MADA GYPSUM

MADA **RENDERS**

Issue No. 01 | July 2022

MADA **RENDERS**

Mada Renders are gypsum based, known for their simple processing and quick drying. They present a logistical advantage with extended shelf life, minimizing transport cost and warehouse space. They are also efficient, user friendly, with no need for sanding, eliminating by that dust and health concerns.

Mada Renders are used on plasterboards and masonry blocks, walls and ceilings, and are ideal for various surface finishes (paint, wallpaper, tiles, etc.). They create immediately a perfectly smooth surface ready to be finished, with no shrinkage nor cracks.

Mada Renders have high porosity allowing them to absorb part of the air humidity and releasing it in when the atmosphere is dry, creating a more pleasant and balanced atmosphere. They also offer a level of fire protection due to the water retained in crystal form after drying.

Mada Renders are natural products made at low temperatures with small energy consumed in the making, giving them a sustainable advantage.

MADA RENDERS
THIN COAT RENDER

MADA THIN COAT RENDER IS THE PERFECT SOLUTION TO CREATE THIN SURFACES PERFECTLY SUITABLE TO APPLY THE FINISHING ON. THE THIN COAT RENDER IS A SINGLE LAYER SMOOTH-COAT RENDER OF GREY-WHITE COLOR INTENDED FOR HAND PROCESSING. BEING COST EFFICIENT, EASY TO USE, AND IS LESS TIME CONSUMING THAN CEMENT RENDER, THIS MAKES THE THIN COAT RENDER THE PERFECT SOLUTION FOR CREATING 3-6 MM THICK LAYERS.

Advantages

- Easy & Fast Installation
- High Adhesion
- Low Consumption
- Versatility of Usage

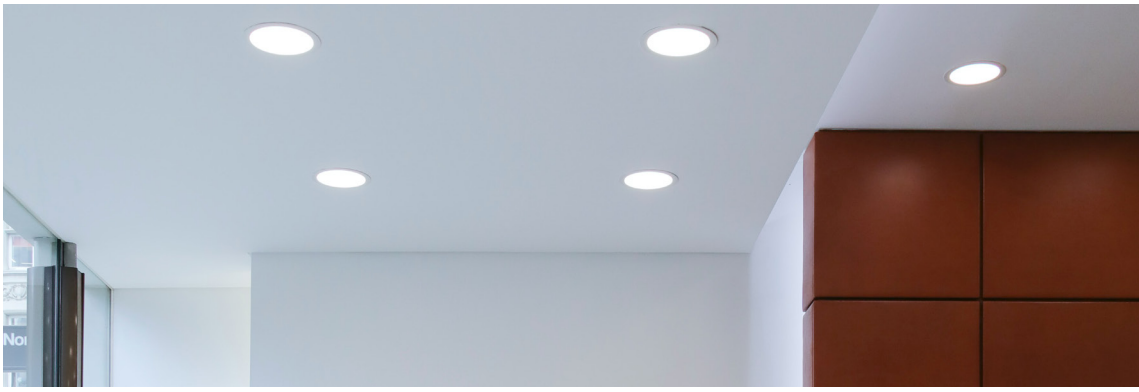
When to chose Thin Coat Render

Mada Thin Coat Render is the best option to use when the surface is flat or perforated such as concrete and porous concrete. In such cases, the wall does not need putty, and the Thin Coat Render is used to prepare the wall for the finishing items (paint, wallpapers, etc.). The render is also perfect for repair works, and can easily be used to fill in cracks, holes, and scratches in the walls.

MADA RENDERS
THIN COAT RENDER

Technical specifications

Parameters	
Color	Grey / White
Mixing Ratio water / powder	0.54 : 1
Workability	< 50 mins
Initial Setting Time	50 mins
Final SettingTime	180 mins
Surface Hardness	≥ 2.5 N/mm^2
Flexural Strength	≥ 1.0 N/mm^2
Compressive Strength	≥ 2.0 N/mm^2
Adhesive Strength	≥ 0.1 N/mm^2
pH	8-12



Application

The recommended thickness of the render is 3 to 6 mm and it can be used for full plastering of concrete blocks. it does not require surface mesh reinforcing.

Thin coat render also saves time by fast processing, it is simply mixed with water, and after about three minutes a smooth mixture is prepared.

Description	Thin Coat Render
Composition	Stucco, additives to improve adhesion to base material
Usage	Interior walls, ceilings at temperatures above +5 °C
Application	Manual
Working Time	Approx. 60 to 90 minutes
Base Surface Material	Concrete, Porous concrete, Render
Recommended render thickness	3 – 6 mm
Surface finish	Paint, Wallpaper
Packaging	40 kg bag
Storage term	12 months

MADA RENDERS
HAND APPLIED RENDER

MADA HAND APPLIED RENDER IS YOUR GO-TO PRODUCT FOR PROJECTS THAT REQUIRE VERSATILE THICKNESSES OF RENDERS WITHIN SMALL AREAS. THE HAND APPLIED RENDER IS A MIXTURE OF HEMIHYDRATES CALCIUM SULFATE, LIME, PERLITE AND VARIOUS ADDITIVES THAT IMPROVE ITS WORKABILITY AND SURFACE ADHESION. BEING QUICK TO PREPARE, EFFICIENT, AND VERSATILE, THIS MAKES THE HAND APPLIED RENDER THE PERFECT SOLUTION FOR CREATING 5-30 MM THICK LAYERS.

Advantages

- Easy & Fast Installation
- High Adhesion
- Low Consumption
- Versatility of Usage

When to chose Hand Applied Render

Mada Hand Applied Render is the best option to use when the surface requires thick, small layers of renders. The Hand Applied Render is primarily applied to brick walls, concrete, stable mortar and other concrete structures. Applications can also be found in interiors with regular humidity as well as in kitchens and in bathrooms.

MADA RENDERS
HAND APPLIED RENDER

Technical specifications

Parameters	
Color	Grey / White
Mixing Ratio water / powder	0.4 : 1
Workability	< 45 mins
Initial Setting Time	45 mins
Final SettingTime	90 mins
Surface Hardness	≥ 2.5 N/mm^2
Flexural Strength	≥ 1.0 N/mm^2
Compressive Strength	≥ 2.0 N/mm^2
Adhesive Strength	≥ 0.1 N/mm^2
pH	6-8

Application

Working with Mada Hand Applied Render is surprisingly simple, and its universality is a true benefit. It is easy to prepare, and requires no special training; simply add water, wait three minutes, and mix until smooth.

The application process begins with applying a primer layer, followed by applying the mixture. The mix can be applied to a wide range of thicknesses, varying from 5mm up to 30mm. contact bridge on smooth surfaces and absorption regulator on high absorptive materials.

Description	Hand Applied Render
Composition	Stucco, additives to improve adhesion to base material and Perlite light weight filler
Usage	Interior walls, ceilings at temperatures above +5 °C
Application	Manual
Working Time	Approx. 60 to 90 minutes
Base Surface Material	Brickwork, Concrete, Porous concrete, Render
Recommended render thickness	5 – 30 mm
Surface finish	Paint, Wallpaper
Packaging	25 kg bag
Storage term	12 months

MADA RENDERS
MACHINE RENDER

MADA MACHINE RENDER IS OUR SOLUTION FOR COVERING BIG AREAS USING REGULAR PLASTERING MACHINES. THE MACHINE RENDER IS DESIGNED TO HAVE HIGHER THICKNESSES AND HANDLE MORE WEIGHT. THE MACHINE RENDER HAS A HIGHER APPLICATION PERIOD, AND WITH THE OTHER ADVANTAGES MENTIONED, THIS MAKES THE MACHINE RENDER PERFECT FOR CREATING LAYERS STARTING FROM 6 MM OVER A LARGE AREA.

Advantages

- Easy & Fast Installation
- High Adhesion
- Low Consumption
- Versatility of Usage

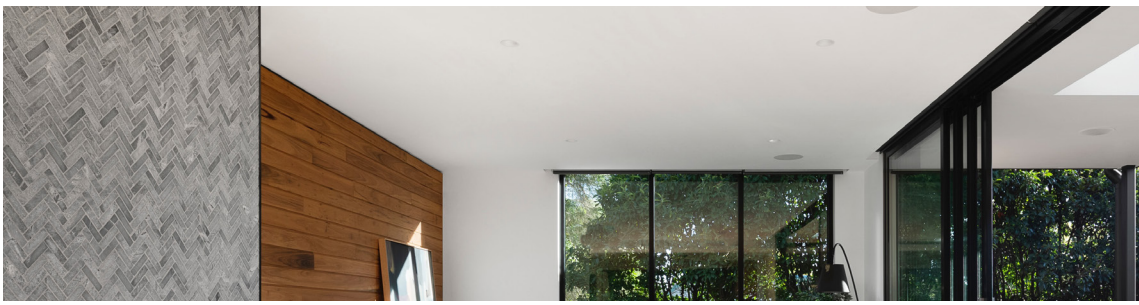
When to chose Machine Render

Mada Machine Render is used when the designated area is big, and the thickness required exceeds 6 mm. The Machine Render can be used when the surface is made of brickwork, concrete and porous concrete. Much like the Hand Applied Render, Machine Render shares the same core usage requirements, with the addition of being used by machines for a quicker coverage of the designated area.

MADA RENDERS
MACHINE RENDER

Technical specifications

Parameters	
Color	Grey / White
Mixing Ratio water / powder	0.4 : 1
Workability	< 120 mins
Initial Setting Time	120 mins
Final SettingTime	200 mins
Surface Hardness	≥ 2.5 N/mm^2
Flexural Strength	≥ 1.0 N/mm^2
Compressive Strength	≥ 2.0 N/mm^2
Adhesive Strength	≥ 0.1 N/mm^2
pH	6-8



Application

Mada machine Render is a universal render, thus it may be used with all ordinary plastering machines, provided that the instructions and guidelines specified by the machines' manufacturer are followed.

Changes in water-mixture ratio affect properties of the mixture; they have impact mainly on the time of setting and strength of the render.

Description	Hand Applied Render
Composition	Stucco, Lime, sand, perlite and additives to improve adhesion to base materials
Usage	Interior walls, ceilings at temperatures above +5 °C
Application	Machine
Working Time	Approx. 120 to 150 minutes
Base Surface Material	Brickwork, Porous concrete, Render
Recommended render thickness	≥ 6mm
Surface finish	Paint, Wallpaper, Tiles
Packaging	40 kg bag
Storage term	12 months

PRINCIPLES OF **APPLICATION**

Base surface evaluation and preparation

Make a visual inspection of the base surface material before starting the work to ensure that there are no wet spots, or other contamination (separation oil) remaining on the ceiling or wall. Next, a further inspection involving running a hand over the wall must be performed in order to make sure there is no dust on the surface and that the surface of the material is not loose. Base surface materials that are not suitable must be corrected before any render is applied – i.e. remove loose materials, reinforce the material and remove all grease and oil. A damp brush can be used to remove dust from the surface of the material. Any loose materials, contamination or other debris (cement milk, residual mortar, etc.) should be removed using a trowel or scraper.

The next step is to determine the absorbency of the base surface material. Absorbency is verified by making a small area of the surface damp. If the water drips in drops then the material is still damp. If the base quickly absorbs the water, the material is dry and absorbent.

Materials that are extremely absorbent (porous concrete and plasterboard) must be treated with an absorbency regulator. The absorbency regulator may need to be thinned depending on the absorbency of the base surface material and should be thinned following the instructions on the packaging. It is most frequently applied using a paint roller or a spray gun.

Non-absorbent smooth materials with glossy surfaces (e.g. solid concrete structures, polystyrene work pieces and blocks) must be treated with a contact bridge in order to increase the adhesion of the render to the base surface material.

The contact layer must be well mixed before application and remain so during actual application. This limits the settling of larger components in the dispersion. The contact layer is only applied using a roller and is never thinned with water! The time needed for the contact and penetration layers to dry before the application of Mada products is at least 12 hours.

Preparing the mixture

Slowly add the mixture to a clean container holding clean water. Allow the mixture to settle for 3-5 minutes. If the mixture is too thick, then add slightly more water or if the mixture is too liquid, then add slightly more powder. Mix again and if necessary repeat the process until the mixture reach optimum thickness for application.

1. Visually inspect the surface of the material

2. Touch the surface to inspect the quality of the material – adhesion, etc

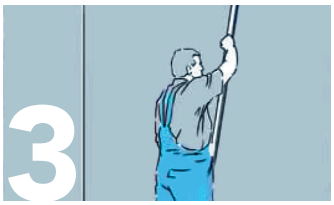
3. Use a scraper to remove excess construction cement or mortar

4. Use a brush to apply water to the surface to check its absorbency

APPLICATION

If needed, an absorbency regulator should be applied before gypsum-based manual and machine renders are applied.

Use a wide stainless steel trowel for application. Smooth the render mixture as it is applied on the structure.



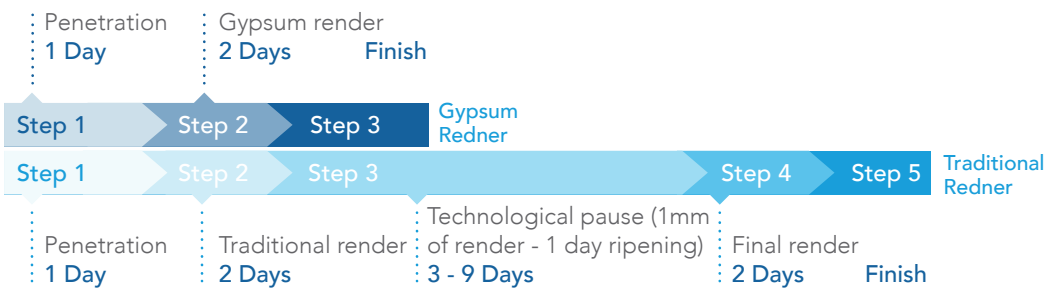
Level the applied render layer using an aluminum “h” straight-edge; smooth in all directions.

Moisten the surface with water once the render surface has set. We recommend using a water sprayer in order to ensure equal application.

Smooth the surface in a circular manner using a foam sponge float so that the “plaster milk” remains on the surface.

Use a wide stainless steel trowel to complete the final surface treatment in order to smooth out the “plaster milk”.

Work procedure comparison



APPLICATION AREAS AND **TECHNICAL PARAMETERS**

	Thin Coat Render	Hand Applied Render	Machine Render
Type of render	Grey-white gypsum based render	Grey-white gypsum based render	Render with a glossy surface
Description	Thin coat render with a smooth surface	Render with a smooth surface	Render with a smooth surface
Composition	Stucco, additives to improve adhesion to base material	Stucco, additives to improve adhesion to base material	Stucco, Lime, sand, perlite and additives to improve adhesion to base material
Usage	Interior walls, ceilings at temperatures above +5 °C	Interior walls, ceilings at temperatures above +5 °C	Interior walls, ceilings at temperatures above +5 °C
Workability Time	Manual – < 60 mins	Manual – < 45 mins	Machine – < 120 mins
Coverage	0.9 mm	0.8 mm	1.0 mm
Base surface material	Concrete, Porous Concrete, Render	Brickwork, Concrete, Porous Concrete, Render	Brickwork, Porous Concrete, Render
Recommended render thickness	3 – 6 mm	5 – 30 mm	≥ 6 mm
Surface finish	Paint, Wallpaper	Paint, Wallpaper	Paint, Wallpaper, Tiles
Packaging	40 kg bag	40 kg bag	40 kg bag
Storage term	12 months	12 months	12 months

MADA GYPSUM

BUILDING EXCELLENCE

Renders

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