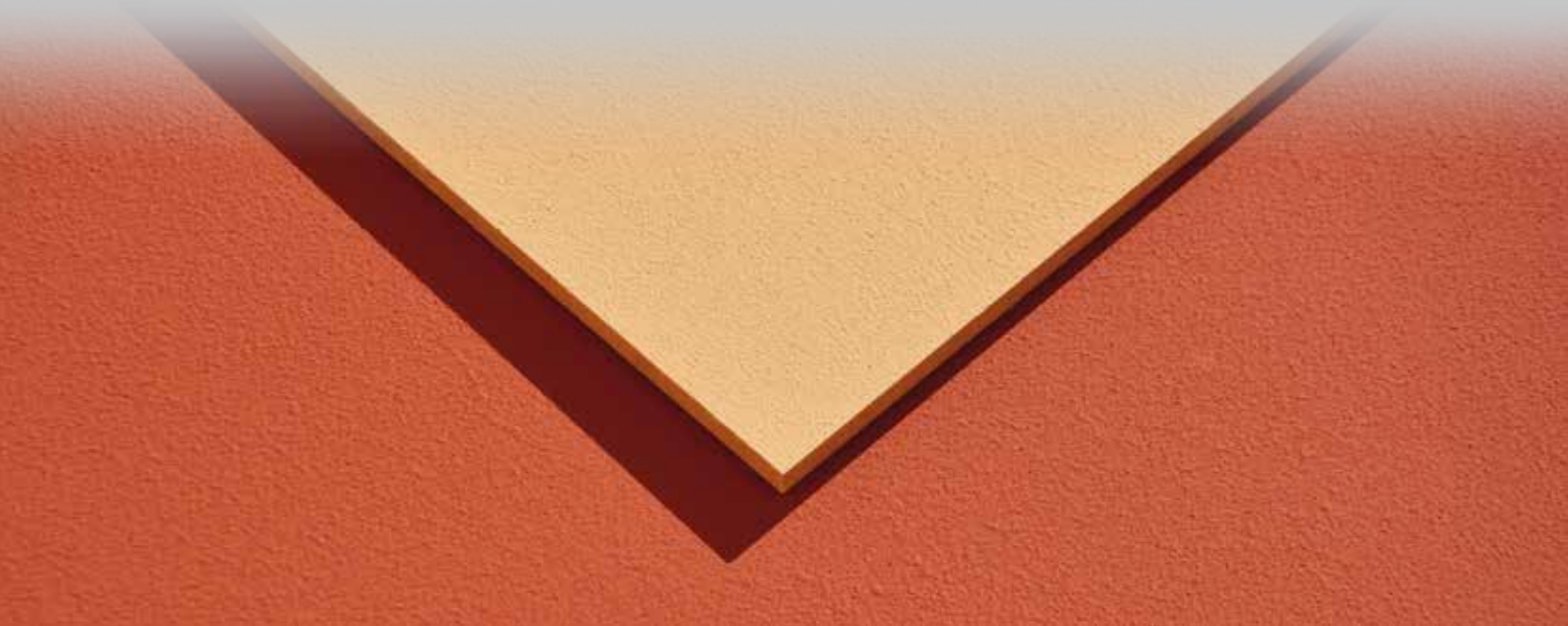
rialto

RIALTO FINISH

over 50 years experience in color and durability



RIALTO FINISH

Fifty years of success

In the colorful world of decorative paints, always in apparent upheaval and in search of new ideas and solutions aimed at reducing time and costs, **rialto finish** stands out as a rare example of an exterior product. Created at the beginning of the ‘60s, this product has grown, has evolved, and today more than ever represents a point of reference for professionals looking for a simple, elegant and reliable solution, even in critical situations.

The ‘60s: the beginning of the **rialto finish** story

RIALTO FINISH

Its origins

In 1963, the evolution of the chemical industry follows and supports the economic boom: new organic binders with never-seen performance are made available to paint and varnish formulators.
finish was a paint that in a short time distinguishes itself for its adhesion, resistance to atmospheric agents and smooth and velvety appearance.
Today, more than fifty years from its first formulation, rialto finish is still one of the most high-performance finishes. Let's take a look at why.

An evolution based on experience

The Italian territory is characterised by having many climatic and constructive variables.
The contribution of experience developed on-site has been decisive for achieving the high quality standard of today, in such as a way as to satisfy the strictest application requirements.

A revolutionary process born in 1963.

45 million square meters

have been decorated with rialto finish since then! Beyond the technical characterisations defined by standards and tested in laboratories, this is a fact that inspires confidence and gives testimony to its historical reliability.

Formulation

In an applied coating system, overall performance is the result of a delicate balance of many factors. Very schematically, we can summarise that the properties of adhesion to the substrate, abrasion resistance, water absorption and breathability of the film are mainly due to the type and quantity of the binders present in the formulation.
The mix of aggregates present, which contributes to the creation of the structure and body of the applied coat, also plays a role in the breathability of the system and especially influences the resistance to atmospheric agents, characterising its durability.
In an organic binder-based paint product, resistance to fungal and mould aggression is defined by the presence of additives that preserve both the product in the can and, of different types, the dry film applied to the wall.
Finally, the color, brightness of its shades and resistance to UV rays are defined by the type and quality of the coloring pigments used.
Starting from essential white, generated by titanium dioxide, up to the most delicate blues and yellows, pigments have a considerable influence on the overall performance and, no less important, also on the cost of the final formulation.

The **rialto finish** formulation contains a terpolymer binder which influence its high-adhesion characteristics. Even on different kinds of surfaces such as plasters, prefabricated panels, bricks and even on galvanised sheets, this paint maintains high adhesion standards that last over time.
The particularly tough aggregates present in **rialto finish**, such as sandstone, granite and mica chippings, suitably mixed by type and granulometry, are spread in the liquid film giving rise to a protective, filling, resistant and long-lasting coat. Unlike many similar organic binder-based products, the structure created remains microporous, opposing a low resistance to the passage of vapour.

rialto finish today

The evolved formulation of **rialto finish**, with its vapour permeability values among the highest in the category (220 g/m² 24h), boasts a breathability class V1 (standard ISO EN 7783-2).

Its Sd value, or rather the equivalent thickness of air which offers the same resistance to the passage of water vapour as the paint film being examined, is only 0.09 m. This important breathability together with its extraordinary capacity to adhere to the substrate (37 kgf/cm²), make it the perfect product to decorate and protect wall surfaces in an effective and lasting manner.

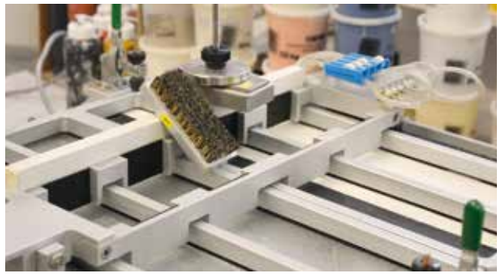
We can easily compare these values of **rialto finish** (which is essentially categorized as an acrylic paint) to the typical values of more expensive products, the acril-siloxanes, which normally make breathability the strongest selling point.

Its technology and simplicity of use make **rialto finish** the ideal solution for the most demanding projects in terms of color and duration.

Breathability and adhesion: the reasons for its reliability

High breathability of finishes is an important feature for limiting degradation due to the presence of water vapour in the walls.
A persistent presence of this phenomenon triggers processes such as the formation of blisters, crumbling of the substrate and detachment, obvious consequences of paint products that do not let the system breathe, even if it is protective or waterproofing.
This property combined with the strong decorative film adhesion of **rialto finish**, influences the reliability of the applied cycle and, as a result, its duration over time.
The pull-off test performed in the laboratory, which measures the tensile strength by applying a tensile stress in a direction perpendicular to the surface of the film, has confirmed resistance values before detachment of approximately 37 kgf/cm^2, an objective validation of the recognised longevity of the product, already demonstrated in the field.

Measurement of breathability in a climatic chamber



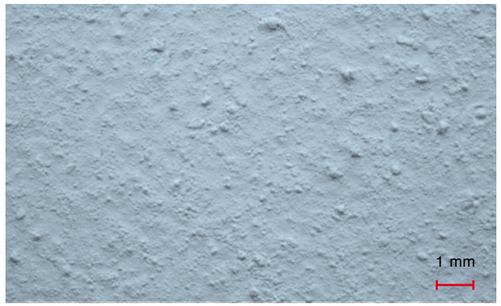
Wet-scrub resistance test

Analysis and color formulation

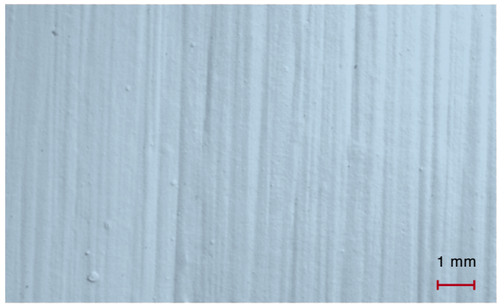
Pull-off adhesion test

Taking a closer look

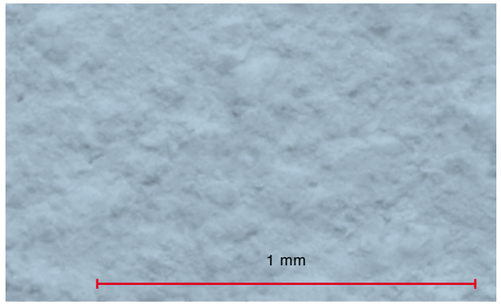
The resistant **rialto finish** film, protective and cohesive with the substrate, has a typical slightly rough appearance to the naked eye.
This is due to the high content of tough minerals, feldspars and micas that constitute this microporous structure, all decisive elements for achieving high levels of breathability.
In the two series of images taken under an electron microscope, we compare the conformation of the different films at different magnification levels. It is evident how the different conformation of the paint film may favour or instead hinder the passage of water vapour and the reliability of the paint system.



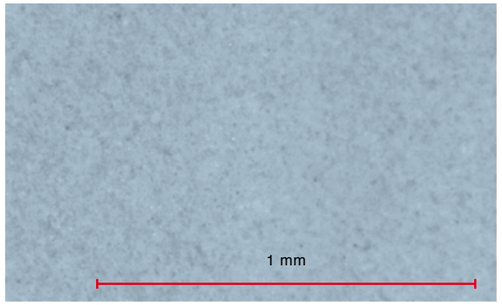
rialto finish 8X zoom



Standard acrylic paint 8X zoom



rialto finish 100X zoom

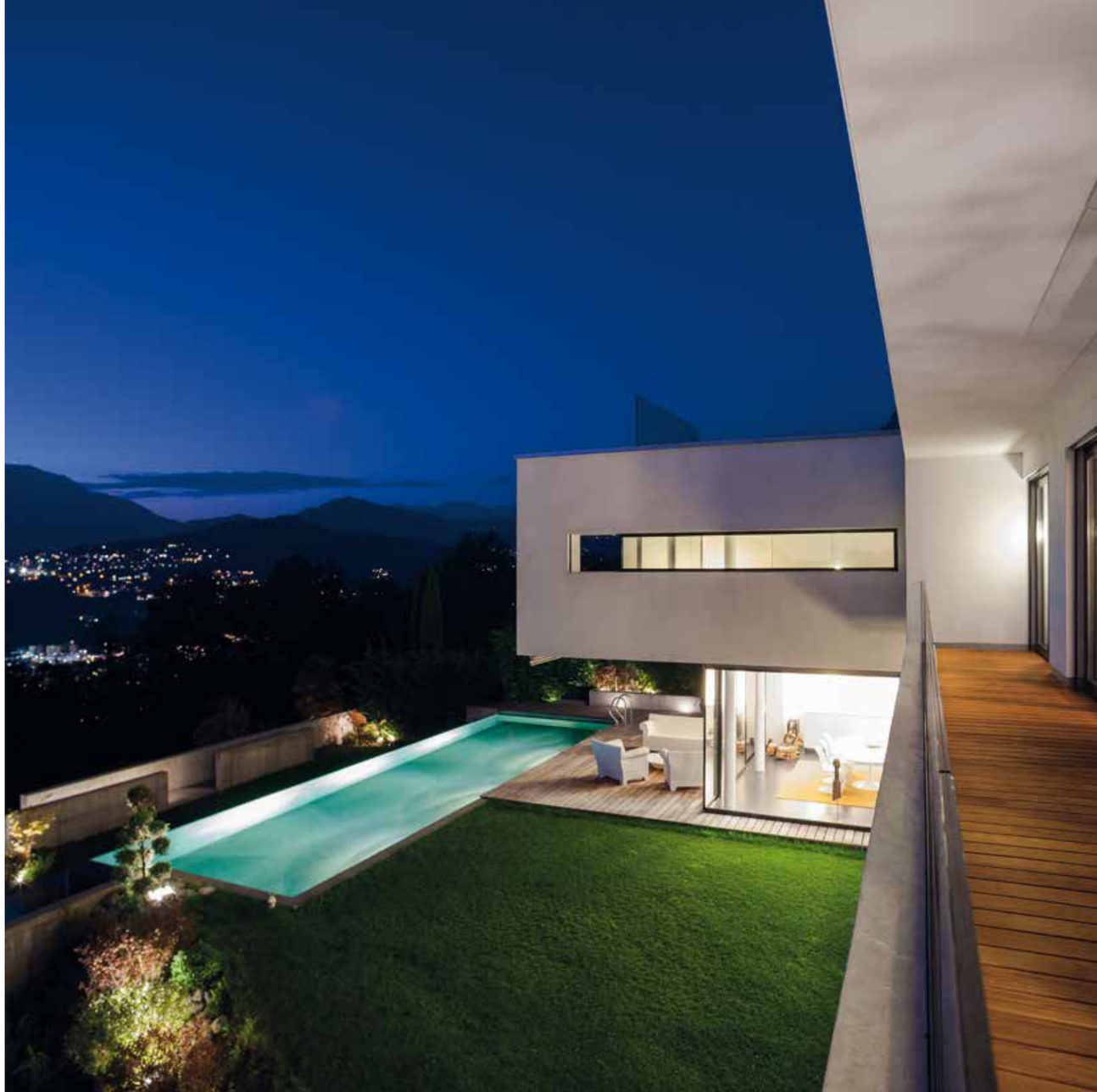


Standard acrylic paint 100X zoom

rialto finish identity and numbers

type	protective acrylic terpolymer water-based paint for exteriors
year of first formulation	1963
square metres applied (December 2018)	> 45 million
available tintometric bases	3
special colors formulated to customer specifications (December 2018)	> 8.200

technical specifications	rialto parameter	reference parameter	standard
white point	optimal L 95,18 a - 0,75 b + 2,02	-	total coverage spectrophotometric reading
hiding power	optimal Y = 99,75%	optimal if Y ≥ 98%	Unichim 1631
dirt pick-up	very low ΔL = 0,3	Very low if ΔL ≤ 0,3	UNI 10792
vapour permeability	high V1 - 220 g/m²-24h	V1: > 150 g/m²-24h V2: > 15 ≤ 150 g/m²-24h V3: ≤ 15 g/m²-24h	UNI EN ISO 7783-2
adhesion to substrate (pull-off test)	3,63 MPa (37 kgf/cm²)	-	UNI EN ISO 4624
Sd Steam diffusion / air layer equivalence	0,09 m	-	UNI EN ISO 7783-2
filmability at low temperature	good	-	UNI 10793
wet-scrub resistance	optimal (> 30.000 cycles)	-	UNI 10560
gloss degree	mat	-	UNI 9389
mould resistance	resistant to mould attack	-	UNI 9805/ Thor Method 800.2
resistance to algae	resistant to algal attack	-	Thor Method 850.2



Application guidance

No special procedures or tools are required to use **rialto finish**.
After normal checks of the consistency of the substrate, cleaning and removal of the parts in the detachment phase, the surface is prepared with the application of a coat of **rialto stabilizer** consolidating primer.

After at least 24 hours, the first coat of **rialto finish** is applied with a brush 10% diluted with clean water. After an interval of 12 hours, proceed with the second and last coat of **rialto finish**, to be rolled on without dilution.

Further details are available in the product data sheet.

The color range

The product that has written the history and evolution of **rialto** is obviously the most formulated coating ever by our color laboratory.
More than 8,200 special colors have been created based on specific customer requests and, together with the extensive standard color database of fan decks and folders, represent a valuable historical reference archive.

More than 50 years of fashions, trends, experimentation and traditions have been investigated and represented in all their shades of color.

rialto finish is available in its three base colors, designed to make even particularly intense shades.

The current standard color range is contained in the "**COLLEZIONE ITALIA esterni**" fandeck and the "**CENTO COLORI**" color chart. A targeted selection to greatly support the designer in the delicate phase of choosing a color.

The current **rialto finish** color range

Support and consultancy

rialto is present internationally with a network of prepared, qualified sales agents ready to advise you on the best solution for your project.

Moreover, **rialto** technical support is available for consultancy, surveys and stratigraphic analysis where a scientific approach and in-depth instrumental evaluations are required.

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rialto
via caduti sul lavoro, 7 - z.i. noghere
34015 muggia - trieste - italy
tel. +39 040 9897300
rialto@rialto-colors.com - www.rialto-colors.com

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