

C	H	O	80	60	N	B
Collated (Glued)	Hooked- end	Ordinary	Aspect ratio	Length	Normal	Bright

Description

C Collated

Several dozens of wires are collated by special glue.

H Hooked-ends

Fibers should be secured for high anchoring.

O Ordinary

The hooks are well designed for good performance.

80 Aspect ratio

Aspect ratio means ratio of length to diameter. This aspect ratio and length are main factors for shotcreting quality.

60 Length of steel fiber

Length of fiber should be min 2 times of max aggregate size.

N Normal low carbon

Quality meets KS D 3552 SWM-B
JIS G 3552 SWM-B

Tensile strength : min 11,000kg/cm²
(1,100N/mm²)

-test method : KS B 0802

B Bright

Bright steel is the norm for steel fibers in concrete

Application

- Flooring
- Precast reinforcement

Quality

- ISO 9001, ISO 14001
- Meets ASTM A820

Fiber quantity & length

- Approximately 4,500~5,500 pieces/kg
- Fiber Length : 288m/kg

Packing

- 20kg degradable bag
- 1ton bag

How to dose

- Manual counting
- Automatic dosing machine

How to input into mixer

- By using conveyor belt
- By airblower

Performance

Its performance depends on dosage. Pls check performance data when designing.

Flexural tensile strength $f_{u,fl}$

$$F_{u,fl} = 0.4 \times (f_c)^{2/3}$$

f_c ; cylindric 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

Dosage kg/m ³	15	20	25	30	35	40
$R_{e,3}$	40	52	64	73	80	87

Tensile strength after cracking

$f_t = 0.37 \times$ equivalent flexural strength

Minimum dosage

based on spacing theory according to Romualdi & Mandel's equation

$$S = 13.8d \sqrt{1/V_f}$$

(d:diameter, V_f :volume fraction)

Type	Length	Dia	Aspect Ratio	pc/kg	m/kg	0.4*length		Quality
						Min Space	Min kg	
60/0.75	60	0.75	80	4,653	288	24	15	Best
60/0.8	60	0.8	75	4,090	254	24	17	Good
60/0.9	60	0.9	67	3,231	200	24	21	Fair

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