



LIME

a process at the speed of nature



pietra *stone*

acqua *water*

fuoco *fire*

tempo *time*

quattro ingredienti naturali *four natural forces*
per la creazione della *that create*

calce *lime*



Nella società moderna ci aspettiamo sempre riscontri e risultati immediati. I materiali da costruzione non fanno eccezione. Tuttavia, i risultati più affidabili sono sempre frutto di una esperienza consolidata nel tempo.

MA TUTTO QUESTO COSA C'ENTRA CON LA CALCE?

Anche la calce ed i suoi equilibri naturali non passano indenni l'evoluzione e lo sviluppo industriale; la sua natura spesso non è capita, si vuole lavorare più in fretta, si vuole forzarne l'uso su substrati inadatti, o colorarla con formulazioni che ben presto riveleranno tutta la loro incompatibilità.

La calce, questa materia, che può sembrare antica o moderna, povera o ricca, speciale o ovvia a seconda delle culture e delle tradizioni.

Calce idrata, latte di calce, grassello di calce, calce purissima, calce invecchiata, sono tutte descrizioni che oggi ritroviamo promosse da molti produttori di finiture a calce.

Siamo in grado di interpretare queste parole per il loro significato originale?

Perché si ricerca un invecchiamento nel grassello?

Che cosa è un vero grassello di calce?

Quali vantaggi derivano dall'uso di una finitura a calce basata su calce idrata e quali su grassello di calce?

In our modern society, we expect immediate results. Building products are no exception.

WHAT DOES THIS HAVE TO DO WITH LIME?

Lime can look old fashioned or brand new, poor or rich, a rare specialty or a very common item, according to cultures, countries and their local traditions.

Hydrated lime, air-hardening lime, lime milk, grassello di calce, pure lime, seasoned slaked lime, names used in marketing by many paint and plasters manufacturers promoting lime finishes.

Can we understand the real meaning of these words?

Why is a seasoned slaked lime better?

What is a true Grassello di calce?

What is the difference between coatings based on hydrated lime and those based on grassello di calce?



Questo opuscolo ha il solo scopo di trasferire al lettore alcuni semplici concetti legati a questo mondo ma che spesso, per svariati motivi, non fanno più parte del bagaglio culturale degli operatori.

La consapevolezza dei processi fisici regolati da madre natura che indiscutibilmente fissano dei paletti precisi, dalla produzione della materia prima alla formulazione, sino all'applicazione del prodotto finito, ci faranno apprezzare anche quegli aspetti che, per chi è abituato ad operare con materiali "moderni", possono sembrare a prima vista svantaggi o perdite di tempo.

Costruire e decorare con l'ottica di creare qualcosa che duri nel tempo, che sia in armonia con il contesto del progetto, dei materiali impiegati e con l'ambiente, questo è lo spirito che anima chi lavora con questo nobile materiale.

Parleremo di pietre, di legno, di acqua, di fuoco e di tempo, non ci inventeremo nulla di nuovo, rivedremo insieme le origini del legante usato nella decorazione sin dalla notte dei tempi e che, grazie alla passione ed alla dedizione di alcuni professionisti, è ancora oggi disponibile nel pieno rispetto della tradizione italiana nella decorazione dei nostri edifici.

*This booklet wishes to inform the reader about the simple concepts related to the history and behavior of lime that often, for different reasons, are unknown to today's generation of painters and plasterers.
An endangered knowledge that we want to keep alive.*

The awareness of the physical process ruled by the mother nature, precise steps of a natural process that can't be changed, will make the applicators more conscious, and they'll appreciate those aspects of the lime finishes that, at first sight may seem a waste of time, but if used with due respect, can create works of art that will last for generations.

To build something that will last and be in perfect harmony with the context of the project, compatible with other construction materials and with the environment, this is the spirit of those who work with this noble substance.

We will speak about stones, wood, water, fire and time, we won't reinvent anything new, we'll learn together the roots of the binder used by our ancestors, that thanks to the passion and professionalism of few technicians, is still available today, in full respect of the Italian tradition in restoration and decoration of our buildings.



LA CALCE, UN MATERIALE ATTUALE DIRETTAMENTE DAL PASSATO

Il primo legante utilizzato dall'uomo per costruire la propria dimora fu l'argilla che, impastata con acqua e stesa su armature di giunchi, forniva un valido riparo dalle intemperie. Successivamente l'argilla lavorata con la paglia, cassetta in stampi ed essiccata al sole, donava all'umanità il primo mattone.

In età più moderna i fenici scoprirono la calce spenta, un legante aereo che induriva se esposto all'aria. In seguito, mescolando la calce con la polvere dei mattoni di argilla e con sabbie vulcaniche, ottennero il primo legante idraulico capace di indurire anche in presenza di acqua.

Durante l'impero romano la calce fu ampiamente utilizzata come materiale da costruzione ed ancora oggi possiamo trovare monumenti ed opere in ottimo stato strutturale proprio grazie alle caratteristiche costruttive di questo fantastico materiale.

Vitruvio, architetto e trattatista romano ampiamente nominato da chi analizza la storia dei materiali da costruzione, vissuto tra l'età di Cesare ed i primi anni del regno di Augusto, nei suoi trattati dedicava ampi spazi alla calce ed al suo utilizzo nelle opere pubbliche e private. Nel Medioevo e soprattutto nel Rinascimento i suoi scritti furono un fondamentale riferimento per tutti gli architetti.

Certamente alcune migliaia di anni fa non si potevano conoscere i principi chimico-fisici che causavano gli effetti desiderati, quindi l'esperienza sul cantiere era l'unica fonte di sapere gelosamente custodita dagli artigiani.

Oggi la comprensione di questi fenomeni è ben nota e dimostrata, ma non può, o meglio non deve, rimanere un'interessante e dimostrata teoria.

LIME, A MATERIAL DIRECTLY FROM THE PAST

The first binder ever used by human kind to build his home was clay. Mixed with water and spread over reed structures creating areas protected from rain, cold and wind.

Afterwards, using clay mixed with straw, left to dry under the sunlight was created the first brick.

In more recent times, the Phoenicians discovered slaked lime, a binder that sets if exposed to air. Later on, by mixing slaked lime with clay or Volcanic ashes, they obtained the first hydraulic lime able to set even in presence of water.

During the Roman Empire lime was widely used as construction material. Even today, we can still see buildings and monuments in very good structural condition thanks to the technical and physical properties of this natural and fantastic binder.

Vitruvio, the Roman architect often mentioned the use of lime in different mixtures for construction of public and private buildings.

Thousands of years ago, certainly nobody could know the chemical reactions and the physical principles behind the beautiful decorative results; their experience on the jobsites was the only real source of knowledge.

Today, we fully understand these phenomena and put this knowledge to work in our lime products whose formulations have been improved and proven over time.



DALLA PIETRA ALLA PIETRA

Vi racconteremo il ciclo della calce, ovvero come viene ottenuto il grassello di calce, che servirà per la produzione delle nostre finiture e degli intonaci.

FROM STONE BACK TO STONE

We will tell you how the Grassello di calce is made, that Grassello that will be used in the production of our lime finishes.

pietra
stone



cottura del ciottolo
firing of the limestone

ciottolo cotto
cooked limestone



Immaginiamo di spostarci su un percorso ideale ad anello a settori, dove ogni settore rappresenta una fase, e dove in ogni fase si completa un processo ad una velocità indipendente dalle altre.

Partiremo dalla pietra e ritorneremo nuovamente alla pietra, dopo una serie di eventi che la trasformeranno, ne separeranno alcuni elementi, ed infine ne ricreeranno la sua natura minerale ma con la forma e l'aspetto che noi ricerchiamo lasciando inalterata la sua naturalità, resistenza e traspirabilità.

We'll start from stone and go back again to the state of stone after a series of events that will transform it, separate some elements and eventually recreate its natural mineral essence, without affecting its naturalness, durability, and vapor permeability.

spegnimento
del ciottolo
slaking of
quick lime



stagionatura
seasoning



latte di calce
lime milk

formulazione e
produzione
formulation and
production



applicazione
application



Imagine to move on an ideal circle where each section represents a production phase. Each phase moves forward at a different speed independent from the others.

IL MINERALE

Il minerale utilizzato è il ciottolo di fiume, pulito e dilavato dall'elemento stesso in cui si trova in natura.

Esso è costituito da carbonato di calcio, ed è ricco di una presenza importante di carbonato di magnesio, circa il 16%.

La presenza di magnesio nel minerale anche se, nei processi chimici interessati che vedremo più avanti, può imporre una fase di lavorazione più lunga e costosa, riesce nel contempo a conferire al prodotto finito applicato una più alta tenacità e resistenza agli agenti atmosferici:

caratteristica importante nella formulazione di intonachini e stucchi a base di calce adatti ad un impiego in esterno.



THE MINERAL

The mineral used is river limestone, washed and cleaned by the same element in which can be found in nature, the water.

It is essentially made up of calcium carbonate, rich with magnesium carbonate.

The presence of magnesium in the mineral may require longer production time, but it imparts a much higher tenacity and abrasion resistance to the final applied decorative finish. An important feature especially for exterior plasters and exterior Venetian stuccos.



Carbonato di Calcio

*Carbonato di
Magnesio*

Calcium Carbonate

*Magnesium
Carbonate*



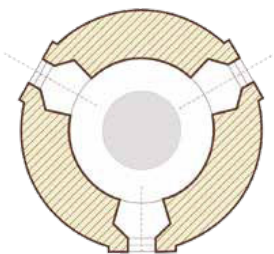
LA FORNACE

La costruzione del 1962 di tipo tradizionale sorge vicino alla ben più vecchia fornace a calce del 1905, della quale replica il principio di funzionamento migliorandone l'efficienza.

THE KILN

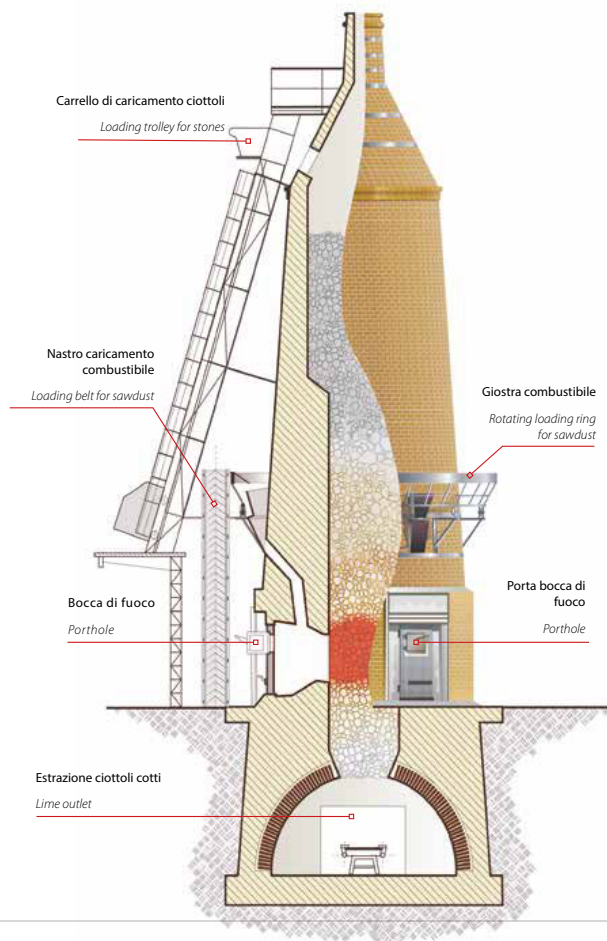
Dating back to 1905, the kiln is a traditional Italian furnace for lime production.

The second kiln, built in 1962, works with the same principle, improving efficiency and production capacity.



Sezione della fornace con tre bocche di fuoco

Cross-section of the furnace with the three portholes



IL COMBUSTIBILE

Semplice segatura e trucioli di legno, sottoprodotti delle vicine segherie ed industrie del mobile che, miscelati in modo diverso tra loro, garantiscono sempre la temperatura ottimale di cottura anche in condizioni climatiche diverse.



THE FUEL

Simple sawdust and wood chips, by-products of the close sawmills and furniture industries.

Different mixtures ensure an optimal firing temperature in different weather conditions.



LA COTTURA

I ciottoli più piccoli vengono separati per avere una omogeneità nelle dimensioni e conseguentemente anche nella cottura. Essi vengono caricati dalla sommità della fornace da dove scenderanno lentamente attraversando una prima fase di preriscaldamento per giungere alla vera e propria zona di cottura.

La cottura della pietra avviene lentamente ad una temperatura costante di 900°C per circa 7 giorni.

Durante questa fase, il carbonato di calcio ed il carbonato di magnesio si liberano dell'anidride carbonica in essi contenuta e la pietra perde così sino ad un terzo del suo peso.

Ciò che otteniamo è una sostanza caustica, instabile, fortemente igroscopica, denominata ossido di calcio (e di magnesio) anche conosciuta come calce viva.

Alla fine della cottura i ciottoli vengono nuovamente selezionati in modo da eliminare le parti non completamente trasformate in ossido di calcio o "stracotte"; sottoprodotti questi che, grazie alla loro durezza, venivano anticamente utilizzati dagli artigiani, i quali li riducevano in pezzi poi utilizzati per comporre fantastici mosaici o pavimenti "seminati".



THE FIRING

The smaller limestone is separated to obtain a load of the same similar size and, as a consequence, an homogenous cooking of the limestone.

They are loaded from the stone inlet at the top of the kiln, from where they will slowly go down to the firing zone passing through the first pre-heating zone.

The cooking of the stones is very slow and constant, about 7 days at an average temperature of 900°C (1650°F).

During this phase the calcium carbonate and magnesium carbonate release the carbon dioxide contained in them, the stones lose up to one third of their weight.

What we obtain is a caustic substance, unstable, highly hygroscopic, called calcium oxide (and magnesium oxide) also known as quick lime.

After the cooking the limestone is sorted again, in order to eliminate those stones not completely converted into oxides or the "stracotte" (overcooked); these byproducts of the kiln, thanks to their dark color and hardness, are used by expert artisans, like in the ancient times, to make beautiful mosaics or "seminati" floor, a typical Italian decorative floor of the Middle-ages for masonries.



LO SPEGNIMENTO

La calce viva è ora pronta per lo spegnimento.

Un processo fortemente esotermico, generato dall'aggiunta in eccesso di acqua.

All'interno della macchina spegnicalce, grazie al movimento di rotazione vi è un contatto continuo e costante con l'acqua; la calce assorbe fortemente l'acqua generando reazioni esotermiche fino a 150°C e vapore acqueo, dando luogo sia ad una reazione chimica di idratazione degli ossidi, che fisica. Lo stato cambia da solido a sospensione in acqua calda e lattiginosa chiamata idrossido di calcio, o idrato di calcio o meglio ancora conosciuta come calce spenta o latte di calce. Tanta più acqua sarà aggiunta nello spegnimento tanto più efficace sarà la trasformazione chimica degli ossidi in idrossidi, processo che comunque continuerà lentamente durante la lunga fase di stagionatura.



THE SLAKING

The quick lime is now ready for slaking.

This is a highly exothermic process, generated by adding water in excess to the quick lime.

Thanks to the rotation of the slaking machine, the quick lime is constantly in contact with water; it strongly reacts absorbing plenty of water, generating steam in an exothermic thermal exchange with temperatures up to 150°C (300°F). This is a chemical reaction, the hydration of the oxides, also a physical reaction takes place, changing the state from solid to a hot milky slurry called calcium hydroxide, or better known as slaked lime or lime milk.

The more water is added in the slaking process, the more efficient is the chemical reaction of oxides into hydroxides, a process that will go on slowly in time, during the long phase of seasoning.



LA STAGIONATURA

Il grassello di calce "fresco" ottenuto viene depositato nelle fosse dove inizia la fase di stagionatura che dura minimo 3 mesi, per la calce usata nella preparazione delle malte, o minimo 24 mesi per quella usata nella preparazione delle finiture.

Durante il periodo di stagionatura in realtà avvengono due trasformazioni ben distinte: una di tipo chimico ed una di tipo fisico, entrambe fondamentali per ottenere una calce di qualità. Dal punto di vista chimico l'idratazione continua lentamente ma con due velocità diverse per il calcio ed il magnesio.

L'ossido di magnesio infatti richiede normalmente molto più tempo nella fase di stagionatura per trasformarsi in idrossido rispetto all'ossido di calcio.

La presenza del 16% di magnesio nel minerale è molto importante in quanto dona alla finitura applicata una durezza immediata della superficie ed una più alta tenacità e resistenza agli agenti atmosferici nel tempo.

Per alcuni invece il magnesio viene visto come una impurità e quindi come sostanza da evitare solo perché costringe a rispettare dei tempi più lunghi di stagionatura e quindi costi più elevati che certi produttori non sono disposti a sostenere.

Nel caso in cui non venissero rispettati i tempi di stagionatura del grassello, potrebbe accadere che nel prodotto finito rimangano dei residui di ossidi di calcio e magnesio non ancora completamente trasformati in idrossidi, i cosiddetti "calcinaroli" che provocano distacchi e difformità di colore nella finitura dopo l'applicazione.

THE SEASONING

What is obtained is a "fresh" grassello di calce, it is left to rest in pits where the seasoning process begins.

It takes a minimum of 3 months for the lime used in preparation of mortars, or a minimum of 24 months for that used as binder for finishing coatings, such as the lime plasters.

During the seasoning two different and complementary reactions take place, one is chemical, the other is physical. Both are extremely important to obtain a high quality lime.

From a chemical point of view, the hydration of the two oxides goes on at different speed for lime and magnesium.

Magnesium oxide needs a much longer time than calcium oxide to become hydroxide.

The 16% content of Magnesium in the mineral is very important, it gives to the final applied finish an immediate abrasion resistance and an excellent weather resistance with the aging.

That's why in the modern lime factories magnesium is often seen as a contaminant or impurity to be avoided. Most modern Lime has to be ready to use in a quick time, sold and used as hydrated lime in powder or fresh grassello, to produce lime plasters, paints and stuccos.

In fact, the unwanted presence of unhydrated calcium or magnesium oxide in the decorative finish creates uncontrollable alkali aggressions of the pigments or other component of the coating, which requires completely redoing the job.



24 MESI

Il cambiamento fisico nel tempo riveste però un ruolo ancora più importante.

Dalla fase iniziale in cui la sospensione di idrossido di calcio in acqua ha una bassissima viscosità, il grassello prende corpo e struttura diventando sempre più consistente... si sta formando il grassello di calce ed è proprio dal suo stato fisico da cui deriva il nome.

A 3 mesi il grassello ha un aspetto cremoso e morbido; dopo circa 24 mesi i cristalli della sospensione di idrossido di calcio per successiva idratazione che "bagna" le particelle in sospensione fino a renderle sempre più "elementari", da "macro" diventano "micro" e si orientano per creazione di un debole campo elettrico in file quasi parallele, dando pastosità e consistenza. L'aspetto è quello di una pasta densa e tixotropica che si può tagliare in blocchi di reologia pseudoplastica.

Abbiamo così ottenuto la materia prima quale legante per la produzione delle finiture a calce: il grassello di calce stagionato per almeno 24 mesi.

Un buon grassello di calce tradizionale deve avere un contenuto di parte solida del 42-43% in peso per poter garantire ottime prestazioni del formulato di finitura.

24 MONTHS

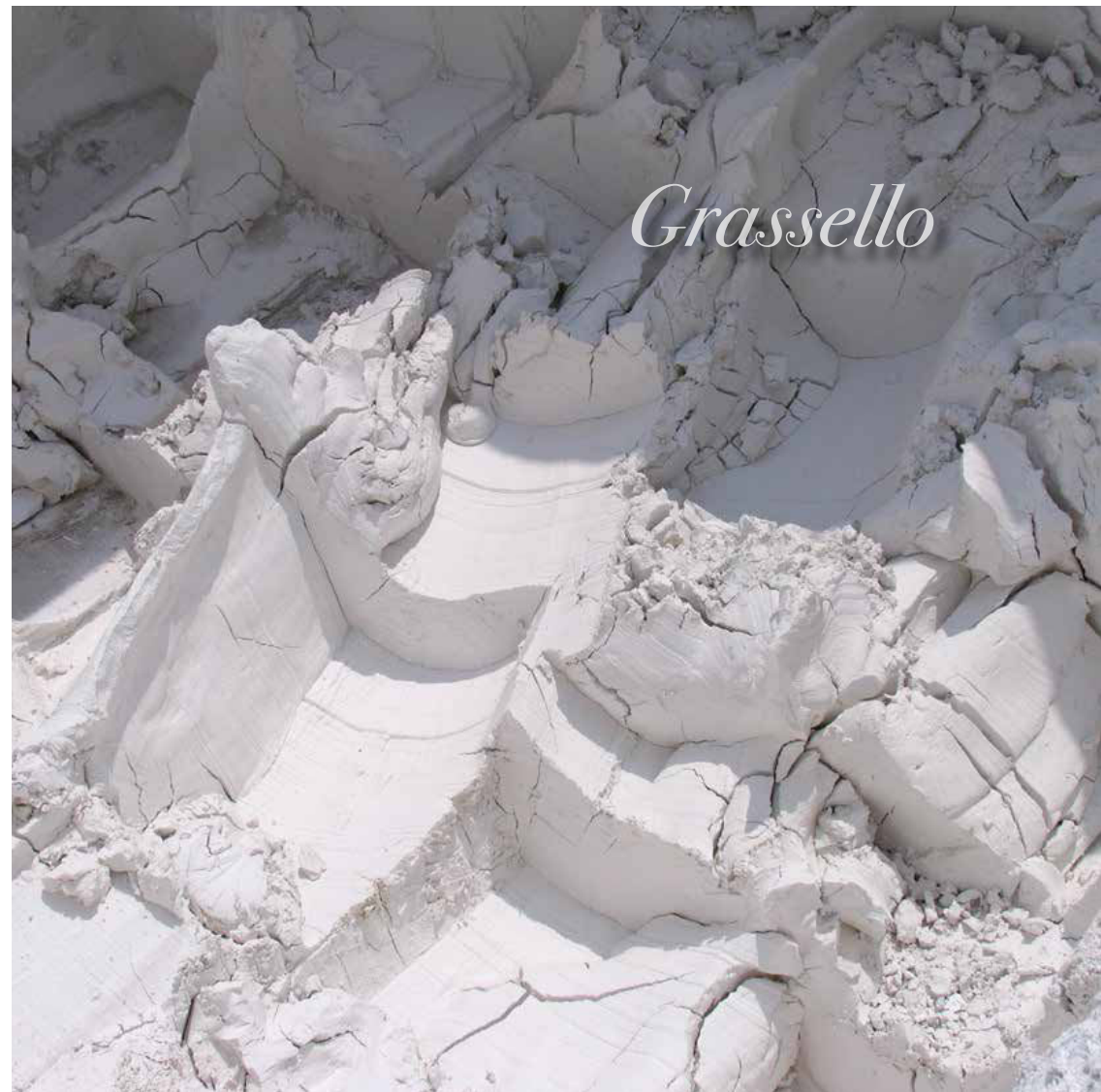
During the long seasoning the physical change becomes more and more important.

After the initial stage in which the solution of calcium and magnesium hydroxide has a very low viscosity, the grassello changes its structures becoming more creamy and "greasy". Grassello was originally named after this physical state, "grasso" means fat, "grassello" means "fatty and greasy substance"

After 3 months the seasoned slaked lime is creamy and tender; after 24 months of continuous hydration, the particles morph from macro to micro crystals in an orderly structure, oriented by a weak electric field, giving softness and consistency to the slurry. Grassello seasoned for 24 months has so much body that it can be cut into blocks.

Now we obtain the raw material used as the binder in the production of lime finishes: the grassello di calce, seasoned for at least 24 months.

A good traditional grassello must be 42-43% solids to ensure good performance of the final decorative finish.



FORMULAZIONE E PRODUZIONE

Come in ogni settore produttivo per realizzare un buon prodotto finito è essenziale partire da materie prime di qualità e combinarle sapientemente tra loro per ottenere la performance voluta all'atto dell'utilizzo. Questo può sembrare ovvio, ma nel campo specifico delle finiture abbiamo qualche variabile in più.

Una pittura, un intonaco o uno stucco, durante ogni singola fase del percorso di lavorazione, subiscono diverse e, a volte, consistenti variazioni di:

- temperatura
- viscosità
- struttura
- colore
- Ultima, ma non meno importante, è la compatibilità con i supporti esistenti e la resistenza agli agenti esterni.

Questi fattori che raramente trovano così ampie variazioni nel ciclo di vita di un prodotto, possono determinare il livello della performance finale.

Nello specifico delle finiture per edilizia molte volte il risultato finale può apparire ottimo inizialmente ma drasticamente deludente dopo alcuni anni o addirittura dopo solo alcuni mesi. Nel caso delle finiture a calce, se un buon prodotto è applicato correttamente, il fattore tempo con i processi chimici coinvolti nell'invecchiamento, che vedremo nel prossimo capitolo, possono invece esaltarne le caratteristiche tecniche ed estetiche.

FORMULATION AND PRODUCTION

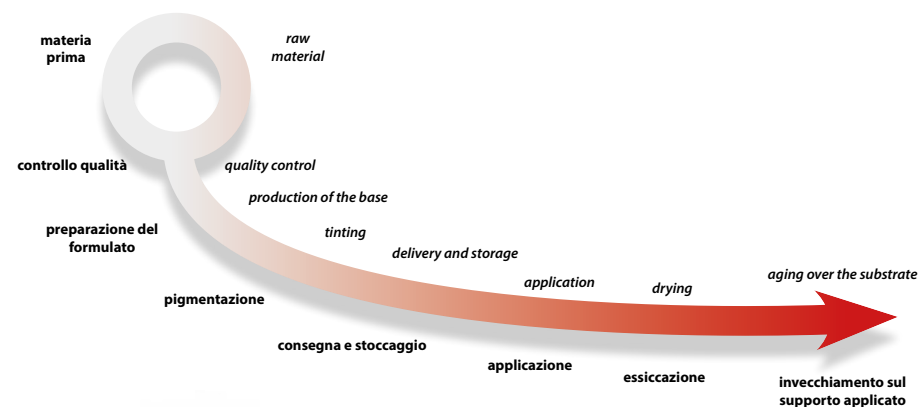
In order to obtain a high quality final product it is essential to start with high-quality raw materials and use them wisely in balanced recipes developed and optimized to perform according to the final use or requirements.

In the production of a paint, a plaster or a stucco, important variations may happen in:

- temperature
- viscosity
- structure
- color
- The structure and workability of a coating is determined by the correct selection of the aggregate.

Lime materials are prone to a wider variation range than in most industrial processes. Therefore, process control is essential to a good finished product.

In the field of decorative finishes sometimes the result may look exceptional immediately after application and drastically disappointing after a few years or just a few months.



Per la preparazione degli stucchi bisogna evitare di inglobare troppa aria durante la mescolazione per non comprometterne la viscosità. Una piccola parte di aria è invece utile per creare un cuscinetto che favorisca ulteriormente l'applicazione. La scelta degli inerti adeguati alla tipologia del prodotto, determinerà la lavorabilità e la struttura della finitura. Il territorio italiano offre una ampia gamma di granulati di ottima qualità, dalle pietre dolomitiche al famoso marmo bianco di Carrara che riesce, grazie alla sua particolare struttura, a rifrangere la luce in modo unico ed inimitabile, arricchendo i toni ed il calore dei colori della finitura in opera. Nella preparazione del colore è fondamentale usare pigmenti inorganici quali terre naturali e ossidi, e per ottenere una migliore omogeneità del colore è preferibile lavorare con pigmenti in pasta che ne facilitano la dispersione nel prodotto a calce in quanto già “bagnati”.

La formulazione del colore di un prodotto a calce richiede semplici attenzioni dettate dalla natura stessa del prodotto:

compatibilità con l'aggressione alcalina	utilizzo di pigmenti inorganici
quantità max di pigmento nella base	dosi eccessive di pigmento non intensificano immediatamente il colore ma continueranno il processo in modo incontrollato o non verranno addirittura assorbite dalla base, in quanto la bagnabilità del pigmento nel prodotto a calce è un processo lento.

Il giusto equilibrio suggerito da più di 50 anni di esperienza del nostro laboratorio, permetterà di fornire al committente la soluzione coloristica più affidabile per mantenere nel tempo, se non anche migliorare, le caratteristiche estetiche del progetto.

In the preparation of Venetian plasters it is important to avoid the addition of high volumes of air. Air bubbles can make the application very difficult but a minimum presence is important for a fluent application and easy polishing. Over the Italian territory can be found aggregate of high quality in a wide variety; from the dolomite stones to white Carrara marbles. The specific crystalline structure of the minerals reflects the sunlight in a unique and unmistakable way, enriching the colors and giving the typical warmness and delicate effects of a natural finish to walls. For tinting it is necessary to use inorganic pigments like natural earths and iron oxides. For easy dispersion of the pigments in a wet lime base it is necessary to work with liquid colorants.

Coloring of lime finishes has to comply with few simple natural factors:

alkali-resistance	use of inorganic pigments
maximum pigment loading	too much pigment in a lime finish cannot wet immediately the base over a certain threshold, but the tinting process will go on slowly and in an uncontrollable way in cans, or even worse will never wet a saturated base.

Our 50 years of color matching experience allows us to give our customers efficient and long-lasting color formulations for every project.



Macchina sottovuoto per il controllo della quantità d'aria presente nello stucco.

Vacuum stirrer to control the quantity of air in a lime Venetian plaster



IL COMPLETAMENTO DEL CICLO DELLA CALCE

La finitura è pronta per l'ultima fase del ciclo della calce

Il prodotto finito viene applicato, pennellato, frattazzato o lucidato a seconda del tipo di esecuzione desiderata ed immediatamente si avvia una reazione chimica tra l'idrossido di calce (grassello) e l'anidride carbonica presente nell'aria.

L'idrossido si trasforma nuovamente in carbonato di calcio creando corpo unico con l'intonaco di sottofondo, realizzando così una superficie estremamente resistente.

Il grassello di calce ritornerà quindi ad essere quella materia tenace che avevamo sottratto all'ambiente: la pietra.

Questo processo finale, che ha inizio immediatamente dopo l'applicazione, perdura e si consolida nel tempo. Infatti la finitura a contatto con l'anidride carbonica presente nell'aria, avvia il processo di carbonatazione. Più il tempo passa più la finitura acquista le caratteristiche desiderate.

Per ottenere 100 kg di calce "carbonatata" cioè il carbonato di calcio che avevamo all'inizio del ciclo, occorrono 63 kg di idrossido di calcio (grassello) e ben 37 kg di anidride carbonica (l'anidride carbonica è presente nell'aria solo per lo 0,03% in volume).

THE COMPLETION OF THE LIME CYCLE

The finish is now ready to become stone again, over two years since it began the production process.

The lime finish is applied by brush, trowel, sponge floated or steel troweled according to the desired final effect. A chemical reaction starts immediately while drying, the carbon dioxide present in the atmosphere combines with calcium hydroxide present in the coating. The calcium hydroxide becomes again calcium carbonate (limestone), creating an extremely durable surfaces

In our finish, the Grassello di Calce will slowly become that rugged mineral which was taken from the river bed – limestone.

A point to remember is that this final part of the cycle is extremely slow. In fact to obtain 100 Kg (220 lb) of carbonated lime (calcium carbonate) requires 63 Kg (138 lb) of calcium hydroxide (grassello) and 37 Kg (82 lb) of carbon dioxide. When you think that carbon dioxide is only 0,03% by volume of air, you realize how gradual this phenomenon is – a process at the speed of nature.



La finitura

The finish

Caratteristiche intrinseche delle finiture a calce

La calce ed i prodotti formulati hanno un pH elevato (12–13), sono essi stessi un naturale biocida quindi non favoriscono la crescita di muffe e funghi.

Per la loro natura le finiture a calce sono antistatiche, non attirano la polvere e lo sporco.

Sono altamente traspiranti e quindi favoriscono il naturale passaggio di vapore acqueo delle murature limitando i distacchi per sbollature in aree umide, tipico fenomeno invece favorito dai rivestimenti acrilici che proteggono sì come un manto la parete, ma ne limitano drasticamente la traspirazione.

Caratteristiche estetiche

Una buona calce e degli inerti di qualità permettono di realizzare finiture dai colori vibranti, caldi e confortevoli.

La profondità del colore sulla parete diventa uno strumento per arricchire l'ambiente e valorizzare gli elementi architettonici e di arredo.

Le superfici decorate a calce, nel tempo migliorano l'aspetto enfatizzando sempre di più la naturalezza delle tinte e delle sfumature.

Intrinsic features of lime based finishes

Lime based finishes because of their high pH (12–13) are themselves a natural biocide. Therefore they do not promote the growth of mold. Thanks to their nature they create anti-static surfaces, that do not attract dust and dirt.

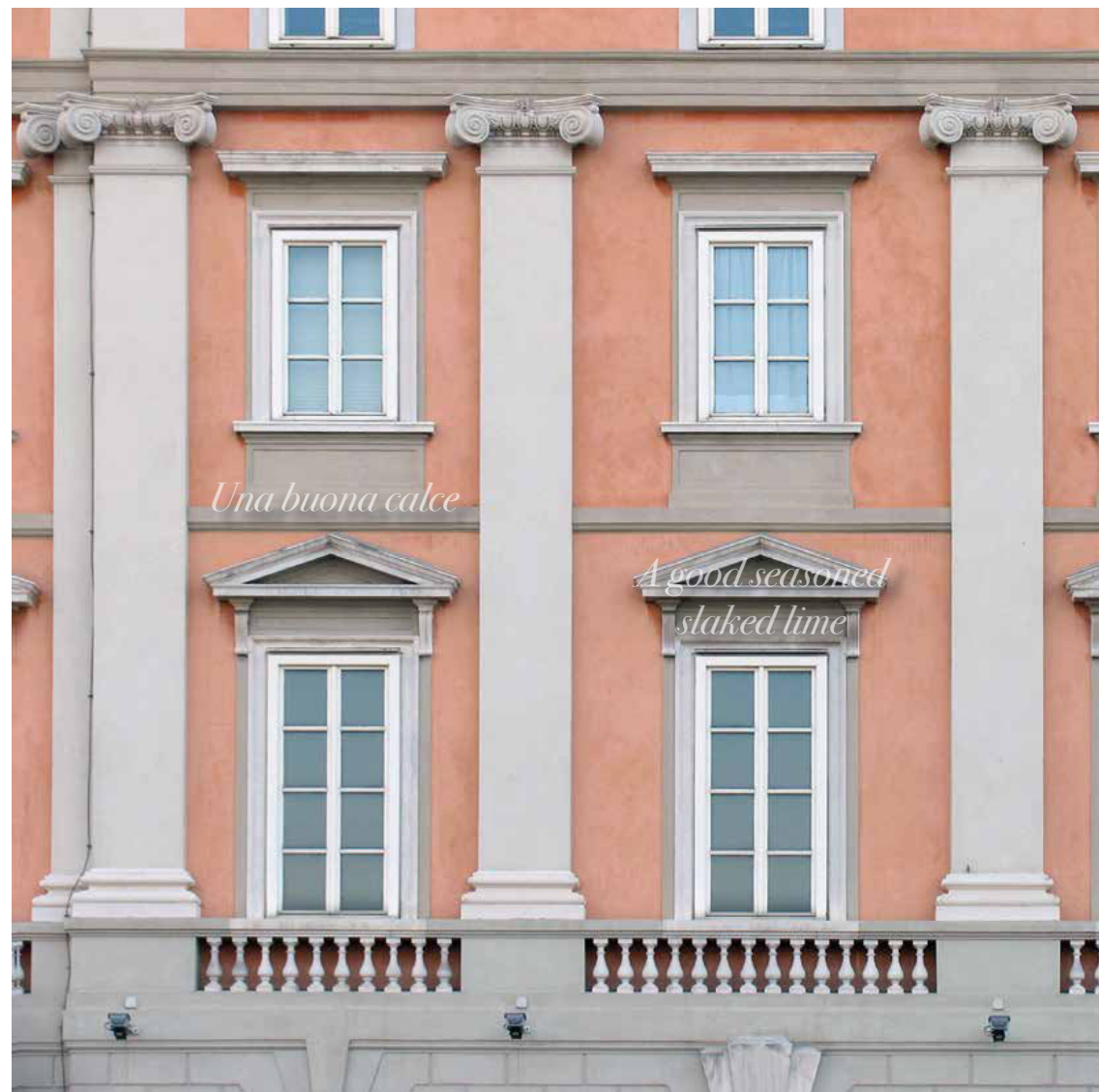
They have a high water vapor permeability, which helps the natural vapor-flow through the walls, reducing the risk of blistering and peeling in humid areas. That is a typical phenomenon which is instead favored by acrylic coatings that cover the walls like a protecting and water-proof overcoat, but reduce drastically the water vapor transmission.

Aesthetic features

Good quality lime and aggregates create finishes with warm, comfortable and vibrant colors.

The color depth on the walls enriches the architectural and design elements of the house.

A wall plastered with a good lime finish gets richer and richer with age, emphasizing the natural shadowy and cloudy look of the lime colors.



CONSERVARE E TUTELARE IL PATRIMONIO ARCHITETTONICO ITALIANO

Sul territorio nazionale operano le Soprintendenze che esercitano i compiti di tutela conservazione e restauro dei beni architettonici, e di tutela ambientale e paesaggistica.

La Direzione Generale per i beni architettonici e paesaggistici ha la funzione istituzionale di tutela e valorizzazione del patrimonio architettonico e del paesaggio del territorio italiano. Il suo compito è porre in essere ogni strumento in grado di garantire la conservazione materiale e culturale dei beni tutelati.

Conservare significa assicurare la conoscenza, la valorizzazione e la diffusione del patrimonio architettonico e paesaggistico della nazione, così come creato dall'uomo e dalla natura nel corso dei secoli: solo la consapevolezza del suo valore può garantirne il rispetto, il senso di appartenenza e la trasmissione al futuro.

Tutte le operazioni di restauro previste dalle Soprintendenze nascono da una approfondita analisi dello stato di fatto, con indagini diagnostiche per determinare le cause di degrado e acquisire cognizioni sulle tecniche ed i materiali utilizzati.

Elaborare quindi le soluzioni di intervento per rimediare al ripetersi di queste cause ed individuare cicli di intervento che siano quanto più possibile risolutivi ed omogenei con i materiali preesistenti.

Questo vale per il consolidamento della struttura, la difesa dall'umidità di risalita nelle murature, la compatibilità con gli intonaci esistenti e con le tinteggiature a calce e la loro vibrante semi-trasparenza e luminosità tipica delle facciate dei centri storici.

Le finiture a base di grassello di calce della nostra gamma, sono state utilizzate in molti importanti progetti di restauro tra i quali: iniezioni di rinforzo delle vecchie malte a base di Grassello di Calce e Cocciopesto in alcune aree del Colosseo, la decorazione con finiture a calce nel Palazzo Boncompagni Ludovisi (oggi palazzo Fendi), il Quirinale e la sede della Banca d'Italia in Roma. Nell'area nord possiamo trovare questi intonaci a calce anche nel Palazzo Sforzesco a Milano, stucchi decorativi a calce nel palazzo Ca' d'Oro sul Canal Grande, nel Palazzo Grassi e nel Palazzo Manfrin a Venezia. Meno conosciuti ma non per questo meno importanti, troviamo una moltitudine di restauri di centri storici come Matera (I Sassi di Matera riconosciuti e protetti come patrimonio dell'umanità dall'UNESCO), Palermo, Napoli e Catanzaro, dove le locali autorità hanno autorizzato l'uso delle finiture a calce di nostra produzione in restauri di civici musei e palazzi di interesse storico.

I nostri laboratori e uffici tecnici sono pronti ad accogliere stimoli e richieste da parte dei committenti e dei professionisti che operano in questo settore. Le tecniche ed i segreti del mestiere vengono comunicati con il duplice obiettivo di garantire una perfetta utilizzazione dei prodotti e divulgare quel sapere artigiano, cuore del patrimonio culturale italiano di incommensurabile valore.

Il know-how acquisito e sviluppatosi in decenni di esperienza può essere oggi condiviso con tutti coloro che operano sia nel restauro che nella realizzazione di nuovi edifici, alla ricerca di soluzioni rispettose della natura e dell'ambiente.

PRESERVATION AND PROTECTION OF THE WORLD'S ARCHITECTURAL HERITAGE

In Italy, the "Soprintendenze", state preservation organizations are focused on the preservation, restoration and protection of the immense architectural and landscape heritage of the country.

Conservation and preservation mean to ensure the transfer of the knowledge and the values of these works of art to the next generations, preserving the original characteristics wanted by the artists.

Only through awareness of the need for preservation can this effort receive the deserved attention in this modern society.

Every single restoration job undertaken by the Italian authorities is a result of series of analysis of the substrates: from the diagnostic tests to determine the reasons of the degradation of the initial construction materials to the learning of the original building technologies and procedures. Specific solutions that can restore the building and preserve it in the future can be elaborated only after detailed examinations.

This applies to the consolidation of foundations, to the defense against rising damp and to the compatibility with original decoration of the facades, mostly painted with delicate and vibrant lime colors.

Lime products are used in Italy in different applications on restoration projects. To mention some of the most recognized:

Reinforcement of old mortars with injections of Grassello di Calce and Cocciopesto in some areas of the Colosseum in Rome.

Decoration with lime plasters in the Palazzo Boncompagni Ludovisi (now Fendi Palace in Rome) in the Quirinale palace (seat of presidency of the Italian Republic) and in the seat of Banca d'Italia (Bank of Italy in Rome).

In the northern area we can find our lime plasters in the Castello Sforzesco in Milan, and lime stuccos in the Ca' d'Oro Palace over the Canal Grande, in Palazzo Grassi and Palazzo Manfrin in Venice.

Less famous but not less interesting is the multitude of small historical centers like Matera (Sassi di Matera, recognized and protected by UNESCO), Palermo, Napoli and Catanzaro, where local authorities approved our lime finishes for restoration of civic museums and palaces of historical interest.

Our technical office and customer service department can provide technical solutions and support to architects and organizations involved in this fascinating activity worldwide.

The know-how developed in decades of experience in this field can be shared with professionals who want to operate both in restoration and creation of structures in full respect of nature and environment.



*Conservare significa assicurare
la conoscenza, la valorizzazione
e la diffusione del patrimonio
architettonico e paesaggistico.*

*Conservation and preservation
mean to ensure the transfer of
the knowledge and the values
of these works of art to the next
generations, preserving the original
characteristics wanted by the
artists.*





rialto

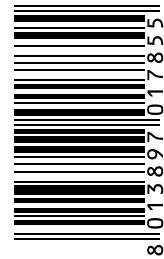
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rialto is a brand of:

COVEMA Vernici S.p.A.

Product Code: A200009200



Design APG Trieste - 10 - 2019



SINOPIA

seasoned slaked lime based fine finishing plaster for interiors



RIALTO SINOPIA

multi-sensorial color

When our five senses are stimulated simultaneously, our sensations are amplified. The final perception is complex and captivating. **rialto sinopia** is a fine interior lime plaster with a velvet, suede-like effect of delicate color tones that want to be touched, stimulating our curiosity toward the spaces around us.

rialto sinopia is a colored, mineral-based coating with an overall suede-like effect.

It is composed by a magnesiatic seasoned slaked lime, seasoned for at least 24 months, colored earths, inorganic pigments and marble aggregates selected according to granulometric criteria. **rialto fix 210** is a transparent finishing solution based on neutralized amino-functional polydimethylsiloxane which is used to make the finish water repellent and suede-like in texture when applied on **rialto sinopia**.





01 bianco (white)



06 capri



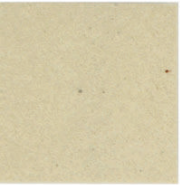
11 elba



16 ios



21 lampedusa



02 arbe



07 cervi



12 eso



17 ischia



22 lesina



03 brioni



08 cherso



13 formentera



18 isto



23 lipari



04 calino



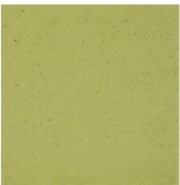
09 chio



14 gerba



19 kalamos



24 lissa



05 caprera



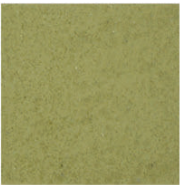
10 cipro



15 ibiza



20 keros



25 lussino



26 maiorca



31 pago



36 ponza



41 samotracia



46 syrna



27 miconos



32 panarea



37 premuda



42 selve



47 tavolara



28 milo



33 pantelleria



38 procida



43 sifnos



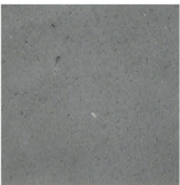
48 ustica



29 minorca



34 paros



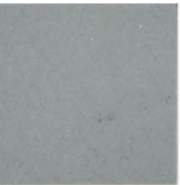
39 salina



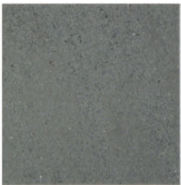
44 sira



49 veglia



30 montecristo



35 pianosa



40 samo



45 stromboli



50 vulcano

Care has been taken to ensure that the colors in this chart represent the true color of the product. However, this color collection only approximates the color of real finishes. Colors may change over time due to exposure of light, paper aging, pigment fading and handling. Variation in color and texture due to weather, job conditions and method of application should be expected.



rialto sinopia

rialto sinopia is a fine decorative plaster for interiors based on seasoned slaked lime. It creates smooth surfaces that want to be touched and admired in a multisensory experience.

The origin of its name comes from a variety of red ochre from Sinop, one of the Turkey's most important towns and Black Sea ports. Sinop was declared a Roman colony by Julius Caesar in 47 BC (its Latin name was "Colonia Julia Felix Sinope"). It soon became very prosperous, thanks to the trading of red ochre and other products yielded by the fertile Turkish inland.

The word sinopite (which is translated literally as "red earth") is sometimes used improperly to identify earth and different colors. In the past sinopite was used to produce the preliminary drawing prepared for frescos and murals. *Sinopite* was often used by artists during initial stage of their work, and was therefore of the utmost importance. Recently studies in sinopites have reassessed the enormous cultural value of these drawings.

rialto sinopia is formulated and produced according to traditional recipes of seasoned slaked lime plasters. Its application confers a chromatic variety, softness and range of color reflections to walls.





rialto

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Design APG Trieste - 02/2020



EPOCA MARMO

PAST PRESENT FUTURE

This fine colored plaster, rich with the highest quality white Carrara marbles, replicates the true look of solid marmorino surfaces with vivid colors and exclusive textures. The presence of this precious mineral, widely used since the time of the Romans, is the secret to this particular look. In fact, marble crystals, due to their specific shape reflect light differently than quartzes, granite, and carbonates which creates unique color variations. Mottling can vary depending on application methods and polishing. **rialto epoca marmo** can be matt, shiny, smooth, textured, or have an elegant vintage appearance. This quick & easy to use lime plaster creates a refined look of classic aged walls with the pleasantness of a warm & healthy familiar environment. **rialto epoca marmo** matches perfectly with other construction materials such as stone, wood & metal thanks to its composition based on seasoned slaked lime & different kinds of fine marbles, color tones & textures.

*Questo fine intonaco colorato, ricco di marmo bianco di Carrara della migliore qualità, riproduce superfici solide e compatte dai motivi e dalle tinte particolarmente vive. È proprio la presenza di questo prezioso minerale, già largamente usato nell'antica Roma, che, riflettendo la luce in modo diverso da carbonati, quarzi e graniti, contribuisce ad una resa superiore del colore e delle sue sfumature. A seconda dello stile applicativo, **epoca marmo** può apparire liscio e discreto o ricco di movimento con un aspetto elegantemente vintage. Questo prodotto è stato sviluppato proprio per creare, con passaggi semplici e veloci, quel ricercato aspetto di parete preziosa e vissuta, che trasmette familiarità, piacevolezza e benessere. Pur essendo una finitura dalle origini classiche nel contenuto, ovvero composta da grassello di calce a lunga stagionatura e varie granulometrie di pregiati marmi bianchi, **epoca marmo** è l'intonaco a calce di **rialto** che, con le sue trame, i suoi colori e la sua intensità dei toni, si combina, in un perfetto equilibrio stilistico, con la matericità di altri elementi quali pietra, legno o metallo.*





01 blanco (white)



03 Anconis



05 Bagella



09 Brenda



02 Aesernia



04 Aristianis



06 Balerne



10 Brixia



07 Bellua



08 Bononia



11 Carallis



12 Cararia



13 Catina

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Le tonalità qui riprodotte, pur avvicinandosi per quanto possibile a quelle di fornitura, debbono considerarsi puramente indicative. I colori possono subire variazioni nel tempo a causa della esposizione alla luce, dell'invecchiamento della carta e dei pigmenti. L'intensità del tono ed il design della trama dipendono dalle condizioni applicative e dalla tecnica utilizzata.



14 Depranum



18 Gorca



15 Ferraria



19 Janua



16 Florentia



20 Leucum



17 Fovea



21 Liburnia



22 Lupiae



23 Malventi



27 Nissae



31 Pistorium



35 Tarvisus



24 Mantua



28 Nugor



32 Rhegium



36 Taurinum



25 Megocia



29 Patavium



33 Rodigium



37 Tergeste



26 Messana



30 Perusia



34 Spedia



38 Trienta



rialto

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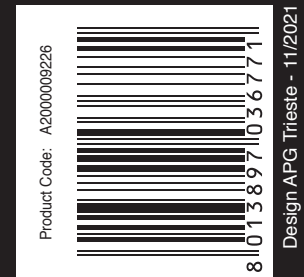
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ANTIQUA

seasoned slaked lime based mineral decorative finishing plaster



rialto antiqua
is a natural decorative
finish for interiors and
exteriors based on
slaked lime that has
been seasoned for 24
months, manufactured
in Italy according to
traditional criteria and
formulated with the
best raw materials.

*Designed for the
demanding restoration
requirements for
historic buildings
and for the creative
research of decorative
effects and the color
depth of contemporary
architecture.*

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THE NATURE OF THE PRODUCT

rialto antiqua is a seasoned slaked lime-based decorative plaster for interiors and exteriors, formulated according to traditional criteria and using the best Italian raw materials. Thanks to its simple, handcrafted nature, it can meet both the demanding specifications typical of historic building restoration and the creative research of new colors and effects typical of contemporary architecture, which is increasingly sensitive to the sustainability of the materials used in projects.

The base recipe

Long-seasoned magnesiatic slaked lime, fine ground selected authentic white Carrara marble grains, colored earths and inorganic oxides are the main ingredients of this colored finish.

Since the time of the Roman Empire, the Apuan Alps have contributed to embellishing the buildings and structures of the Italian territory by providing this "shining stone", the only of its kind in the world.

The peculiarity of this metamorphic rock is that it reflects light in a characteristic way, emphasising color and light and dark shades.

1: translation of the original name, "mármaron", in ancient Greek.



THE GREEN SPIRIT

CO₂

Seasoned slaked lime, a third of the ingredients in the product's recipe, is still today obtained in a furnace following the traditional method. Because of the chemical composition of this air-hardening lime, once the product is applied, it begins to reabsorb a good portion of the CO₂ emitted during the production process, referred to as the so-called carbonatation phase. This process transforms it into calcium carbonate (stone). Traditional slaked lime holds a special record in this balance of emissions and carbonatations: as much as 60-62% of the CO₂ is re-absorbed, drastically reducing the permanent emissions in the atmosphere.

Hydrated dolomitic lime and calcic air-hardening lime perform at 53-56%, while hydraulic lime performs at 26% and the other various types of cement do not exceed 1%. Choosing a seasoned slaked lime-based finish for your project is an excellent sustainable, ecological choice.

Breathability

By nature, unlike acrylic-based finishes, slaked lime-based coatings do not create a barrier to water vapour transmission but instead they promote this exchange.

Dry walls help guarantee a healthy, welcoming environment that preserve their characteristics over time.

Biocides

The high pH (12.5/13.5) of the finished product itself constitutes a basic environment with antiseptic properties, contributing to purifying living spaces and improving their liveability.

rialto antiqua simply does not contain added biocides.



ANTIQUA

Elegant decorative plaster with an especially versatile structure for better workability and creative possibilities. Quick, easy application, available in two versions: **rialto antiqua 1** (fine, uniform grain) and **rialto antiqua 2** (rustic look).



rialto antiqua 1 steel trowel "lamato" effect
color 024 clio
from the rialto "CENTO COLORI" color chart for lime finishes



rialto antiqua 1 sponge trowel "frattazzato" effect
color 024 clio
from the rialto "CENTO COLORI" color chart for lime plaster



rialto antiqua 2 sponge trowel "frattazzato" effect
color 024 clio
from the rialto "CENTO COLORI" color chart for lime finishes

ANTIQUA

rialto antiqua 1 steel trowel "lamato" effect

The extraordinary structure of this plaster and its slow drying allow applications on walls that change their appearances and shades. It can be levelled with a steel trowel to obtain smoother surfaces. A second coat of the product compacts the surface and makes it solid through pressing and polishing the plaster, enhancing the texture and color. **rialto antiqua**'s characteristics makes it suitable both for classic style and refined contemporary architecture.



rialto antiqua 1 steel trowel "lamato" effect
color 039 ermione
from the rialto "CENTO COLORI" color chart for lime plaster



rialto antiqua 1 steel trowel "lamato" effect
color 061 patrosso
from the rialto "CENTO COLORI" color chart for lime plaster



rialto antiqua 1 steel trowel "lamato" effect
color 076 giacinto
from the rialto "CENTO COLORI" color chart for lime plaster



rialto antiqua 1 steel trowel "lamato" effect
color 089 orione
from the rialto "CENTO COLORI" color chart for lime plaster

ANTIQUA

rialto antiqua 1 sponge trowel "frattazzato" effect

rialto antiqua is a fine colored plaster in its most traditional form. The long-seasoned slaked lime of which it is composed is the reason for its extraordinarily versatile workability.

A structure that is simple to work with, that easily recreates elegant, timeless light and dark tones.

Its traditional application is a sponge trowel finish: a smooth, simple method that preserves the intrinsic properties of its components including high breathability, resistance to wear over time, and antistatic and natural anti-mould properties.



rialto antiqua 1 sponge trowel "frattazzato" effect
color **023 cefalonia**
from the **rialto "CENTO COLORI"** color chart for lime plaster





rialto antiqua 1 sponge trowel "frattazzato" effect
color bianco
from the rialto "CENTO COLORI" color chart for lime plaster

ANTIQUA

rialto antiqua 2 sponge trowel "frattazzato" effect

rialto antiqua 2. Contains a small quantity of black carbonates. This small presence creates colored surfaces with a finely rustic appearance.

The high absorption of the mineral structure of **rialto antiqua 2** gives creative colored shades. The two-coat application of the siloxane veiled **rialto velasil** adds water repellency to the surface and depth to the chromatic effect, thanks to its transparent coloring property.



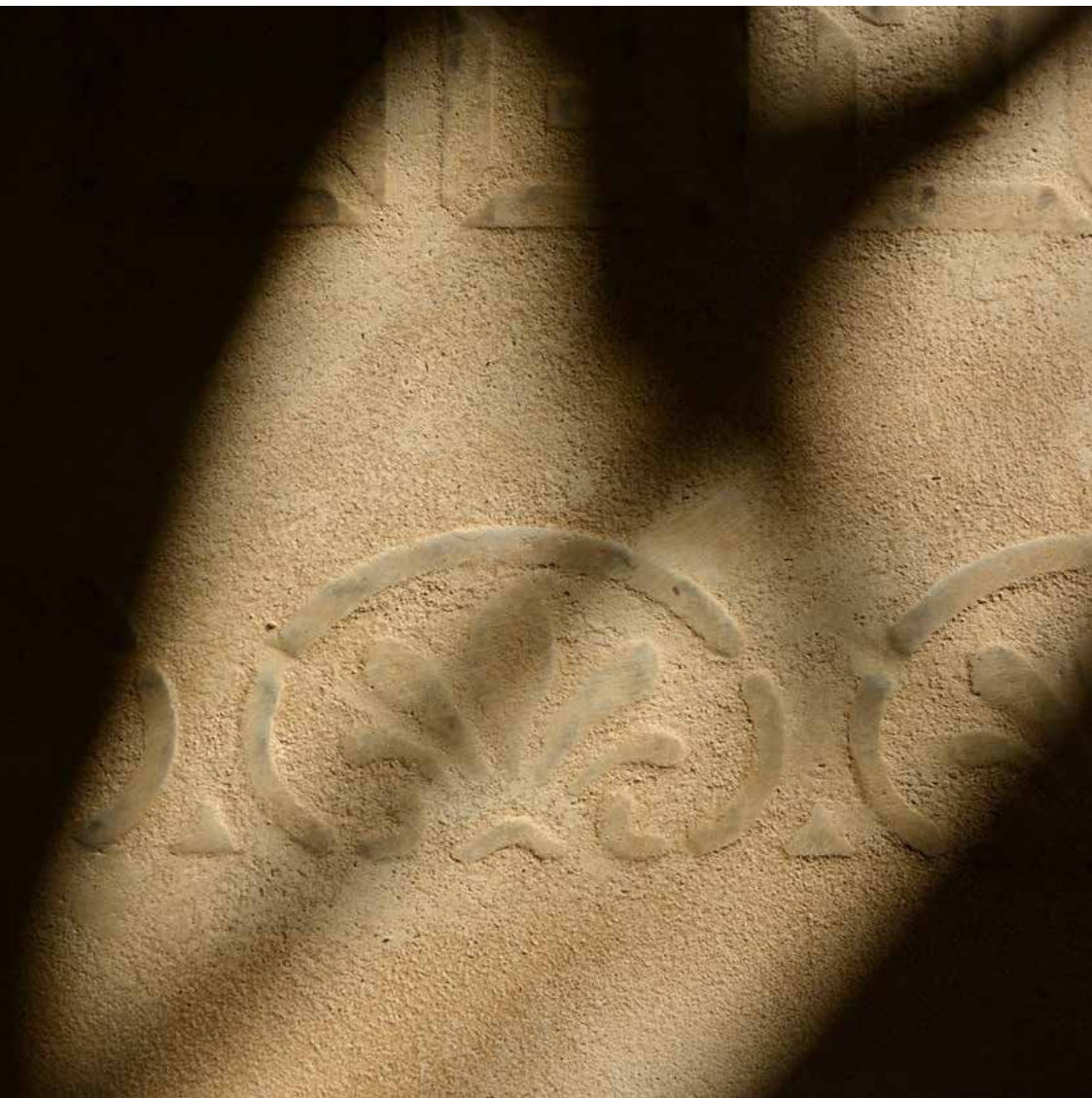
rialto antiqua 2 sponge trowel coarse "frattazzato" effect
color 038 atena
from the **rialto "CENTO COLORI"** color chart for lime plaster



rialto antiqua 2 sponge trowel coarse "frattazzato" effect
color 053 pericle
from the rialto "CENTO COLORI" color chart for lime plaster



rialto antiqua 2 sponge trowel coarse "frattazzato" effect
color 020 diomede
from the rialto "CENTO COLORI" color chart for lime plaster



EFFECTS

VEILED EFFECT



rialto antiqua 1 color bianco
+ rialto velasil color mattone and paglierino

rialto velasil, applications

The application of **rialto velasil** on **rialto antiqua 1** and **2** creates customised veiled effects with one or more colors. This finish is suitable for both interior and exterior walls. The effect can be a solid color or multiple overlapping colors. The **rialto velasil** application method can be applied by brush or with various other tools to obtain the most varied aesthetic effects.

rialto antiqua 1 color bianco sponge trowel

Sponge trowel finishing followed by application of **rialto velasil**, for a two-tone veiled effect with a single coating applied by brush in **rialto velasil** color **mattone** and the following brush coating of **rialto velasil** color **paglierino**.

VEILED EFFECT



rialto antiqua 2 color bianco
+ rialto velasil color meriggio

rialto velasil, the technology

rialto velasil is a highly breathable, single-component siloxane veiled effect for exteriors and interiors composed of oligomeric siloxanes, colored with UV stable pigments.

rialto velasil combines breathability and water repellency with a veiled, delicate aesthetic effect.

The use of **rialto velasil** over **rialto antiqua** provides protection against acid rain and adds water repellency to the finish while still maintaining the characteristic breathability properties of **rialto antiqua**.

rialto antiqua 2 color **bianco** sponge trowel effect with sponge trowelling with **rialto velasil** for a single-color veiled effect coat, applied with a large flat brush.

AFFRESCO EFFECT



rialto antiqua 1 color 079 tegea
+ epoca spatolato color S001

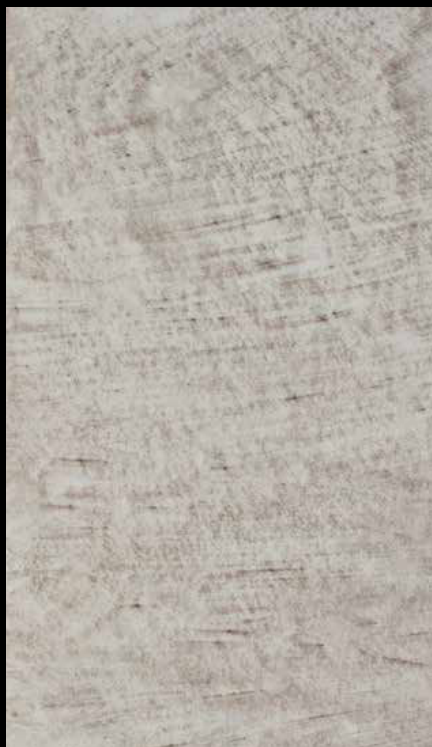
The affresco technique

The technique of applying a slaked lime-based stucco over a decorative lime based plaster is a rare technique possible thanks to the use of these traditional high quality products: **rialto antiqua** and **rialto epoca spatolato**.

As a result of their content of long-seasoned magnesiac slaked lime, **rialto epoca spatolato** stucco and **rialto antiqua 1** plaster combine perfectly for decorations with this ancient application method, which is however more contemporary than ever thanks to the creative possibilities that it can offer as well as the natural and ecological characteristics of the products.



AFFRESCO EFFECT

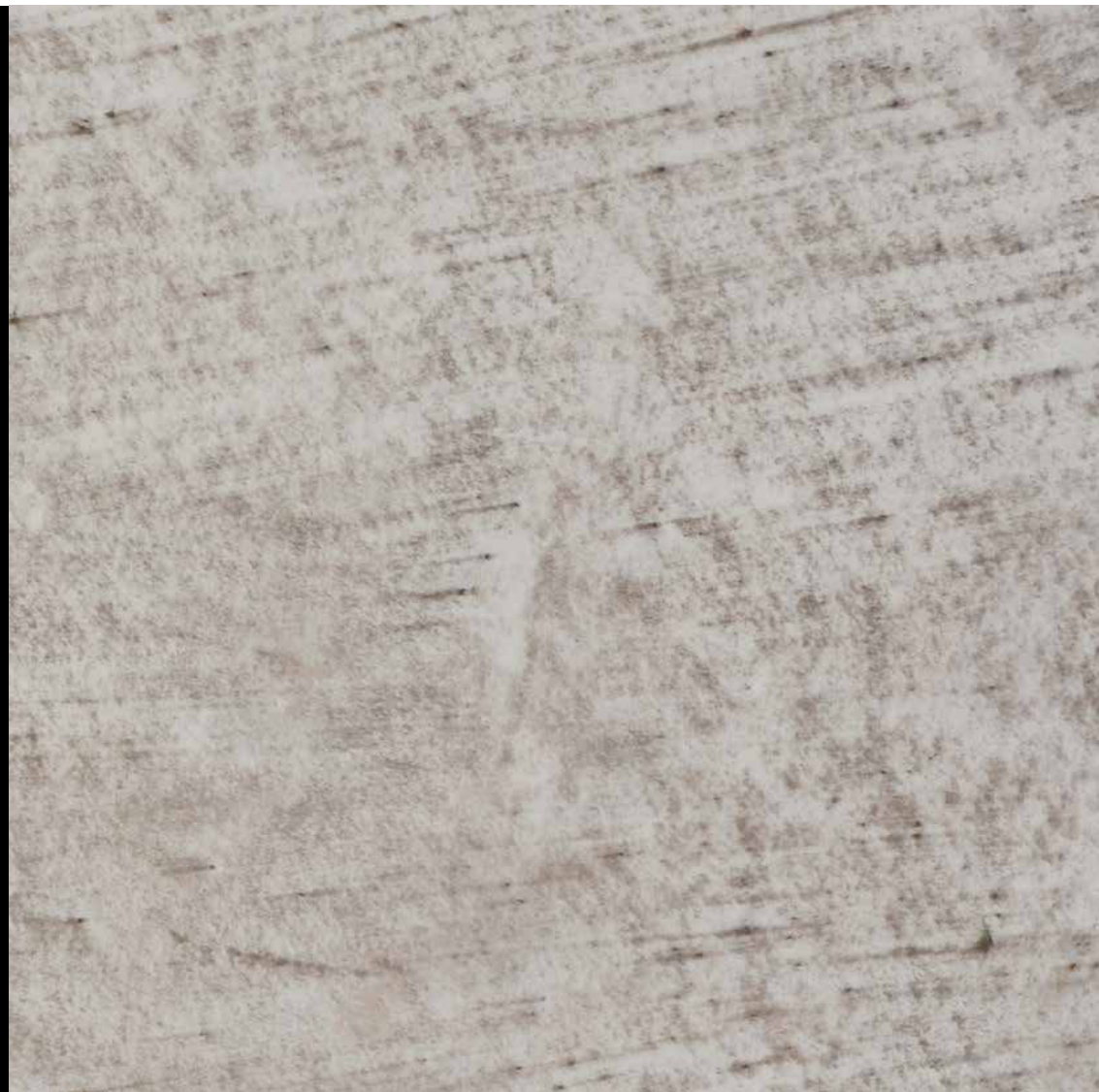


rialto antiqua 1 color bianco
+ cocchiopesto + epoca spatolato color bianco

The effect is obtained by applying **rialto epoca spatolato** over **rialto antiqua 1** with the steel trowel lamato effect. At least 24 hours, and no more than 2-3 days, after application of **rialto antiqua 1** with the steel trowel, the substrate should be sprayed with clean water and then **rialto epoca spatolato** should be applied with a stainless steel trowel or spatula on top.

The wet plaster will ensure that the slaked lime which is not yet carbonated that is in it and the one which is in the stucco will chemically bond, forming a decorative system of the two materials joined together in a single body.

This technique can be used with similar or contrasting colors, with a more or less glossy finish. The blending in of **rialto antiqua 1** added with the natural "cocchiopesto" brick powder, creates the base for the "cocchiopesto" effect, called after the ancient Roman building technique. This mixture will then be finished with **rialto epoca spatolato** to give the stucco finishing effect of the surface. The blending of **rialto antiqua 1** with the "cocchiopesto" powder gives the product greater water repellency. Moreover, this blending develops a hydraulic hardening which combines with the typical air-hardening of slaked lime-based products.



TEXTURED EFFECTS



Travertino stone effect

Colour. Natural colour.

The beauty of a texture, the interpretation of a style, the colour that characterizes it. All essential elements of a decorative project that has the power to transform simple walls into surfaces full of colour, expressiveness and harmonious beauty.

rialto antiqua 1 color 030 demetra
steel trowel application



TEXTURED EFFECTS



rialto antiqua 1 color 029 creta
steel trowel application

Inspiration, experimentation and creativity find in **rialto antiqua** an extraordinary mean of artistic expression. The high workability gives the opportunity to create refined and elegant surfaces with a simple application technique. A versatile material which offers various interpretations of textures, colors and effects.



TEXTURED EFFECTS



rialto antiqua 1 color **bianco** steel trowel application
+ **rialto velasil** color **v316**, **v453** and **gridellino**

Stencil effect

Traces and patterns can be obtained with the experimentation of the use of unconventional tools for the application of **rialto antiqua**. Stencils can be used to apply patterns in relief.

The use of **rialto velasil** on top of **rialto antiqua 1** color **bianco**, adds a colored deep cloudy effect. **rialto velasil** may be applied in more coats, in this case each coat has a different color tone: **v316**, **v453** and **gridellino**.



TEXTURED EFFECTS

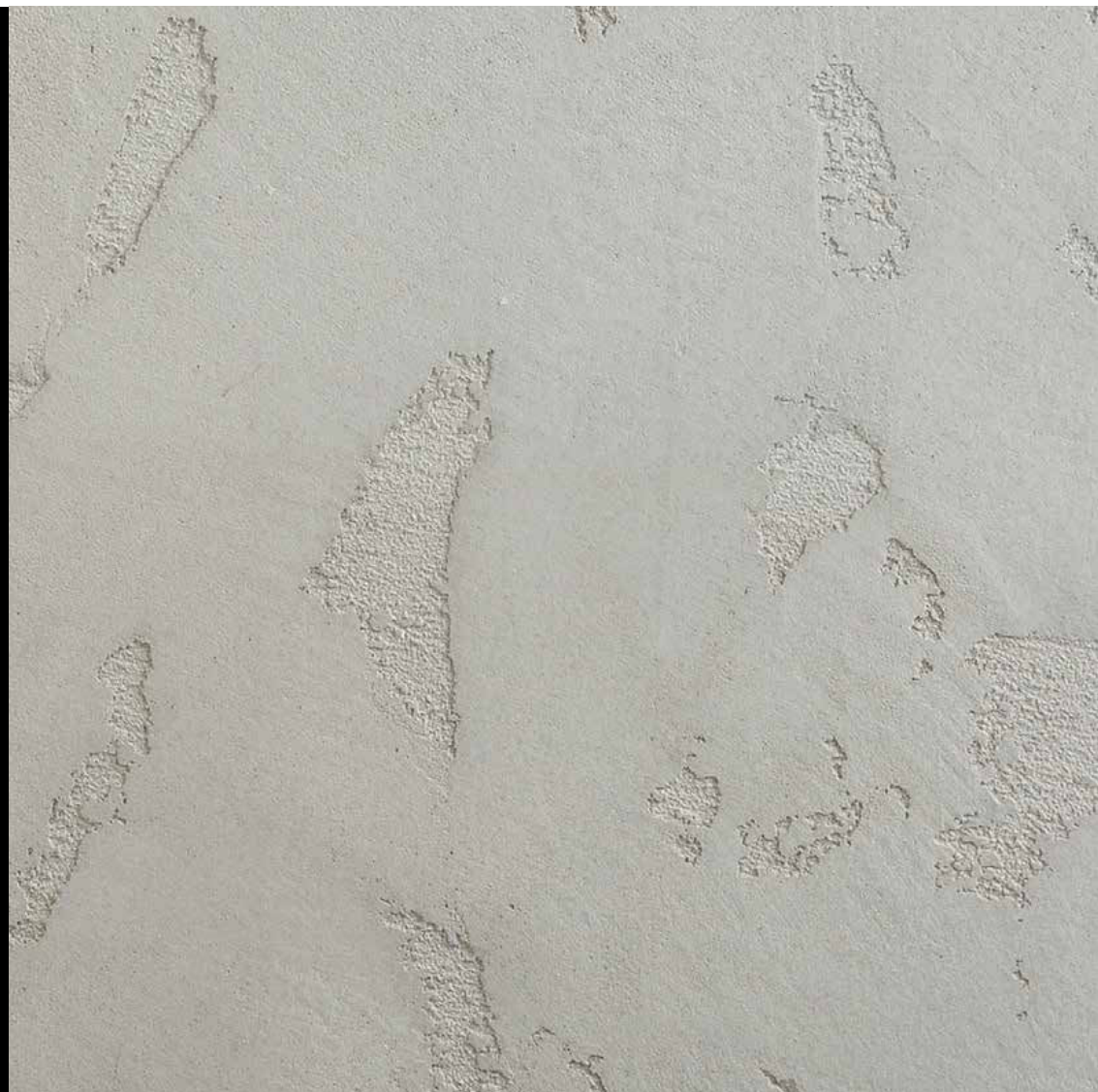


rialto antiqua 1 color 010 arianna
steel trowel application

Concrete effect

The texture of **rialto antiqua 1** is the ideal surface to create interpretations of the contemporary style and the application of the concrete effect.

The workability and consistency of the slaked lime finds the perfect product for contemporary decorative effects. The wide range of colours in the **rialto colour collections** include a complete variety of shades of grey to choose the best tone for each decorative project.



TEXTURED EFFECTS



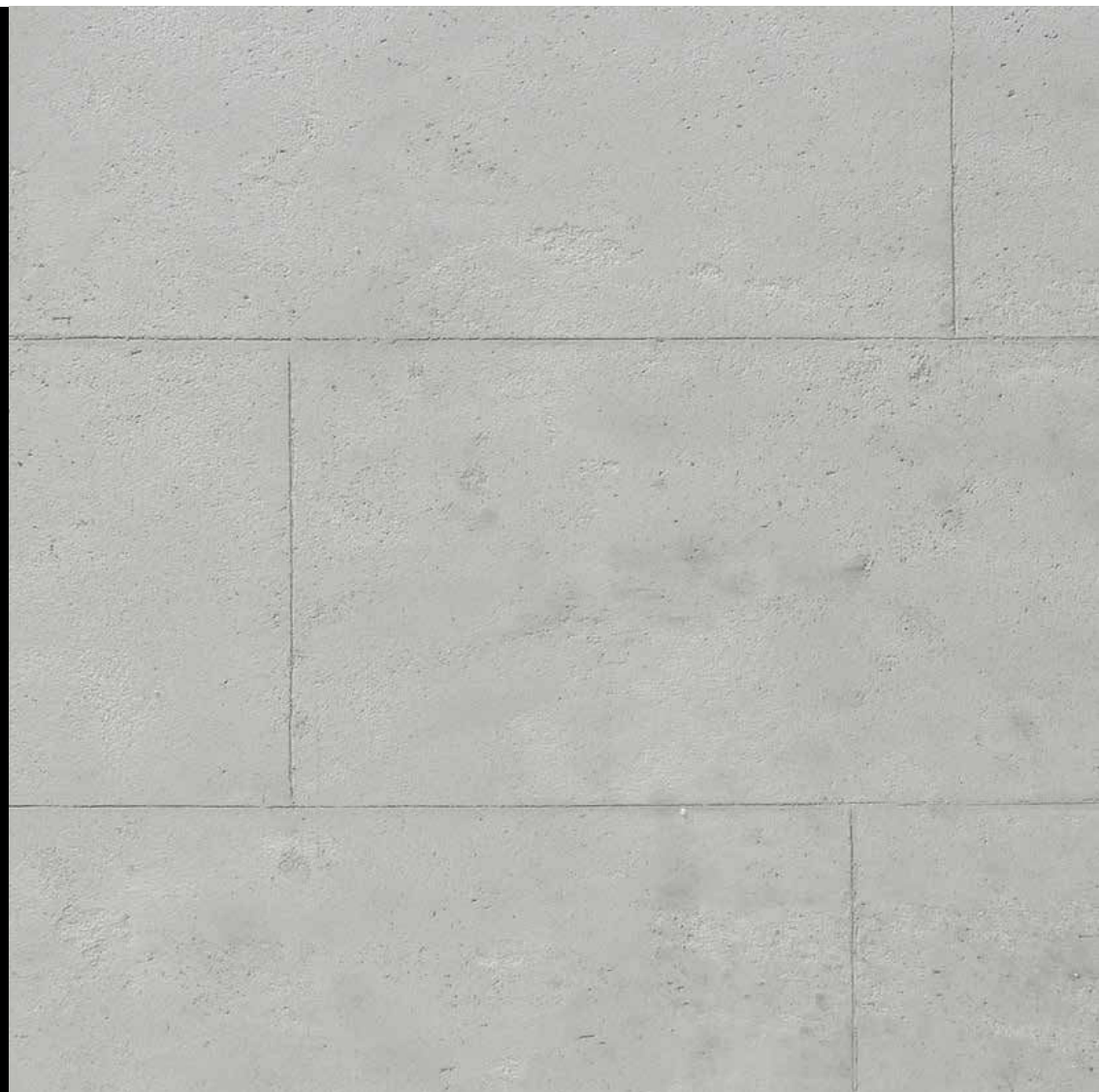
Brick wall effect

Thanks to **rialto antiqua 1**'s structure and workability, it is possible to create patterns and to imprint effects in the thickness of the surface.

The use of different tools give the opportunity to create different textures that need to be imprinted in the plaster before **rialto antiqua** has completely dried.

The **rialto stainless steel trowels** are the ideal tools to work the surface and to create the decorative textures and effects on the walls.

rialto antiqua 1 color 011 aristide
steel trowel application



TEXTURED EFFECTS



rialto antiqua 1 color **084 cassiopea** steel trowel application
+ **rialto wax 15**

Opaque marmorino effect

The marmorino effect obtained with **rialto antiqua 1** is opaque.

The application of **rialto antiqua 1** in the "lamato" effect, with the addition of the protective coating of **rialto wax 15** has a water repellent property.

rialto wax 15 is a water based solution formulated using natural waxes, soap and siloxane additives which add water repellency to surfaces.



TEXTURED EFFECTS



rialto antiqua 1 color 011 aristide
steel trowel application





RESTORATION

PRESERVING AND PROTECTING THE HISTORICAL ARCHITECTURAL HERITAGE

In Italy, the "Soprintendenze" are the national preservation organisations depending from the Ministry of Cultural Heritage, which are focused on the task of protecting, preserving and restoring architectural heritage as well as protecting the environment and landscape

The Directorate General for Architectural and Landscape Heritage has the institutional function of protecting and enhancing the architectural heritage and landscape of the Italian territory. Its role is to put in place any and all instruments able to ensure the material and cultural preservation of the protected heritage. Preservation means ensuring the knowledge, enhancement and dissemination of the architectural and landscape heritage of the nation, whether has been created by man or by nature over the centuries. Only the awareness of its value can guarantee respect, the sense of belonging and it being handed down to future generations. All the restoration operations envisaged by the Superintendence arise from an in-

depth analysis of the current conditions, with diagnostic evaluations to determine the causes of deterioration and acquire knowledge on the techniques and materials used in the past. The following phase considers implementing the solutions for intervention to resolve the causes of decay. The aim is to identifying cycles of intervention that are as much efficient as possible and compatible with the pre-existing materials. This applies for structural consolidation and protection against rising moisture in walls. The finishing effect needs to be compatible with the existing plasters and lime-based paints and with their vibrant cloudy brightness typical of the facades of historic town centres.

rialto is open to study suggestions and evaluate requests from customers and professionals operating in this field. The techniques and secrets of the arts are communicated with the objective of guaranteeing the perfect use of the products as well as to growing that artisan knowledge, the immeasurably valuable heart of the Italian cultural heritage, to which **rialto** intends to continue to make its contribution to conservation and renewal.



1.



2.

The phases of restoration:

- 1. Facade restored with **rialto** restoration systems. The materials used are **rialto malta grezza**, **rialto malta fine** and **rialto antiqua 1**. The stone elements have been treated with **rialto alkal 2** e **rialto neutral k2** stone cleaning products.
- 2. Before restoration work, the facade was showing damages and problems related to the detachment of the finish and the plaster surfaces. The stone elements showed smog and atmospheric dust deposited over the years.
- 3. Reconstruction of the facade stringcourses with **rialto malta grezza**, **rialto malta fine** using handcrafted moulds on pre-existing friezes anchored with precise mechanical fixings.
- 4. Manual reconstruction of friezes with **rialto malta grezza**, **rialto malta fine**.

The friezes and plasters have been reconstructed using **rialto malta grezza**, **rialto malta fine** with conservation restoration techniques. To restore the ancient splendour to the facade, the finishes used were **rialto antiqua 1** and some friezes are painted with **rialto epoca ottocento**, the slaked lime-based paint.

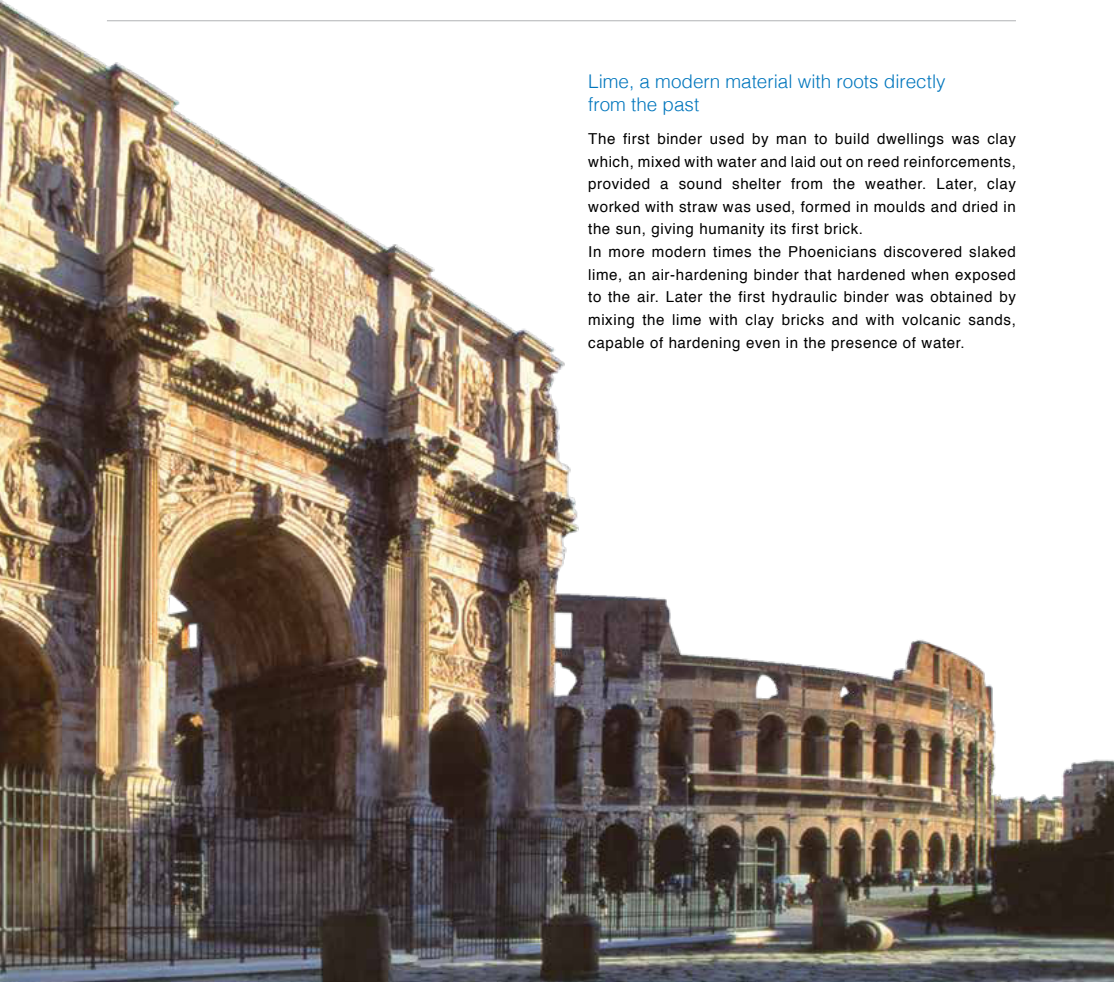


3.



4.

THE CONSERVATIVE RESTORATION



Lime, a modern material with roots directly from the past

The first binder used by man to build dwellings was clay which, mixed with water and laid out on reed reinforcements, provided a sound shelter from the weather. Later, clay worked with straw was used, formed in moulds and dried in the sun, giving humanity its first brick.

In more modern times the Phoenicians discovered slaked lime, an air-hardening binder that hardened when exposed to the air. Later the first hydraulic binder was obtained by mixing the lime with clay bricks and with volcanic sands, capable of hardening even in the presence of water.

During the Roman Empire, lime was widely used as a building material, and still today we can find monuments and works in excellent structural conditions thanks to the construction characteristics of this remarkable material. Vitruvius, a Roman architect and treatiser commonly cited by those who analyse the history of building materials, lived between the age of Caesar and the early years of the reign of Augustus. In his treatises, he devoted ample space to lime and its use in public and private works.

In the Middle Ages and especially in the Renaissance, his writings were a fundamental reference for all architects. The experience on the building site was the only source of knowledge, jealously guarded by the artisans. Today, we fully understand these phenomena and have put this knowledge toward formulations which have been improved and proven over time.



Systems for the conservation restoration of the historic building facades with plaster mortars and seasoned slaked lime-base finishes

The complete cycle required for the conservation restoration of historical facades is composed of **rialto malta grezza** and **rialto malta fine** plaster mortars and slaked lime-base finishes such as **rialto antiqua**. The use of these products ensures a stratigraphy of materials obtained in compliance with the strictest tradition, with unique and

essential characteristics for the reconstruction of walls and antique structures in accordance with the Environmental and Cultural Heritage Superintendence requirements. Slaked lime is seasoned for 3 months when used in the preparation of “**malta grezza**” and “**malta fine**” wet plaster mortars and at least 24 months for the slaked lime used in the preparation of finishes, such as **rialto antiqua**. The slaked lime-based binder applied in a complete system for the composition of wet plaster mortars and in finishes forms a stratigraphy that blends together for homogeneity



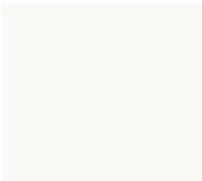
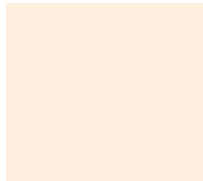
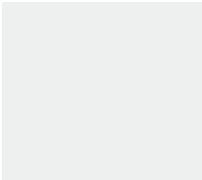
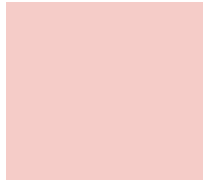
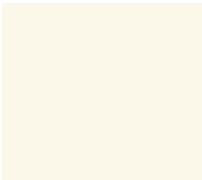
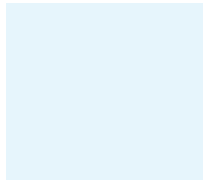
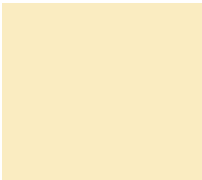
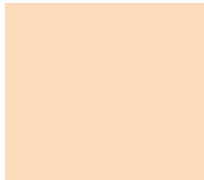
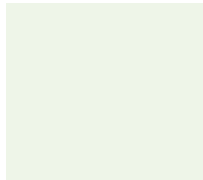
Facade stratigraphy composed of: stone structure, render in **rialto malta grezza** blended with **cocchiopesto** powder, layer of **malta grezza** blended with **cocchiopesto**, **malta fine** blended with **cocchiopesto**, **rialto antiqua 1** finish.

of the components and binders chemically and physically bond together. In this way, a single resistant element is obtained. The natural vapour permeability, water absorption and mechanical resistance remain coherent throughout the stratigraphy. **rialto cocchiopesto cc** consists of ground and dehydrated earthenware, derived from the crushing of bricks. The addition of **rialto cocchiopesto cc** in the mortars at the time of use produces a hydraulic resistance that improves the characteristics, increasing mechanical and chemical-physical resistances in shorter times.

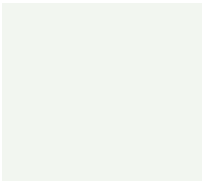
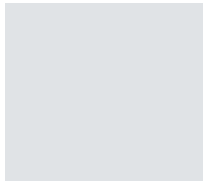
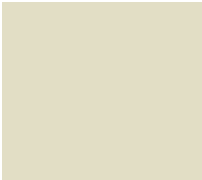
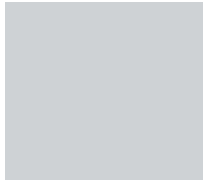
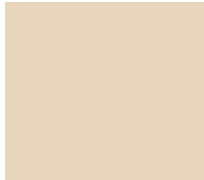
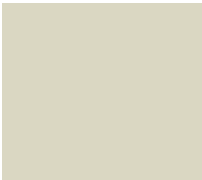
rialto malta grezza, **rialto malta fine** and **rialto cocchiopesto cc** are natural, bio-compatible, cement and additive-free products. The ideal fields of application for this system combined with **rialto antiqua** are: the restoration and conservation of antique buildings and the creation of new contemporary projects that follow the principles of Bio-Architecture.



THE HISTORICAL COLORS OF RIALTO ANTIQUA

			
giglio	segesta	volterra	augusta
			
matera	orvieto	tarquinia	alassio
			
erice	urbino	taormina	fiuggi
			
fabriano	faenza	tropea	camogli

SELECTION FROM THE “CENTO COLORI” COLOR COLLECTION

			
001 achille	009 argo	021 calliope	081 oceano
			
005 agata	011 aristide	023 cefalonia	082 urania
			
006 andromeda	012 aristotele	026 cnosso	089 orione
			
007 apollo	013 asia	030 demetra	095 zante

THE COLOR RANGE

Different color tools have been created from the historical archives of the **rialto** color lab to provide a solution for every need: the renowned "**COLLEZIONE ITALIA**" fan deck and the "**CENTO COLORI**" color chart offer a premium selection of today's most esteemed colors for lime-based products.



TECHNICAL SUPPORT AND TRAINING

rialto customer service and technical support promote the correct use throughout Italy of long-seasoned slaked lime-based finishes, offering specific training courses for professionals.

"**rialto scuola calce**" training extends internationally and aims to spread and revitalise this excellence of the Italian construction tradition.

For information:
rialto@rialto-colors.com
www.rialto-colors.com



Note: the decorative solutions illustrated in this catalogue are to be considered a reference guide to inspire new decorative effects. The final effect of the product on the wall is decided by the personal style and interpretation of the installer. The versatile nature of the product makes every single project customisable and unique.

Care has been taken to ensure that the colors in this catalogue represent the true color of the product. However, this printed catalogue only approximates the color of real finishes. Printed colors may change over time due to exposure of light, paper aging, pigment fading and handling.

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COVEMA Vernici S.p.A.



Le tonalità qui riprodotte, pur avvicinandosi per quanto possibile a quelle di fornitura, debbono considerarsi puramente indicative. I colori possono subire variazioni nel tempo a causa della esposizione alla luce, dell'invecchiamento della carta e dei pigmenti. L'intensità dei toni ed il design della trama dipendono dal prodotto, dalle condizioni applicative e dalla tecnica utilizzata.

Care has been taken to ensure that the colors in this chart represent the true color of the product. However, this color collection only approximates the color of real finishes. Colors may change over time due to exposure of light, paper aging, pigment fading and handling. Variation in color and texture due to the product used, job conditions and method of application should be expected.

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LA CALCE

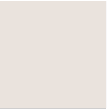
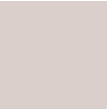
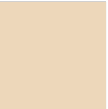
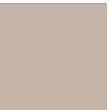


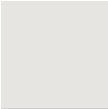
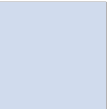
LA CALCE

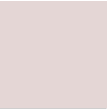
NATURAL MINERAL COLORS



 33 Dagna	 37 Federia	 41 Gravaglia	 45 Inro
 34 Ellero	 38 Fiasina	 42 Gresta	 46 Lanzo
 35 Elvo	 39 Fucino	 43 Grigna	 47 Lauro
 38 Ealno	 40 Gandino	 44 Intabli	 48 Lemme

 49 Lentre	 53 Merula	 57 Navelli	 61 Palago
 50 Lumiel	 54 Misa	 58 Neto	 62 Paligna
 51 Maira	 55 Mongia	 59 Nicolo	 63 Pesarina
 52 Masino	 56 Mosso	 60 Nure	 64 Petronio

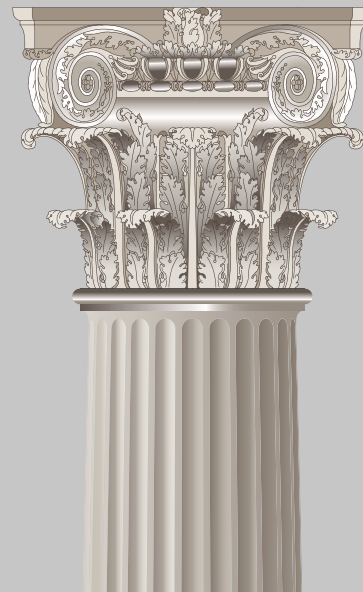
 65 Popera	 69 Rezzo	 73 Saleira	 77 Seeto
 66 Rascino	 70 Riglio	 74 Scrivia	 78 Soana
 67 Reatina	 71 Roia	 75 Senales	 79 Spluga
 68 Reala	 72 Roveto	 76 Seriana	 80 Stabio

 81 Suva	 85 Tidone	 89 Tures	 93 Versa
 82 Taro	 86 Trino	 90 Vara	 94 Vobbia
 83 Torna	 87 Trebbia	 91 Varet	 95 Zemola
 84 Tave	 88 Tronto	 92 Vercy	 96 Zoldo



MEDITERRANEO

thick decorative plaster based on seasoned slaked lime



MEDITERRANEO

thick decorative plaster based on seasoned slaked lime

Mediterraneo, a word that recalls a sea and an area between Europe, Africa and Asia. The origin of some of the most ancient civilizations of the planet, where the history of mankind and the European culture find their roots. It is known for being the mother of arts and where the search for beauty began.

RIALTO MEDITERRANEO

rialto mediterraneo is inspired by the Italian landscape and reproduces nature in a very authentic way.

The magnesian limestone, known as "Dolomite stone", gives origin to the seasoned slaked lime, the "**grassello di calce**" with a traditional manufacturing process. After a long seasoning, the slaked lime is blended with fine **White Carrara Marble** aggregate to create a plaster. Applied with the correct technique it can reproduce in a realistic way the decorative stones of the Italian historical architectural tradition.

rialto mediterraneo's formulation yields the opportunity to produce finishes that are rich in texture. It is possible to create thick artistic effects to replicate the classic decorative Italian limestones.



"Grassello di Calce", a traditional manufacturing process

We will guide you through the Italian peninsula recreating with brushes and trowels Italian stones which are known worldwide

Color, an inspiration from nature

rialto has formulated specific colors inspired by real natural stones that are typical of the Italian landscape, a perfect balance with nature.

The consistency, the patterns and colors of **rialto mediterraneo** joined with the versatility of **rialto velasil** will create a pleasant and natural sensation on your walls.



White Carrara Marble grains

DECORATIVE SUGGESTIONS

We suggest eleven decorative solutions, that find inspiration from the classic Italian stones and we will tell you about their origins.

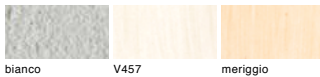


In the second part of the booklet we will show nine examples of our creations, in a combination of patterns, shades and color tones.

ROMAN CLASSIC TRAVERTINE



Origin of the stone
Tivoli, Province of Rome



OUR INSPIRATION

The surface is covered with one coat of **rialto mediterraneo** color **bianco**, laid with a stainless steel trowel.

Use the linear effect plastic trowel to create the texture before mediterraneo has completely dried. Smoothen and compact the roughest effects with the stainless steel trowel.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in two coats.

Colors: **V457**, **meriggio**



ROMAN GUIDONIAN TRAVERTINE



Origin of the stone
Guidonia, Province of Rome



rialto

OUR INSPIRATION

The surface is covered with one coat of **rialto mediterraneo** color **bianco**, laid with a stainless steel trowel.

Use the linear effect plastic trowel to create the texture before mediterraneo has completely dried.

Smoothen and compact the roughest effects with the stainless steel trowel.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in three coats.

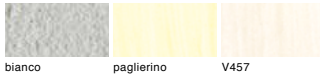
Colors: **gridellino**, **V316**, **turchino**



ROYAL GUIDONIAN TRAVERTINE



Origin of the stone
Guidonia, Province of Rome



OUR INSPIRATION

The surface is covered with one coat of **rialto mediterraneo** color **bianco**, laid with a stainless steel trowel.

Use the linear effect plastic trowel to create the texture before mediterraneo has completely dried.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in two coats.

Colors: **paglierino, V457**



TRANI NAVONA TRAVERTINE



Origin of the stone
Trani, Province of Barletta-Andria-Trani



OUR INSPIRATION

The surface is covered with one coat of **rialto mediterraneo** color **bianco**, laid with a stainless steel trowel.

Use the linear effect plastic trowel to create the texture before mediterraneo has completely dried. Smoothen and compact the roughest effects with the stainless steel trowel.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in two coats.

Colors: **gridellino**, **V457**



TRANI CLASSIC TRAVERTINE



Origin of the stone
Trani, Province of Barletta-Andria-Trani



rialto

OUR INSPIRATION

The surface is covered with one coat of **rialto mediterraneo** color **bianco**, laid with a stainless steel trowel.

Use the linear effect plastic trowel to create the texture before mediterraneo has completely dried.

Smoothen and compact the roughest effects with the stainless steel trowel.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in three coats.

Colors: **gridellino**, **gridellino**, **V457**



QUARRY SPLIT FACE PINK LESSINIA STONE



Origin of the stone
Lessinia, Province of Verona



OUR INSPIRATION

The surface is covered with one coat of **rialto mediterraneo** color **bianco**, laid with a stainless steel trowel.

Use the same stainless steel trowel to create the split face effect before mediterraneo has completely dried.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in two coats.

Colors: **V316**, **V457**



QUARRY SPLIT FACE VALFONTANABUONA ARDESIA



Origin of the stone
Valfontanabuona, Province of Genova



OUR INSPIRATION

The surface is covered with one coat of **rialto mediterraneo** color **bianco**, laid with a stainless steel trowel.

Use the rubber trowel to create the split face effect before mediterraneo has completely dried.

Smoothen and compact the roughest effects with the stainless steel trowel.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in two coats of the same color.

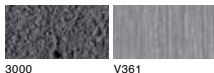
Colors: **V361**, **V361**



SAW CUT VALFONTANABUONA ARDESIA



Origin of the stone
Valfontanabuona, Province of Genova



3000

V361

OUR INSPIRATION

The surface is covered with one coat of **rialto mediterraneo** color **3000**, laid with a stainless steel trowel.

Use the rubber trowel to create the fine linear saw cut effect before mediterraneo has completely dried.
Smoothen and compact the roughest effects with the stainless steel trowel.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in one coat.

Colors: **V361**



LECCESE BEIGE LIMESTONE



Origin of the stone
Lecce



OUR INSPIRATION

The surface is covered with one coat of **rialto mediterraneo** color **bianco**, laid with a stainless steel trowel.

Use the linear effect plastic trowel to create the texture before mediterraneo has completely dried. Smoothen and compact the roughest effects with the stainless steel trowel.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in two coats of the same color.

Colors: **V457, V457**



LECCESE WHITE LIMESTONE



Origin of the stone
Lecce



OUR INSPIRATION

The surface is covered with one coat of **rialto mediterraneo** color **bianco**, laid with a stainless steel trowel.

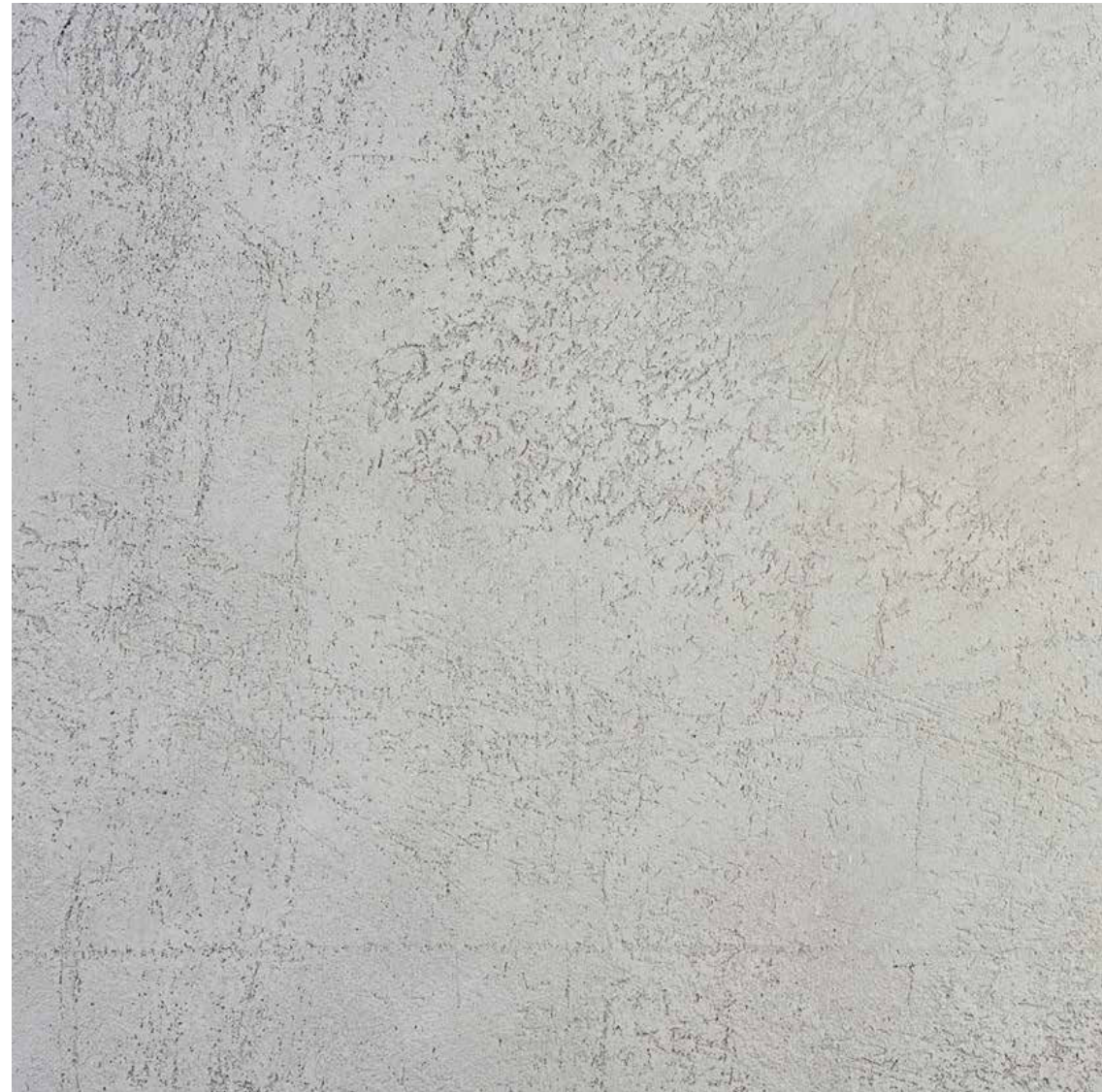
Use the linear effect plastic trowel to create the texture before mediterraneo has completely dried.

Smoothen and compact the roughest effects with the stainless steel trowel.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in two coats of the same color.

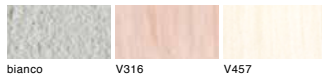
Colors: **gridellino**, **gridellino**



COMISO STONE



Origin of the stone
Comiso, Province of Ragusa



OUR INSPIRATION

The surface is covered with one coat of **rialto mediterraneo** color **bianco**, laid with a stainless steel trowel.

Use the linear effect plastic trowel to create the texture before mediterraneo has completely dried.
Smoothen and compact the roughest effects with the stainless steel trowel.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in two coats.

Colors: **V316**, **V457**



THE STONES WE ARE INSPIRED BY

Travertine

Lapis Tiburtinus, the stone from Tivoli, this is how this stone was known during the Roman Empire and is known today as the "Travertino". It has always been chosen as the ideal stone for the decoration of villas and monuments. This material is able to transform a wall from a simple structural element to an admirable, beautiful and natural surface that can adorn the building.



Roman Classic Travertine
Origin: Tivoli, Province of Rome



Roman Travertine
Origin: Guidonia, Province of Rome



Royal Guidonian Travertine
Origin: Guidonia, Province of Rome

Trani stone

"Welcome to Trani, the city of stone.", This is the message that welcomes the visitor to this marvelous city in the region of Puglia. The Trani stone, a well-known stone even outside Italy, contains different kinds of sedimentary stones and travertine's. This stone is famous for use in monuments.



Trani Navona Travertine
Origin: Trani, Province of Barletta-Andria-Trani



Classic Travertine
Origin: Trani, Province of Barletta-Andria-Trani

Lessinia stone

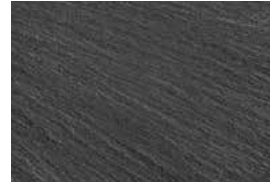
The mountainous area of Verona, the Lessinia, reaches an altitude of over 1000 meters. This is the site where this carbonate stone has been extracted since the Iron Age. It is also known as the Prun Stone and it is found in nature in various tones from white to grey. It is often used as a material for urban design and to clad significant buildings. It is also found in different shades of pale pink that can have a various amounts of patterns and veins.



Quarry split face Pink Lessinia stone
Origin: Lessinia, Province of Verona

Ardesia slate stone

A sedimentary rock from the region of Liguria with antique origins. Austere in its glossy and matte shades of dark grey, it was traditionally used in black and white patterns combined with the Carrara Marble. Its texture, when cut or extracted from the quarry, matches perfectly with other construction elements, such as wood, steel, marbles and glass. **Rialto mediterraneo** readily assumes the looh and feel of this noble and elegant stone when laid on the wall.



Quarry split face Ardesia
Origin: Valfontanabuona, Province of Genova



Saw cut Valfontanabuona Ardesia
Origin: Valfontanabuona, Province of Genova

Leccese stone

A kind of homogenous limestone which is perfect for different uses, just like **rialto mediterraneo**. In the area of Salento this rock is commonly found in a range of various colors. These tones are given by different content of quartz, oxides and clay.



Leccese Beige Limestone
Origin: Lecce



Leccese White Limestone
Origin: Lecce

Comiso stone

From the heart of the Isle of Sicily, this sedimentary calcareous stone is characterized by an elegant beauty. This stone is colored by warm and soft tones and sometimes reveals the presence of quartz in it. In this same geographical area, you can find the presence of compact and fine limestone's with a solid structure.



Comiso stone
Origin: Comiso, Province of Ragusa

OUR CREATIONS

Thanks to **rialto mediterraneo**'s structure and workability, it is possible to create modern and highly creative effects. This catalogue offers some suggestions of effects that are limited only by the creativity of the applicator. We suggest some finishes which are obtained with different combinations of colors and techniques.



CARTAGENA EFFECT

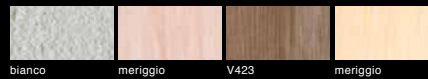
The surface is covered with one coat of rialto mediterraneo color bianco, laid with a stainless steel trowel.

Use the linear effect plastic trowel to create the texture before mediterraneo has completely dried. Smoothen and compact the roughest effects with the stainless steel trowel.

Leave the product to dry for 24 hours.

Apply by brush rialto velasil diluted with 50% of water in three coats.

Colors: meriggio, V423, meriggio



MAIORCA EFFECT

The surface is covered with one coat of **rialto mediterraneo** color **bianco**, laid with a stainless steel trowel.

Use the linear effect plastic trowel to create the texture before mediterraneo has completely dried. Smoothen and compact the roughest effects with the stainless steel trowel.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in three coats.

Colors: **turchino**, **primavera**, **paglierino**



THARROS EFFECT

The surface is covered with one coat of **rialto mediterraneo** color **bianco**, laid with a stainless steel trowel.

Use the linear effect plastic trowel to create the texture before mediterraneo has completely dried. Smoothen and compact the roughest effects with the stainless steel trowel.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in three coats.

Colors: **mattone**, **V316**, **meriggio**



GERBA EFFECT

The surface is covered with one coat of **rialto mediterraneo** color **bianco**, laid with a stainless steel trowel.

Use the rubber trowel to create the fine linear effects before mediterraneo has completely dried.
Smoothen and compact the roughest effects with the stainless steel trowel.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in three coats.

Colors: **V453, V316, V457**



MALAGA EFFECT

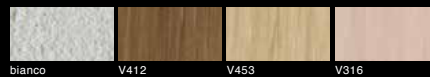
The surface is covered with one coat of **rialto mediterraneo** color **bianco**, laid with a stainless steel trowel.

Use the scratching float to create the texture before mediterraneo has completely dried.
Smoothen and compact the roughest effects with the stainless steel trowel.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in three coats.

Colors: **V412, V453, V316**



ITACA EFFECT

The surface is covered with one coat of **rialto mediterraneo** color **bianco**, laid with a stainless steel trowel.

Use the plastic roller bamboo effect to create the texture before mediterraneo has completely dried. Smoothen and compact the roughest effects with the stainless steel trowel.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in three coats.

Colors: **V361**, **gridellino**, **V457**



DELFI EFFECT

The surface is covered with one coat of **rialto mediterraneo** color **bianco**, laid with a stainless steel trowel.

Use the plastic roller bamboo effect to create the texture before mediterraneo has completely dried. Smoothen and compact the roughest effects with the stainless steel trowel.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in three coats.

Colors: **gridellino**, **V316**, **V457**



SPARTA EFFECT

The surface is covered with one coat of **rialto mediterraneo** color **bianco**, laid with a stainless steel trowel.

Use the rubber roller to create the texture before mediterraneo has completely dried.
Smoothen and compact the roughest effects with the stainless steel trowel.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in three coats.

Colors: **mattone**, **V316**, **meriggio**



EFESO EFFECT

The surface is covered with one coat of **rialto mediterraneo** color **bianco**, laid with a stainless steel trowel.

Use the scratching float to create the texture before mediterraneo has completely dried.
Smoothen and compact the roughest effects with the stainless steel trowel.

Leave the product to dry for 24 hours.

Apply by brush **rialto velasil** diluted with 50% of water in three coats.

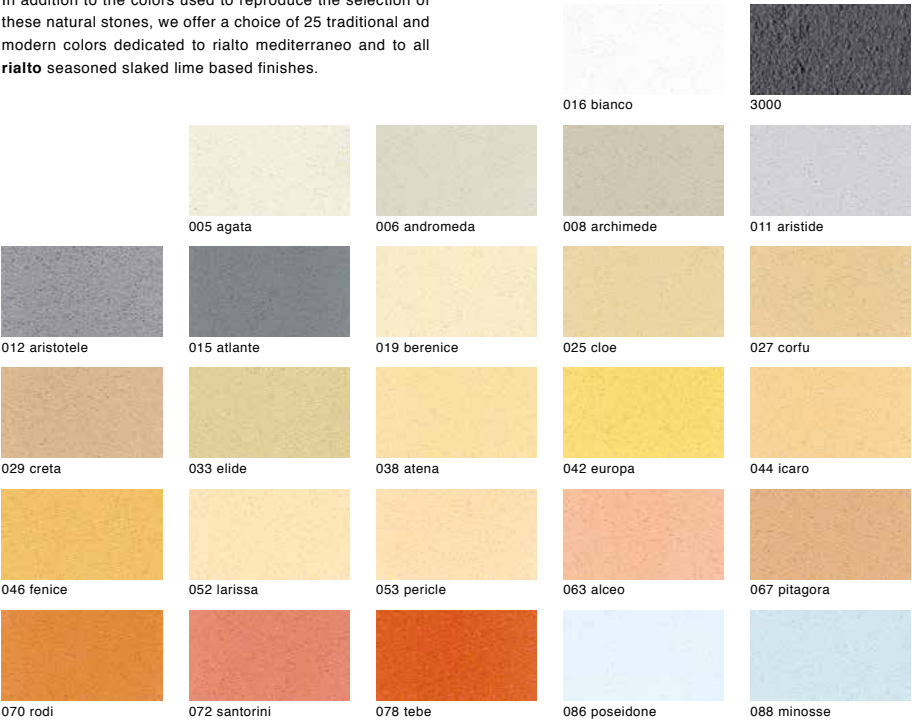
Colors: **V316**, a generous coat of **mattoni**, **V361**



THE COLOUR RANGE

MEDITERRANEO

In addition to the colors used to reproduce the selection of these natural stones, we offer a choice of 25 traditional and modern colors dedicated to rialto mediterraneo and to all **rialto** seasoned slaked lime based finishes.



VELASIL

The deepness of the color, the shades and tone variations, are emphasized by the use of colored **rialto velasil**.

The tones used for these reproductions are from the standard color range.



APPLICATION GUIDE

texture type	rialto mediterraneo coat			rialto velasil		
	color	applied with	worked with	1° color	2° color	3° color
Roman Classic Tivoli Travertine	bianco	Stainless steel trowel	Linear effect plastic trowel	V457	meriggio	
Roman Guidonian Travertine	bianco	Stainless steel trowel	Linear effect plastic trowel	gridellino	V316	turchino
Royal Guidonian Travertine	bianco	Stainless steel trowel	Stainless steel trowel	paglierino	V457	
Trani Navona Travertine	bianco	Stainless steel trowel	Linear effect plastic trowel	gridellino	V457	
Trani Classic Travertine	bianco	Stainless steel trowel	Linear effect plastic trowel	gridellino	gridellino	V457
Quarry split face Pink Lessinia Stone	bianco	Stainless steel trowel	Stainless steel trowel	V316	V457	
Quarry split face Valfontanabuona Ardesia	bianco	Stainless steel trowel	Linear effect rubber trowel	V361	V361	
Saw Cut Valfontanabuona Ardesia	3000	Stainless steel trowel	Linear effect rubber trowel	V361		
Beige Leccese Limestone	bianco	Stainless steel trowel	Linear effect plastic trowel	V457	V457	
White Leccese Limestone	bianco	Stainless steel trowel	Linear effect plastic trowel	gridellino	gridellino	
Comiso Stone	bianco	Stainless steel trowel	Linear effect plastic trowel	V316	V457	
Cartagena	bianco	Stainless steel trowel	Linear effect plastic trowel	meriggio	V423	meriggio
Maiorca	bianco	Stainless steel trowel	Linear effect plastic trowel	turchino	primavera	paglierino
Tharros	bianco	Stainless steel trowel	Linear effect plastic trowel	mattone	V316	meriggio
Gerba	bianco	Stainless steel trowel	Linear effect rubber trowel	V453	V316	V457
Malaga	bianco	Stainless steel trowel	Scratching float	V412	V453	V316
Itaca	bianco	Stainless steel trowel	Plastic roller bamboo effect	V361	gridellino	V457
Delfi	bianco	Stainless steel trowel	Plastic roller bamboo effect	gridellino	V316	V457
Sparta	bianco	Stainless steel trowel	Rubber roller	mattone	V316	meriggio
Efeso	bianco	Stainless steel trowel	Scratching float	V316	mattone	V361

Tools:



Stainless steel trowel



Linear effect Plastic trowel



Brush



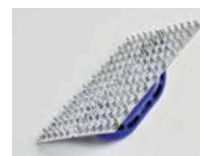
Plastic roller bamboo effect



Linear effect rubber trowel



Linear effect rubber roller



Scratching float

Covering Capacity

→ **rialto mediterraneo**: 2 kg/sqm

→ **rialto velasil**: 15 sqm/l

These values represent an average and may vary according to the desired effect and nature of the substrate

rialto mediterraneo is a thick decorative plaster that gives the opportunity to replicate with success the color and structure of various stones used in interior design and architecture.

Its outdoor use is recommended for applications on vertical walls that are protected from direct rain.

Customer assistance and training courses

rialto offers customer assistance and technical consultancy to support the correct use of seasoned slaked lime finishes with specific training courses dedicated to contractors.

This training program has the goal of sharing knowledge and revitalizing the interest in this Italian tradition.

Note: the decorative solutions illustrated in this catalogue are to be considered a reference guide to inspire new decorative effects. The final effect of the product on the wall is decided by the personal style and interpretation of the installer. The versatile nature of the product makes every single project customisable and unique.

Care has been taken to ensure that the colors in this catalogue represent the true color of the product. However, this printed catalogue only approximates the color of real finishes. Printed colors may change over time due to exposure of light, paper aging, pigment fading and handling.

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