



SingleHook® Bullhide 65/60 NB - continued

Performance

Performance is linked to dosage and concrete mix design. This fiber rates toward the top for performance compared to other steel fibers.

Flexural tensile strength $f_{u,fl}$

$$f_{u,fl} = 0.393 \times (f_c)^{2/3}$$

f_c ; cubed compressive strength N/mm²

Equivalent flexural strength is tested by JSCE-SF4 for 3mm deflection.

Equivalent flexural toughness ratio $R_{e,3}$

$R_{e,3}$ = Equivalent flexural strength/flexural strength x 100
(Approximate toughness)

Dosage kg/m ³	20	25	30	35	40	45	50
$R_{e,3}$	50	59	68	74	80	84	87

Tensile strength after cracking

$$f_t = 0.37 \times \text{equivalent flexural strength}$$

Minimum dosage based on spacing theory according to Romualdi & Mandels equation

$$S = 13.8d\sqrt{1/V_f} \quad (d ; \text{diameter, } V_f ; \text{volume fraction})$$

Type		60/0.75	60/0.8	60/0.9
Length		60	60	60
Diameter		0.75	0.8	0.9
Aspect Ratio		80	75	67
Pc/kg		4,653	4,090	3,231
M/kg		288	254	200
0.4*Length	Min. space	24	24	24
	Min. kg	15	17	21
Quality		Best	Good	Fair

** Max space for reinforcement is 0.4 times of fiber length