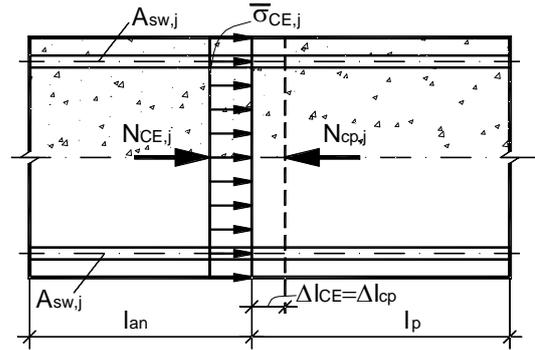


$\sigma = 0.8$
 $\sigma = 2.3$

$\rho_l = 0.0033, \sigma = 1.7$
 $\rho_l = 0.0133 (\rho_l \hat{\delta})$

$\sigma = 0, \rho_l = 0,$
 $\rho_l = 0.0085,$



[9]

[7].

[9]:

$$\Delta f_{ctk} = 0.15 \cdot \sigma_{CE,j} \quad (1)$$

Δf_{ctk}

[7]

()

[10],

$\sigma_y \leq f_{ctk}$

1.

2.

[11],

$$\bar{\sigma}_{E,j} = f_{CE,d} \cdot k_{\rho'} \quad (6)$$

$$f_{CE,d} \cdot k_{\rho'} = \frac{1}{l_p} \cdot E_{cp} \cdot \frac{A_{cp,j}}{A_{CE,j}} \quad (7)$$

$f_{CE,d}$

[11]; $A_{CE,j}$

[7].

$$l_p = \frac{f_{CE,d} \cdot k_{\rho'}}{E_s} \cdot l_{an} \quad (8)$$

(7) (8):

$$\rho_l' = \alpha' \cdot \frac{l_{an}}{l_p} \cdot n \quad (9)$$

		$\rho_{sw,j}$	$f_{CE,d} / \sigma_{CE,j}^2$	$\sigma_{CE,j}$		$\frac{CE,j(ex)}{CE,j(cal)}$
I	-I-1	0.0085	1.57	1.50	1.52	0.99
	-I-2			1.57		1.03
	-I-3	0.0033	0.91	0.69	0.69	1.0
II	-II-1		1.18	0.85	0.92	0.98
	-II-2					
	-II-3					
	-II-4					
III	-III-1	0.0085	1.97	1.79	1.9	0.94
	-III-2			1.71		0.9
	-III-3			1.77		0.93
IV	-IV-1	0.0033	0.91	0.69	0.69	1.04
	-IV-2			0.67		0.95
VII	-VII-2	0.0133	2.22	2.33	2.33	1.0

$\sigma_{CE,j(ex)}$

ρ'_l — , -
; l_p óó ; l_{an} óó
15Ø; $\alpha' = E_{cp}/E_s$, $n = A_{cp,j}/A_{CE,j}$
, $\rho'_l > \rho_l$
(,)
($l_{an} = l_p$)
($\lambda=0.97$, $V_x=13.3\%$).
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2. ()
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