

## **Thermocromex: general application recommendations**

Thermocromex is a One Coat render designed to be applied by spraying on most surfaces, including clay blocks and light weight blocks.

On high suction surfaces it is recommended that these are well dampened the day before application and again just before. Bricks should be dampened within 30 minutes from application of the render.

Do not apply on gypsum, wooden boards, lath, cob, adobe, frozen or oversaturated masonry units, painted surfaces.

Not to be applied in temperatures below 5°C or above 30°C unless the appropriate protection and curing practices are followed.

On existing waterproofed surfaces apply only if an adequate key is provided. On pre cast units ensure that de-moulding oil has been removed (high pressure water jet). Apply the render in 2 passes, wet on wet. The first pass will be as a rough slurry and will contain 0.5 litres of SBR per bag of Thermocromex (30kg.).

The same procedure applies on very smooth surfaces.

Backgrounds incorporating multiple elements will have to be prepared with a suitable mesh covering the areas where the different surfaces meet. When rendering on masonry units with vertical joints not filled, the joints over 5mm width should be pointed.

When rendering on masonry units built with large joints, to avoid shadows. **Either** apply the one coat render in two passes waiting 1 day maximum between passes. **OR** Apply a base coat and render on it after about 5 days.

When rendering on masonry units with vertical joints not filled, the joints over 5 mm width should be pointed and fully dry before the render is applied.

On high suction surfaces, apart from the previously described dampening, it is beneficial to work with 2 passes (2nd pass after about 8 hours from the first). The function of the 1st pass is to unify the suction. Tight floated finishes should be avoided unless the background is properly constructed with tight and well finished joints. Sponge finished are preferable.

The **minimum** requirement to achieve water resistance is 10mm finished work overall. Allow therefore 12 to 15mm (or more) when scratched or textured finishes are required.

The **maximum** thickness should not be over 25mm. (if thicker, the application will be made in more passes but it will never exceed 40mm).

Test panels are recommended in all cases. In the presence of multiple surfaces or other potentially difficult surfaces to be rendered, a representative test panel will help in establishing the best method for the applicator to follow.

**Mixing.** Always use whole bags. Do not add any other material unless specifically agreed with the Manufacturer.

**Add** 5.5 to 6 litres of clean water per bag. Always use the same water dosage for each mix (proper measuring devices should be used)

**Mix for 5 to 10 minutes maximum.** Always maintain the same mixing time for all mixes. Use the mixed material within 1 hour. Do not try and re-work the mortar.

## **Protection and curing**

Protect fresh work against adverse weather conditions (rain, wind, frost etc...). To avoid blooming, do not apply One Coat renders with strong colours at temperatures below 8°C and high humidity. In hot weather or windy conditions, cure the work repeatedly with light water mist for at least 2-3 days.

### **Coat/s thickness**

Do not apply in coats over 20mm. The maximum overall thickness should not be over 25 mm.

## **Different finishes using Thermocromex One Coat Render**

*Rustic (rough cast), partly smoothed rough cast and dragged finishes*

Work in 2 passes at an interval of some hours. The first pass has to be at least 10mm to guarantee the waterproofing effect of the whole work. If the second pass cannot be done within few hours, dampen the surface before its application. In sprayed renders, make sure that the pressure and the distance of the spraying nozzle are constant.

In rough cast finishes the render is left as cast.

Smoothing a rough cast finish is done once the render is slightly hardened

Dragged finishes are achieved by scraping the surface once sufficiently hardened.

## **Scratched finishes**

The render is applied in 1 or 2 passes, depending on the background : the first will be cast on or sprayed coat (10 mm), the second is applied soon after. The total thickness of the work should be minimum 15mm making sure that a minimum of 10mm is left after scratching over the whole surface.

Rule the second pass immediately after application.

The scratching should be uniform and using appropriate scratching tools (devil floats etc...) and it can be done between 3 to 24 hours after ruling, depending on the weather conditions.

Remember that scratching will cause a different visual effect in the colour of the product from the colour of the same product with a smooth finish.

Deep scratched surfaces are more sensible to rapid drying and therefore more attention should be paid to curing with light water mist. This should not be done in full sun or on sun baked surfaces (cure in advance and later on in the day).

## **Sanded finish**

Proceed as per scratched finish. When the surface is hard enough, usually 48 hours but could be longer.

## **Sponged finish**

Can be applied on various types of work, using different sponges texture or hardness when the work is sufficiently dried.

## **Smooth floated finishes (floats, sponge, trowel)**

The render is applied in 2 passes of 5mm each, ruled and floated when sufficiently dry. The minimum thickness has to be 10mm after floating. Note: on large surfaces without joints it might be necessary to introduce joints. In all cases, if joints are present in the background, these should not be bridged.

## **Dry dashing**

Apply the render in 2 passes to achieve a 15mm overall thickness.

Dry dashing is possible on the second pass when still fresh

## **Lined finishes**

Lined finish, simulating stonework, is achievable with the appropriate tools.

Limit the line to a maximum thickness of 10 mm.

## **Further Guidelines on the application of Thermocromex**

On a suitable background, offering adequate key and, if required, suitably dampened, spray Thermocromex to various thicknesses (depending on the finish required).

Rule immediately after spraying.

Float to finish few hours after ruling out.

**As compaction has been achieved by spraying, do not float exercising a lot of pressure as overworking might produce patches.**

Smooth finishes can be achieved using the TF grade (0-1.3mm). If using a sponge, use a fine texture sponge, semi dry. Single floated finishing coats should not exceed 5mm thickness, they will not therefore achieve the minimum waterproofing thickness of 10mm.

## **Spraying equipment:**

Pneumatic Hopper Guns (3 holes) – pressure should be between 3 and 4 bars.

Spraying machines (Putzmeister, Lancy etc...)

Continuous spraying machines (i.e plaster sprayers)

When using spraying equipment it is essential to respect the Manufacturer recommendations on the water addition and mixing time. It is also essential, as for all rendering/plastering work, that the background is correctly prepared (protection of windows, doors etc...).

### **IMPORTANT NOTE:**

**The information contained in this document does not constitute a specification but is given as a general recommendation. Please consult your St. Astier Distributor for site specific issues.**

**For further Guidance, contact your St Astier Distributor.**

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