20.4	31.9	49.9	81.7
C20/25	3.2	5.7	8.9	12.8	22.8	35.6	55.7	91.4
C25/30	3.6	6.3	9.9	14.3	25.5	39.8	62.3	102.1
C30/37	3.9	6.9	10.9	15.7	27.9	43.6	68.2	111.9
C35/45	4.2	7.5	11.7	16.9	30.1	47.1	73.7	120.8
C40/50	4.5	8.0	12.5	18.1	32.2	50.3	78.7	129.1
C45/55	4.8	8.5	13.3	19.2	34.1	53.4	83.5	136.9
C50/60	5.0	8.9	14.0	20.2	36.0	56.3	88.0	144.3
C55/67	5.2	9.4	14.7	21.2	37.7	59.0	92.3	151.3
C60/75	5.5	9.8	15.3	22.1	39.4	61.6	96.4	158.0
C70/85	5.9	10.5	16.5	23.8	42.5	66.5	104.0	170.6
C80/95	6.3	11.3	17.7	25.5	45.4	71.1	111.2	182.4
C90/105	6.7	11.9	18.7	27.0	48.1	75.3	117.9	193.4

Normaalit osavarmuuskertoimet [kN]

	T6	T8	T10	T12	T16	T20	T25	T32
C12/15	2.2	3.9	6.1	8.8	15.7	24.5	38.3	62.8
C16/20	2.5	4.5	7.1	10.2	18.1	28.3	44.3	72.6
C20/25	2.8	5.0	7.9	11.4	20.2	31.6	49.5	81.1
C25/30	3.2	5.6	8.8	12.7	22.6	35.4	55.3	90.6
C30/37	3.5	6.2	9.6	13.9	24.8	38.7	60.6	99.3
C35/45	3.7	6.6	10.4	15.0	26.7	41.8	65.4	107.2
C40/50	4.0	7.1	11.1	16.0	28.6	44.7	69.9	114.6
C45/55	4.2	7.5	11.8	17.0	30.3	47.4	74.1	121.5
C50/60	4.4	7.9	12.4	17.9	31.9	49.9	78.1	128.1
C55/67	4.7	8.3	13.0	18.8	33.5	52.4	81.9	134.3
C60/75	4.9	8.7	13.6	19.6	34.9	54.7	85.5	140.3
C70/85	5.2	9.4	14.7	21.2	37.7	59.0	92.3	151.5
C80/95	5.6	10.0	15.7	22.6	40.3	63.1	98.7	161.9
C90/105	5.9	10.6	16.6	24.0	42.7	66.9	104.6	171.7

Onnettomuustilanteen osavarmuuskertoimet [kN]

	T6	T8	T10	T12	T16	T20	T25	T32
C12/15	3.3	5.9	9.2	13.3	23.7	37.0	57.9	94.9
C16/20	3.8	6.8	10.7	15.4	27.3	42.7	66.8	109.6
C20/25	4.3	7.6	11.9	17.2	30.5	47.8	74.7	122.5
C25/30	4.8	8.5	13.3	19.2	34.1	53.4	83.5	136.9
C30/37	5.2	9.3	14.6	21.0	37.4	58.5	91.4	149.9
C35/45	5.6	10.0	15.7	22.7	40.3	63.1	98.7	161.9
C40/50	6.0	10.7	16.8	24.2	43.1	67.5	105.5	173.0
C45/55	6.4	11.4	17.8	25.7	45.7	71.5	111.9	183.5
C50/60	6.7	12.0	18.7	27.0	48.2	75.4	117.9	193.4
C55/67	7.0	12.5	19.6	28.3	50.5	79.0	123.6	202.8
C60/75	7.3	13.1	20.5	29.6	52.7	82.5	129.1	211.7
C70/85	7.9	14.1	22.1	31.9	56.9	89.1	139.4	228.6
C80/95	8.2	14.5	22.7	32.6	58.0	90.7	141.7	232.2
C90/105	8.2	14.5	22.7	32.6	58.0	90.7	141.7	232.2



$$V_{sd,Rd} = \frac{1,3}{\gamma_v} \phi^2 \left(\sqrt{1 + (1,3\varepsilon)^2} - 1,3\varepsilon \right) \sqrt{f_{cd} f_{sd} (1 - \zeta^2)} < \frac{A_s f_{sd}}{\sqrt{3}}$$

$$\varepsilon = 3 \frac{e_V}{\phi} \sqrt{\frac{f_{cd}}{f_{sd}}}, \quad \zeta = \frac{\sigma_s}{f_{sd}}$$