

# Frequently Asked Questions

Technical information for specifiers and decorators published on 19.10.2011



## Wall surface characteristics – wall surface problems

### What characteristics must the wall surface have?

The wall surface for successful wallpapering must be dry, firm, uniformly absorbent, clean and smooth.

### What can I do if the wall surface is damp?

A damp wall surface is in no circumstances suitable for wallpapering or another form of coating. A mildew quickly forms on damp wall surfaces that can damage the building fabric.

If an attempt is made to wallpaper over a damp wall surface, this will result in seams rising and poor adhesion, particularly in the area of the seam.

- New plaster generally needs to be left to dry for at least six weeks. The exact residual moisture can be measured with a **moisture meter**.
- Darker spots, mildew and mould stains are indicators of increased moisture in an existing wall.
- The condition of a wall can be effectively measured with the **film sample**. If condensation forms behind the film after 12 - 24 hours, the wall is too damp for wallpapering.
- Recommendations:
  1. Rectify cause of damp (structure of wall)
  2. Leave wall surface to dry.
  3. Heat and ventilate if necessary
  4. Test again

### What can I do if the wall surface is not firm?

Wallpaper adhesion cannot be ensured by removing the wall surface (plaster, emulsion paint, chalking abrasion). Seams or whole lengths can come away from the wall surface and ruin the overall uniform appearance.

The **scratching or pressure test** can be used to check the firmness of the wall surface:

- If damage is caused to the surface when it is scratched with a hard object with moderate pressure, the surface is too soft. The same applies to the pressure test if pressing with a thumb nail leaves a visible mark.
- The wall surface is also unsuitable if when a hand is rubbed over it **chalking abrasion** is noticed.
- Old emulsion paints can be checked for durability with the **adhesive tape test**. A strip of adhesive tape is stuck on the painted area and then peeled off in stages. If bits of paint come off or remain stuck to the strip of tape, the paint should be removed before wallpapering. Latex paints are also not suitable for wallpapering.
- Recommendations:
  1. Remove loose and unstable areas.
  2. Areas of plaster that chalk or crumble slightly can be primed with a wallpaper primer (e.g. Metylan wallpaper primer for old plaster).

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## What can I do if the wall surface has sintered layers?

Sintered layers are accumulations of binding agent on the surface of the wall surface that prevent firm adhesion of wallpapers and other wall coverings. The characteristics features of sintered layers are a gentle surface sheen and low absorbency.

- To check, **scratch the wall surface with a sharp object in a grid shape** and wet with water. If the scratch marks turn a darker colour and the water runs off from the other areas, there may be a sintered layer.
- Recommendation:
  1. Sintered layers must be mechanically removed by sanding.

## What can I do if the wall surface is not absorbent/is too absorbent?

The absorbency of the wall surface is a crucial factor in the success of wallpapering. If a wall surface has very poor absorbency or cannot absorb any more moisture, it is not suitable for wallpapering as adhesion to the wall surface cannot be achieved. In the worst case scenario, it is probable that the strips of wallpaper will fall off.

It is also problematic if the wall surface is too absorbent. There will again be a few problems during wallpapering, as the wallpaper paste is absorbed by the wall surface too quickly, causing an extremely high surface tension, which in turn may result in the seams bursting open.

- The absorbency can be checked by **wetting with water**. If the water runs off, this is an indication that the wall surface has no absorbency or only poor absorbency. If on the other hand there is a rapid absorption of water and a very dark discolouration of the wall surface, this is an indicator of an extremely absorbent wall surface.
- Recommendation:
  1. In the case of non-absorbent wall surfaces, application of a smooth non-woven lining is recommended. (E.g. non-woven lining; article number 2000-13) with a dispersion adhesive (e.g. Ovalit T from Metylan). The non-woven lining is a perfect wall surface for wallpapering.
  2. In the case of wall surfaces with poor absorbency, it is recommended that the wall surface be sanded slightly, and a lining paper or alternatively a non-woven lining is applied to the wall. For non-woven wallpapers, a dispersion additive in the wallpaper paste may be sufficient.
  3. In the case of wall surfaces with high absorbency, either equalise the absorbency with a deep-acting solvent primer or alternatively pre-paste the area thoroughly with a diluted wallpaper paste. **Caution:** Plasterboard cannot be pre-pasted.

## What can I do if the wall surface is not smooth or clean?

Rough and unclean wall surfaces show through when wallpapering. As a result, the hung wallpaper will not give a good surface effect on completion of decoration.

- By way of a visual check, check the wall surface for uniformity and cleanliness using an inspection lamp.
- Recommendation:
  1. Rough wall surfaces must be smoothed with a suitable filler. **Filling according to Q3** followed by adhesion of waste non-woven wallpaper is recommended.

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## What can I do if the wall surface is alkaline?

Alkaline wall surfaces such as new plaster or concrete are not suitable for wallpapering with grass, bronze, or metallic wallpapers. With other wallpapers, blistering can also occur in individual cases; these manifest themselves as spots on the wallpaper.

- To check for alkalinity, the wall surface is moistened with distilled water and superimposed with **indicator paper**. The colour change that emerges is checked against the enclosed **colour scale** and the pH value is determined.
- The neutral range is around 7. An alkaline wall surface is one that registers a value upwards of 7.8.
- Recommendation:
  1. Wash off the alkaline wall surface twice with a multiple fluate (e.g. Olafirn from Pufas).
  2. Then rewash the wall surface once with clear water.
  3. Then apply non-woven lining (article number 2000-13) onto the prepared wall surface.

## What can I do if there are cracks in the wall surface?

Cracks in walls and ceilings can adversely affect wallpapering in a major way. A distinction is made between three different groups of cracks:

- **Hairline cracks and craze cracks** are fine, reticulated cracks in the surface of the plaster that often only become visible when the surface is moistened.
- **Shrinkage and joint cracks** extend across the entire plaster layer and penetrate right into the joints of the masonry.
- **Static cracks and expansion cracks** are induced by the structure of the building or by movement of the foundation and often run perpendicularly through the entire building.
- Recommendation:
  1. Non-woven lining (article number 2000-13) should be used to cover over cracks in the first two groups of cracks.
  2. Special measures to cover over cracks are required to restore static cracks, however.

## What can I do if the wall surface has been attacked by mildew?

A mildew attack can develop anywhere where mildew nutrients are present and moisture occurs. (See additional information [Schimmelbildung.pdf](#))

- If the **ambient air is too damp**, it forms precipitation on the coldest parts of the wall and ceiling. Typical cold areas are room corners and poorly insulated outer walls that are insufficiently heated by the ambient air.
- A permanent elimination of mildew cannot be successfully achieved if the cause of the mildew is not identified and rectified.
- Recommendation:
  1. Preventative measures such as regular ventilation and controlled heating to lower the relative air humidity will reduce moisture precipitation.

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## What can I do if there are blisters in the wall surface?

White salt blisters on the surface of the plaster occur as a result, for example, of rising moisture from a **horizontal barrier** that is no longer intact, of leaky masonry, or following water damage.

- Recommendation:
  1. Wallpapering should not be carried out in this case until appropriate restoration measures have been completed.

## Pre-treatment of wall surface

### What must I do to pre-treat the wall surface for wallpapering?

Correct pre-treatment of the wall surface is a prerequisite for perfect wallpapering. Omitting to carry out the preparatory work can adversely affect wallpapering overall in the long term.

### Do old wallpapers need to be removed before wallpapering?

The old wallpaper must always be removed before wallpapering. Gluing onto an existing wallpaper always presents a risk of poor adhesion or seam behaviour, or that the wallpaper underneath will show through.

The old wallpapers can be removed by hand with water, a wallpaper stripper, ceiling brush and stopping knife. Old wallpapers that are hard to get off even after being wetted several times should be perforated with a **spiked roller**. This helps remove washable and scrub resistant wallpapers. If a dispersion adhesive has been used to hang the wallpaper, often only mechanical steaming with a **hot steamer** will help.

In the case of peelable wall coverings, the old wallpaper may only be wallpapered over if it is firmly stuck to the wall surface. This can be checked by wetting the old wallpaper with water in a few places and then waiting about 15 minutes. If no blisters have formed by this point, the old wallpaper can be wallpapered over.

### What must I do if there are old coats of paint on the wall?

Old, unstable or cracked coats of paint or varnish must be removed before wallpapering. This can be done by sanding down or scraping off. In difficult cases, stripping of the paint residue can help.

### What must I do if there is a coat of glue-water colour or emulsion paint on the wall?

Old coats of glue-water colours must be thoroughly washed off with water. Adding wallpaper stripper will make the work significantly easier.

Swell coats of wipe-proof emulsion paints (referred to as mixed binder coats) by soaking with water, adding a wallpaper stripper, and then remove. After cleaning, consolidate the wall surface with a water-based wallpaper primer.

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## **What should be done if there are coats of oil paint or varnish or metal and plastic surfaces on the wall?**

These surfaces are not a suitable wall surface for wallpapering. However, if you wish to wallpaper these surfaces, it is recommended that all adhesives such as dust, grease or dirt first be removed from the surface and a non-woven lining be applied to the surface with a dispersion adhesive (e.g. Metylan Ovalit T). This surface can also be prepared so that it is suitable as wall surface for wallpapering.

## **How should I pre-treat mineral wall surfaces?**

Firm mineral wall surfaces should be pre-pasted with diluted wallpaper paste. With this type of wall surface – such as concrete surfaces, plasterboard, plaster based fillers, and newly plastered walls– it is advisable to prime the walls with a deep-acting solvent primer.

Wall surfaces that crumble or are heavily absorbent must also be stabilised with a deep-acting solvent primer.

## **Is special pre-treatment of the wall surface required when working with non-woven wallpapers?**

Non-woven wallpapers offer a number of advantages that make wallpapering significantly easier. For one thing, non-woven wallpapers, unlike conventional paper wallpapers are not opaque. The wall surface therefore does have to be made uniform in by applying a non-woven lining prior to wallpapering.

To make the wall surface uniform and also to create even absorbency, a pigmented wallpaper primer should be used. This type of priming is also recommended for smooth, plastered surfaces.