

WHAT CAUSES SURFACE MICRO CRAZING IN A SMOOTH FINISH, HOW TO OVERCOME AND HOW TO AVOID

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Surface micro crazing in a smooth render finish can sometimes occur. When the render is tapped, there should not be any hollow sounds, which would indicate the render has debonded and failed. In these cases, the render needs to be removed back to a sound substrate and a new over render applied.

In the case of micro crazing, though the appearance is displeasing before any remedial solution can be carried out, the render must not be hollow and must be soundly adhered.

What can cause micro crazing?

There are several possible reasons why the micro crazing effect happens which may not initially show up when the rendering work is completed but will often become visible after a rainstorm.

When a smooth type, trowelled, sponged or bagged finish is being created it is important to understand the surface appearance is hand finished and will therefore create inconsistencies in the appearance, shade, and finish. This is a normal scenario to be expected with these types of finishes.

As with all applications, the skill of the applicator is key to this process, and they must ensure the finish is as consistent as possible by checking the surface immediately after application to blend in any anomalies as best as possible as rectification afterwards is not easily achieved.

Micro crazing is generally caused through the following scenarios:

- Quick hydration of the top layer – This will probably be the most likely cause. When the render is curing, the top surface could be exposed to sunlight, strong winds etc which creates a flash drying process to the surface of the render. Scaffolding can often create a wind tunnel effect too so this needs to be a consideration.
- Excessive trowelling by the applicator – Basically the render finish is over worked, and this draws up the laitance (a watery slurry consistency) to surface which because it is very thin, dries out rapidly and shows as a patchy surface crazing.
- If a thin layer of render has been applied over a dry basecoat – This is a situation where the moisture from the topcoat is sucked into the dry basecoat. If this occurs the surface appears powdery which means the render finish hasn't reached its full curing capacity. Generally, the final effect will also quickly show up as delamination. In both instances the topcoat must be removed and reapplied using a suction control coat first.
- Not treating the finished surface – For example, dampen the surface with a light spray after initial curing of the topcoat finish to prevent early surface hardening and hydration.
- Cover the render area with a hessian or mortar fleece to protect from drying winds, frost, strong sun and driving rain.

How do I prevent micro crazing occurring?

In general, the key to prevention is to ensure the render does not dry out quickly.

After completion of creating a smooth finish, it is advisable to dampen the surface with a light spray after initial curing of the topcoat finish, using a garden sprayer or mist spray from a hose to prevent early surface hardening and hydration which can lead to surface micro crazing. It is also good practice until the render has dried and hardened to cover with a hessian or mortar fleece to protect from drying winds, frost, strong sun and driving rain.

When micro crazing has occurred, how do I deal with this?

The suggested proposal to deal with this, are as follows:

Clean the surface and remove all traces of dust and dirt first. Ensure the surface is dry then apply a primer coat of CREPIFOND F or G and allow to dry – if the substrate is dry this will take just a few hours.

Alternatively:

Apply a diluted coat of COLOR SILOFLEX.

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When dry, overpaint the surface with COLOR SILOFLEX applied in one or two coats.



- **CREPIFOND F or G:** Acrylic based, high opacity primer



- **COLOR SILOFLEX:** Semi thick flexible, siloxane resin enhanced coating.

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