

# FACADE RENDER BASES

To successfully apply a façade render, the base must first be correctly analysed using the CASFAS method (Clean, Adherent, Strong, Flat, Absorbent, Sound).

The base must be:



### Clean

Remove dust and any loose parts. Treat moss, algae, lichen and fungi using a cryptogamic product.



### Flat

Film coatings (paints, organic decorative coatings, etc.) are applied to perfectly flat bases. If necessary, level them.



### Adherent

Test the adherence of old coatings:

- Hydraulic renders: sound using a hammer and remove any hollow-sounding parts.
- Paints and organic decorative coatings: create a grid using a cutter (8 vertical and 8 horizontal cuts).

At least 80% of the squares must remain in place. Otherwise, remove the non-compliant parts.



### Absorbent

Before applying a hydraulic render, assess the base porosity by spraying water on the façade:

- if the water runs off, the base is not porous,
- if it beads, the base is waterproofed,
- if it is absorbed: the support is porous.

This criterion determines a specific preparation for the chosen render.



### Strong

Test the hardness of old hydraulic renders using a pointed tool (screwdriver...). If the tool penetrates easily, remove the render.



### Healthy

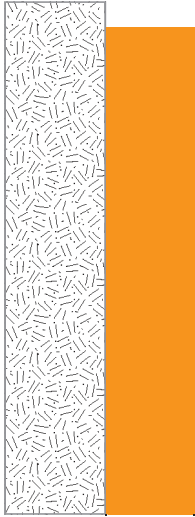
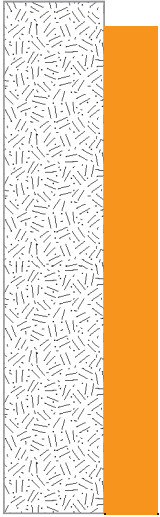
Locate and treat cracks in the base. The treatment depends on the width and origin of the crack.

# SINGLE-LAYER RENDERS

On rough masonry, a single-layer render provides waterproofing, provided it is applied in 12 mm thickness, and decoration, if it is tinted.

On a base that is already waterproof (concrete or undercoat), the single-coat render has only a decorative function:

it is thus applied in a thickness of about 7 mm.

	WATERPROOFING + DECORATION	DECORATION
Base	Rough masonry	Concrete
Fresh render thickness	12 to 15 mm (on well finished masonry)	5 to 8 mm.
		
Finished render thickness	12 mm	7 mm

The rules for choosing a single-coat render depending on to the base and its application follow DTU 26.1.

## Choice of render depending on the base

BASE	RENDER CATEGORY
<b>Rt3 Masonry</b> Examples: common aggregate concrete blocks, bricks, concrete	OC1, OC2 or OC3
<b>Rt2 Masonry</b> Examples: bricks, lightweight aggregate concrete blocks	OC1 or OC2
<b>Rt1 Masonry</b> Example: autoclaved cellular concrete blocks	OC1

The OC render category is indicated on its QB Certificate and on its technical data sheet.

On rough masonry, regardless of the base and the selected finish, a single-coat render is always **applied in 2 passes**.

Note: there is only one case where application in 1 pass is tolerated. This is the application of a "scratch" finish on:

- Consistent masonry: all the facade elements must be of the same type, including the lintels...
- and well finished: the thickness defects must be less than 10 mm under the 2 m rule and 7 mm under the 20 cm rule.

Whichever finish is chosen, the render thickness must never be less than 10 mm at any protruding point on the masonry, including hollow pointing or cornice outlines.

# TRADITIONAL RENDERS

These renders are applied in several layers, over a total thickness of about 20 mm. The render selection rules depending on the base, the thicknesses and the drying times between the layers follow DTU 26.1.

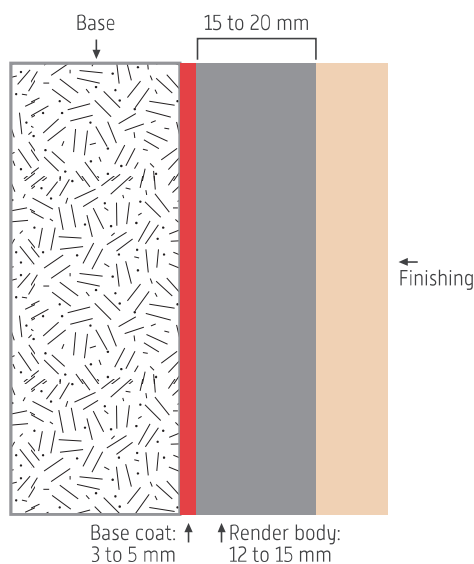
## Choice of render depending on the base

BASE	RENDER CLASS
Rt3 Masonry Examples: common aggregate concrete blocks, Rt3 bricks, concrete	CS II, CS III or CS IV
Rt2 Masonry Examples: Rt2 bricks, lightweight aggregate concrete blocks	CS II or CS III
Rt1 Masonry Example: autoclaved cellular concrete blocks	CS II

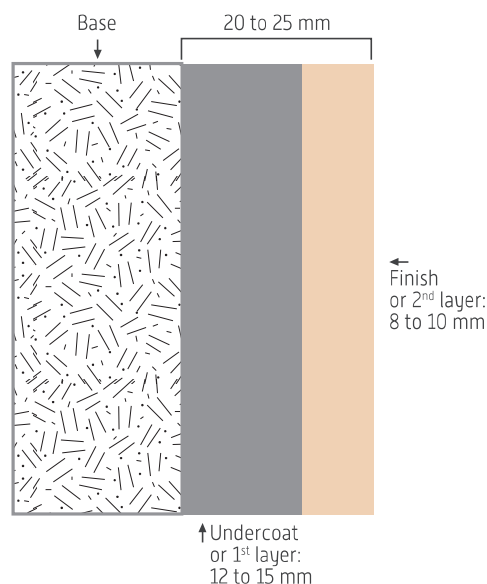
The render class indicated on its technical data sheet.

## Layer thickness

**3-layer system**  
(manual application or using spraying machine)



**2-layer system**  
(application using a spraying machine)



## Drying time between layers

LAYER	DRYING TIME
Base coat	2 to 7 days
Render body or 1 <sup>st</sup> layer	- 4 to 7 days for a hydraulic render finish - 7 days for a paint finish, organic decorative render, mineral or thick organic-mineral coating - 3 weeks for a tiled finish

# DECORATING FACADES WITH RENDER

## Combining colours and aspects

The junction between two shades or between two aspects can be made edge to edge or using a suitable profile.



### Create patterns and modelling in hollows or extra thickness

The recessed patterns can be made using fresh or hardened render, using a suitable tool (pointing iron, gauge saw, etc.). On masonry, the thickness at the bottom of the recessed pattern must never be less than:

- 10 mm for single-layer renders,
- 15 mm for traditional renders.

Extra thickness patterns are made using templates or rules fixed to the façade before spraying. On masonry, the render thickness must not exceed 25 mm in any one spot.

