



'Site Unseen' Application Guide

Version 2018

Graphenstone Paints UK

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THIS IS A 'SITE UNSEEN' DOCUMENT.

1. PROJECT SUMMARY.

This proposal report has been produced by Graphenstone paints, to give advice on the application of Graphenstone products.

2. PRE-TREATMENT

All loose, flaking and unstable material must be identified and then thoroughly removed, to get back to a sound edge; these edges should then be feathered in to provide a good, even surface. Ensure that any paint materials left remaining and the underlying substrate is sound and adhering well. Any gloss or shiny surfaces should be thoroughly flatted down using sandpaper to create a good key.

All mould and fungal growth must be thoroughly removed then treated with a suitable fungicidal wash.

PLEASE NOTE:

Particular care and preparation need to be taken, when applying **OVER** existing painted film forming surfaces (eg: Acrylic, Pliolite). It is essential that the adherence of the previously decorated surface is completely sound and in full contact with the underlying substrate, as the Graphenstone paints will only perform as well as the surface to which they are applied.

Any moisture trapped behind an existing painted surface can potentially cause this original paint to delaminate from the substrate. Subsequent finishes attached to the previous painted surface will not stop this from happening.

As Graphenstone paints cure, they can cause poorly adhering decorative layers to delaminate due to their strength, if these previous paints are not in a complete, sound and strong bond with the substrate. Care needs to be taken to ensure that the right preparation is done (as detailed above), and Graphenstone UK cannot be liable for any issues that arise from problems with the previously painted surface and underlying substrate.

Additional pre-treatments:

Some areas may need additional pre-treatment works if a problem is indicated eg: salt deposits, damp ingress or excess moisture. Please contact your Graphenstone Sales representative or the Graphenstone technical team for further advice.

3. FILLERS & PRIMERS

FILLERS:

In the case of any cracks or small holes, or superficial defects of 1-3mm, the surface should be filled using **Füllmasse Premium**, a ready to use lime and graphene filler. Apply with a trowel or filling knife in 1 or 2 layers where needed. Sand back when dry for a smooth surface.

PRIMERS:

Ambient Primer L42/L44 - Interior/Exterior

Apply a single even application of Ambient Primer L42 or L44 where the surface is absorbent eg: new lime. This is also used as a general primer where there is an even, smooth, and well finished surface.

Dilute 1:1 with clean cold water and apply by brush, roller or low-pressure spray, worked well in to the surface and allowed to dry for 24 hours.

Primer GCS Interior/Exterior:

A primer used prior to GCS paints. Mostly used over existing painted surfaces, surfaces of different materials, and where surface repairs have been made. Please be aware that the GCS Exterior primer, is very slightly textured.

First dilute with water 15-20% by volume (150-200ml/L). Mix well to form an even mixture and apply 1 even coat. Look to always keep a wet edge and be careful not to overlap or over apply. Application by roller, brush or airless spray. Allow to dry for 4-6 hours.

Filler F10/20 – Interior/Exterior:

A high fill, primer coat, for **Ecosphere or Biosphere only**. Filler 10 is very slightly textured, and Filler 20 has a more textured finish. Filler 10/20 is used if the surface is of uneven finish (paint layers, irregular surface texture), and where there is need to cover over micro cracks of less than 1mm.

First dilute with water 15-20% by volume (150-200ml/L). Mix well to form an even mixture and apply 1 even coat. Look to always keep a wet edge and be careful not to overlap or over apply. Application by roller, brush or airless spray. Allow to dry for 4-6 hours.

Four2Four Premium:

A very high bond water-based primer for use over Wood & MDF, Metal (where free of corrosion or Oxidation), Tiles and other non-absorbent surfaces. On rusted metal, first apply a suitable primer. Mix well and apply 1 or 2 coats depending on absorption and nature of substrate and staining. Sand in between coats to achieve an even finish. Allow 30-60 minutes between layers and 6-8 hours for total drying.

BASIC PRIMER GUIDE

Paints	Primer
Ecosphere - Interior	L42/ L44 Primer GCS - Interior F10/F20 Four2Four
Biosphere - Exterior	L42/L44 Primer GCS - Exterior F10/F20 Four2Four
GCS Premium – Interior & Exterior	L42/L44 Primer GCS – Interior/Exterior Four2Four
Ambient Pro + - Interior & Exterior	L42/L44
GrafClean White	L42/L44 Four2Four
GrafClean Colour	L42/L44 Four2Four

Please note that this is offered for guideline purposes only. Please contact your Graphenstone Sales representative or the Graphenstone technical team for further advice.

4. DECORATION

After filling and priming of the substrate where needed, it is recommended to apply two full coats of a Graphenstone paint system. Any new/repaired areas (particular note needs to be taken on new lime surfaces) must be allowed to dry out for a minimum period of 28 days prior to the application of Graphenstone paints. When all surfaces are clean, sound, wind dry, dust free and free from all surface contaminants, decoration may proceed.

BASIC PAINT GUIDE:

Paints	Details
<p>Ecosphere - White</p> <ul style="list-style-type: none"> ○ Interior only. ○ Natural Matt finish & semi-matt finish (Ecosphere Eggshell). ○ Lime & Graphene. ○ Cradle to Cradle Certified™ GOLD. GreenRate Certified™ LEVEL A. ○ BREEAM & LEED certification. ○ Class 1 strength. ○ Fire rating: A1 EU, BS 0. ○ Sd – High 	<ul style="list-style-type: none"> ○ High covering power. ○ Over 98% whiteness. ○ Absorbs CO2 (4.8 kg/15 l). ○ Breathable & avoids condensation. Good washability. ○ Tough and long-lasting. ○ High adherence. ○ Excellent flexibility. ○ Not cracking. ○ Free of VOCs and formaldehyde.
<p>Biosphere - White</p> <ul style="list-style-type: none"> ○ Exterior only. ○ Natural Matt finish. ○ Lime & Graphene fibres. ○ Cradle to Cradle Certified™ GOLD. GreenRate Certified™ LEVEL A. ○ BREEAM & LEED certification. ○ Class 1 strength. ○ Fire rating: A1 EU, BS 0. ○ Sd – High 	<ul style="list-style-type: none"> ○ High covering power. ○ Over 98% whiteness. ○ Absorbs CO2 (4.8 kg/15 l). ○ Breathable & avoids condensation. Good washability. ○ Tough and long-lasting. ○ High adherence. ○ Excellent flexibility. ○ Not cracking. ○ Free of VOCs and formaldehyde.
<p>GCS Premium – Interior / Exterior</p> <ul style="list-style-type: none"> ○ Available in Graphenstone colours and a range of NCS and bespoke colour matches. ○ Mineral matt finish. ○ Lime, Silicate and Graphene fibres. ○ Cradle to Cradle Certified™ SILVER. GreenRate Certified™ LEVEL A. ○ Class 1 strength. ○ Fire rating: BS 0. 	<ul style="list-style-type: none"> ○ Breathable. ○ Avoids condensation. ○ Good washability. ○ High adherence. ○ Tough and long-lasting. ○ Excellent flexibility. ○ Not cracking. ○ Bases free of VOCs and formaldehyde.

<p>GrafClean – White & Colour</p> <ul style="list-style-type: none"> ○ Interior & Exterior use. ○ Available in Graphenstone colours and a range of NCS and bespoke colour matches. ○ For areas of High traffic. ○ Available in Matt & Satin. ○ Ecological & VOC free - < 0.1g/L. ○ Natural Mineral & Graphene. ○ Class 1 strength. ○ Fire rating: BS 0. 	<ul style="list-style-type: none"> ○ Very good washability. ○ V.High covering – 70% solid content ○ Breathable. ○ High adherence. ○ Very tough and long-lasting. ○ Excellent flexibility. ○ Not cracking.
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PAINTS:

Ecosphere Premium:

To apply Ecosphere, first dilute with 15-20% (150-200ml/L) clean water – **suggested no more than 15% on the second coat** - following the guidelines given and mix with a mechanical mixer to ensure a smooth and homogenous mixture. Avoid excessive shaking of the paint and allow to settle to minimize air bubbles. Apply 2 coats evenly over the surface and look to maintain a 'wet-edge' and avoid overlapping. Application can be by roller, brush or airless spray.

Unless specified, allow 2-4 hours between coats and allow 24 hours for total drying.

Biosphere Premium:

To apply Biosphere, first dilute with 15-20% (150-200ml/L) clean water – **suggested no more than 15% on the second coat** - following the guidelines given and mix with a mechanical mixer to ensure a smooth and homogenous mixture. Avoid excessive shaking of the paint and allow to settle to minimize air bubbles. Apply 2 coats evenly over the surface and look to maintain a 'wet-edge' and avoid overlapping. Application can be by roller, brush or airless spray.

Unless specified, allow 2-4 hours between coats and allow 24 hours for total drying.

GCS Premium –Interior/Exterior:

To apply GCS Premium, first dilute with 15-20% (150-200ml/L) clean water – **suggested no more than 15% on the second coat** - following the guidelines given and mix with a mechanical mixer to ensure a smooth and homogenous mixture. Avoid excessive shaking of the paint and allow to settle to minimize air bubbles. Apply 2 coats evenly over the surface and look to maintain a 'wet-edge' and avoid overlapping. Application can be by roller, brush or airless spray.

Unless specified, allow 2-4 hours between coats and allow 24 hours for total drying.

GrafClean Premium – Interior/Exterior:

To apply GrafClean Premium, first dilute with 15-20% (150-200ml/L) clean water – **suggested no more than 15% on the second coat** - following the guidelines given and mix with a mechanical mixer to ensure a smooth and homogenous mixture. Avoid excessive shaking of the paint and allow to settle to minimize air bubbles. Apply 2 coats evenly over the surface and look to maintain a 'wet-edge' and avoid overlapping. Application can be by roller, brush or airless spray.

Unless specified, allow 2-4 hours between coats and allow 24 hours for total drying.

GENERAL NOTES FOR DECORATION:

Take care to maintain a 'wet-edge' where possible and do not over apply the paint. Apply in one smooth movement and avoid overlapping of the paint, as an excess build-up of layers, can lead to micro-cracks appearing in the painted surface.

The lime-based paints will initially appear translucent immediately after application. **DO NOT WORRY**, the product will become increasingly opaque after a period of about 3-4 days, as the initial curing of the paint takes place. It is recommended to protect the newly painted/treated surface from rain for 4 days whilst the initial carbonation and curing process takes place.

The total curing process of the product occurs within the first 30 days after application. Please avoid any cleaning or excess rubbing of the product during that time.

5. COLOUR MIXING.

Whilst every effort is made to ensure all our mixed paints are consistent in colour, please be aware that Graphenstone paints are made using natural minerals and raw ingredients and there is the possibility of slight colour variation of the base paints. If using more than 1 pot/tub of paint, please ensure that you intermix between pots on application to ensure a consistent colour. Batches may differ slightly so please make sure your order enough paint for the individual job as specified. Please contact the office to ensure the same batch numbers are supplied if required.

6. CONSUMPTION RATES.

Typical consumption rates would be as follows (rates quoted in 1 coat unless specified)

Füllmasse	100-200g/m linear
Filler 10/20	5/7m ² /L
Ambient Primer L42/44	26-30m ² /L
GCS Primer	11-14m ² /L
Four2Four	10-11m ² /L
Ecosphere	6-9m ² /L – 2 coats
Biosphere	6-9m ² /L – 2 coats
GCS Premium	6-9m ² /L – 2 coats
GrafClean	5-8m ² /L – 2 coats

Please note that these consumption rates are offered for guideline purposes only and should more accurate measures be required then site trials must be conducted.

7. SCOPE OF ADVICE.

The key to optimum performance with Graphenstone products, is preparation prior to decoration. Please ensure that all recommendations in the General Considerations section are followed.

For previously painted surfaces where stripping and removal of unstable surfaces is recommended it should be noted that once stripped there is the potential for impurities such as salts and staining to emerge as the surface dries.

'Site unseen' specifications, are issued using general guidelines for pre-treatment and preparation. For further advice or to arrange a site visit, please contact our head office.

8. GENERAL CONSIDERATIONS.

Important points to be borne in mind when using Graphenstone paints, and for them to achieve the best bond with the surface to which they are applied, it is essential that the following recommendations are followed:

1. all areas to be decorated should be free from all surface contaminants, sound and in complete bond with the substrate, dry and dust free.
2. all materials must be thoroughly mixed beforehand using a mechanical mixer, to ensure an equal distribution of pigments and to create an even and homogenous texture.
3. materials must not be applied at temperatures below 5°C or those more than 30°C.
4. materials must not be applied if it is raining or if there is an immediate likelihood of rain. Surfaces should be protected from rain for a period of 4 days after application.
5. on newly applied mineral surfaces, we would suggest that a period of at least 28 days is allowed following application, prior to the application of Graphenstone paints.
6. use only Graphenstone range of pre-treatments and fillers prior to application of Graphenstone paint systems.
7. any splashes or spillage should be removed immediately using water - note needs to be taken of this in respect of Graphenstone on glass and wood, as it has a slight etching effect if allowed to dry hard.
8. clean all brushes and tools immediately in water.
9. always store in frost-free conditions.
10. always maintain a 'wet edge' and work materials out well.

9. ORDERING

When ordering, reference to the project should be made, to ensure that the correct products and colours required are delivered. In the event of re-ordering, we can then make sure that a colour match can be supplied.

Graphenstone Paints operates a policy of 'sale and no return' on all goods.

Other products are available. Please consult the website for further information or contact the UK Head Office.

MANY THANKS FOR YOUR INTEREST IN GRAPHENSTONE PREMIUM PRODUCTS.

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