Product Definition:

Fine Tadelakt, a traditionally inspired concept, is a coating based on NHL natural hydraulic lime and marble sands with a maximum particle size of 0.35 mm, which is used to produce both smooth and trowelled decorative plaster.

It is available as a beige powder, which is its natural undyed colour.
Due to its aggregate composition, it can be applied in thinner coats, meaning that a smoother finish can be achieved than with Medium Tadelakt.

Fine Tadelakt is a continuous mineral coating using natural hydraulic lime, sand and marble dust in its composition, with the addition of tiny amounts of organic additives (<5%), to ensure adhesion on unusual substrates for this type of material and to cater for new construction solutions; plasterboard, projected plaster, perlite plaster, additivated mortars, wedi panels, painted surfaces and post-formed wood chip (MD, OSB and other agglomerates).

Suggested Applications:

- Wall decoration in hotels, offices, shops and malls, school-nurseries, hospitals, museums, etc., proposing magnificent properties such as:
- To be a continuous mineral finish.
- Flame retardant (due to its mineral nature).
- Breathable (permeable to water vapour molecules).
- Due to its crystalline structure, it reflects the radiations of light and heat.
- Aseptic (high alkalinity, pH 11.5).
- Antistatic.
- Magnificent ageing, as the action of environmental CO^2 hardens it progressively.
- High resistance to rubbing/wear.
- Low thermal spread.
- In its simpler finish technique, the burnished smooth, the stylistic contrasts are well resolved, and decorations are not conditioned.

Physical Location:

Indoor-outdoor, even in aggressive indoor environments (wash rooms and kitchens), with the suitable protections that we indicate later. Although the stucco is very hard, like many marbles, it is also absorbent. Thus, it needs a treatment to avoid the penetration of substances that affect its aesthetics.

Technical Data:

PH: 11.5 ± 0.5
BULK DENSITY of the POWDER: 1.7± 0.05 g/cm^3
PRESENTATION: Single component powder to which water must be added and mechanically removed until it is completely homogenised.
Standard PACKAGING: 11 kg.
MIX (powder water kneading): 11kg of Fine Tadelakt can be prepared with 4,8-5 l of water.
Pour in the necessary water first, then the Toner Dye and finally the powder, homogenise-knead the mix sun an electric mixer.
LIFE SPAN OF THE MIX: 3 days.
LIFE SPAN IN CONTAINER: Approximately 14 months in stable environmental conditions +5°C (min.) and +32°C (max.) without opening the tin. Avoid frost and high temperatures.

Application Technical Data:

FINISH: Matt or high glossy, depending on the polishing (compacting) degree with the trowel in the finishing coat, for the traditional plastered technique. Other techniques may have different gloss levels.

COLOURS: obtained from the Toners and Dyes listed in the **Microcement & Micro-concrete Colour Chart**, and the **Medium Marmorino Stucco** colour chart added to the neutral Tadelakt (i.e., as presented on the packaging).

*Outdoors: Only use the Dyes/Toners referenced in the Colour Charts as Outdoors.

For production of special colours, contact the technical-commercial department.

For special façade colours (much more problematic with the colour difference between batches due to the difficulty for finding clear cuts on it when compared to indoors), calculate the material performance well (kg/m^2) so that the wall does not show two different batches in which there may be small differences in intensity and tint. In this event, it is best to find a clear cut to start on with the other batch and / or mix with the excess from the first (don't use up all of the first batch).

MAXIMUM THICKNESS PER COAT: 1 mm.

INTERVAL BETWEEN COATS: 14 to 16 hours under 20°C and 55% relative humidity conditions. Do not let more than 5 or 6 days to pass by between coats.
DRYING: 48 hours until completely dry (20°C and 65% relative humidity). Progressive hardening by carbonation, after 30 days it presents a considerable hardness.

APPLICATION TOOLS: suitable trowel, brush and spraying equipment. For large and fast works, the first coat of stucco can be applied using the roller, fresh smoothing with the trowel, for this application dilute 7-10% in water.

DELTADELAKT FINO PROTECTIONS: depending on the desired finish and in certain locations such as façades, bathrooms, passageways... to prevent dirt or other contaminants from penetrating, it is necessary to apply any of our protective systems listed below:

- Tadelakt Wax Soap
- Marmorino Stucco Wax
- Stucco Wax
- Single-component matt or gloss water-based varnish

*Check the technical data sheets of each protection to place them correctly, learn the application techniques, and to use suitable materials.

*If you have any questions, please contact the technical-commercial department.

Application conditions:

PREVIOUS PREPARATIONS: Surfaces must be dry, firm/set up, well adhered, free of salts, free of any biological contamination such as mould, algae, lichens, free of environmental contamination (grease stains, soot, substances of unknown nature, etc.); i.e., free of any visible or invisible substance or contaminant that prevents the perfect attachment and finish of Fine Tadelakt or its previous primers, if any.

Types of Surfaces	Application Method
Indoor ceramic surfaces	Apply the ***ENDUIT REPAIR/LEVELLING***, when dry apply the ***QUARTZ PRIMER*** and then ***FINE TADELAKT***.
Cement, lime, or mixed plastering	Clean the dust and be sure that surface is not gritty and is set up, apply ***QUARTZ PRIMER*** before applying ***FINE TADELAKT***.
Outdoor spackling and plastering for repair/levelling.	Clean the dust (if any due to sanding or contamination) apply the ***QUARTZ PRIMER*** and proceed with ***FINE TADELAKT***.
Concrete, special mortars	It is necessary to be careful with the additives it contains and try to learn about its nature to make a good prescription (release agents, anti-retraction agents, antifreeze, plasticising admixtures, setting accelerants, plasticisers ...).
Emulsion paints (matte or satin latex paints). *On these surfaces the application can only be performed indoors.	Verify that they are well adhered and do not have any problems. Apply 2 undiluted coats of Insulating Base coat, leave to dry and apply ***FINE TADELAKT***.
Synthetic enamels, polyurethanes. *On these surfaces the application can only be performed indoors.	Verify that they are well adhered, no problems are present, and that at least 1 month has passed. Sand, apply ***IMPRITEX 4x4*** (water-based shop primer), then Quartz Primer, and then ***FINE TADELAKT***.
Cardboard/Water-resistant plaster, normal and flame retardant.	Apply 2 coats of ***QUARTZ PRIMER*** (undiluted if possible), leave to dry and apply ***FINE TADELAKT***.
Granites-marbles	Apply the Repair/Levelling Spackle and then ***FINE TADELAKT***.
Ceramic vitreous tile (glass tiles with joints)	Apply the Repair/Levelling Spackle and then ***FINE TADELAKT***.
Sprayed plaster and perlite plaster without fine plaster finish.	Clean the dust and be sure that the surface is not gritty and is set up, carefully checking that no other problems are present. Apply Ultrafine Binding Primer, if necessary, before ***QUARTZ PRIMER***. Let dry and proceed with ***FINE TADELAKT***.
Plasters with fine plaster finish	The same as the previous case.
Wood shavings boards (waterproof MDF)	Apply 2 coats of undiluted Insulating Base coat, leave to dry and apply ***FINE TADELAKT***.

GENERAL OBSERVATIONS

➢ Working temperature, both ambient and surface (outdoor-indoor): 7ºC minimum and 32ºC maximum (in reheated surfaces, slightly moisten with water), even if the temperature is 7ºC in adverse weather conditions (abrupt temperature drop) do not apply the Fine Tadelakt coat, because at this temperature it takes time to expel the contained water and it may freeze.
➢ It is advisable to provide adequate protection outdoors, in order to prevent pigment bleeding in high-toned colours when in contact with the rain, and also because of atmospheric pollution, in order to avoid fast dirtying in certain locations.
➢ Outdoors, it can only be applied on parge coats of industrially produced mixed mortars, with no retractions, fissures, cracks, other defects that show any problem, and that have not received any final treatment or finish. Keep in mind that mortars made on-site using sand or Portland cement can present retractions for at least for 6 months. If the parge coat is slightly gritty, apply the Ultrafine (binding) Primer beforehand, and if there are significant differences in the trowelled or smoothing (to avoid irregular absorptions) apply two coats of Primer to the Quartz.
➢ While the stucco is being applied outdoors (on façades), it must be protected from the direct action of water to avoid bad hardening of the coat or if the coat is hard, "colour bleeding" before being able to apply appropriate protection.
➢ In areas where there is moisture due to condensation (there is no break in the thermal bridge) our Quartz Primer and Fine Tadelakt system should not be applied.
➢ Moisture coming from the interior, i.e., the water that the stucco can receive through the part where it adheres to the surface, can be a cause of its destruction.
➢ The presence of salts (sulphates, nitrates, chlorides, etc.) in the surface can be caused by the slow evaporation of water in the building materials (adverse weather) or can be due to the continuous presence of moisture in the wall (meteoric filtration, leakage in conduits - drainage and moisture due to rising damp). The first cause does not present any complications, the salts are washed and an optional anti-salt treatment can be applied with the subsequent application of our Quartz Primer and Fine Tadelakt system. The second cause is a more serious problem that cannot be solved with surface treatments but with construction repair procedures. Therefore, if the causes are not repaired, we recommend that you do not use our Fine Tadelakt system.
➢ Fine Tadelakt can be reinforced with fibreglass mesh.
➢ Architectures of unprotected sharp edges must be adequately protected at the ending points: rain gutter, wall/roof-terrace joints...
➢ Also indoors, when before applying the stucco, it is necessary to plaster or smooth gotele, stippling paste or other textures, use an outdoor spackling because the strength of the stucco can detach a less resistant spackling.
➢ The facing must be very flat to avoid using excess material and prevent retraction cracking due to excessive coats.
➢ Avoid application outdoors, on horizontal surfaces, or inclined planes.
➢ When stuccoing wash rooms, rapid drying of the wall must be ensured by using good ventilation. This is essential to avoid rapid growth of lichens and mould.
➢ Before placing self-adhesive stencil templates to add decorative patterns or other types of masking, you should wait 48 hours for the stucco to harden.
➢ Once you have started a wall, don't interrupt the section to avoid joints.
➢ Depending on the applicator, and as it is a handmade process, the final 'drawing' may vary.
➢ The resulting colour will be more or less intense depending on the amount of pressure applied to the trowel.
➢ If small bubbles appear when burnishing, do not keep on pressing, continue and return when the area has hardened more.
➢ Large work surfaces should be carried out without joints. It is therefore necessary to carry out this work using teams with a sufficient amount of people, or, if applicable, planning the necessary quarterings.
➢ Pisa is exempt from responsibilities for damage and problems in regards to stains, detachment, lack of cohesion, exposures, produced by deficiencies of the direct surface or structure.

Application methods:

There are many application methods with very different finishes. The technique used to develop our colour chart is described below. Once the surface is well prepared with the above indications we will move on to the application:

Smooth Finish

1. Apply an initial coat of Fine Tadelakt using a stainless-steel trowel. Leave to dry for 14-16 hours (20°C and 65% relative humidity).

2.Apply a second coat in arches using a stainless-steel trowel. After about 2-2.5 m^2 have been laid, go back and smooth or compact. If no material is left (texture is not smooth) repeat this operation using small amounts of stucco; fresh on fresh.

3. After the stucco has hardened but is still fresh, return to the treated area and smooth it using a clean trowel (compacting to embed protruding sands and burnished), using a water vaporiser, if necessary, slightly wetting the surface to be burnished.

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Technical data of the applied and dry material:

HARDNESS: 100 Shore C units after 30 days.

RESISTANCE TO FLEXO-TRACTION (UNE-EN 196-1:1996)		
2.8 N/mm^2 after 1 day	5,2 N/mm^2 after 7 days	8,2 N/mm^2 after 28 days

RESISTANCE TO COMPRESSION (UNE-EN 196-1: 1996)		
3,6 N/mm^2 after 1 day	7,6 N/mm^2 after 7 days	12,6 N/mm^2 after 28 days

ADHESION: 6 Kg/cm2

RESISTANCE TO ABRASION: Excellent after 30 days.

WATER VAPOUR PERMEABILITY: Sd = 0.36 m (KNUDSEN)

REFRACTION TO LIGHT IN WHITE COLOUR: 81%.

WASHABILITY: Excellent after 28 days, but as the material is absorbent, it becomes necessary to apply some of our protective systems.

CLEANING OF TOOLS: Water. The remains of the dry material in the tool can be removed using sandpaper.

PRECAUTIONS: Alkaline material, protect eyes and skin.

THEORETICAL PERFORMANCE: Depending on the product's roughness, planimetry, and absorption.

1.6-1.8kg/m² in 2 coats