

**Installation guide** 

# EasyFlow® Screed C

Go with the flow, for a faster flooring solution

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# EasyFlow® Screed C

# Go with the flow, for a faster flooring solution

EasyFlow Screed C is a free-flowing, cement-based screed suitable for all internal domestic and commercial floors. It meets the requirements of EN 13813 CT C25 F4, provides a smooth substrate suitable for unbonded or floating floors and supports the application of all floor finishes.

#### Easy to lay

EasyFlow Screed C is fast-flowing and pump-applied for precise, yet quick application – up to 100m² per hour.\* It gains strength more quickly than traditional cementitious screeds, withstanding light traffic within 24 hours.

#### Easy to trust

EasyFlow Screed C provides all the benefits of a cementitious screed in a quick-curing solution, with C20 and C25 variants available. It out-performs traditional screeds for impact resistance during the construction phase, with reduced potential for shrinkage and cracking during drying.

#### **Easy efficiency**

Compared with other screed solutions, EasyFlow Screed C offers improved thermal conductivity (up to 2.9W/mK), providing more effective heating and cooling, particularly when used with underfloor heating systems.

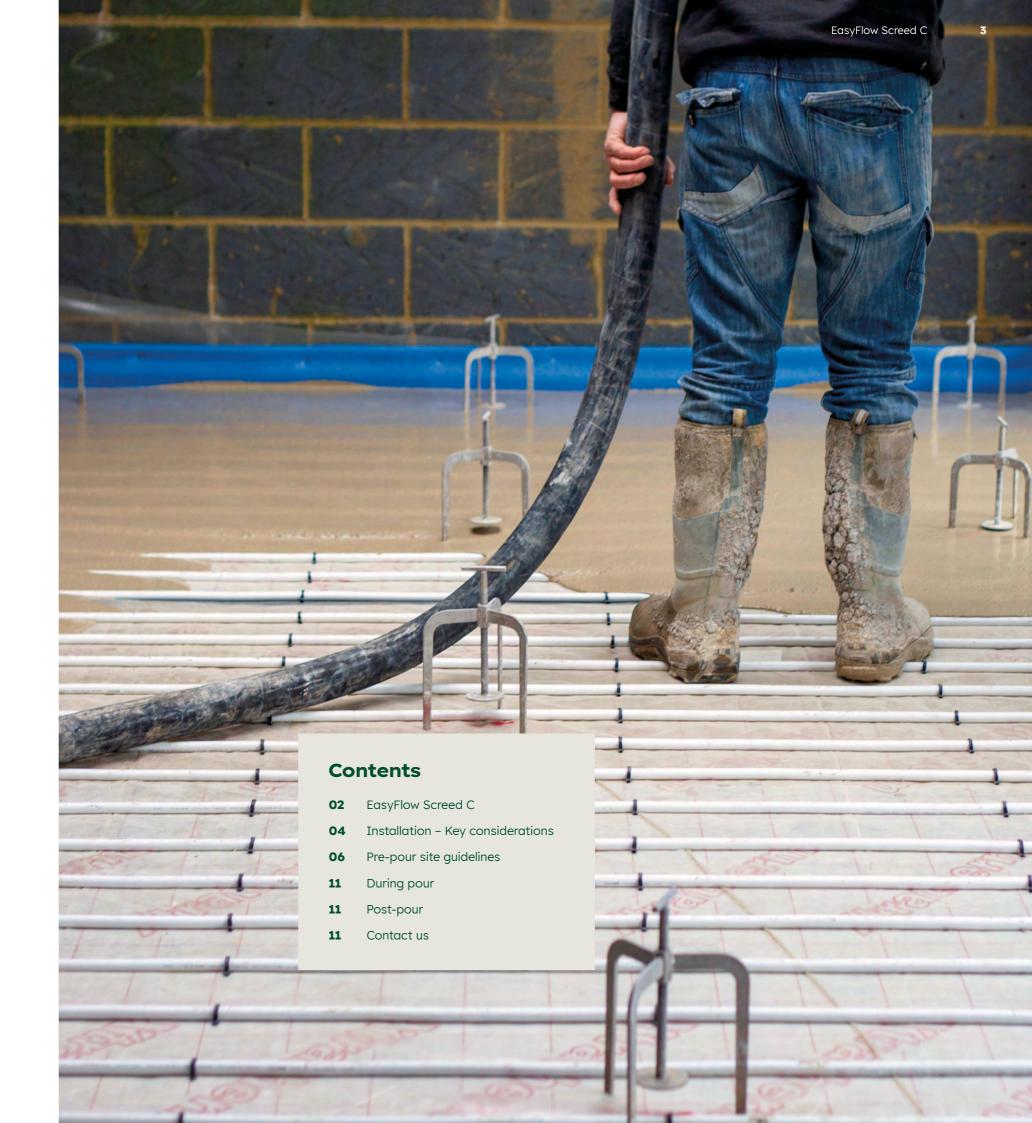
### In this guide

This document outlines the installation process to ensure the best finish for your project. If you have any questions regarding placing screed, please contact our concrete technical team.

- North: **0330 678 1305**
- South: **0330 678 1307**
- Central: **0330 678 1306**
- London: **0330 678 1308**

#### To place an order

Contact the Concrete Sales Team, you can find your team's details on **p11**.



<sup>\*</sup> When used with correct bay sizes and jointing.

### **Installation**

EasyFlow® Screed C is self-compacting and pump-applied, making it quick and easy to place. As a result, areas of up to 100m² can be installed in a day, providing a smooth surface that can accept foot traffic 24 hours after installation, and allows trades to commence work seven days after placing.

### **Key considerations**

- Heidelberg Materials EasyFlow Screed C is for use in internal environments only and installed in accordance with BS 8204 Code of Practice.
- It is not intended as a wearing surface and therefore must be installed under a floor covering.
- Screeding should only commence once the building is weather-tight (i.e. structure built, and all windows and doors fitted or covered) and with an ambient temperature of above 5°C. Should windows and doors not be fitted, all apertures must be covered with opaque polythene to mimic weather tightness.
- EasyFlow Screed C must not be laid when the temperature is below 5°C or above 30°C. This must be maintained for at least 48 hours after the screed has been laid.

- Where installation is at ground-floor level, a suitable damp-proof membrane must be placed under the screed.
- Underfloor heating pipes should be pressurised in accordance with BS EN 1264- 4:2021 and must be fixed securely to prevent floatation and lifting during installation of EasyFlow Screed C.
- Columns, service ducts and manhole covers that lie within the installation area, as well as the building's perimeter, should be covered with 10mm miothene or a suitable alternative.
- Failure to follow these installation guidelines may result in aesthetic issues with the screed.



<sup>\*</sup> When used with correct bay sizes and jointing.

## **Pre-pour site guidelines**

#### 1. Intended usage

Heidelberg Materials EasyFlow Screed C is a cement based self-compacting screed, designed for use in all types of unbonded or floating construction, it can be used to great advantage in both new build and renovation work. All residential and commercial floors carrying pedestrian traffic that lie within BS 8204-1: 2013 classification reference are suitable.

#### 2. Bond to substrate

The screed is to be laid unbonded to the substrate. A polythene membrane will be required. Underfloor heating and/or cooling pipes and embedded low temperature electric heating elements can be used. The screed can also be laid above rock wool or cellular plastic thermal and/or acoustic insulation. The maximum compressibility of the insulation should be no more than 6mm.

#### 3. Intended coatings

It is important that the intended coating of the screed be known prior to application. Bonded fabric and plastic coverings, removable heavyweight slabs, sealed or bonded tiling, bonded parquet and cast resin flooring are all suitable. Where tiles are to be laid the moisture content of the substrate should be no more than 3% using a drilled sample and Speedy Moisture Meter.

#### 4. Flatness tolerance

The overall substrate should not vary more than 7mm under a 2m straight edge and not more than 2mm under a 200mm straight edge. If the level variations in the substrate are greater it may be necessary to lay a regulating product prior to placing EasyFlow Screed C. If the surface properties are unsatisfactory, please seek advice.

#### 5. Substrate preparation (1)

The substrate should be scraped clean of any materials, such as mortar, which affect the overall flatness of the floor. All loose material must be swept up and removed.

#### 6. Perimeter isolation

A compressible strip with a minimum thickness of 5mm and maximum of 15mm shall be fixed round the walls. The isolation strip is required to be fixed around vertical features such as columns, pipe ducts and particular care must be taken at re-entrant angles such as doorways, bays and alcoves. It is necessary to ensure that the perimeter isolation is cut square into all corners of the room. On exterior angles it may be necessary to double up the isolation to ensure that the minimum thickness is maintained around the angle. The most suitable material for this is a self-adhesive Ethafoam strip; polystyrene must not be used.

#### 7. Substrate preparation (2)

In all cases a polythene membrane of minimum thickness of 150µm and maximum thickness 350µm is required to be laid onto the substrate. Where the membrane is thicker than 200µm to avoid "tenting" it is advisable to use unfolded polythene sheet. EasyFlow Screed C is highly fluid and this requires the membrane to be substantially watertight to prevent loss of material. The sheets shall be laid with a 100mm overlap, adhesive tape at least 50mm wide shall be applied along the overlapping joints of the sheets to seal them. Care should be taken to ensure the membrane is folded, or cut and sealed, into any corner. Around the perimeter of the room the edges of the polythene membrane should extend well above the intended level of the topping.

#### **Benefits**

- Better thermal conductivity (2.9W/mK)
- Faster lay up to 100m² per hr\*
- **Durable** less shrinkage, less cracking
- Recyclable 100% recyclable
- Flexible suitable for all internal flooring
- **Support** end-to-end technical support
- Safer non-combustible, BS 8204 compliant
- \* When used with correct bay sizes and jointing.



# Sustainable concrete solutions

Heidelberg Materials concrete can incorporate a proportion of Regen, a cement replacement material that generates a much lower level of embodied CO<sub>2</sub> emissions than ordinary cement, minimising environmental impact. Recycled aggregates can also be incorporated subject to local availability and mix design.



## **Pre-pour continued**

#### 8. Underfloor heating

Where underfloor heating is being used and incorporates a proprietary system for pipe location/insulation it may not always be necessary to use a polythene membrane as the system may be sufficiently watertight. It will be necessary to ensure that when water is the heating medium that the system has been tested for leaks and the pipes are under pressure before laying the screed to ensure they are not compressed. If there is any doubt please seek advice from your Heidelberg Materials concrete representative.

#### 9. Bay sizes – unheated screeds

The area between the joints shall not exceed 75m², and the longest side shall not exceed 14m. The length to width ratio within the room shall not exceed 2:1.

#### 10. Bay sizes – heated screeds

The area between the joints shall not exceed 40m², and the longest side shall not exceed 8m. The length to width ratio within the room shall not exceed 2:1.

#### 11. Bays

Bays should be set out in accordance with normal concrete practice.

#### 12. Crack inducers

Crack inducers should be located and fixed in accordance with the maximum bay sizes as indicated above. They should also be fixed across all doorways. At re-entrant angles it may be necessary to install further crack inducers or place a reinforcing mesh. The crack inducer should be fixed to the substrate by the use of nails or equivalent.

#### 13. Crack prevention or reduction

For all EasyFlow Screed C applications it is necessary to place crack control mesh at all re-entrant angles. This shall be accomplished by using small sections of mesh,  $400 \text{mm} \times 300 \text{mm}$ , the mesh may be metallic or glass fibre having a 10mm mesh size. The mesh shall be placed in contact with the corner and at an angle of  $45^{\circ}$  to it.

#### 14. Overall environment

The building/room should be totally sealed to avoid any draughts; this will have to be maintained for at least 48 hours following placement of the screed. If the windows have not been fitted the openings should be sealed with a polythene film prior to placing the screed. The screed should not be subjected to direct sunlight after placing, if this is to occur the windows should be blacked out. If the room has a large volume, it may be necessary to use a curing membrane. If there are any questions, please contact your Heidelberg Materials concrete representative.



To find out more about EasyFlow Screed C visit **heidelbergmaterials.co.uk/easyflow-screed** or scan the QR code.



# **Pre-pour continued**

#### 15. Ambient conditions

EasyFlow Screed C may only be laid when the air temperature is between 5°C and 30°C. The substrate must not be frozen and ideally should be within the above temperature range. There must be no risk of freezing for at least four days after placement.

#### 16. Setting out levels

For both heated and unheated floors the thickness of the screed from the highest point of the prepared substrate should be not less than 40mm. To adequately set out the levels before placing the screed the highest point of the room should first be found. To easily identify the thickness to be laid a series of tripods having a height adjustable indicator should be used. A tripod should be placed at the highest point within the room to denote the top of the finished screed and a minimum screed thickness of 40mm. Other tripods should be placed at two to three metre intervals throughout the floor and the indicators set using a laser levelling device and the first tripod as the datum. The quality of finished surface level is affected by the number and frequency of reference points, tripods, used during placing.

#### 17. Slump-flow measurement

When EasyFlow Screed C arrives on site the slump-flow of the material should be 270 mm +/- 20mm when measured using the appropriate equipment. If the mix is outside of the target range, then advice should be sought from your Technical representative as to the appropriate course of action.

#### 18. Pump priming – unheated screeds

Prior to the screed being pumped it is essential that the pump is primed. The pipes must be systematically "lubricated" with a slurry made up of approximately 10 kg of pure cement mixed with 10 litres of water. The slurry should be fed through the pipes and fully recovered at the other end before any of the screed is discharged from the truck mixer into the pump.

## **During pour**

#### 19. Placing

When placing the product, the hose should be held approximately 500mm from the substrate. The pipe should be moved in a sweeping motion and should not be held stationary above any fixed point. EasyFlow Screed C should be poured until the pre-set levels, as denoted by the tripods, have been reached.

#### 20. Dappling

When the material has been placed to the desired levels within a room/area it should be dappled immediately to obtain the best surface finish. The T-bar should be moved across the surface of the screed with a tamping motion to generate a wave like ripple across the surface. EasyFlow Screed C can be dappled up to 2 hours from the time of batching as shown on the delivery ticket.

### **Post-pour**

#### 21. Following placing

The room where the screed has been laid in should be sealed for 48 hours after laying. The room will be suitable for light foot traffic after 24 hours. Partitions can be erected after a minimum of 7 days from the time of placing.

#### **Contact us**

If you have any questions regarding placing screed, please contact our concrete technical team.

• North: **0330 678 1305** 

Central: 0330 678 1306South: 0330 678 1307

• London: **0330 678 1308** 

To place an order, contact the concrete sales team using the table below.

#### Our concrete sales team

Region	Telephone	Email address
Scotland	0330 123 4627	concretescotland@uk.heidelbergmaterials.com
North East	0330 123 4628	concretenortheast@uk.heidelbergmaterials.com
North West	0330 123 4629	concretenorthwest@uk.heidelbergmaterials.com
Central West	0330 123 4631	concretecentralwest@uk.heidelbergmaterials.com
Central East	0330 123 4632	concretecentraleast@uk.heidelbergmaterials.com
South West	0330 123 3406	concretesouthwest@uk.heidelbergmaterials.com
South Wales	0330 123 3403	concretesouthwales@uk.heidelbergmaterials.com
South Central	0330 123 4633	concretesouthcentral@uk.heidelbergmaterials.com
South East	0330 123 4634	concretesoutheast@uk.heidelbergmaterials.com
London	0330 678 1621	concretelondon@uk.heidelbergmaterials.com

### **End-to-end technical support**

As the leading producers of cement-based construction materials in the UK, we offer application training and have a dedicated technical support team ready to help.

Our experts can advise on EasyFlow Screed C and its installation; including movement joints, drying times and the use of sealers and primers.

North: 0330 678 1305
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