

BADGEONING - MANUAL



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1. DESCRIPTION OF BADGEONING

Badgeoning is an age-old technique for creating an authentic finish on outdoor façades which involves applying a sufficiently thick layer of a mineral paint using a block brush.

The Stoopen & Meeûs Badgeon is weather resistant and leaves the structure of the brickwork visible. When the weather is damp, badgeon displays the well-known 'stain formation'. If you wish, a layer of Badgeon Protect can be applied to prevent this discolouration. The appearance is partly determined by the brushing technique used. The absorption capacity of the substrate determines the colour nuance in the badgeon.

Badgeon consists, among other things, of mineral raw materials (max. granule size 0.75 mm) and cement-free binding agents such as lime and hydraulic lime, which do not affect the breathable and damp-regulating properties of the façade.

Stoopen & Meeûs Badgeon is a one-component system, which means that both the first and the second layer are coloured with pigment. So if any damage occurs, no grey bottom layer will be visible, as is the case with badgeoning systems finished with a coat of paint.

Various techniques are possible: from a fairly nuanced, gritty and streaky look to a far softer effect (block brush), without many stripes (polished with a sponge or a dry block brush). If you rub in pigments with a sponge, you can create superb effects.

We advise always doing a test beforehand: a colour sample system is available from our dealers (See website www.stoopen-meeus.com).

Our YouTube channel (http://www.youtube.com/user/stoopenmeeus) shows a wide variety of completed projects and a video of the application process. This will give you inspiration for your future projects.

2. BADGEON SUBSTRATES

2.1. SUITABLE SUBSTRATES

Substrates such as brick, clean concrete, some plasters, etc. absorb minerals and are suitable for badgeoning.

A substrate is absorbent when it absorbs water when wet and continues to do so for a while.

If half a glass of water is poured over the façade at a height of 1.5 m, no long trickles of water should appear. After 5-15 seconds it should be possible to see the glistening damp fade away and a 'matte' darker outline should remain. A darker outline alone is insufficient. Many mineral plasters darken when damp, but they are fully saturated immediately and therefore no longer absorbent.

The substrate should be clean and free of grease. Loose parts should be removed first. Loose joints should be repaired.

For badgeoning, it is important for the substrate to be uniform. Uniform substrates such as brickwork comprising one type of stone and mortar absorb evenly. Non-uniform, absorbent substrates may show significant differences in colour when dry.

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With highly absorbent substrates, particularly in high temperatures or if there is a strong wind, the substrate should first be dampened. Dampening the substrate sufficiently will have a positive impact on the processing and hardening. The dampening should be uniform and the substrate should definitely not be saturated. If necessary, the wall should be protected against wind and sun.

If the substrate is too dry or thicker layers are applied, shrinkage cracks may occur. These can be eliminated by added another thin layer of badgeon.

2.2. PAINTED SUBSTRATES - BADGEON ADDITIVE

Generally speaking, badgeon adheres less well to painted and poorly absorbing substrates. For the best possible result, old coats of paint should always be removed.

In certain cases, Badgeon Additive can be added to improve adhesion to painted and poorly absorbing substrates. However, the adhesion of the new layer of badgeon is only as good as the adhesion of the old coats of paint. When using Badgeon Additive, 2 kg powder is added per 25 kg of badgeon, mixed with water.

Applying badgeon to an old coat of paint can adversely affect the adhesion of the old coats of paint. Old coats of paint cause water to run off and dry out quickly. When applied in rainy weather, the badgeon may retain damp for a long time (several days). This damp can penetrate continuously through the paint and/or cracks in the coat of paint, which can cause the old coats of paint to come loose from the substrate. It is certainly not advisable to apply badgeon to an old coat of paint in poor condition.

It is not easy to assess whether existing coats of paint adhere sufficiently. Applying badgeon to old coats of paint is always risky. Very old, weather-beaten coats of paint in poor condition, which have recently been covered over, may at first sight seem to provide a suitable substrate. In this case, the underlying problem is not visible, but it exists nevertheless. With painted façades that are not painted in some places (bricked in windows), the window should first be primed to ensure even absorption.

It is never advisable to prime large surfaces as this results in poorer adhesion compared with absorbent substrates. The preferred option is always to remove old coats of paint.

There is a risk of saponification with old coats of paint. Saponification occurs when a non-alkali resistant paint comes into contact with an alkali product such as concrete, brick work or badgeon.

Stoopen & Meeûs can never be held liable as a manufacturer for the application of Badgeon on unsuitable substrates.

The person doing the work is responsible for assessing the substrate. If there is any doubt, removal of the old paint should always be recommended. Hidden defects are always possible.

2.3. ABSORPTION DETERMINES THE COLOUR NUANCES

The extent to which the badgeon is absorbed by the substrate determines the intensity of the colour. Highly absorbent substrates will have a darker colour, compared with less absorbent substrates. Owing to this phenomenon, badgeon applied in a dry or a wet period may dry differently.

The difference in absorption between various stones means that slight differences in colour will always occur. This is typical of the use of badgeon. It is advisable to do a test in a less visible spot to assess the colour in combination with the substrate once it is fully dry. A sample system exists for this purpose.

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If the substrate is saturated due to rain, rising damp, etc., the badgeon will not be absorbed and will not adhere as well. This can lead to damage over time. Rising damp can cause frost damage.

SOLUTION:

- Allow the substrate to dry out before badgeoning.
- If necessary, remedy the damp problem first.
- If damage has occurred, retouch certain spots during a dryer period.
- Stones beneath the water-repelling level can cause problems due to inadequate adhesion and frost damage. Badgeoning after a dry period can offer a solution here.

Badgeoning does not offer a solution for salt bleeding. The salts will pass through the badgeon and reform on the surface, as they do with brickwork. A large quantity of salt in combination with saturated bricks could damage the badgeon.

Badgeoning right to the bottom of the façade is not recommended. Badgeon can absorb moisture from the soil, and be spattered with sand, etc. when it rains. Rising damp due to badgeoning below the water-repelling film can lead to soiling and/or frost damage.

Badgeoning should preferably be carried out during a dry period, not after a few days of rain, so that the badgeon is adequately absorbed by the substrate. Walls that are saturated by rising damp may suffer damage in the event of a heavy frost.

Badgeon should be protected against damp until it is fully dry. Higher temperatures and strong winds cause the badgeon to dry faster and make the working conditions more difficult. This fast drying can also adversely affect the adhesion.

3. USING BADGEON

3.1. PREPARING BADGEON

First put a small quantity of mixing water in a container (min. 8 litre / 25 kg), then add pigment and stir well.

If you are using Badgeon Additive, this should be added to the pigment in the mixing water.

Add the badgeon powder and mix mechanically. Add water if necessary in order to obtain the required consistency. The quantity required is determined, among other things, by the pigmentation, the absorption capacity of the substrate and the brushing technique used.

Badgeon is supplied uncoloured in 25 kg bags of dry powder. Badgeon can be used without pigment (NATURA) or a wide range of colours and intensities can be created by adding a specific quantity of powered pigments.

3.2. APPLYING BADGEON

3.2.1. BASIC BADGEONING TECHNIQUE

The appearance is partly determined by the brushing technique used. The absorption capacity of the substrate determines the colour nuance in the badgeon. The thickness of between 1-3 mm is determined by the quantity of mixing water, the brush and the number of layers. It is recommended always to apply two layers. The first layer

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serves to colour all joints while the second layer is diluted, so as to finish the façade surface quickly and without the formation of blocks (diluting makes the colour a little lighter).

Once the first layer has been applied, the badgeon should be allowed to dry fully before the second layer is applied.

The covering capacity of badgeon is +/- 1.5 kg/m²/two layers and depends very much on the substrate and the quantity of mixing water.

Badgeon should be applied at an ambient and underground temperature of between 5 and 25° C. It is best to avoid working in strong wind, direct sunlight and rain. Once badgeoned, the surface should be protected against rain and damp from 72 hours.

Badgeon is fully hardened by carbonation after two or three months.

3.2.2. POLISHING BADGEON

To easily achieve a more even, softer result, the surface can be polished with a slightly damp sponge once the badgeon has been absorbed (15 - 30 minutes depending on the conditions). This will make the surface softer, the sand is removed and the brush strokes are less visible. The surface should be sponged when the badgeon plaster has been absorbed but is not too dry. A lint-free, synthetic sponge can be used.

3.2.3. ADDING ACCENTS IN BADGEON

By adding pigment or water with pigment to the badgeon using a sponge, nuances of colour and accents can be created. This technique is mainly used on accent walls.

3.2.4. BUTTERING TECHNIQUE

The buttering technique creates weather-beaten appearance with the underlying brickwork wholly or partially visible in places.

To achieve this, the badgeon should be fairly liquid so that the layer remains thin. As a result, some bricks are either not covered in badgeon (which creates a greater contrast) or once the badgeon has been applied it is immediately removed with a wet sponge or brush (softer lime wash, so that the brick colour comes through to a greater or lesser extent).

This buttering technique always involves just one layer.

4. FINISHING BADGEON WITH BADGEON PROTECT

If you wish to protect the badgeon against soiling by moss, etc., or the wall against beating rain, a layer of Badgeon Protect can be applied. Badgeon Protect will also prevent the typical discolouration caused by the penetration of moisture.

Badgeon Protect can be applied using a brush or spray at least 48 hours after the badgeon is fully dry. Once dry, the BADGEON is protected against damp from outside. Rising damp, seeping damp or damp contained in the wall can cause a darker outline. Badgeon Protect will slow the drying of damp that is in the wall compared with an untreated wall.

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Advantage:

- The badgeon will remain attractive for longer, because rain water will run off together with impurities.
- Green scale, moss, etc. stand less chance because the surface remains dry.
- Dark outlines of damp caused by rain are avoided.

Disadvantage:

- Typical discolouration after rain is prevented.
- It is also possible that the outline becomes irregular if the Badgeon Protect is applied unevenly.
- Any rising or seeping damp will form outlines and dry more slowly.

5. MAINTAINING BADGEON

In good conditions, which depend on the architecture and the environment, badgeon can remain attractive for 7-10 years, after which we may refer to a 'lovely weather-beaten Tuscany look'. In dusty or woody surroundings, the badgeon will become dirty or green more quickly.

Wall anchors, window sills without a drip edge, roofs without eaves and running water will also cause the badgeon to become dirty more quickly. Spattering mud and rising damp can also cause soiling.

Badgeon can be carefully cleaned with a high-pressure cleaner, but care should always be taken not to damage it.

If you want to freshen up badgeon, simply add a thin layer if you are not changing the colour.

6. NOTE

The information provided in this manual constitutes a general product description. On the basis of our experience, a few tips are given about the processing of our product. However, every actual situation in which the product is used is different. We therefore invite our customers to always carry out representative tests, taking into account the nature and condition of the substrates, before going ahead with processing.

It is up to the customers to check our website, <u>www.stoopen-meeus.com</u>, to see whether the current manual and technical data sheets have been replaced (updated) by more recent versions.

Stoopen & Meeûs takes responsibility for the quality of its products but not for the processing of these products.

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