

Nordic Copper Durable architectural solutions in copper



NordicCopper.com

Copper, a long tradition in architecture

Copper was one of the first metals used by man and is one of our oldest building materials, with unique properties and characteristics.

Nordic Copper products are produced by Aurubis, part of the world's leading integrated copper group and largest copper recycler with over 140 years experience. They are distributed exclusively by VM Building Solutions in numerous countries in the worldwide.

Aurubis provides an extensive range of preweathered and prepatinated copper products for architectural applications used in facades and roofing systems. Copper is both modern and traditional thanks to its longevity, giving architects unparalleled creative freedom and ensuring them a favourable environmental performance.

Nordic Copper products use phosphorus deoxidized copper, designated Cu-DHP and copper alloys as Brass, Bronze and Aluminum-bronze complying with EN 1172:2011 – "Copper and Copper Alloys: Sheet and Strip for Building Purposes".

Qualities of Nordic Copper products

This pure and natural material exhibits a unique range of characteristics and performance benefits, including:

Esthetics

Copper is the only metal that having natural colors (except Gold).



Durability

Some copper roofs are around 350 years old. Copper benefits from exceptional, indefinite lifespan demonstrated over hundred of years.

Malleability

Copper shows easy malleability at any temperature and no brittleness in cold weather. Copper withstands immense pressure and extreme temperature changes.

Therefore, it is ideal for cold climate conditions and places where temperature variations are high as it does not break when worked and formed.



Goldfisch (Germany) - Architect: Trapez Architektur - Aspect: Nordic Royal

Patina

When exposed to the climate, copper surface begins a natural process, which is dependent upon local environmental conditions, orientation and inclination of the surface. This changing patina is unique comparing to other materials.

Within a few days of exposure to the atmosphere, a copper surface begins to oxidise, changing from the 'bright' mill finish to a chestnut brown, which gradually darkens over several years to a chocolate brown. The patina film provides impressive protection against corrosion and can repair itself if damaged, defining the exceptional longevity of copper cladding.

Maintenance

A copper roof or façade needs no special maintenance or cleaning.

Certification

With an 'A1 (non-combustible material)' fire classification to EN 13501-1, copper is suitable for cladding taller buildings, using appropriate constructions.



Wohnhaussanierung (Germany) - Company: Rold Kleinfeld GmbH - Aspect: Nordic Blue Living 3

Recycling

Copper has the longest recycling history of any material known to civilization and is probably the most recycled material in the world.

It is estimated that two thirds out of the 550 million tonnes of copper produced since 1900 are still in productive use (Fraunhofer Institute).

The copper industry aims to be exemplar among other activities to reduce the environmental impact of their activities. The collection and trade of scraps and used materials is well organized for generations.

Our durable material can be recycled repeatedly without any loss of performance. The production of new products coming from the virgin metals maintains the same quality and properties. All of the architectural copper products from Aurubis are manufactured by 100% recycled raw-material.

Copper production from secondary materials only requires a maximum of 20 percent of the energy needed to extract primary copper from ore and concentrates. Globally, this saves 100 million MWh of electrical energy and reduces Co_2 emissions by 40 million tonnes annually.

This contributes to the modern circular economy, promoting the efficient and environmentally friendly use of valuable resources, and contributing to raw material security.



Copper and human beings

Copper is an essential trace element.

Unlike many chemical products, its environmental impact is not assessed in the same way.

It is a natural element and an essential micro-nutritional substance in all living organisms. It is present in the earth's crust, in oceans, lakes and rivers.

Humans and other organisms acquire copper from their environments through air, water and soil.

It is vital to the health of humans, animals and plants and an essential part of the human diet.



Nordic Copper stands for individual architectural solutions, a long life cycle for buildings and a responsible legacy for future generations.

VM Building Solutions A reliable partner for roofs and façades.

VM Building Solutions is your preferred partner for high-quality copper and zinc products as well as high-quality EPDM waterproofing membranes.

VM Building Solutions is the **exclusive distributor of the Nordic Copper architectural products** all over the world with 14 different material and surface variants.

VM Building Solutions is the **world leader in the production of zinc for building**, selling zinc for roofing and façade applications in more than 30 countries under the international VMZINC[®] brand.

As a **European supplier of EPDM waterproofing membranes**, VM Building Solutions distributes a complete range of roof and façade membranes to building professionals throughout Western Europe.

 ** "We are proud to be the exclusive distributor of Nordic Copper. With 185 years' experience in zinc and 40 years' experience in EPDM,
VM Building Solutions is regarded as the benchmark and partner for roofing and façade professionals on the European market and beyond."

Hendrik Deraedt, Managing Director VM Building Solutions









Find out more on Nordic Copper.

VM Building Solutions Phone : 01992 921 300 vmzinc.uk@vmbuildingsolutions.com www.vmzinc.co.uk



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