

# SPS Envirowall guide to Granicem monocouche renders'



## Mineral renders

This document is intended to act as a guide for applying SPSenvirowall Granicem monocouche renders. Also included in this guide is information to help select the correct grade of Granicem and how to maintain the appearance of the render.

### Overview

SPSenvirowall Granicem is a one coat, ready mixed, cementitious, weather resistant, external decorative, through colour render that contains mineral binding agents. Granicem is commonly referred to as a 'monocouche' render which is the industry term for a one coat external render finish.

Once applied, Granicem can be finished using a wooden float, or scraped back with a scraping tool to give a more open finish. It is supplied in 30kg bags in a range of 48 standard colours. More colour options are available upon request.

Granicem is also available in three grades, with Granicem L being the most commonly used. The choice of grade will depend on many factors including, but not limited to: -

- Substrate type
- Finish required
- Abrasive resistance

The grades available are: -

Granicem  
Granicem L  
Granicem UL

Product density is 1500 kg/m<sup>3</sup>  
Product density is 1340 kg/m<sup>3</sup>  
Product density is 1050 kg/m<sup>3</sup>



## Consideration to design.

Like all mineral coatings, Granicem will absorb some surface water during inclement weather. This does not deter away from the performance of the material, however, walls in the shade and / or sheltered from the wind will have an increased risk to organic growth matter because of this. In these locations we would advise the use of our Granicem products with the Tropical 'TR' additive as this contains a higher level of fungicidal agents. If using two products, please ensure entire elevations are completed using only one to ensure colour consistency and appearance.

Should organic growth occur, this will not have a detrimental effect on the product performance, but may look unsightly if left untreated. Please consult your local Technical Consultant or trade counter for more information.

## Substrate types

The choice of Granicem will be mainly dependant on the substrate that it is to be applied to. The substrate cannot have lower mechanical properties to that shown by the Granicem render. For ease of reference, a table can be found on the back cover showing typical substrates and Granicem grades to be used.

## Preparation and Substrate Treatments

Prior to the application of the Granicem render it is important to ensure the substrate is suitably prepared. This may involve the need for treatment of organic growth, removal of friable material, localised repairs or shuttering oil for new concrete

Prior to application it is important to ensure that the substrate is level. If the substrate is not in line and level, the Granicem may not cure evenly leading to a patchy appearance on colour. The substrate may be levelled out using SPSenviowall Mega or Cement'in C & G depending on the thickness of levelling coat needed and density of the substrate.

For cast concrete structures or smooth finished substrates, a suitable pricking coat should be applied such as SPSenviowall SBR.



For mixed material substrates, SPSEnirowall Cement'in P should be applied at 3mm thick ensuring it is left with combed key for the application of the Granicem. This is to ensure that the substrate has a constant homogeneous layer that will reduce the risk of an uneven cure leading to patchiness in the colour.

For all other substrates, the wall must receive a mist spray coat to control the suction of the substrate. In most cases this should be applied the day before with a second fine spray applied 1 hour prior to the Granicem being applied. It is essential that the wall is not saturated, water is not running down the surface or a that there is no water film layer.

### Application of Granicem

1. Ensure the substrate has been prepared and treated in line with the guidance in this document or the project specification.
2. Mix the Granicem with clean water as per the amount stated on the project packaging. When preparing the render, make sure that the mixing time and consistency are constant as this ensures that the appearance of the render is consistent in terms of colour and texture. When mixing by hand, allow the render to mature for approximately 10 minutes before mixing again.
3. Once mixed, apply the render using suitable trowels. While it is still fresh, it must be levelled out and combed through with a notched float to remove any trapped air.
4. If mesh is specified or is needed because of the substrate type, it must be applied to the first layer.
5. Apply 300 x 500mm scrim patches at 45 degrees at the corners to all openings.
6. Once the render has started to set, apply a second layer smoothing off whilst still fresh as per stage 3.
7. Once the product has started to set, if it is to receive scratched finish, lightly rough up the surface using a 'H' section profile prior to scratching the surface to help maintain an even set.



## For scratched finishes

8. Depending on weather conditions, the render is finished on the next day or the day after that with the aid of a scraping tool. The grain must process cleanly and without sticking to the scraper tool.
9. It is important that the scraping takes place at the right time so that a clean texture is achieved. Once an area has been started, it must be finished rapidly and in one continuous operation.
10. The material scraped off during this process must not be re-incorporated in the render, but it can be used in part to repair some defects, e.g. scaffold tie holes. Pigmented renders must be protected against the rain for 1-2 days after scraping. If this is not done, efflorescence may occur.

## General notes on application

- Reinforcing mesh should be alkali resistant with a grid size of 7 x 7mm.
- If additional product is required, this should be mixed with the old product to reduce the risk of colour shading between batches.
- Granicem may also be applied using any of the standard spray render application machines, in which case please note the relevant machines instructions.
- To avoid leaving application marks, the applicators should be positioned in vertical rows along the scaffold so that connected areas can be applied 'wet in wet'. For larger areas, we recommend applying the render up to a natural boundary (beads, overhangs or shoulders, drainpipes etc.).
- The fresh render must be protected against driving rain and from drying out too rapidly. Special protective measures, e.g. shrouding the façade or scaffold, are required in the event of direct sunlight or wind effects. Do not apply at substrate and/or ambient temperatures below +5°. Clean tools and equipment with water immediately after use. Carefully protect all structural elements such as windows, sills, etc.



The table below shows typical substrates Granicem can be applied to along with guidance on material thickness and substrate preparation needed. In all instances, the Granicem product referenced is the highest density product that can be used, however lower density grades may be used i.e. brickwork shows Granicem L, but Granicem UL can be used whereas Granicem cannot.

Substrate	Substrate Preparation	Product	Scratched Finish
 Brickwork	Pre wet the wall	1. Granicem L	8mm 
		2. Granicem L	7mm
 Dense Concrete Block	Pre wet the wall	1. Granicem	8mm
		2. Granicem	7mm 
 Blockwork >600 kg/ m³	Pre wet the wall	1. Granicem L	8mm 
		2. Granicem L	7mm
 Blockwork <600 kg/m³	Pre wet the wall	1. Granicem UL	8mm 
		2. Granicem UL	7mm
 Mixed Substrate	Pre wet the wall	1. Cement 'in P	3mm
		2. Granicem L	8mm 
		3. Granicem L	7mm 
 Smooth Concrete	SPS Envirowall SBR	1. Granicem	8mm
		2. Granicem	7mm 

 Layers must be applied Wet on Wet    
  Layer must be left with a notched key    
  Mesh to be included to this lay

Thicknesses shown are the minimum thickness of applied material.



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