

SPRICKVIDD MAXLAST BRUKSGRÄNSTILLSTÄNDET BBK 04

$$\sigma_{sbmax} := \sigma_s(x) \cdot \frac{\left(h - x - t_s - \frac{\phi_s}{2}\right)}{d - x} \quad \sigma_{sbmax} = 308$$

$$\text{info2} = 2 \quad A := 2 \cdot (h - d) \quad B := \left(A \frac{h - x}{3}\right) \quad \text{def} := \begin{cases} \min(B) & \text{if info2} = 2 \\ A & \text{if info2} = 1 \end{cases}$$

def = 42.6 mm

Armeringsinnehåll

$$\chi_2 := 0.25 - \frac{\text{def}}{8 \cdot (h - x)}$$

$\chi_2 = 0.208$

$$\rho_r := \frac{A_s}{b(h) \cdot \text{def}}$$

$\phi_s = 9$

$\rho_r = 0.0142$

$\chi_1 = 1.2$

Sprickavstånd

$$S_{rm} := 50 + \chi_1 \cdot \chi_2 \cdot \frac{\phi_s}{\rho_r}$$

$S_{rm} = 208.3 \text{ mm}$

$$S_{rm} := \text{if}(\text{InfoNÄT} = 1, \text{if}(s \leq S_{rm}, s, S_{rm}), S_{rm})$$

$S_{rm} = 208.3 \text{ mm}$

$M = 20.8 \quad M_{cr} = 8.6$

$$v := 1 - \left(\frac{0.5}{2 \cdot \chi_1}\right) \cdot \frac{M_{cr}}{M}$$

$$v := \text{if}(v > 1.0, 1.0, v)$$

$$Q := (v \cdot 0.4)$$

$$v := \max(Q)$$

$v = 0.91$

Sprickvidd

$$w_k := 1.7 \cdot v \cdot \left(\frac{\sigma_{sbmax}}{E_{sk}} + 0 \cdot \varepsilon_{cs}\right) \cdot S_{rm}$$

$\varepsilon_{cs} = 0$

$$w_{kb} := \text{if}(\sigma_{cbuk} \geq 0, w_k, 0)$$

$w_{kb} = 0.498 \text{ mm}$