

**ROADSTONE**

# EASY LEVEL SCREED



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# EASY LEVEL

Roadstone Easy Level is a self-levelling, free flowing cement based screed installed by a competent flooring contractor using a screed pump, it is suitable for domestic and commercial applications including underfloor heating and wet environments.

## PRODUCT DESCRIPTION

Designed to provide a smooth level surface in both commercial and domestic buildings prior to the application of floor finishes. Roadstone Easy Level can be used as an bonded or floating screed. It is also suitable for use with underfloor heating. For advice on specifications and for proprietary systems contact your Roadstone representative.

- Suitable for all residential and commercial floors carrying internal pedestrian traffic, produced to I.S. EN 13813 and installed to BS 8204 Code of Practice

## CONSIDERATIONS IN USE

- Roadstone Easy level is a non structural and non wearing surface, but will provide a flat surface for the application of floor coverings
- Not suitable for external areas

- The building should be weatherproof before screeding commences. Where applicable, especially on ground floors, there must be a damp-proof membrane below the screed or sub-base
- The screed should only be laid when the internal air temperature is between 5°C and 30°C
- Cannot be laid to falls

## ROADSTONE EASY LEVEL BENEFITS

- Roadstone Easy level fully encapsulated underfloor heating pipes and provides more conductivity and thermal mass for the transfer of heat.
- It can be laid thinner (45mm over heating pipes) than traditional screeds
- It can be laid as a floating construction over most types of rigid insulation board or acoustic matting at a minimum thickness of 65mm
- It offers significant programme benefits, as areas of up to 120m<sup>2</sup> can easily be installed and finished per hour.
- Roadstone Easy level screed has very low shrinkage values and the inclusion of crack control fibres mean you require less construction joints than traditional sand:cement screeds. Shrinkage at 28 Day under Laboratory Conditions < 0.045%
- It can receive foot traffic after 48 hours, partitions can be erected seven days after placing
- It is installed by trained and competent contractors
- It is non-combustible

# DESIGN DATA

## TECHNICAL DATA

Roadstone Easy Level Appearance/Colour: Dark Grey fluid screed  
 Wet Density: 2,200 kg/m<sup>3</sup>  
 Dry Density: 1,950 kg/m<sup>3</sup>

FIGURE 1

Description	Compressive Strength	Flexural Strength
Easy Level Screed D6 C20 F4	C20	F4
Easy Level Screed D6 C25 F5	C25	F5
Easy Level Screed D6 C30 F6	C30	F6

*Suitable for all residential and commercial floors carrying internal pedestrian traffic, produced to I.S. EN 13813 and installed to BS 8204 code of practice.*

## SPECIFICATION

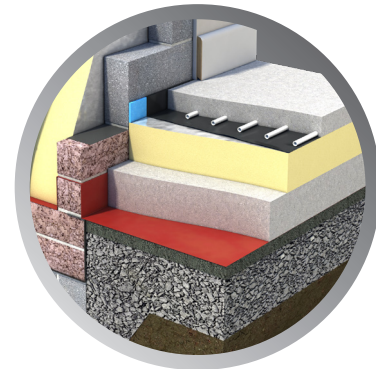
- Workability after batching - 3 hours
- Flow range = 220 - 260mm
- Maintenance of fluidity = max 1 hour after placing subject to environmental conditions
- Drying shrinkage at 28 days typically <= 250µm/m
- Thermal conductivity = 1.7w/mK
- Fire Rating - Class A1 – Non-combustible, Based on Commission Decision 200/605 EC amending 96/603 EC

## FLOOR FLATNESS

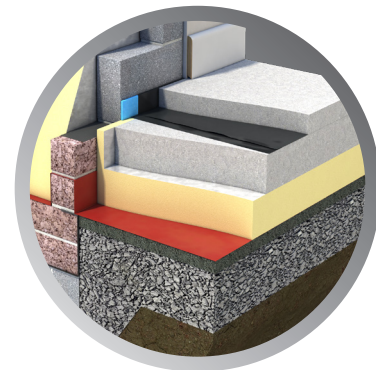
Easily achieves SR2 under BS8204

## MAXIMUM THICKNESS

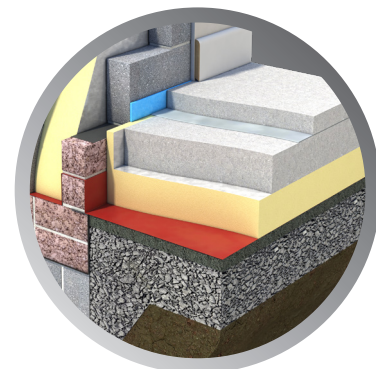
Recommended to be no more than 100mm. Depths over this may impact on drying times.



SCREED WITH UFH



UNBONDED /FLOATING



BONDED

# INSTALLATION

Minimum Depth		
Floating	Domestic	65mm
	Commercial	75mm
Unbonded		50mm on slip membrane - No embedded services
Bonded		65mm with the use of primers
Underfloor heating		50mm cover over pipes

\* For depths > 65mm Commercial and light Ind SCC concrete - structural screed available.

Consideration should be given to take account of maximum bay length as well as maximum bay size and aspect ratio e.g. a corridor 2m wide will require a joint frequency of 1 joint per 4m. A room 4 m wide by 10 m long will require two joints breaking the areas into 3 equal size panels. The shape of the room and the aesthetic effect on the subsequent floor coverings should be taken account of when designing joint configurations and bay sizes.

Additional joints must be placed between independently controlled heating circuits, between heated and unheated screed areas and in areas of high thermal gain.

Bay Size (m <sup>2</sup> )		
Floating	Domestic	40m <sup>2</sup>
	Commercial	40m <sup>2</sup>
Unbonded		40m <sup>2</sup>
Bonded		40m <sup>2</sup>
Underfloor heating		20m <sup>2</sup>

Bay joints should be formed using rigid joint formers where possible which can be placed during the preparation phase and will remain in place during operation. Ideally the joint former should be 5mm lower than the finished floor screed depth to allow a smooth transition in height between bays. As with all screeds, joints should reflect structural joints in the substrate.

## EDGE DETAILING

In common with all screeds Roadstone Easy Level Screed should be isolated at all edges, abutments and columns. This is to ensure adequate allowance is given to the screed to undergo the maximum positive movement under the application or removal of thermal loadings.

## EDGE STRIP WIDTH

Heated Screed: 8mm (typically 10mm)

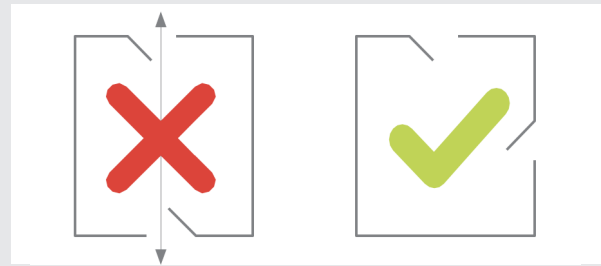
# POST INSTALLATION

- Post application of the curing agent the floor should not be subjected to severe draughts, direct sunlight or heating for the first 48–72 hours.
- The room in which the screed has been laid should therefore be sealed for a minimum of 24 to 48 hours.

After this time the room should be ventilated. Windows and doors should then be closed at night and reopened during the day to allow further ventilation to aid drying.

## ENVIRONMENT

- Roadstone Easy Level should be laid and immediately cured with a suitable curing agent in a weather tight environment, protected from wind and rain, at internal temperatures of between 5 to 30°C. Once placed the area should be sealed for 24 to 48 hours dependant on external temperature. After this time the area should be ventilated by opening doors and windows to assist in drying, these should be closed at night and re-opened the following morning until the floor reaches the required relative humidity.



- During drying doors or windows opened to vent the buildings, should be off set to avoid wind tunnelling effect.

## CURING TIMES

The floor is ready for foot traffic from 24 to 36 hours dependent of ambient temperatures and humidity – generally 66% target strength at 7 days full strength at 28 days.

Moisture migrates from the bottom to the surface. This takes time; BS 8204 recommends 1 day per mm, for thicknesses up to 50mm. Normally 3 weeks is the absolute minimum.

## DRYING TIMES

Screed with Under Floor Heating (UFH) will require a thermal cycle as highlighted in the diagram below (FIGURE 2.). The maximum temperature of the heating can amount to 55 °C. Heating up can be carried out from the 14th day after installation.

Screeds can be forced dried, by commissioning the underfloor heating system or by utilising a dehumidifier.

### DRYING SCREED USING UFH SYSTEM

Age of Screed (14 to 21 Days)	Temperature Degrees Celsius	Age of Screed (14 to 21 Days)	Temperature Degrees Celsius
Day 1 of Heating cycle	25	Day 9 of Heating cycle	55 Max
Day 2 of Heating cycle	30	Day 10 of Heating cycle	50
Day 3 of Heating cycle	35	Day 11 of Heating cycle	45
Day 4 of Heating cycle	40	Day 12 of Heating cycle	40
Day 5 of Heating cycle	45	Day 13 of Heating cycle	35
Day 6 of Heating cycle	50	Day 14 of Heating cycle	30
Day 7 of Heating cycle	55 Max	Day 15 of Heating cycle	25
Day 8 of Heating cycle	55 Max		

Prior to cycling the area should have natural ventilation for a min of 10 days Natural Ventilation and/or the use of dehumidifiers must be used during heating cycles Minimum time to receive floor coverings @  $\leq 2.0$  CM-% is generally over 28 days after placing. Prior to laying the final floor finish the flooring contractor is responsible for measuring the residual humidity, moisture of the screed, adhesive selection and the use of other proprietary materials and/or treatments.

Figure 2

## FLOOR COVERINGS

Roadstone Easy Level is compatible with all floor coverings, and also compatible with all cementitious adhesives and floor levellers.

Ask for further information on compatibility and testing or see our post installation guidelines.

\*Note: The environment in which the screed is placed may impact these figures. The floor covering contractor is responsible for measuring the residual humidity prior to laying the final floor finish.

Roadstone Easy Level may require further surface preparation prior to receiving floor coverings. It is recommended to lightly abrade in order to clean and remove any laitance residue from the floor prior to application of floor covering if needed.

In order to accelerate the application of floor coverings it is possible to use a compatible liquid DPM. Refer to DPM manufacturer instructions and guidelines.

## HEALTH AND SAFETY

Some of the components of this product may be hazardous during mixing and application. Please consult the relevant Health and Safety data sheets, available from Roadstone on request and provided with each delivery

## ENVIRONMENTAL/MATERIAL DATA

Roadstone SDS for concrete

Cement I.S. EN 197 Cement

Aggregates & Filler I.S. EN 12620 Aggregates for Concrete & SR 16

Admixtures I.S. EN 934 Admixtures for concrete, mortar and grout

I.S. EN 16001 Energy Management System

I.S. EN ISO 9001 Quality Management System

I.S. EN ISO 14001 Environmental Management

Ref - Contractor Flooring Association "Guide To Contractor Flooring"



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