

# SingleHook® Bullhide 80/60 NB

SingleHook	C	H	O	80	60	N	B
Made of high tensile wire	collated	Hooked-ends	ordinary	Aspect ratio	length	Normal carbon	Bright

## Description



### C Collated

Fibers bundled together to ensure proper mixing.

### H Hooked-ends

Hooked-ends provide anchorage in paste and around aggregates.

### O Ordinary

The hooks are designed for good performance in normal concrete mixes.

### 80 Aspect ratio

Aspect ratio refers to the ratio between the length with respect to the diameter.  $L/D=AR$

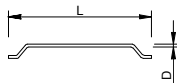
### 60 length of steel fiber

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

### N Normal carbon wire

Quality meets KS D 3552  
JIS G 3552 SWM-B

Tensile strength for wire  
; 11,000kg/cm<sup>2</sup> (1,100N/mm<sup>2</sup>)  
- test method ; KS B 0802



### B Bright

Bright steel is carbon steel.

## Application

- Flooring
- Precast reinforcement



## Quality

- ISO 9001, ISO14001 registered,
- Confirms to ASTM A820

## Fiber quantity & Length

- approximately 4,500—5,500pieces/kg
- Fiber Length : 288m/kg

## Packing

- 20kg degradable bag
- 1ton bag

## How to dose

- Manual counting bags to mixer.
- Automatic dosing machine.

### How to input

- Conveyor belt.
- Manually adding to mixer.

## Performance

Performance is linked to dosage and concrete mix design. The Bullhide 8060 is a premium fiber.

### Flexural tensile strength $f_{u,fl}$

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

$f_c$  ; cube compressive strength  
N/mm<sup>2</sup>

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 <sup>3</sup>	15	20	25	30	35	40
$R_{e,3}$	39	50	64	73	80	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	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

## Bullhide Fibers & Shotcrete Supply, Inc.

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