

MATERIALS & FINISHES



MATERIALS



STAINLESS STEEL

It has a high resistance to oxidation and corrosion due to the presence of chromium in its composition; This element combines with oxygen and creates a protective surface layer of chromium oxide, called passive layer.





ALUMINIUM

Aluminum is a very light metal characterized by its excellent performance in the construction industry. Its specific weight is 2.7 g/cm3, one third the weight of steel. It stands out for its excellent properties such as lightness, malleability, durability, and corrosion resistance.

COPPER

Copper is a material widely used in industry due to its numerous properties: high resistance to corrosion, ability to withstand extreme temperature changes, high malleability and excellent thermal and electrical conductivity.



BRASS

Brass is an alloy that is composed of copper and zinc. It has a bright golden appearance but will slowly turn greenish and brown over time. Considered a "living finish", the natural color change occurs quickly and depending on environmental conditions, the final color will vary.

*Other materials on request.



STAINLESS STEEL

It has high mechanical and wear resistance, high durability and is easy to machine and handle.

It is a material highlighted by its high sustainability, as it has a long service life and requires little or no maintenance.

In addition, it is 100% recyclable at the end of its useful life, with an average recycling rate of between 60% and almost 90%. Its production generates minimal levels of CO2 and other emissions.

It has numerous applications in architecture and interior design: enclosure of pavilions or garages, rehabilitation of facades, elevators, stairs, floors, ceilings, protection of openings, division of spaces, etc.

Codina Architectural offers several finishes for this material.

Natural

This is stainless steel without any extra treatment. It can be used for interiors and exteriors. Its appearance is smooth and metallic gray.





Brushed

Brushed stainless steel is a treatment applied to steel, which is characterized by short, parallel, uniform, and directional looking grinding lines. The mesh is lightly patterned with a brighter appearance than the natural finish. It can be used for interior and exterior applications.



Sandblasting

This process consists of the projection of abrasive particles on the stainless steel mesh. With this treatment, we change the natural appearance of the material itself. We go from a smooth metallic gray color, typical of stainless steel, to a darker, matte gray color and a textured finish. We will not have so much light reflection on the metal, and we will give a matte appearance on the entire mesh. It can be used for interiors and exteriors.





Painting

This material can be painted in any RAL or custom color desired. Powder coating is used to have more adherence on the mesh surface and thus increase resistance and durability. But beyond this undoubted improvement of the technical qualities of stainless steel, powder coatings allow a great diversity of final color and texture effects. The paint finish can be glossy (standard), matte, textured or satin. It must also be specified if the paint is to be used for an exterior application or for an interior application, since its characteristics will be different.

Painting stainless steel mesh that is installed as interior partitions or cladding is an option that adds texture and personality to the space where it is located. Special paints can also be applied to create metallic or textured effects or to combine two colors. It is a coating that can even imitate oxidized and aged metals, providing a very real chromatic effect.





ALUMINIUM

It has a sustainable life cycle from beginning to end. Therefore, it can be said that aluminum is a 100% recyclable material. Its recovery rate in construction reaches 95% and its recycling saves 95% of the energy used in its initial production.

It is the most widely used material in building enclosures: interior dividers, curtains, interior decorations, fences, etc.

It offers an infinite number of designs and constructive possibilities.

It can be anodized or painted in any color and optical effect, using different surface finishes, in order to satisfy the decorative needs of any designer. Anodizing and lacquering also serve to provide greater durability to the material and increase its resistance.





ALUMINIUM

Anodizing

Anodizing is a surface treatment of aluminum that consists of the formation of a layer of aluminum oxide in a controlled way, in which a continuous current is passed through the surface of the aluminum.

This process provides a high level of protection against corrosion and a high resistance to surface abrasion. The protection layer varies between 5-7 μ m for indoor/mild environments, about 15 μ m for outdoor and harsher climates and up to 20/25 μ m for industrial, marine, and extreme environments.

Another peculiarity of anodizing is that, thanks to the porous structure of this anodic layer, it allows us to obtain a wide range of coloration.

For both indoor and outdoor projects, the available colors are:





BLACK

DARK BRONZE







BRONZE

GOLD



CHAMPAGNE



NATURAL





BRONZE STAINLESS STEEL

Painting

This material can be painted in any RAL or custom color desired. Powder coating is used to have more adhesion to the metal and to increase resistance and durability. But beyond this undoubted improvement of the technical qualities of metal surfaces, powder coatings allow a great diversity of final color and texture effects. The paint finish can be glossy (standard), matte, textured or satin. The paint must be specified if it will be for an exterior application or for an interior application.





Painting aluminum mesh that is installed as interior partitions or cladding is an option that adds texture and personality to the space where it is located.

Special paints can also be applied to create metallic, textured, or twocolor effects. These coatings can even imitate oxidized and aged metals, providing a very real chromatic effect.





COPPER

In architecture and design, it has numerous applications; combining almost naturally with other materials such as wood, brick and glass, it provides a modern and elegant design in both interior and exterior spaces.

Copper metal meshes will oxidize in the presence of air, moisture and even natural skin oils. Natural color change occurs quickly depending on environmental conditions and exposure time. But in general, in any atmospheric exposure – presence of oxygen, salt, moisture and sunlight – copper will turn from bright shades to brown tones, then to gray and finally to a blue-green or grayish-green patina.

As a 100% recyclable material, copper can be reused over and over again without losing its physical properties. In fact, studies carried out by the European Copper Institute show that copper is a material that, during its production, handling, use and at the end of its useful life, complies with the European regulatory framework to generate the least impact on the environment and people's health. In this sense, it is the most sustainable metal used in construction, above steel, aluminum and zinc.





There are three possible finishes for copper: Natural, lacquered or textured.

NATURAL

Copper wire starts out "shiny" but is considered "live." This means that the copper wire will be almost immediately susceptible to color changes from the handling and fabrication of the mesh. Codina cannot guarantee color consistency when it reaches its final installation point. Moreover, the color will continue to change at a unique rate and intensity depending on the environment and amount of handling. It can be used for interiors and exteriors.





LACQUERED

Applying a transparent lacquer on the top surface will create a protective barrier and prevent the material from being marked or tarnished to the touch. This lacquer will flake off over time, but will slow down the natural process of the copper. The color changes in the material will not be as immediate as with the natural finish. We recommend this type of finish especially for indoor use, where the mesh will be exposed and within easy reach of handling.



TEXTURED

The color tone of the mesh will start from a pinker color with a textured and matte appearance. The color will not be as orange as natural copper or lacquered copper. It can be used for interiors and exteriors.





BRASS

Brass forms a protective oxide layer when exposed to air that prevents further corrosion. Like copper, it is a highly sustainable material, with a total recovery rate at the end of its life cycle, and high percentages of recycled material in its composition. Most brass can be re-melted and reformed indefinitely without losing properties.

It is a material widely used in architecture and interior design. At Codina Architectural we offer brass meshes with natural or lacquered finish.

NATURAL

Brass wire starts out "shiny" but is considered "live." This means that brass wire will be almost immediately susceptible to color changes from the handling and fabrication of the mesh. Codina cannot guarantee color consistency when it reaches its final installation point. The color will continue to change at a unique rate and intensity depending on the environment and the amount of handling. It can be used for interiors and exteriors.





LACQUERING

Applying a transparent lacquer on the top will create a protective barrier and prevent the material from being marked or tarnished to the touch. This lacquer will flake off over time, but will slow down the natural process of the copper. The color changes in the material will not be as immediate as in the natural finish. We recommend this type of finish especially for indoor use, where the mesh will be exposed and within easy reach of handling.



Other materials and finishes available on request.

