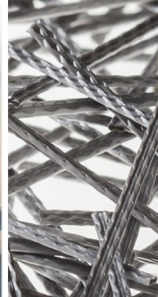




ADFIL
Construction Fibres



**Adfil Fibres
Beam & Block
House Floor
Information**



Scan here for additional information

UK Office: Adfil Ltd 6th Floor, 9 Appold Street,
London, EC2A 2AP.

UK Customer Services & Orders

Tel: +44 (0)1482 274777 or E-mail: Orders@adfil.com

Reinforced concrete reinvented

Belgium Office: Adfil NV Industriestraat, 39 9240,
Zeleveld Belgium

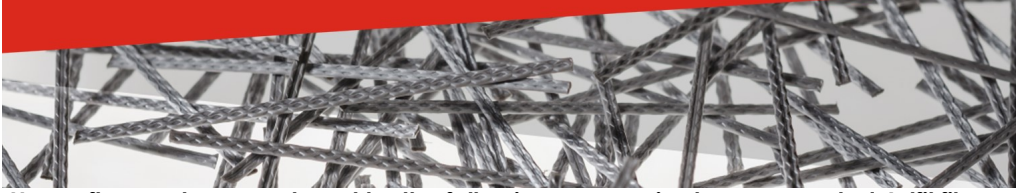
Belgium Office Tel: +32 52 24 00 00

www.adfil.com



NHBC Accepted Housing Oversight Concrete

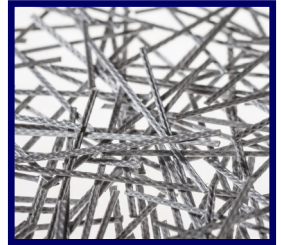
Information for House Builders / Ready Mix / Contractors



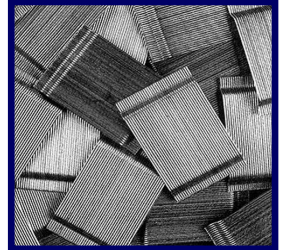
House floor systems produced by the following companies have accepted Adfil fibres on their current certificates for NHBC approved house floor toppings (BBA & KIWA)

Adfil also has its own BBA certificate which covers these systems via the Adfil Product Sheet 99 with new lower dosages

Durus®
EasyFinish
2.5kg



Adfil®
SF86
7.5kg



Durus®
S400



- Springvale
- Jablite
- Rackhams
- Litecast
- Forterra
- Styrene
- Others*

****NOTE: Always check with Adfil to ensure that the fibre product and dosage information for the specific system is correct. Information is available on the Adfil website: www.adfil.com.**

Please contact us for assistance or visit our website www.adfil.com to view our guidance films.



Adfil Product Sheet 99

Information for House Builders / Ready Mix / Contractors

Adfil Ltd
Devonshire House
60 Goswell Road
London
England
EC1M 7AD

Tel: 01482 274777
e-mail: info@adfil.com
website: www.adfil.com



Agreement Certificate
21/5891

Product Sheet 99

SUPPLEMENT TO SF86 STEEL FIBRE AND DURUS EASYFINISH FOR BEAM AND BLOCK FLOORS

The following BBA-approved beam and block floor systems are compatible for use within the scope of Product Sheet 1 (SF86 Steel Fibre) and Product Sheet 2 (Durus EasyFinish) of this Certificate, for single-family dwellings (for suspended ground floors) only:

SF86 Steel Fibre and Durus EasyFinish

Table 1 Certificates with beam and block floor systems compatible with SF86 Steel Fibre and Durus EasyFinish

BBA Certificate number/Product Sheet (PS)	Certificate title	Company name	Minimum depth of concrete topping above the services
88/2059 PS3	Jetfloor Floor System	Forterra Building Products Ltd	70 mm
07/4411 PS1	Beamshield Plus and Platinum Beamshield Plus	Springvale EPS Ltd	75 mm
06/4369 PS1	TDeck EPS Panel System	Combined Thermal Solutions	75 to 80 mm
13/5021 PS1	Stylite T Beam and Stylite T Beam Plus	Styrene Packaging & Insulation Ltd	75 mm
16/5360 PS1	TS System	Rackham Housefloors Ltd	75 mm
17/5431 PS2	Warm Beam Top Sheet System (minimum grade of EPS top sheet is 120 kPa)	S and B EPS Ltd	75 mm
20/5829 PS1	Jablite Thermal Floor System Incorporating Structural Boards	Jablite Limited	65 mm

The BBA has awarded this Product Sheet to Agreement Certificate 21/5891, to the company named above for SF86 Steel Fibre and Durus EasyFinish.

On behalf of the British Board of Agrément

Date of First issue: 24 December 2021

Hardy Giesler
Chief Executive Officer

The BBA is a UKAS accredited certification body – Number 113.

The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at www.bba.org.uk
Readers MUST check the validity and latest issue number of this Agreement Certificate by either referring to the BBA website or contacting the BBA directly.
Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.

British Board of Agrément
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Watford
Herts WD25 9BA

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Adfil Product Sheet 99

Information for House Builders / Ready Mix / Contractors



A detailed description of each floor system is given in the relevant Certificate. The SF86 Steel Fibre and Durus EasyFinish fibres at dosage rates of 7.5 kg·m⁻³ and 2.5 kg·m⁻³ respectively, must be incorporated in a system which is designed, installed and used strictly in accordance with Product Sheets 1 and 2 of this Certificate and the relevant floor system Certificate.

Prior to installation, a suitably qualified and competent engineer should assess the system to ensure that the floor design and detailing is adequate to resist the applied loads. SF86 Steel Fibre and Durus EasyFinish may be used in concrete toppings in single-family dwellings where the applied loads do not exceed the values shown in Table 2. The BBA has not assessed the product for use in communal areas of blocks of flats or commercial buildings, or where the design loads are greater than those stated in Table 2.

Table 2 Maximum characteristic loads for single-family dwellings

Description	Maximum characteristic loads for single-family dwellings
Imposed uniformly distributed load (UDL) (kN·m ⁻²)	1.5 ⁽¹⁾
Imposed concentrated load (kN)	2.0 ⁽¹⁾⁽²⁾
Line load partition parallel and perpendicular to the beam (kN·m ⁻¹)	1.0 ⁽³⁾⁽⁴⁾
Allowance for moveable partition (kN·m ⁻²)	1.0 ⁽³⁾
Finishes (kN·m ⁻²)	0.5

- (1) Imposed concentrated load must not be combined with the imposed UDL or other variable actions.
- (2) Imposed concentrated load is assumed to be applied over a square plate not less than 50 by 50 mm.
- (3) Either the imposed load for lightweight partitions (moveable) or line load partition must be considered.
- (4) Non-load bearing partition walls heavier than 1.0 kN·m⁻², in any orientation with respect to the concrete beams, must either be supported by the foundation or bear directly on the concrete beams.

British Board of Agrément

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Herts WD25 9BA

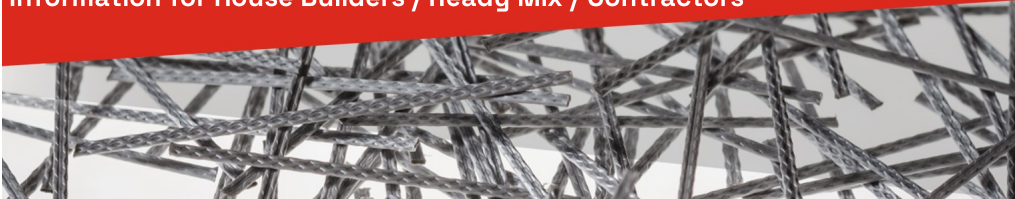
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www.bbacerts.co.uk

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NHBC Accepted Housing Oversight Concrete

Information for House Builders / Ready Mix / Contractors



Durus®
EasyFinish

- **Cost effective dosage per m³**
- **Mixes and finishes better than other longer fibre products.**
- **Nationwide availability**
- **Accepted in NHBC flooring systems**
- **Approved by the beam & block floor manufacturers**

- **Cost Effective Dosage per m³** - Adfil have invested in extensive R&D, new state of the art manufacturing equipment and accredited testing to ensure that you get a cost effective dosage for fibre reinforced concrete.
- **Mixes and finishes better than longer fibres** - Ready Mix Suppliers are happy that our shorter length fibres makes it easier to mix in the concrete. Installers rarely report any finishing issues.
- **Nationwide availability** - Durus EasyFinish is the macro fibre product of choice for many Contractors. This product is readily available from most Ready Mix plants nationwide.
- **Accepted in NHBC approved flooring systems** - This gives you assurance that our fibres comply with all the necessary requirements for use.

Concrete Types

Durus® EasyFinish can be used in Slump Concrete with S3 or S4 consistence, or in Self Compacting with flow consistence of SF3 & SF4. The concrete will arrive on-site with the fibres already added at the required dosage from your Ready Mix supplier.

Installation

When using Slump concrete with **Durus® EasyFinish** it can be easily placed with a rake and finished with a conventional float. Screed bars or magick screeders are also sometimes used.

Where SCC with **Durus® EasyFinish** mixes are used, a dapple bar should be used to finish the concrete after placement. This will orientate the fibres horizontally beneath the concrete surface.

Installation should be in accordance with the BPF 'Application Guide for the Specification & Installation of concrete toppings to beam & EPS suspended floors'.

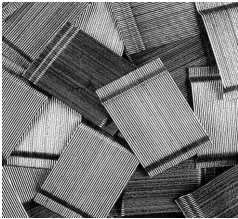
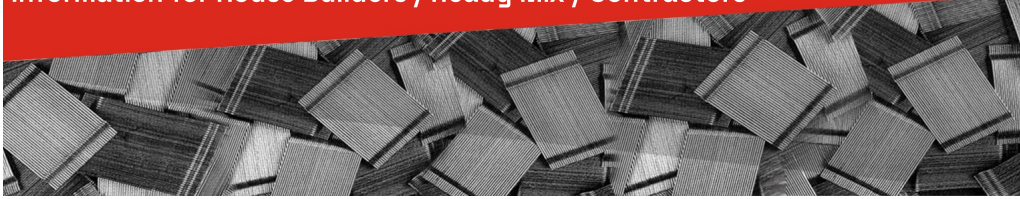


61% Reduction in CO₂ in comparison to traditional A142 steel mesh



NHBC Accepted Housing Oversite Concrete

Information for House Builders / Ready Mix / Contractors



Adfil® SF86

- **Cost Effective Dosage per m³**
- **High quality finish**
- **Easier to mix**
- **Accepted in NHBC flooring systems**
- **Approved by the beam & block floor manufacturers**

- **Cost Effective Dosage per m³** - Adfil has made significant investment in testing to ensure one of the lowest dosages of steel fibre reinforcement for this application.
- **High Quality finish** - with most steel fibres in concrete a high quality finish is achieved, meaning little or no remedial work after laying.
- **Easier to mix** - Lower dosage and less fibres makes Adfil SF86 easier to mix in concrete.
- **Accepted in NHBC approved flooring systems** - This gives you assurance that our fibres comply with all the requirements.
- **Reduced Packaging** for less waste. Supplied in paper sacks for easy disposal.

Concrete Types

Adfil® SF86 can be used in Slump Concrete with S3 or S4 consistence, or in Self Compacting with flow consistence of SF3 & SF4. The concrete will arrive on-site with the fibres already added at the required dosage from your Ready Mix supplier.

Installation

When using Slump concrete with **Adfil® SF86** it can be easily placed with a rake and finished with a conventional float. Screed bars or magic screeders are also sometimes used.

Where SCC with **Adfil® SF86** mixes are used, a dapple bar should be used to finish the concrete after placement. This will orientate the fibres horizontally beneath the concrete surface.

Installation should be in accordance with the BPF 'Application Guide for the Specification & Installation of concrete toppings to beam & EPS suspended floors'



54% Reduction in CO₂ in comparison to traditional A142 steel mesh



NHBC Accepted Housing Oversight Concrete

Information for House Builders / Ready Mix / Contractors



Zero Carbon Targets

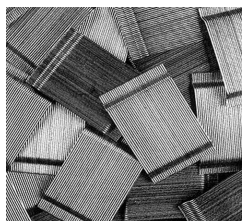
With the emphasis on using more sustainable construction methods **Durus® EasyFinish** & **Adfil® SF86** fibres can give your project considerable reductions in the carbon footprint that is being made.

Through an independent report you can save the following.



Durus®
EasyFinish

61% Reduction in CO₂ in comparison to traditional A142 steel mesh



Adfil® SF86

54% Reduction in CO₂ in comparison to traditional A142 steel mesh

In addition to the CO₂ reduction you will benefit from

- **Quicker construction**
- **Safer site work not cutting mesh**
- **Guaranteed placement of the reinforcement**
- **Less Site waste**



DURUS® EasyFinish

MACRO SYNTHETIC FIBRES



Designers and contractors around the globe appreciate the advantages of macro synthetic fibres over steel mesh for concrete reinforcement. Durus EasyFinish has been developed to facilitate effective post crack residual flexural strength, crack control whilst allowing a high quality surface finish and is suitable for use in all concrete mixes for the most demanding applications.

Advantages & Benefits

Durus® EasyFinish revolutionises reinforcement in concrete:

- **Cost effective reinforced concrete**
- **Faster construction**
- **Easy & safe to use**
- **Proven performance**
- **High quality concrete surface finish**
- **Replaces steel mesh**

Finishing Tests

The finishability of **Durus® EasyFinish** has been tested in different applications, including flooring concrete mixes. The number of fibres visible on the surface was greatly reduced confirming the performance of the product. Durus EasyFinish has also proven successful for use in self-compacting concrete and precast applications, which require fibre free external faces.

Design Service

Durus® EasyFinish is the result of years of product development of the recognised DURUS macro fibre brand. Based on beam test data carried out at a range of dosages in accordance with EN 14651, Adfil Engineers can deliver bespoke design calculations covered by professional indemnity insurance for a wide range of projects.

General Applications

- **Industrial floors (Durus Floor)**
- **External paving (Durus Pave)**
- **NHBC house floor toppings**
- **Agricultural**
- **Marine & Coastal**
- **Ports & Docks**
- **Precast element toppings**

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SB-ENG-EF-05/2022UK



ADFIL® SF86

STEEL FIBRES



Adfil SF86 is a high performance cold drawn hook end steel fibre that has been tested and accepted by the NHBC via third party testing. This product is certified for use in the UK construction market.

Advantages & Benefits

- **Glued for ease of mixing**
- **Reduced installation time**
- **High tensile strength**
- **Proven in SCC concrete**
- **Proven performance**
- **Replacement for structural steel reinforcement**

Tests

Adfil SF86 has been tested in independent accredited laboratories to meet stringent criteria for use in the UK housing market and NHBC accepted. This product has also had extensive BS EN 14651 beam testing carried out to ensure that when used in structural applications, it will achieve the required post crack residual flexural strength.

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SB-ENG-SF86-05/2022UK



Suggested Mixing Procedure for Durus® Macro

When adding this fibre into concrete, careful attention must be taken with the batching and mixing procedure.



The suggested procedures below are based upon our own testing. However, experience suggests that different concrete plants, trucks and materials may give varying results and we therefore advise that individual plant trials are

For Dry Batch Plants:

- Load the truck mixer with all ingredients **excluding the fibres**
- Add **1 bag** of Macro fibres approximately every **30 seconds** (**Not all at once**)
- Mix the truck at **full speed for 4-5 minutes** before you leave for site
- Check your load and leave or carry out any required testing.



Adding Fibre to the back of the truck

For Wet Batch Plants:

- **Add the fibres in the plant mixer with the other concrete ingredients**, Take into account your general safety procedures.
 - i : **Either directly into the plant mixer**
 - ii : **Or onto the aggregate conveyor**
- Check your load and leave or carry out any required testing.



Adding Fibre to the mixer

If the Fibres cannot be added to the plant mixer then the **Dry Batch** Plant mixing procedure is suggested.

The **Durus** bags are made of pulpable paper and can be added directly into your concrete.

NOTE: If you are adding in micro fibres as well, refer to the micro fibre mixing procedure.



Final 5 minute mix at full speed

Batching films are available via our website www.adfil.com



Suggested Mixing Procedure for Adfil® SF86

When adding this fibre into concrete, careful attention must be taken with the batching and mixing procedure.



The suggested procedures below are based upon our own testing. However, experience suggests that different concrete plants, trucks and materials may give varying results and we therefore advise that individual plant trials are

For Dry Batch Plants:

- Load the truck mixer with all ingredients **excluding the fibres**
- Add **1 bag** of Steel fibres approximately every **30 seconds** (**Not all at once**)
 - i : Either directly into the truck if possible**
 - ii : Or onto a conveyor**
- Mix the truck at **full speed for 4-5 minutes** before you leave for site
- Check your load and leave or carry out any required testing.



Adding Fibre to the back of the truck



Adding Fibre to the mixer



Final 5 minute mix at full speed

For Wet Batch Plants:

- **Add the fibres in the plant mixer with the other concrete ingredients.** Take into account your general safety procedures.
 - i : Either directly into the plant mixer**
 - ii : Or onto the aggregate conveyor**
- Check your load and leave or carry out any required testing.

If the Fibres cannot be added to the plant mixer then the **Dry Batch** Plant mixing procedure is suggested.

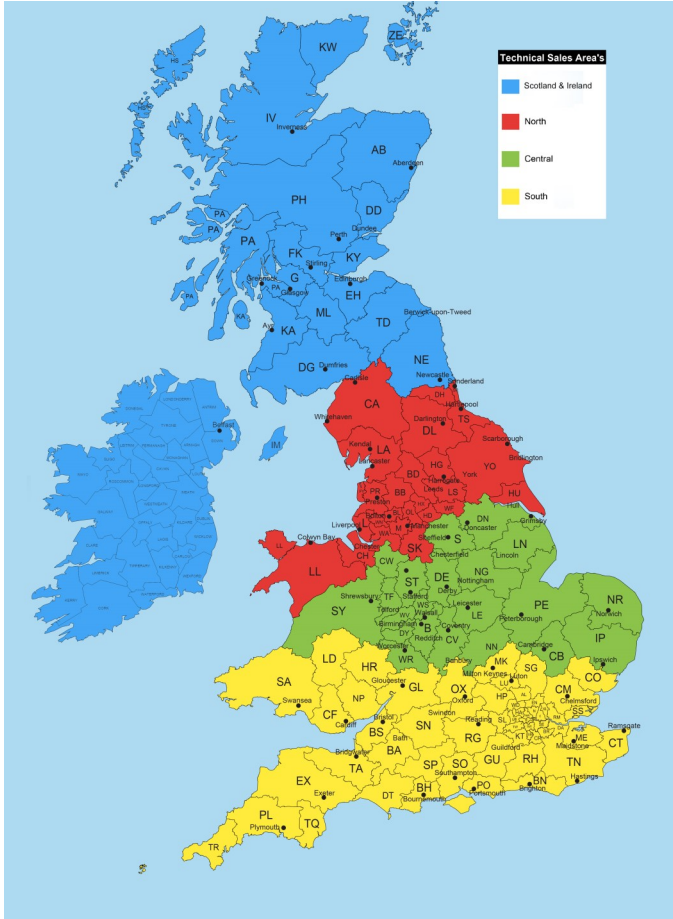
The **Adfil SF** bags **are not** pulpable paper and **should not** be added to the concrete.

NOTE: If you are adding in micro fibres as well, refer to the micro fibre mixing procedure.



UK Technical Sales

Assistance



For any assistance please contact one of the following to get appropriate technical support:

Scotland & Ireland :
+44 (0)7516506016

Northern :
+44 (0)7785616975

Central :
+44 (0)7801300966

Southern :
+44 (0)7824015717

National :
+44 (0)7801595581

Customer Service T: +44 (0) 1482 274777 E: orders@adfil.com

Reinforced concrete reinvented

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