

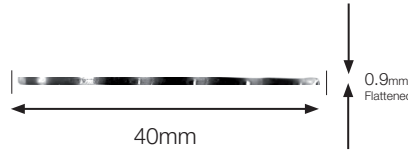
PRODUCT DATA SHEET

Description

Flattened hard-drawn wire fibres, conforming to the provisions of ASTM A820 Type 1.

Technical Information

Diameter 0.9mm x length 40mm; Aspect Ratio = 44.44



Tensile Strength 900 Mpa minimum.

RAD40FW



Benefits

The RAD40FW is a all round general purpose low carbon steel fibre which is designed to give optimum strength in the matrix. This fibre resists any balling effect and has good workability and dispersion in the concrete. Flattened wire fibres, due to the positive mechanical anchorage of the undulation and high tensile strength are specially suited to applications where the risk of stress in concrete exceeds its tensile strength. Post-crack performance (toughness) is excellent. This fibre is user friendly.

Packaging, Storage & Product Information

- 10 or 20kg bags for ease of dispersion.
- Allow 3 to 5 minutes at mixing speed for fibres to disperse evenly throughout matrix.
- Can be added to the mix at any stage during batching.
- Store protected from the weather.
- The RAD40FW fibres are packed in bags to minimize the bulk for waste removal.
- Pallets weights are 1000, 1100 & 1200kg minimizing the need to over order.
- Undulated and flattened to maximize fibre anchorage in the concrete.

TABLE 3.1 PHYSICAL PROPERTIES MODIFIED BY RADMIX FIBRES.

PHYSICAL PROPERTY	BENEFICIAL EFFECT
Modulus of Rupture	1 to 2 x plain concrete
Shear Strength	1.25 to 2 x plain concrete
Torsional Strength	1.25 to 2 x plain concrete
Impact Energy Absorption	2 to 15 x plain concrete
Fatigue Resistance	1.2 to 2 x plain concrete
Cavitation & Erosion Resistance	1 to 1.4 x plain concrete
Restrained Shrinkage Cracks	Reduced Crack Widths
Corrosion Resistance	No Cathodic Corrosion Observed

FIG J. COMPARISON OF PERFORMANCE IN PUNCH AND SHEAR: PLATE TESTS THAMES POLYTECHNIC, 1989.

Slab Reinforcement	Load at First Crack (kN)	Load at Failure (kN)	Comments
No reinforcement	180	200	Cracks through full depth and punching
2 Layers of WWM(200x200x7mm)	280	380	Cracks through full depth and punching
High Strength Deformed 40mm long 30 kg/m ³	280	395	Cracks through full Steel Fibre depth and no visible punching