

DURUS S400

MACRO SYNTHETIC FIBRES



Durus S400 is a macro synthetic fibre that is extruded, embossed and then specifically cut into the lengths required for each concrete application. Durus S400 is used in ready mixed, precast and sprayed concrete in both above and in underground applications. The embossment improves the bond between the fibre and the concrete resulting in improvements to the residual flexural strength of the concrete.

Durus S400 has been designed to replace traditional steel reinforcement with the benefits of increased performance, reduced costs and improved health and safety conditions. It will enhance the toughness of the concrete and alleviate the need for steel mesh when used with the appropriate design and at the recommended dosage. Durus S400 complies to BS EN 14889-2 : 2006 (EC Certificate of Conformity).

Advantages & Benefits

- Offers a 3-dimensional reinforcement system
- Increases the residual flexural strength of the concrete
- Reduces construction time
- Provides an alternative to steel reinforcement
- Cannot be misplaced

- Easier and safer to handle than steel, eliminating need for cutting, fixing and placing of steel mesh
- May eliminate the need for concrete pumps and cranes
- Does not rust or corrode
- Reduces wear on pumps and hoses when concrete pumps are used
- Reduces carbon footprint

General Applications

- Internal floor slabs
- External hardstandings and pavements
- Precast concrete elements
- Agricultural areas
- Marine / Coastal defence concrete
- Shotcreting applications



Mixing Directions

The fibre is best dispersed when added to a forced action pan mixer or equivalent prior to discharging the concrete into a truck. We suggest that you contact your Bonar representative before using the fibre so that we can discuss together the preferred mixing method.

Packing & Dispensing

Durus S400 fibres are packed into pulpable paper bags which means that the fibres can be tipped complete with their paper bags directly into the concrete pan mixer or truck mixer. The dosage rates are dependent on the specific application. We offer flexible packing configurations to suit the dosage and type of concrete plant. Durus S400 is also available in jumbo sacks.

Storage

Durus S400 must be stored on a clean surface, in dry conditions, under cover and away from the possibility of damage.

Health & Safety

Please read the specific Bonar safety data sheet or consult a member of our team.

Quality Assurance

The Quality Management System of Bonar has been approved to the ISO 9001 Quality Management System Standard. Certificates are available on request. Adfil products are manufactured to exacting standards on the technologically advanced production and packaging lines, which allows constant monitoring of quality. Quality audits are conducted at our manufacturing plants.

Technical Advice

Our technical specialists are available for you to assist you in the correct use of all Adfil products.

Typical Properties

Durus S400 has the following chemical and physical properties.

Fibre Length	45 mm or 55 mm
Fibre Type / Shape	Macro / Embossed Monofilament
Absorption	Nil
Specific Gravity	0.91
Electrical Conductivity	Low
Alkali, Acid and Salt Resistance	High
Softening Point (Melt point)	160° C
Colour	Natural

Design Service

Please consult us for fibre reinforced concrete designs and to learn about the Professional Indemnity service that can be offered.

Total Solution Provider

We offer a full design and construction package for our Adfil products. Our expertise and knowledge of the construction industry allows us to offer our customers bespoke solutions in terms of engineered proposals, concrete mix designs, packaging configurations, high standards of distribution and fibre dosage equipment.

Information in these documents including all drawings, suggested procedures and specifications are for general information only. The details are subject to change without notice. Whilst every effort has been made to insure its accuracy, this information should not be used or relied upon for any specific application without independent professional examination and verification of its accuracy, suitability and applicability. The user shall be solely responsible for the selection, use, efficiency and suitability of the information. Anyone making use of the information does so at his or her own risk. Bonar has no control over the design, manufacture or testing of the cementitious products which incorporate our materials. Bonar assumes no responsibility for the end products or uses made of our materials. The concrete manufacturer or processor is responsible for testing its products to establish the physical properties thereof. It is the concrete manufacturers or processors responsibility to certify compliance of its product, including any formulation, which may include any Adfil materials. In no event shall Bonar be liable to the user for any indirect, special, consequential or incidental damages arising out of the use, the result or use or inability to use the information.

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