NU-CORE®

REAL METAL
COMPOSITE PANEL
FAÇADE SOLUTIONS BY **NU-CORE®**

Nu-core® Stainless Steel Mirror Project: Cairns Botanic Garden Visitor Centre - Cairns Architect: Charles Wright Architects

Nu-core® Real Metals

Natural materials which last the test of time

Nu-core® Real Metal Composite Material blends the natural features of metal with the flatness and formability of composite panels at optimized weight, offering infinite design solutions with improved visual appearance in comparison to standard sheet metal. The bond between skin and core materials ensures high durability, stability and rigidity of Nu-core® Real Metal Composite panels.

Superior thermal insulation, sound dampening properties and lower thermal expansion coefficient are only some of the advantages of Nu-core® Real Metal Composite Materials in comparison to solid sheet metal.

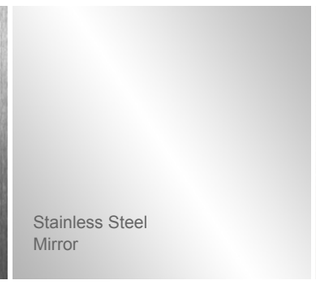
Nu-core® Stainless Steel Composite Panel
Innovative Nu-core® composite core technology with Natural Stainless Steel skin.

Group 1 Fire Rated A2.s1.d0 Fire Rated

Nu-core®
Real Value. Real Metal.

Technical Specifications	
Panel Thickness (mm)	4mm
Stainless Steel Skin Thickness (mm)	0.20mm (Dull, Brushed), 0.30mm (Dull, Brushed, Polished)
Back Skin Thickness (mm)	0.20mm (Dull, Brushed), 0.30mm (Dull, Brushed, Polished)
Available width (mm)	980mm, 1200mm
Length (mm)	3200mm (Standard), customized dimensions available on request
Grade	304, 316


Stainless Steel
Brushed


Stainless Steel
Mirror


Stainless Steel
YUS220M Titanium Bead Blast


Stainless Steel
Beadblasted (No.8)

Nu-core® Stainless Steel Composite Panels are composed of two Stainless Steel skins either side of the Nu-core® core material. Available in 304 or 316 grade Stainless, Dull Finish, Mirror Finish or Brushed Finish. Compared to Solid (3mm) Stainless steel, Nu-core® Stainless Steel (4mm) composite is equal in it's rigidity. This reduction in Stainless Steel, ensures lower energy consumption and CO_2 emissions during production of materials. Easy installation systems (40m^2 per day per person), reduce work period, finishing project quicker and reducing overall construction cost.

Nu-core® Stainless Steel can be installed with fasteners and extrusions made of aluminium, stainless steel or galvanized steel.
We recommend wearing long sleeve shirts and gloves when installing.

For more information refer to Nu-core® Fabrication Manual and Nu-core® Installation Methods brochure or contact Nu-core® Project Consulting Team.

Nu-core® Copper Composite Panel
Innovative Nu-core® composite core technology with Natural Copper skin.

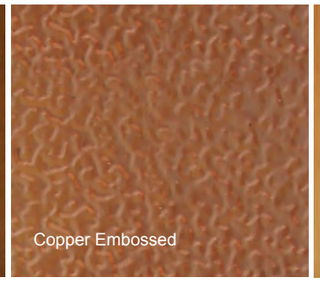
Group 1 Fire Rated A2.s1.d0 Fire Rated

Nu-core®
Real Value. Real Metal.

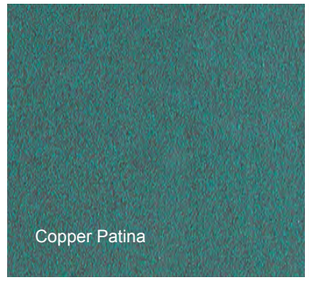
Nu-core® Copper Technical Specifications	
Panel Thickness (mm)	3mm, 4mm
Copper/Brass Skin Thickness (mm)	0.15mm, 0.20mm, 0.30mm, 0.55
Back skin (Al) Thickness (mm)	0.21mm, 0.30mm, 0.50mm, 0.75
Available width (mm)	600mm, 800mm (only Copper), 1000mm
Length (mm)	3200mm (Standard), customized dimensions available on request

Copper


Copper Natural

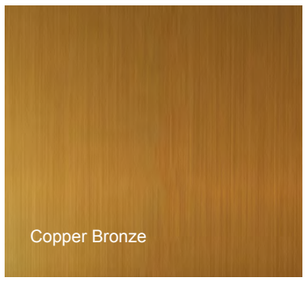

Copper Embossed


Copper Brushed


Copper Patina


Copper Weathered


Copper Brass


Copper Bronze

Copper is the most noble of metals and should always avoid being in contact with dissimilar metals, unless there is barrier between.
When dissimilar metals are in contact with each other in the presence of oxygen and moisture, the lower grade metal will corrode. Therefore, should only be installed with fasteners and extrusions made of stainless steel or copper. Fingerprints are quite visible on copper, to avoid this we recommend wearing long sleeve shirts and gloves when installing.

Special machining and fabrication guidelines need to be taken into consideration due to the unique metallurgical properties of copper.

For more information refer to Nu-core® Fabrication Manual and Nu-core® Installation Methods brochure or contact Nu-core® Project Consulting Team.

Technical Specifications	Alloy	Thickness (mm)	Width (mm)
Nordic™ Standard	Cu-DHP	0.3 - 4.00	1100
Nordic™ Royal	$CuAl_5Zn_5Sn$	0.5 - 1.50	1000
Nordic™ Bronze	$CuSn_4$	0.5 - 2.00	780
Nordic™ Brass and Weathered	$CuZn_{15}$	0.5 - 2.00	1000
Nordic™ Brass 30	$CuZn_{30}$	0.5 - 2.00	1000
Nordic™ Brown	Cu-DHP	0.5 - 1.50	1000

Nu-core
Real Value. Real Metal.

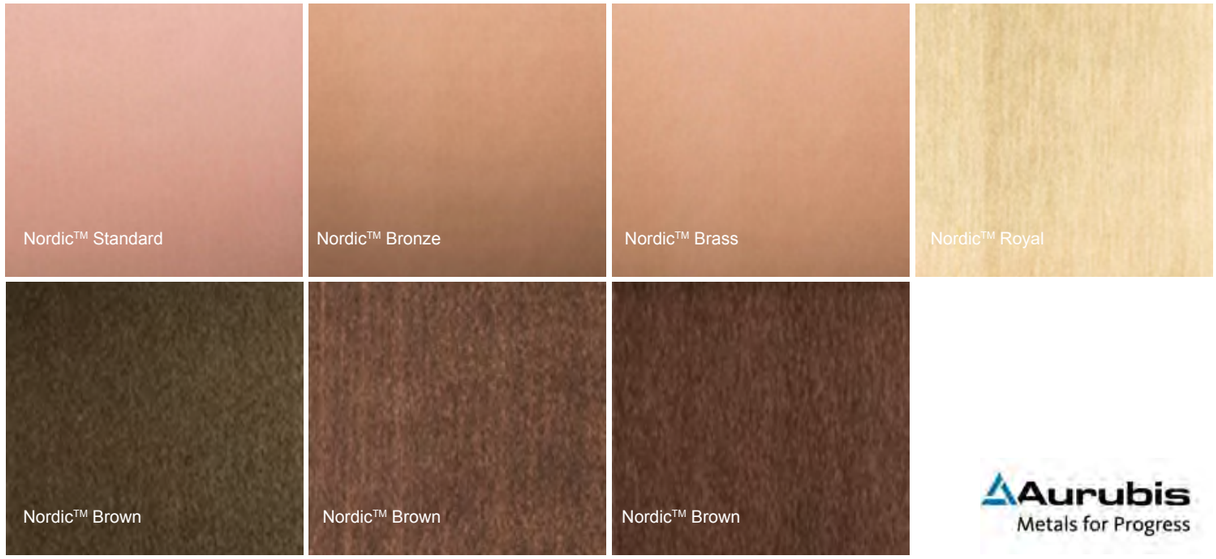
Nordic Standard™ is mill finish copper without any additional surface treatments carried out in the factory.
It has the traditional “bright” finish that develops and changes in the environment.

Nordic Bronze™ is an alloy of copper and tin with a similar color to Nordic Standard™ initially. When exposed to the atmosphere, the surface gradually changes to a reddish dark brown to a black shade.

Nordic Royal™ is an alloy of copper with aluminum and zinc, giving it a rich golden through-color that changeably incorporates a matte, golden-brown surface. It behaves differently from other Nu-core Aurubis copper products over time and does not develop a blue or green patina. Exceptional cases are coastal and humid regions.

Nordic Brass™ is an alloy of copper and zinc with a distinctive golden yellow color. When exposed to the atmosphere, the surface begins to darken within weeks and can change to a dark brown in around a year. A weathered brownish surface is also available to provide the same oxidized brown surface that otherwise develops over time in the environment

Nordic Brown™ products are pre-oxidized at factory to provide the same oxidized brown surface immediately that otherwise develops over time in the environment. The thickness of the oxide layer determines the color: both Nordic Brown™ Light and the darker Nordic Brown™ versions are available. Nordic Brown™ products are useful to minimize hand and other construction marks which can occur for a short time after installing “bright” standard copper.



Aurubis
Metals for Progress

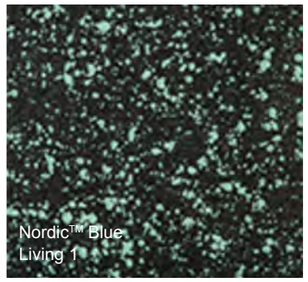
Technical Specifications	Alloy	Thickness (mm)	Width (mm)
Nordic™ Blue	Cu-DHP	0.5 - 1.50	1000
Nordic™ Green	Cu-DHP	0.5 - 1.50	1000

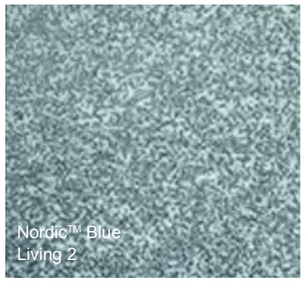
NU-CORE®
Real Value. Real Metal.

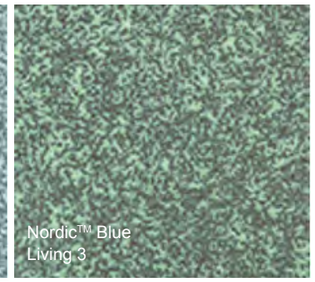
Nordic Green™ and Nordic Blue™ products offer designers unparalleled design freedom and the ability to determine the type and intensity of green or bluish patina for each project with choices of “Living” surfaces. The factory process can be accurately controlled so that, as well as the solid green or blue patina color, other intensities of patina flecks can be created, revealing some of the dark oxidized background material. Special individual levels of patination can be developed to meet the design requirements or to match historically patinated copper on existing buildings.

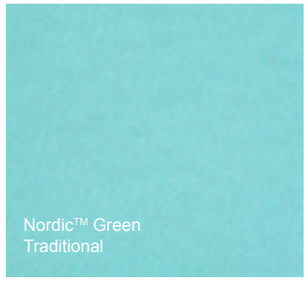
Mineral-based Blue: In marine climates, the natural copper patina contains some copper chloride, giving it more of a blue color, which is emulated with Nordic Blue. Brochantite is a light blue color and Aurubis’ Nordic Blue™ patination is 100 % brochantite. By its nature, Aurubis’ pre-patination process encourages the continuing formation of natural patina by releasing copper sulfate to react with the copper below. As a result, just like natural patina, Nordic Green™ and Nordic Blue™ undergo continuous changes through environmental exposure dependent upon local atmospheric and rainfall conditions.

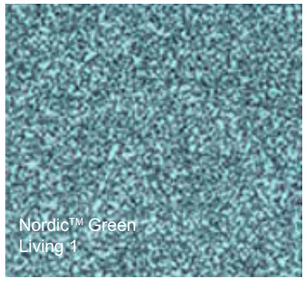
The material is easily bent and formed, and there are no limitations on the length of pre-patinated copper sheet or strip because whole coils are treated on the production line, not just limited size sheets.

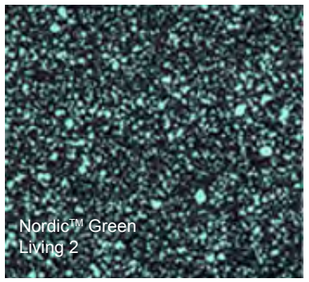












Aurubis
Metals for Progress

Nu-core® Zinc® Composite Panel
Innovative Nu-core® composite core technology with superior Zinc materials from Spain.

Group 1 Fire Rated A2.s1.d0 Fire Rated

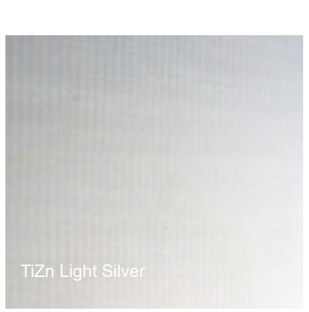
Nu-core®
Real Value. Real Metal.

Technical Specifications	
Panel Thickness (mm)	4mm
Zinc Skin Thickness (mm)	0.65mm
Available width (mm)	500mm, 600mm, 650mm, 670mm (Standard); 1000mm (Conditions apply)
Length (mm)	2000mm, 3000mm, 4000mm, max 6000mm

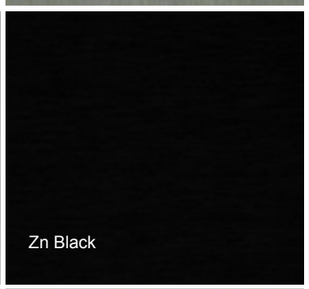
Zinc

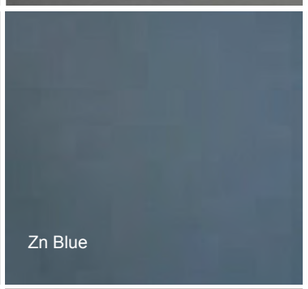

Zn Slate

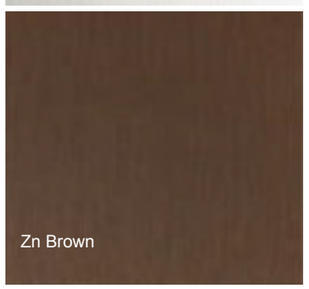

TiZn Silver

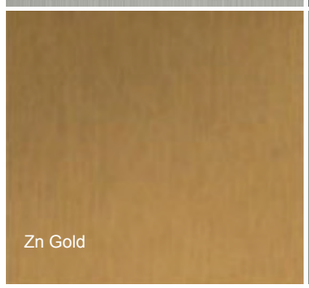

TiZn Light Silver

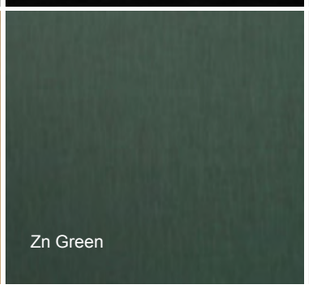

Zn Natural

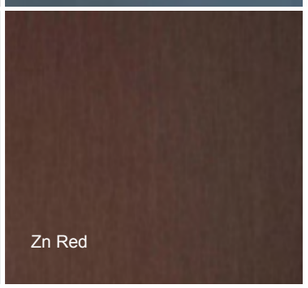

Zn Black


Zn Blue


Zn Brown


Zn Gold


Zn Green


Zn Red

Nu-core® Zinc Rainbow is a rolled zinc-titanium, which meets the European standard EN988, manufactured from Nu-core® Zinc Slate® by applying mineral pigments. The 35µm organic coating provides additional anti-corrosion protection.
Nu-core® Zinc® Composite Panel can be fabricated on site with hand held machinery allowing accuracy in measurements,
according to real conditions. Easy installation systems (40m² per day per person), reduce work period, finishing project
quicker and reducing overall construction cost.

Nu-core® Zinc® can be installed with fasteners and extrusions made of aluminium, stainless steel or galvanized steel.
We recommend wearing long sleeve shirts and gloves when installing.

For more information refer to Nu-core® Fabrication Manual and Nu-core® Installation Methods brochure or
contact Nu-core® Project Consulting Team.

DISCLAIMER:

Nu-core® Industries has taken due care to prepare the enclosed literature to assist the end user. Nu-core® Industries is not liable for any errors and accepts no liability for information which may be misleading or misinterpreted.

NU-CORE®
Real Value. Real Metal.

HEAD OFFICE

9A DAVIS ROAD
WETHERILL PARK
SYDNEY 2614 AUSTRALIA

T: (+61) 2 9756 0439
E: info@nu-core.com.au

www.nu-core.com.au

Intertek

smartfix®

reddot design award

Printed on 100% recycled stok.