# AGORA



SHAPING ROOFS

Viewing buildings from above has become increasingly common in recent times. Beside the possibilities offered by satellite imagery websites, architecture often combines tall and lower volumes, with the lower building's flat roof viewed as a façade from taller ones.

building.

Using the same unique technology as the groundbreaking Riverclack®, the stylish new Riverclack® Agora metal roof system gives a smooth, sophisticated flat look finish to your building's vital fifth façade.



The concept of the roof as a "fifth façade", first introduced by Le Corbusier, is now more relevant than ever: whether sloped or flat, roofs are a significant part of the exterior aesthetic of a

# HIGHLIGHTS

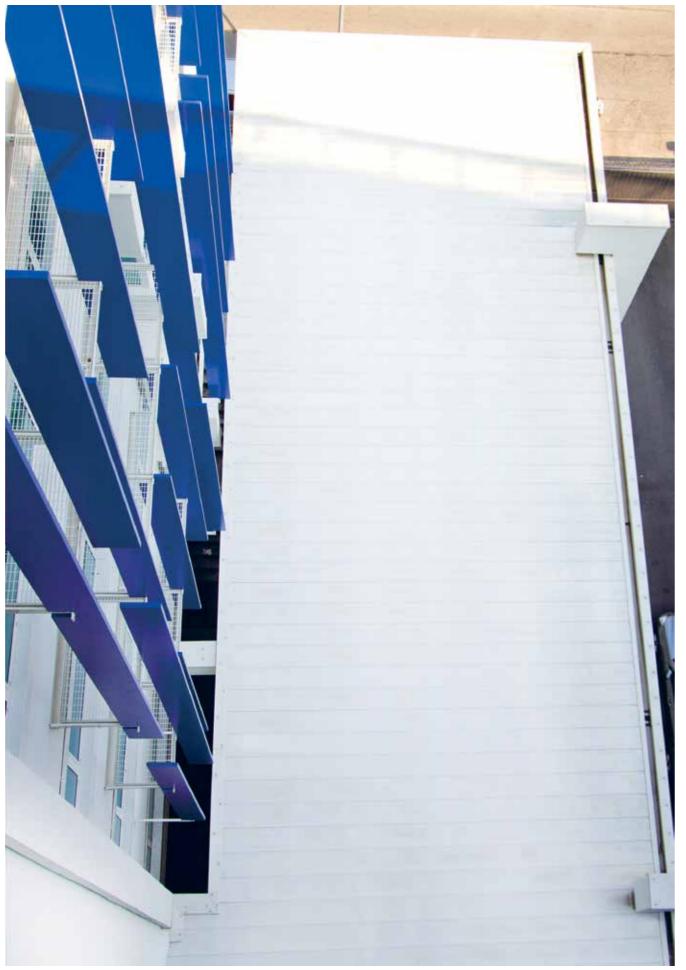
The perfect finish for a One solution for the wi Agora aesthetics rivero

# **KEY FEATURE**

## A PROVEN SYSTEM

Key features Ease of installation Solid engineered clips The drainage channel/ Sheet width/ 405mm t Self bending and taper On-site roll forming A select choice of seler Non-coated material fi Color matters

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all 5 facades whole building envelope vrclack water-tightness	05 09 11
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s I/ a warranty of watertightness n the perfect fit for roof and facade ered sheets lect metals	15 16 18 19 20 21 21 22
finishes – the finishing touch	23 24



# THE PERFECT FINISH FOR ALL 5 FACADES

Whatever your perspective, Riverclack® Agora presents the perfect finish, even when your roof is totally flat. The smooth finish and wide range of materials and coated surfaces in which Riverclack® Agora is available means it both fits in and stands out in any visual context. The ideal modern façade.



FOOD INDUSTRY / WAREHOUSE AND OFFICE BUILDING / TEOLO / ITALY



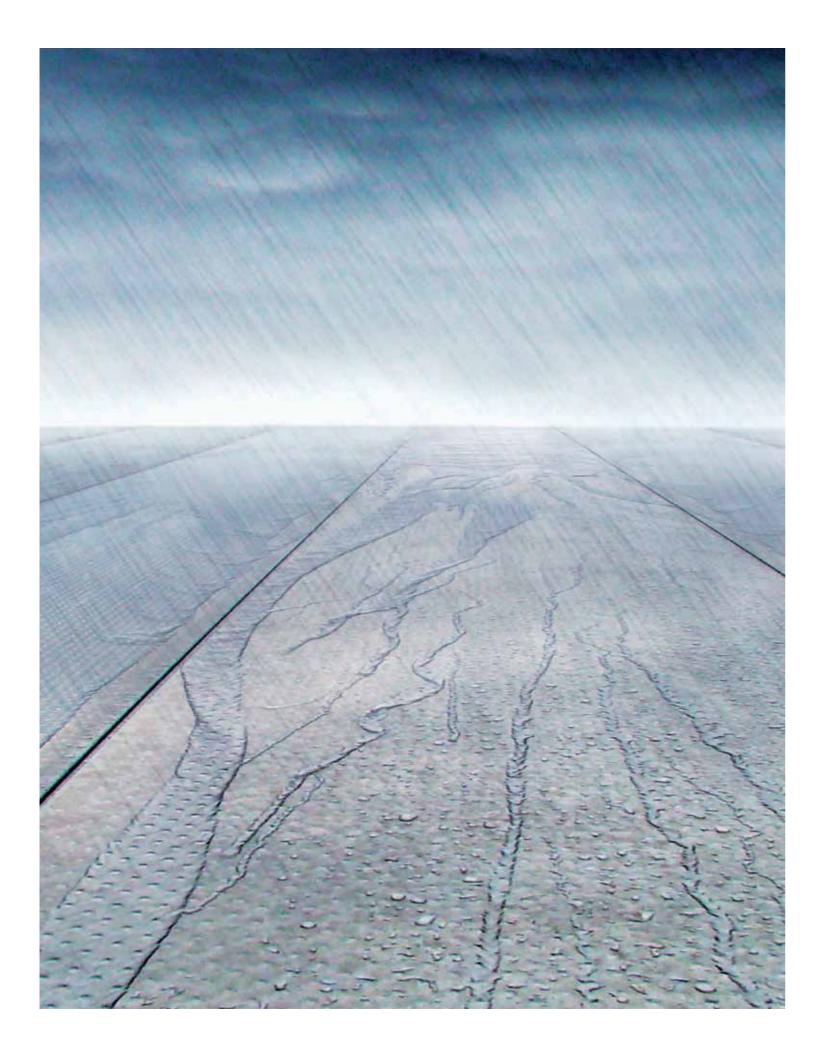
FOOD INDUSTRY / WAREHOUSE AND OFFICE BUILDING / TEOLO / ITALY



# **ONE SOLUTION** FOR THE WHOLE BUILDING ENVELOPE

Originally designed for roof applications, Riverclack<sup>®</sup> Agora works equally well aesthetically and technically as a façade solution, for which exactly the same configuration is employed. The custom-length sheets allow to you create smooth façades of continuous elements or exciting designs using shorter lengths in vertical, horizontal or diagonal designs.

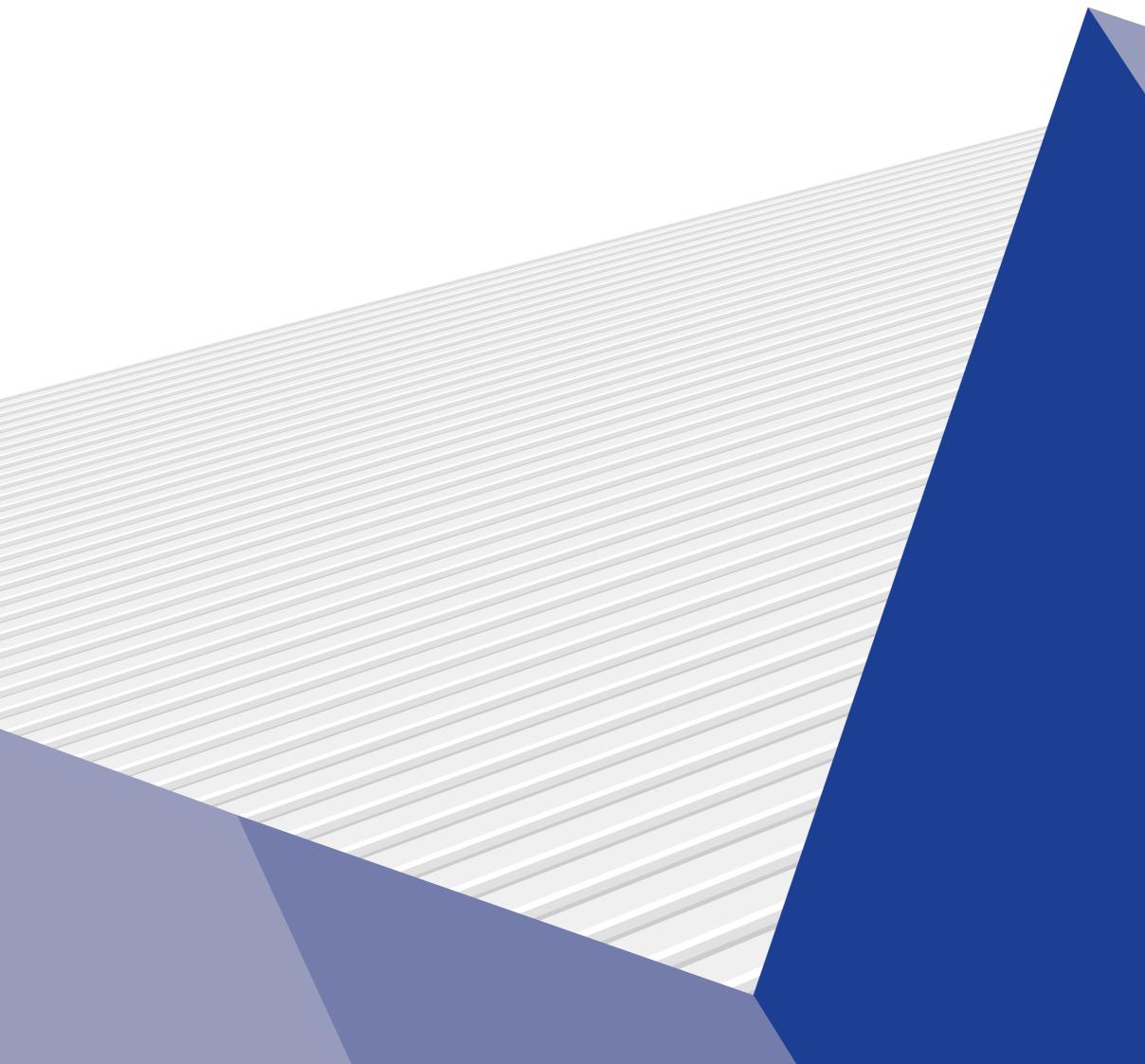




# AGORA AESTHETICS RIVERCLACK WATER-TIGHTNESS

Riverclack<sup>®</sup> Agora uses the same watertight drainage channel technology as the tried and tested Riverclack<sup>®</sup>. This means it can be used on slopes as low as 0.5% after steel work deflection at panel end. And just like Riverclack, it can be totally submerged in water with no risk of leaks into the building. The drainage channel and high tensile geometric locking action system are incorporated underneath the external surface level. So only the smooth, flat, aesthetically appealing exterior is visible to the viewer.





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# A PROVEN SYSTEM

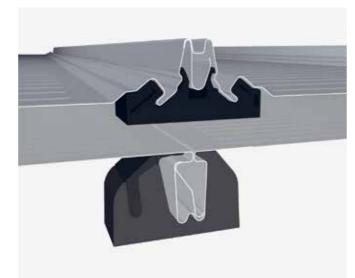
# AGORA KEY FEATURES

The Riverclack® Agora secret-fix metal roof system meets the same exceptional technical standards as Riverclack®, a product that has proven itself the world over in all the most extreme weather conditions. Hardly surprising because it is the same Riverclack® system, but then upside down. So you benefit from the same key characteristics and features: THE JUNCTION BETWEEN TWO ADJOINING SHEETS FEATURES A DRAINAGE CHANNEL THAT ELIMINATES ANY RISK OF LEAKS INTO THE BUILDING

WITH ITS UNIQUE PERFORATION-FREE LOCKING ACTION, THE SYSTEM IS INSTALLED BY FOOT PRESSURE ALONE. SO NO NEED FOR SPECIALIST INSTALLATION MACHINES

THE METAL SHEETS CAN BE ROLL-FORMED ON-SITE, REMOVING THE NEED FOR END-LAPS ON LONG SLOPES

AVAILABLE IN THE AMAZING ALUMINUM ALLOY 5754 AS THE BASE MATERIAL, ALONGSIDE THE OPTION OF OTHER SELECT METALS



# TOTALLY VERSATILE

The system can be employed equally effectively as roof covering or façade cladding.

# **FULLY WATERPROOF**

Thanks to its unique gasket-free drainage joint, the roof system is fully watertight even when completely submerged in water.

# PERFORATION-FREE LOCKING SYSTEM

Riverclack Agora's secret-fix locking system makes no perforations anywhere on the entire roof surface, and allows for free thermal expansion.

# DURABLE

Select Metals such as Aluminum, Copper and Stainless-Steel are used in combination with the roof system's own inherent reliability. All metals are 100% recyclable.



# WALKABLE

Thanks to the temper of the metals used, foot traffic is possible without inflicting any permanent deflection, even after countless heavy-footed trips across its surface.

# **FAST TO INSTALL**

Installation is quick and easy, and pre-assembly of the clips is not necessary.

# **COST-EFFECTIVE**

Long-life, low maintenance and rapid installation make Riverclack Agora cost-effective for big and small projects alike.

# **EASE OF** INSTALLATION

No installation machinery, no drilling. Riverclack<sup>®</sup> Agora has the same easy and fast installation as Riverclack<sup>®</sup>. With simple foot pressure, the profile clicks into the purposebuilt resin clip.

The clip is first snap-locked to the Riverclack® Agora side edge and fixed by two screws to the structure beneath. The movable appendix of the clip is then pushed into locking position along with the next sheet.

The speed with which you install Riverclack® Agora can help you achieve major savings during construction and helps deliver shorter project completion times.

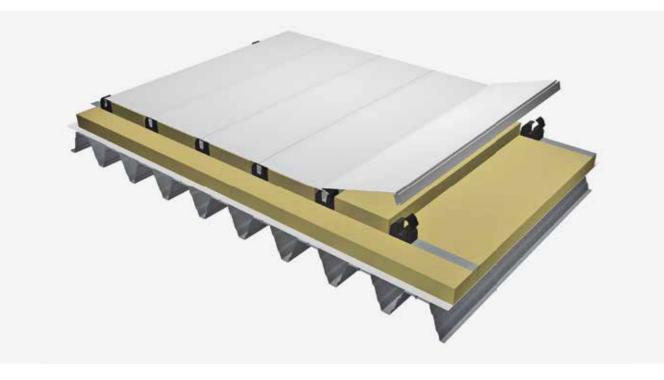
# **INSTALLATION IN SIX SIMPLE STEPS**

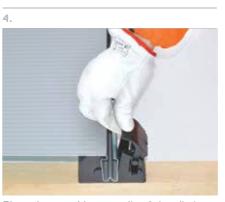




House the profile into the clip as shown.

The correct location of the clips is determined by the sheet itself.





Place the movable appendix of the clip into Hook the next sheet to the appendix and the slide slot.



push into locking position.



Secure the clip to the support element using appropriate fixings.

6.



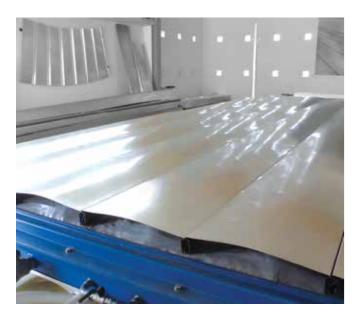
Stand on top of the profile ensuring sheet is fully connected.

# SOLID ENGINEERED CLIPS

The solid-engineered clip allows for sheet thermal movement without any abrasion and guarantees outstanding wind suction load resistance. Moreover, the clip's resin-based material means it forms an efficient thermal and electric break between the roof and the structure beneath.

# SOLID CLIPS







# THE AIRBAG TEST

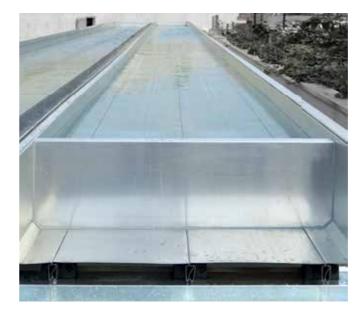
Under laboratory conditions, Riverclack® Agora sheets have undergone the same uniformly distributed load uplift tests as Riverclack®. The sheets were installed on a test rig and a purpose-designed plastic airbag then progressively inflated under the sheets to simulate the effects of a wind vortex passing over the roof. A unique combination of the clip and the high tensile geometric locking of the sheet's side lap ensure loads as high as 8kN/m<sup>2</sup> can be withstood.

# THE DRAINAGE CHANNEL/ A WARRANTY OF WATERTIGHTNESS

Although in heavy rain, the external duct of the construction beneath the surface immediately fills with water so that the joint between two adjacent Riverclack<sup>®</sup> Agora sheets is submerged, the drainage channel feature nevertheless works just as effectively as it does with Riverclack<sup>®</sup>.

# THE DRAINAGE CHANNEL





The high tensile side lap means water cannot easily penetrate the joint. Should this happen, the drainage channel then captures the water and runs it away to the gutter, eliminating the risk of leaks into the building. The drainage channel hydraulic section is designed to process the water that might pass through even in the most demanding situations such as heavy rain or extremely long sheets.

# THE POOL TEST RECONFIRMS RIVERCLACK AGORA'S CREDENTIALS

Riverclack® Agora has undergone the same rigourous water tightness test as Riverclack®. A pool was built using Riverclack® Agora—with no additional side lap sealants—as the pool's base. The pool was then filled with water, completely submerging the Riverclack® Agora. The external channel of the junction between adjacent sheets was then bunged up at the panel ends so the joint remained completely submerged continuously for many days. After this period, it was found that not one single drop of water had leaked through in all that time.

# SHEET WIDTH/ 405MM THE PERFECT FIT FOR ROOF AND FACADE

Riverclack<sup>®</sup> Agora comes in one standard width option that has been carefully selected on the basis that it works perfectly, technically and aesthetically, on both roofs and façades.

# SHEET WIDTHS

	SITE ROLL FORMING	MACHINE CURVING	DRAINAGE CHANNEL	MINIMUM ROOF PICH
RIVERCLACK® AGORA	YES	NO	YES	0,5%



# SELF BENDING AND TAPERED SHEETS

Riverclack<sup>®</sup> Agora straight sheets are selfbending down to a radius of 60m. Adapting perfectly to the shape of your roof surface without any additional operation or costs. Thanks to the new generation of rolling mills, which can be equipped with a tapering kit, Riverclack<sup>®</sup> Agora also offers the option of continuous length tapered and custom-width sheets, even on-site. The minimum width at the sheet's end is 100mm, the maximum 405 mm (for standard width coils).

# ON-SITE ROLL FORMING

Where panels are too long to be produced at our factories and then transported to the construction site, we can provide on-site forming.

If the size of your project would otherwise require numerous deliveries to site, on-site forming can also reduce transport costs and CO<sub>2</sub> emissions.

On-site production is carried out to the same high standards as in our factories, with the Riverclack<sup>®</sup> Agora rolled on a fully-engineered factory specification production unit.

SHAPING ROOFS

# A SELECT CHOICE OF SELECT METALS

In addition to the superior aluminum alloy 5754 – with its guaranteed unrivalled corrosion resistance, mechanical strength and costeffectiveness – Riverclack® Agora is also available in Copper, Stainless Steel, Titan Zinc or Pre-painted Galvanized Steel. All metals are certified and come from first order suppliers. But, being Riverclack, we still subject every single metal coil to further testing before we use it for Riverclack® Agora. Checking crucial parameters such as tensile strength, Brinnel hardness and yield point to ensure full conformity with the strict manufacturing requirements of Riverclack®.

## ALLUMINIUM ALLOY 5754

Light, Strong and Rustproof, this is your most cost-effective solution. In contact with air, aluminum rapidly becomes covered with a tough, transparent layer of aluminum oxide that resists further corrosive action, giving your roof an extremely long lifespan. It is used in the physical state H18/19 which has an outstanding mechanical resistance to both foot traffic and hail.

### COPPER

An elegant metal that is also highly corrosion resistant. Copper develops a "patina" when it weathers, turning it from golden brown to its unique and aesthetically striking blue-green shade.

## **STAINLESS STEEL**

A highly resilient material that hardly thins at all over time. Stainless steel is the ideal choice if total resistance to corrosion is a priority. In high-corrosive industrial environments, for example. Or simply when you're looking for great value in a very attractive material.

## **TITAN ZINC**

Titan Zinc has a very distinctive aesthetic quality thanks to its beautiful grey patina. It is malleable and so, unlike any other Riverclack<sup>®</sup> metals, requires a rigid back support to allow walkability.

# NON-COATED MATERIAL FINISHES – THE FINISHING TOUCH

Depending on the metal you're using, Riverclack<sup>®</sup> Agora can offer a range of metal finishes to enhance the visual character of your building.

## STUCCO EMBOSSED ALUMINUM

Embossing is a unique stucco pattern that, besides its aesthetic qualities, helps reduce glare, an important issue with airports and buildings near highways or busy roads.

#### ANODIZED ALUMINUM

Aluminum Anodizing provides an aesthetically appealing matt finish, as well as an extra layer of protection against atmospheric agents.

#### PRE-PATINATED COPPER

Copper is available at various stages of oxidation and patination.

#### PRE-OXIDIZED ZINC

Zinc, which is always pre-oxidized, offers dramatic architectural possibilities with its ultra-modern combinations of dark and lighter shades.



# COLOR MATTERS

Color is an essential part of architectural design, reinforcing spatial relations through effective use of contrasts.

Aluminum, Stainless Steel and Galvanized Steel Riverclack<sup>®</sup> Agora sheets are available in a wide array of standard Polyester or PVDF color coatings. Helping to express the particular character, mood and ambience of your building.



# EXCEL RANGE

The entire RAL color collection at your disposal to complement and enhance any aesthetic statement



TREND RANGE

Flexible options based on the lat trends.

est color		
	OXIDE RED RAL 3009	PASTEL BLUE RAL 5024
	LIGHT GREEN RAL 6027	PURE WHITE RAL 9010



# **SEEING IS BELIEVING**

Because of the unique qualities of the spatial colors and finishes in this section, you have to see them in real life to fully appreciate their impact. Feel free to contact us for samples of the colors that interest you.

#### FEEL RANGE

Highly pragmatic and cost-effective alternatives to nature's precious natural commodities.





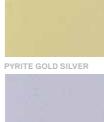
ZINC LOOK I



ZINC LOOK II

## THE INFINITE VARIETY OF LIGHT

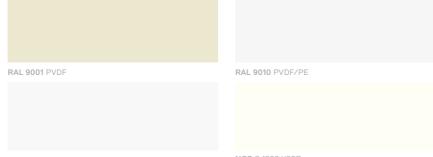
These pigments can reflect their own color or that of the base coat. This on-going reflection and refraction creates fascinating color variation that continuously changes depending on the viewing angle and light.



#### **HIGH SRI COLORS:** FOR A COOLER ROOF

SRI (Solar Reflectance Index) measures a material's ability to reject solar heat. Especially in warm climates, SRI coatings help cool the roof and reduce "heat island effect". A high SRI coating can also help earn LEED® credits.

Though white or light colors remain the most reflective, by using special pigments we can achieve relatively high SRI values even in dark colors.



RAL 9016 PVDF

NCS S 1200 Y50R

#### THINK ZINC

A unique self-weathering zinc in a precoated aluminum. Zinc particles in the topcoat allow the coating to change color over time from an initial light grey to a darker, naturally weathered finish.

ZINC PRO NEWLY PAINTED





PYRITE GOLD RED





ZINC PRO WEATHERED



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