### **BUILDING** SOLUTIONS $\mathbf{V}$

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### VMZINC

### VM BUILDING SOLUTIONS

# Ever Evolving Ever Inspiring Metal facade Solutions

#### Introduction

The VM Building Solutions brand name represents a full range of Metal Products which includes Copper, Brass, Aluminum and Weathered Steel in the form of manufactured façade systems. This international brand belongs to the buildings product unit of the Fedrus International.

This extensive range of products and systems reflects our wealth of professional and practical experience and the variety of climate and standards that VM Building Solutions is designed to meet worldwide.

Shaping facades according to the installation method, Copper, Brass, Aluminum and Weathered Steel adapts as easily to classic designs as to contemporary ones, always adding its special touch of elegance. Unique in its diversity, VM Building Solutions offers a wide range of surface finishes or colors as per architectural design intent.

Why VM Building Solutions should be a material of choice for your next roof and facade project?

#### **Creating Emotions**

Inside every architect is an artist and their work, like any work of art, should stimulate emotion. This is far from simple as ever increasing regulatory requirements need to be reconciled with the creativity needed to generate the intended reaction. Of course the building envelope is one of the main ingredients of this emotion.

#### **Design Integration**

Design integration involves unostentatiously fitting the building into its environment, as though it had always been there. In urban environments, architects are often confronted with historical neighborhoods where they wish to maintain the existing harmony. Designers want envelopes that will enable them to create this balance successfully.

#### **Preferring Simplicity**

While some architects favor complex forms, others delight in simplicity. Simple, however, is not a synonym of easy. Contrary to a grand gesture, the aim is to convey discretion, modesty and conviviality. Simplicity is, as often as not, only in appearance and achieving it requires art and delicacy.

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#### Playing on contrasts

Colors, volumes, materials, transparency, opposing styles...Facades express their individuality and architects have a wealth of choice when composing them. Facades play on originality by combining materials, contrasting with existing city scape, or breaking up space. There are no limits so long as the harmony of forms and materials is respected.

#### Daring to innovate

Innovation is a key word in the building industry. This sector is constantly innovating and creating new architectural trends using materials to form the most complex shapes imaginable - circular, angular, overhanging, concave and convex - the scope of imagination seems to know no boundaries. Each building is a prototype where techniques must adapt to the architect's design.

#### Copper

Copper roofs are often one of the most architecturally distinguishable features of these structures. Today, architectural copper is used in roofing systems, flashings and copings, rain gutters and downpours, building expansion joints, wall cladding, domes, spires, vaults, and various other design elements. The history of copper in architecture can be linked to its durability, corrosion resistance, prestigious appearance, and ability to form complex shapes. For centuries, craftsmen and designers utilized these attributes to build aesthetically pleasing and long-lasting building systems.

#### Brass

Brass. An alloy of copper and zinc, brass has a number of applications in the construction industry. It can be used exclusively for its stunning gold-like decorative look in buildings. Brass often has a bright gold appearance, however, it can also be reddish-gold or silvery-white. A higher percentage of copper yields a rosy tone, while more zinc makes the alloy appear silver. Brass has higher malleability than either bronze or zinc.

#### Aluminium

Aluminium is widely used in building because of its intrinsic properties of lightness and corrosion resistance. Aluminum is used in external facades, roofs and walls, in windows and doors, in staircases, railings, shelves, and other several applications. With a high strength to weight ratio, aluminum offers almost the same strength as steel at only about half of the weight. Because of this, aluminum alloys are commonly used in high-rise structures and skyscrapers.

#### Weathered Steel

Weathering steel is extremely resistant to corrosion caused by weather and other atmospheric conditions. Once the coating is gone, the steel ionizes, which makes it so the steel does not continue to rust and you won't have to worry about the panel being rusted all the way through. The base layer of steel will last just as long as other finishes (so you can expect your roof or siding to last between 40 and 70 years). Weathering steel creates an unbelievable, one-of-a-kind look. As the finish is exposed to different types of weather, it begins to rust into a gorgeous, rustic look over time.

#### Bronze

The term Architectural Bronze describes a metal alloy of copper, zinc and various other metals that contribute various qualities to the mix. The high proportion of the copper constituent imparts corrosion resistance and durability and the addition of manganese contributes tensile strength. Bronze. Advantages: Bronze is an alloy consisting mainly of copper but the addition of other metals (usually tin) produces an alloy much harder than plain copper. Bronze resists corrosion and metal fatigue better, and conducts heat and electricity, better than most steels.





VMBSO COPPER VMBSO Phosphorous deoxidized copper ( DHP-Copper)

Application – Roofing, Facade & Interiors Thickness – 0.7 mm to 1.5 mm System – Cusomised panels



Characteristics · Long Lift-time Formability  $\cdot$  Maintenance free •Temperature and weather resistant  $\cdot$  Natural beauty and variable surfaces  $\cdot$  Durable and fire safe  $\cdot$  Copper has low embedded Co2













Nordic Standard



Nordic Green Living2

Nordic Blue Living3



Nordic Brown





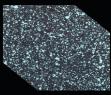
Nordic Green Traditional



Nordic Blue Traditional



Nordic Brown Light



Nordic Blue Living 2



Nordic Green Living1



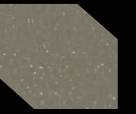
Turquoise

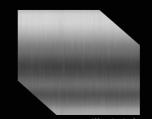


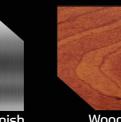






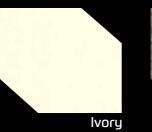






Texture 2500

Mill Finish



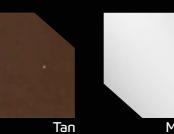


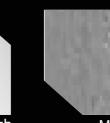


Application – Roofing, Facade & Interiors Thickness – 0.7 mm to 3 mm System – Cusomised panels

### Characteristics

- · Long service life non-corrosive!
- · Fully recyclable
- · Easy to work with even in low outdoor temperatures
- · Easy to work with, strong load-bearing capacity
- $\cdot$  Alloy, mechanical properties and coating are coordinated with the folding technology
- · Non-combustible (A1)





Mill Finish

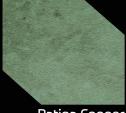
## VM BUILDING SOLUTIONS



Wooden Finish







Patina Copper





Metal Grey





Champagne





Semi Glossy 7032







VMBSO Bronze An alloy of copper and tin.

Application – Facade & Interiors Thickness – 0.7 mm to 2 mm System – Customized panels

#### Characteristics

Weathers to stable dark chocolate brown finish.





Nordic Brass

Nordic Brass Weathered

Nordic Bronze



Copper & Zinc alloy with a distinctive golden yellow color.

Application – Facade & Interiors Thickness – 0.7 mm to 1.5 mm System – Cusomised panels

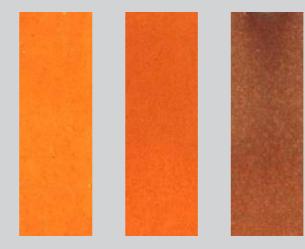
**Characteristics** Weathers to dark brown finish.





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The Patina of weathered steel evolves over time. It Changes from its dark grey mill finish to an orange-reddish brown colour, reaching its final dark purple-brown coloration over the course of time. After some time, there is no coloration change except perhaps for a deep dark brown. The evolution of color in Corten is shown on the image below.





0.5 months 1.5 months

Weathered

Maple Glossy





VMBSO Weathered Steel Weathering steel complying to Cortern A specification.

Application – Facade Thickness – 1 mm to 4 mm System – Customized panels

### **Characteristics**

- Natural weathering with a rough and granule texture.
- Rustic appearance
- Corrosion Resistance
- Non combustible fire retardant
- High strength and impact resistance



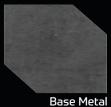






Cider Glossy





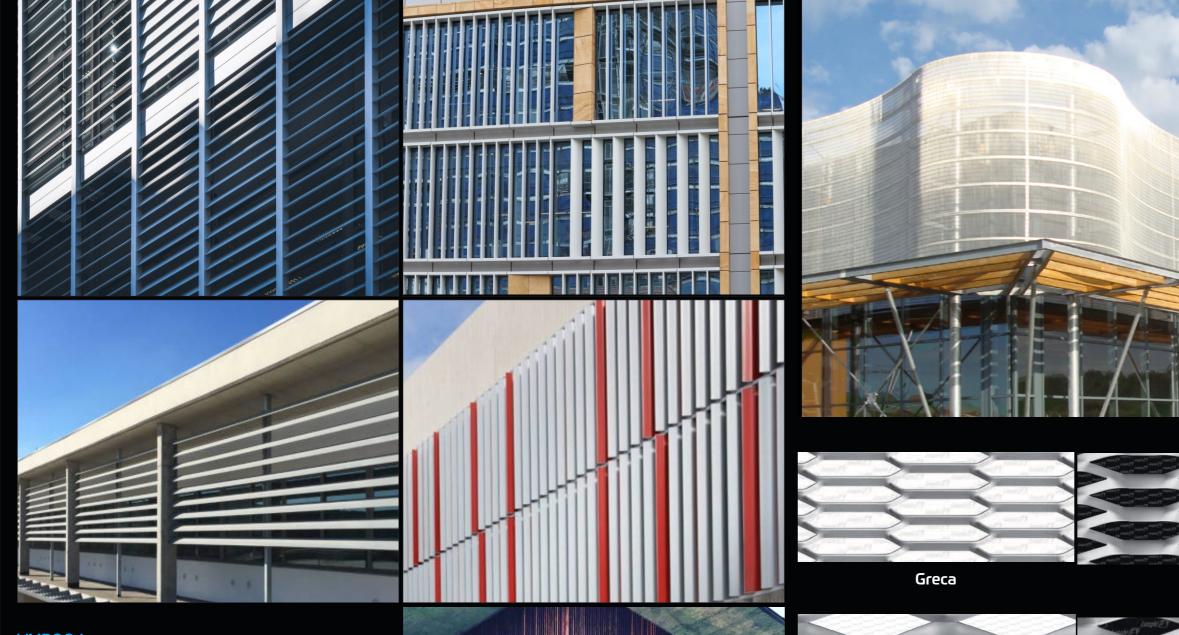


Clay Matt





and Sealed



#### VMBSO Louvers

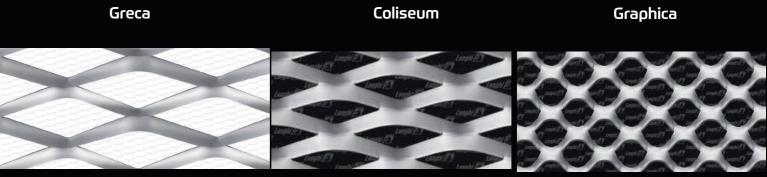
#### Architectural grade aluminum alloy highly corrosion resistant

Application – Facade, Sunshading & Ceiling Thickness – 0.5 mm to 2 mm System – Cusomised panels

#### Characteristics

- Lightweight
- Lowers maintenance requirements
- Versatile
- Visually-appealing
- Improved insulation
- Durable
- Eco-friendly





Prisma

RB 65

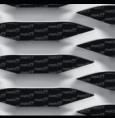
### VMBSO Expanded Metal Mesh

#### Architectural grade aluminum alloy highly corrosion resistant

Application – Application – Facade, Sunshading & Ceiling Thickness – 1.5 mm to 3 mm System – Cusomised panels

## VM BUILDING SOLUTIONS







TAU70

#### Characteristics

- · Lightweight and high bearing capacity.
- · Offer a stereo illuminative effect.
- · Good surface luster & breeziest.
- $\cdot$  Tonal harmony with the building design.
- $\cdot$  Easy to install and maintenance free.
- · Complete textures, finishes and lasting colors.



#### VMBSO Fluted Profile

Architectural grade aluminum alloy highly corrosion resistant

Application – Facade & Interiors Thickness – 1.5 mm to 3 mm System – Customized panels

#### Characteristics

- Leak-proof
- Durability
- Easier installation
- Reduced environmental impact
- Low Maintenance
- Superior energy conservation.





### **Techinical Assistance**

At VM Building Solutions our commitment goes much further than the delivery of quality goods. That is why we work closely with all those involved, starting from the initial idea right down to the finished building.



For each individual customization, every request is specifically examined by the VM Building Solutions teams to provide a comprehensive solution to suit each specific situation.

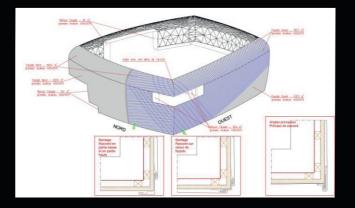
#### **TAILORED SUPPORT**

At each major stage of the project, the VM Building Solutions teams provide support for reflection and development with numerous services.

They can provide upstream confirmation of feasibility regarding the desired customized solutions, taking local regulations into account. They can also provide an initial budgetary envelope to ensure rigorous design of the future

building.

VM Building Solutions can produce prototypes or mock-ups to facilitate decisions or validate principles of installation.



VM Building Solutions works in close partnership with architects, providing support to ensure their building can be customized as simply as possible.

# **BUILDING** SOLUTIONS

#### **Design Assistance**

VM Building Solutions employs a team of architects, engineers and CAD technicians to help you keep one step ahead in the development of increasingly daring and sophisticated building envelops. Our team will assist clients to design their roofing or facade project and will stimulate their creativity by providing innovative solutions that respect budgetary requirements and the relevant standards.

Different services are provided on request

- > Feasibility analyses Of even the most complex projects
- > Recommendations for working drawings
- > Architectural assistance for the development of innovative concepts
- > Review Of shop drawings
- > Library of CAD drawings
- >Quantity estimates



### ADJUSTED LOGISTICS

VM Building Solutions experience of managing these types of project makes it possible to provide support to installers and ensure optimum organization of on-site logistics: sequenced delivery, specific packaging, numbering of parts. assembly plan, etc.