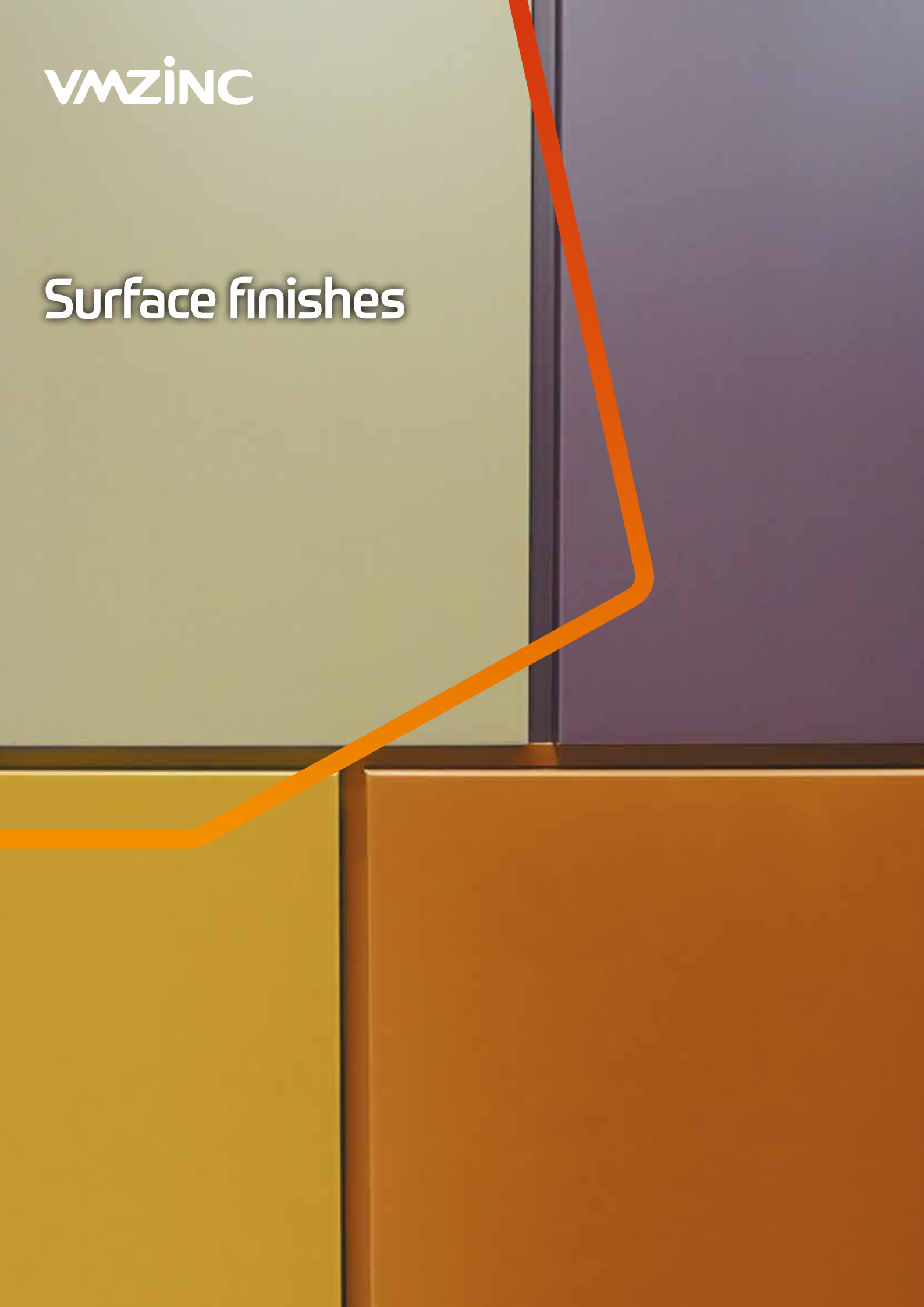


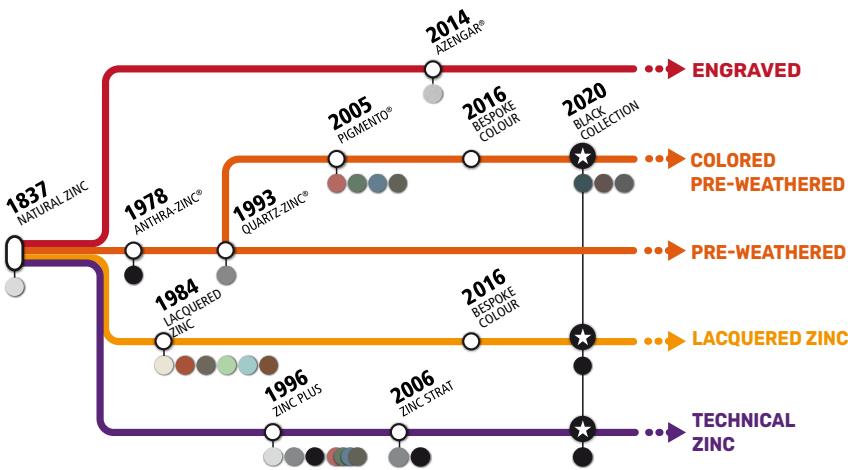
VMZiNC

Surface finishes



Unique diversity of surface finishes

VMZINC offers a variety of surface aspects which blend with wood, brick, cement, glass, stone and other materials in complete harmony. This warm, luminous, highly expressive material responds freely to the play of light, its colours shifting to reflect the changing hues of the sky.



A pioneer in surface aspect treatments, VMZINC® is still putting its know-how at the service of a colour offer compliant with the European EN 988 standard. VMZINC® is produced from an alloy that essentially contains high quality zinc as per the EN1179 standard and small quantities of copper and titanium. The copper hardens the alloy and increases its mechanical strength. The titanium limits its deformation. It is compliant with the European EN 988 standard and the PREMIUMZINC quality label which exceeds the standard’s requirements.

NATURAL ZINC



ENGRAVED ZINC

> AZENGAR®



PRE-WEATHERED ZINC

> QUARTZ-ZINC®



> ANTHRA-ZINC®



LACQUERED ZINC

> BILACQUERED

Stone white



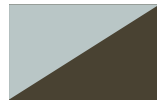
Tile red

Copper green



Macao brown

Blue sky



Slate grey

> LACQUERED

Gold lacquered zinc n°691



Gold lacquered zinc n°1036



COLOURED PRE-WEATHERED ZINC

> PIGMENTO®

Green



Red



Blue



Brown



> BESPOKE COLOURS

VMZINC® also proposes bespoke colours: contact us.

BLACK COLLECTION

PIGMENTO® charcoal blue



Midnight black



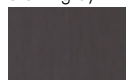
PIGMENTO® grey



Ink black



PIGMENTO® storm grey



TECHNICAL ZINC

To use zinc for warm roofing or in extreme climate conditions, VMZINC® proposes a technical offer composed of ZINC PLUS and ZINC STRAT, of which the underside is protected by a highly corrosion-resistant lacquer, a major component of our Compact roof and Structural roof systems.

Natural zinc

Original zinc

Aesthetic

Of a shiny metal aspect, VMZINC® natural zinc gets its natural patina (semi-dull light grey) after from six months to two years depending on the surrounding environment and its location on the building. It is the historic roofing material.

Technique

Natural zinc is a rolled zinc alloyed with copper and titanium, produced from Z1 quality zinc as per the European EN 1179 standard, that contains at least 99.995 % of zinc.

Technical specifications

Chemical composition	<ul style="list-style-type: none">• copper: 0.08 % minimum and 1.0 % maximum• titanium: 0.06 % minimum and 0.2 % maximum• aluminium: 0.015 % maximum• Z1 grade zinc (*): the remainder <p>Z1 grade zinc is compliant with the chemical standard (EN 1179)</p>
Mechanical specifications	<ul style="list-style-type: none">• tensile strength R_m (SL): 150 N/mm² minimum• elongation at break A_{50mm} (SL): 35 % minimum• yield strength at 0.2 % $R_{p0.2}$ (SL): 100 N/mm² minimum• permanent elongation in the creep test (for 1 hour at a load of 50 N/mm²) (SL): 0.1 % maximum• folding at 180°: no cracks on the fold (fold parallel to the rolling direction)
Physical properties	<ul style="list-style-type: none">• density: 7.2 kg/dm³• thermal expansion coefficient (SL): 22×10^{-6} m/(m.K)• melting temperature: 420 °C• recrystallisation temperature: 300 °C• thermal conductivity: 110 W/(m.K)• Electric conductivity: 17 MS/m <p>(SL): parallel to the rolling direction</p>

The benefits

- > Zinc is essential for rainwater systems and accessories for all types of materials.
- > Zinc of parisian roofs



Light grey zinc

Aesthetic

AZENGAR® is the lightest, dullest and roughest zinc. It harks back to the old Parisian roofing zinc. It gives a timeless touch to the realizations.

Treatment

The innovating processing modifies both the surface roughness of the natural zinc as well as its colour.

Technical specifications

Roughness (as per ISO 25178)	<ul style="list-style-type: none">• Sa < 3 µm• Sz < 25 µm
Gloss (60°)	< 15 GU
Colour	55 < Y < 60 78 < L < 82

The benefits

- > Eco-design approach, low impact on the environment
- > Heterogeneous surface with outcrops
- > Surface insensitive to finger marks



QUARTZ-ZINC®

Satin and luminous velvet grey zinc and mouse grey zinc

Aesthetic

QUARTZ-ZINC® has a satin grey and luminous finish, similar to natural zinc with a patina of several months.

Treatment

The surface treatment it receives in the factory is a treatment to chemically convert the superficial crystalline structure of the metal into zinc phosphate.

Technical specifications

Type	Quadrihydrated zinc phosphate (hopeite)
Weight	35 mg/dm ²
Thickness	1 micrometre approx.
Solubility	Insoluble in water
Colour	Luminance Y = 25 approx (light grey)

The benefits

- > The colour changes very little over time
- > No specific maintenance
- > Available for rainwater systems and finishes.



ANTHRA-ZINC®

Dark zinc, close to the colour of slate

Aesthetic

This is an anthracite zinc that is a good match with slate, with which it is often combined. Its thin organic coating protects it and gives it a unique aesthetic.

Treatment

The surface treatment it receives in the factory, a pre-patina, is a treatment to chemically convert the superficial crystalline structure of the metal into zinc phosphate. The applied Thin Organic Coating, an acrylic resin, is between 1 and 2 micrometres thick.

Technical specifications

Type	Quadrihydrated zinc phosphate (hopeite)
Weight	70 mg/dm ²
Thickness	1.5 micrometre approx.
Solubility	Insoluble in water
Colour	Luminance Y = 4.5 to 7.5 approx (dark grey)

The benefits

- > Elegant dark colour that does not alter
- > Perfect match with natural slate



Coloured zinc

Aesthetic

These colours combine the natural pre-patinated zinc with changing reflections of coloured shades – brown, green, red, blue.

Treatment

It is produced from the QUARTZ-ZINC® substrate to which mineral pigments are added.

This treatment combines chemical conversion of the zinc's metal surface (conversion of the zinc to zinc phosphate) and an organic coating (specific treatment colouring) applied in two coats of a total thickness of 35 µm and a high colour stability.

Technical specifications

Type	Quadrihydrated zinc phosphate (hopeite)
Weight	35 mg/dm ²
Thickness	1 micrometre approx.
Solubility	Insoluble in water

The benefits

- > The answer to modern colour trends with natural and rough shades
- > Matter and light effects
- > Combination with other building materials and other pre-patinated products in the range



PIGMENTO[®] on demand

Coloured zinc

Aesthetic

PIGMENTO[®] has an infinite number of varied colour shades.

Treatment

The treatment is the same as for PIGMENTO[®]

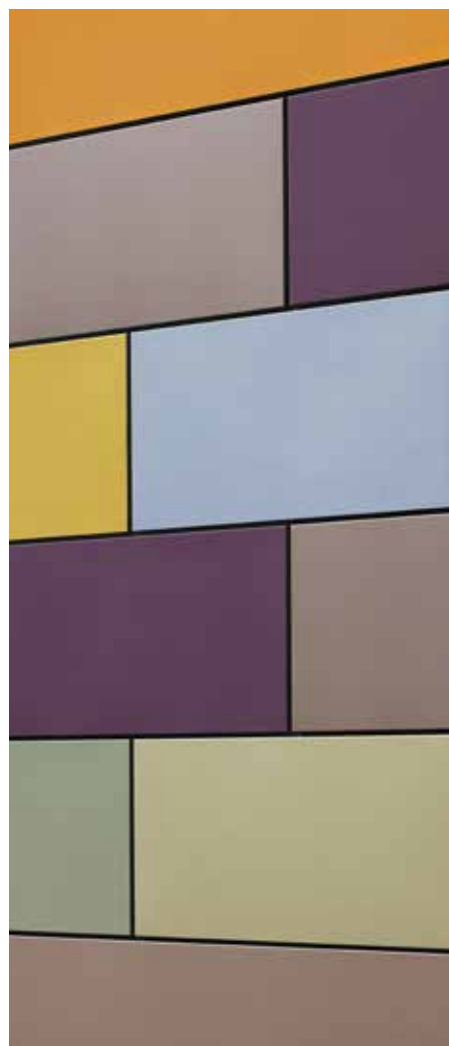
Technical specifications

Thickness: 0.70 - 0.80 - 1 mm

Number of ordered m²: minimum 3 tonnes.

The benefits

- > Multitude of coloured shades
- > Creation of a colour for a single project



Lacquered zinc

Satin zinc

Aesthetic

The zinc is lacquered on both sides for 6 colours that offer new modern aesthetic solutions. Two new gold colours complete this lacquered offer.

Treatment

The treatment consists in applying a continuous hot polymerised paint system on both sides. It is carried out in two phases:

- Application of a first coat of polyurethane resin about 5 microns thick,
- Then application of a coat of high durability polyester resin finish about 20 microns thick.

> BILACQUERED

Stone white



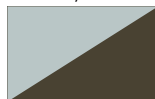
Tile red

Copper green



Macao brown

Blue sky



Slate grey

> LACQUERED



Gold lacquered n°691



Gold lacquered n°1036



The benefits

- > Intense colours
- > No scaling or traces of rust
- > New complementary aesthetic solutions



Black collection

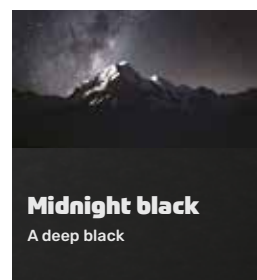
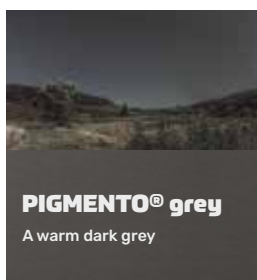
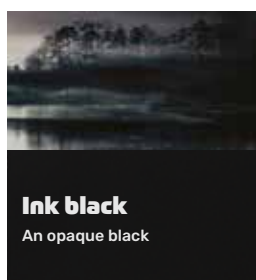
Colour of night

Aesthetic

These colours – dark grey with a touch of blue, opaque black, dark grey with a hint of red, dark grey and deep black – take on many tones depending on the season, the time of day and the weather.

Treatment

A lacquered zinc, three new PIGMENTO® and an ANTHRA-ZINC® STRAT compose this new range.



The benefits

- > Subtle pallet of shades
- > Colours with architectural values



Technical zinc

Zinc PLUS and Zinc STRAT

Treatment

Zinc PLUS

Natural/AZENGAR®/QUARTZ-ZINC®/ANTHRA-ZINC®/PIGMENTO®

The underside is coated with a polyurethane primary coat and a finish coat of organic polyurethane-polyamide compound (total thickness for both coats: about 60 micrometres).

Zinc STRAT

QUARTZ-ZINC®/ANTHRA-ZINC®

It is covered with a clear primary used as a tack coat, then a colourless 20 micrometre organic finish coating. A 12 micrometre varnish is applied to the non-commercial side.

The benefits

- > Additional protection from corrosion
- > Use in warm roof



Surface finishes

The choice by a professional of a VMZINC® product adapted to the building environment must include any possible use constraints depending on the surface appearance being considered.

Each zinc surface appearance may change aesthetically over time, differing with the type of environment (seaside, high UV exposure, snow, etc.) and depending on the applications (roofing, facade, rainwater drainage, unrinsed surfaces).

Marks may appear on surfaces not regularly rinsed by rainfall or maintenance.

These visible, durable marks can alter the aesthetic perception of the product. They are not a deterioration of the material and have no effect on its service life.

If necessary, we recommend contacting VMZINC® services to obtain further information.

All types of environment: care should be taken in zones directly subject to sea spray (seaside), the application of zinc on parts of the building not rinsed by rainwater or by maintenance is not recommended as marking can appear. These marks have no effect on the intrinsic qualities of the zinc or its durability, but create an aesthetic disorder.

