

Product Guide



Valid from July 1, 2024.

All previous editions are obsolete. Terran reserves the right of technical changes. The colors shown herein might slightly differ from actual product color due to printing limitations. We are not responsible for printing errors. The information and products in this edition are intended for use in Hungary.

DEVELOPING FOR OVER 100 YEARS

It was in 1920 when Mr. Kalman Meszaros started making concrete roof tiles in Negyed, now a part of Slovakia. The hand-made, so-called **Meszaros tile**, can be seen in the area for the past 100 years.

In 1993, Mr. Vilmos Meszaros continued the family business using semi-automated production in Bóly, Baranya County, a city with traditional industrial heritage.

The third generation entered the business in 1997 and started rapid technological development. Today's production is fully automated and meets EU standards.

Besides the dynamic development of production processes, intense product development effort starting with the original M15 form factor yielded the M10 form factor, which we have renamed **Danubia**.

In 2001, our product palette expanded further with the **Coppo antique product line**, which evoke the ambiance of the Italian countryside's sun-drenched colors.

In 2000, we have opened our first foreign sales office in Farkasd, Slovakia under the name **Mediterran Slovakia, sro.**

In 2003, continued investment in product development resulted in several significant performance improvement to the Coppo line, which in the spring of 2003 won the **Construma Grand Prize**.

In 2005, our firm expanded its product portfolio with new product lines. Our fluted, double-curved **Rundo** product line was awarded the BNV Grand Prize in the same year.

In 2007, our straight-cut **Zenit** roof tile appeared, representing a new direction in architecture towards modern and sleek contours. Our ColorSystem surface protection can be applied to all products in the Zenit line.

The light-weight yet strong **Synus** roof tile was introduced in 2014 and since it has become one of our most successful products. In recognition, Synus has been awarded the Construma Prize. Consequently, we have made available all of our surface treatment options on Synus beginning in 2019. Since 2022, we have been marketing and selling our **Generon** products abroad.

As of 2024, we expanded our Generon range with R3D-colored solar roof tiles, so from now on, even the more traditional brick-colored roofs can aesthetically produce electricity for families. At the same time, our flat profile product with a material requirement of 10 pieces/m² was reborn and introduced under the name **Zenit Max**.

**(1920-1999)
A SUCCESSFUL FAMILY BUSINESS**

**(2000-2004)
MILESTONES IN PRODUCT DEVELOPMENT**

**(2005-2024)
PRODUCT PORTFOLIO EXPANSION**

NEW DIMENSION IN ENHANCING ROOF TILE DURABILITY

CONTINUOUS INNOVATION

BRAND AFFINITY AND FUTURE VISION

In 2010, we introduced the result of long-term research and development effort, the **Resistor** surface treatment process which ensures **premium protection and lasting value** of our roofing tiles.

In 2020, thanks to ongoing development, we launched our new **Elegant** surface treatment process, which makes tile surfaces **exceptionally smooth and weather resistant. The silky appearance** gives the roof an elegant curb appeal, living up to its name.

The dynamic development of production technology has been the hallmark of the company. Following the commissioning of our **Slovakian factory in 2004**, we opened a new factory every year to ensure the continuous, high-quality supply to our customers.

Since 2018, production of concrete additives continues using robots to ensure efficient and precise manufacture and packaging. In addition, production is started at our second foreign factory in Aranyosgýéres, Romania.

In 2008, we opened our brand new, fully automated production plant in **Kunszentmiklós**. In 2012, our factory in Bóly started production using the most advanced technology in Central Europe.

In 2019, we brought to market one of our most innovative products, the **Terran Generon solar roof tile**, which offers protection and solar power generation without compromise. In the fall of 2020, production of the **stronger, improved Rundo and Zenit product lines** started, further improving the weather resistance of our roof tiles.

In September 2021, our Pécs factory has started production of our Generon solar roof tiles.

In 2014, **Mediterran** became **Terran Roof Tile Manufacturing, Inc.** but only the name had changed, which was a step towards building a leading brand and growth of market share. Capacity expansion was also essential.

The TERRAN brand confers a style that enhances the value and appearance of a home anywhere on Earth regardless of climate.

Today, our company is an internationally renowned supplier of roof tiles and complete roofing systems. The physical characteristics of our products ensure a durable, aesthetically appealing result, manifesting our company philosophy. We are taking bold product development steps to set your imagination free and to bring you a roofing system that fits your needs and style.

5 CONCRETE ROOF TILE FACTORIES, 5 INTERNATIONAL SUBSIDIARIES



5 FACTORIES

operate, where one of Central Europe's LEADING PRODUCTION TECHNOLOGIES is used to produce concrete roof tiles



Scan the QR code to watch how Terran roof tiles are made.

Our goal is to maintain our dynamic growth in Hungary and the markets of neighboring countries.

Continuously increasing production capacity

Today, Terran roof tiles are manufactured in **5 concrete tile production plants** that use fully automated technology, so we ensure a fast and continuous product supply. **Since the fall of 2021, our Generon solar roof tiles have been produced on a specially designed new production line.**

A constantly expanding sales network

In addition to Hungary, we have opened **sales centers in 5 other countries, which supply the markets in 9 countries with Terran concrete tiles.** This is how we reduce transport costs to make our products available domestically and internationally.

Terran has been chosen as one of top 1000 most inspiring European companies, according to the London Stock Exchange. The report collected the European companies with the fastest growth potential. Additional details as well as the survey methodology are available at www.1000companies.com



Concrete roof tile factories

1. **Bóly**
2. **Kunszentmiklós (2 plants)**
3. **Farkasd (Slovakia)**
4. **Aranyosgyéres (Romania)**

Sales centers

5. **Eszék (Croatia)**
6. **Szabadka (Serbia)**
7. **Brno (Czech Republic)**

Generon solar roof tile manufacturing plant

8. **Pécs**



RAW MATERIALS FROM NATURE

We only use these natural, eco-friendly raw materials:



heated and finely ground limestone, i.e.: cement, which is the basis of roof tile production.



water: when mixed with cement, it gives the concrete its rigidity.



river sand: similar to glass production, only the finest and cleanest sand is used



iron oxide: naturally occurring material used for coloring, as well as in cosmetics and food coloring.



it stood the test of time

Concrete, as a raw material, has a history of several thousand years. Ancient Greeks had been using a mix of burnt lime and sand as far back as 2000 B.C. Romans added volcanic ash to the lime mixture. They used this concrete in the building of the dome of the 2000-year-old Pantheon in Rome. Thanks to its rugged construction, we can admire the building even today. Concrete has proven to be a durable material.

Eco-friendly, colors inspired by nature

Our own solar park supplies the energy to operate our plant at Bóly. As we use enclosed production technology which consumes less energy to produce roofing tiles and thus substantially reduces emissions. Additionally, the water used in production is recycled.

Eco-friendly production process

Our own solar park supplies the energy to operate our plant at Bóly.

As we use closed production technology which uses less energy to produce roofing tiles and thus substantially reducing emissions. Additionally, the water used in production is recycled.

Our product, the concrete roof tile is in itself an eco-friendly solution, which has been demonstrated by efficiency studies long ago. Analysis has shown that concrete tile production is one of the leaders in energy efficiency and environmental

We can say that:

it is time to regard the concrete roof tile as eco-friendly.

OUR DAILY consumption of raw materials is nearly

1900

TONS, which corresponds to the weight of

76

humpback whale.*

*The nearly 1,900 tons of raw materials are the total amount of sand, cement and paint used in 1 working day for the roof tiles manufactured in the factories of the Terran group of companies in 2022. The weight of an average-sized humpback whale (25 tons) was taken into account as the basis of the comparison. Source: Terran Kft. procurement department and Wikipedia



THE DEPENDABLE, VERSATILE CONCRETE ROOF TILE

waterproof

Due to the density of concrete, it repels precipitation, thus water cannot seep into the porous substrate. This has two advantages.

- ➔ Thermal expansion of water caused by seasonal freezing and melting cycles does not damage the tiles, thus improving its durability.
- ➔ It does not absorb water, so the weight of the roof does not fluctuate, saving the roof trusses from extra load.

weather-resistant

Thanks to surface treatment, our roof tiles resist the effects of the environment and withstand the tests of time. These protective layers (ColorSystem, Elegant, Resistor, ClimaControl) are colored the same as the tile and offer lasting protection against

- ➔ precipitation,
- ➔ the effects of inclement weather (sleet, wind storms, etc.),
- ➔ dirt,
- ➔ moss,
- ➔ ultraviolet (UV) radiation air pollution, including smoke.

Essentially self-cleaning!

high stress- and load bearing

Our concrete roof tiles have a high surface load-bearing capacity.

- ➔ Heavy snow or ice build-up does not break the concrete roof tiles

Thickness of the tile shell improves the roof's

- ➔ Weather resistance
- ➔ Heat and sound absorbency

In the structural calculation of the roof system, this is merely 15 – 20% added to the weight of wind, snow and the trusses.

resilient and practical

Our production process ensures that the form of the tile remains constant over time, assuring better fit and connection on the roof.

Practical considerations in roofing:

- ➔ Precise size measurement
- ➔ Ease of repair and maintenance
- ➔ Ease of installation

colorfast

Coloring is added to the concrete as a raw material. The desired color is achieved with oxide paint, so the color remains consistent over large surface areas.



REASONS TO CHOOSE TERRAN

100 years of experience

We have 100 years of experience and knowledge in manufacturing quality products. **Our current annual volume is around 95 million pieces.***

modern production technology

We use the most modern manufacturing technologies in Central/Eastern Europe for roof tile production. Our products are marketed in nine European nations.

leading roof tile manufacturer

In Hungary alone, each year around **26.000 families choose** Terran roofing for their home. *

automation technology

Robotics technology enables us to produce **high-quality** concrete additives **efficiently** at our Bóly, Hungary factory.

eco-awareness

As an evidence of Terran's environmentally progressive values, it has built a solar farm in Bóly to reduce its nearby factory's carbon footprint. The solar farm supplies all the electricity needed for concrete tile production.

wide product range

We offer a wide choice of forms and colors in **four product lines** with **four surface treatment options**.

guarantee

Terran was the first company in Hungary to offer a **50-year warranty**. In case of a complete roofing system installation, we guarantee our roofing tiles for life. Warranty details can be found under General Information on page 11.

natural raw materials

We only use natural raw materials of **exceptional quality** (water, iron oxide, limestone and sand) in making Terran roof tiles.

domestic brand, international standard

100% Hungarian family-owned business with products well known and regarded in nine countries.

innovation

When deep experience meets modern technology, we can achieve amazing results. Our mission is to offer you the best possible solution that fits your needs and style – dependable, long-lasting, attractive and energy-efficient roofing.

trusted brand

In addition to overwhelmingly positive customer feedback, we have received lots of professional recognition and awards during the years past, i.e.: the **Construma Grand Prize**, the **BestBuy Award**, six-time winner of **HungarianBrands** and twice the **SuperBrands** awards.

* The information is based on the quantities of tiles manufactured and sold by the Terran group of companies in 2022.



OUR SERVICES

Material requirements calculation

If you send us your detailed plans, we will calculate, free of charge, the materials required. The drawings needed are:

- Building-permit level drawings of floorplans and roof structures
 - Elevation view from every side
 - In case of complex roofing, sectional views
- For precise calculation, we also need the pitch of the roof, the length of rafters and eaves protrusion and the type of roof tile chosen.

You can send us your plans and drawings by email:
sales@terrantiles.com

or by mail addressed to:

Terrán Tetőcserép Gyártó Ltd.
P.O. Box 7
H-7607 Pécs

N.B.: we are not responsible for calculation errors.

Expert advice

The Users Guide contains useful information for the professional installation and use of Terran roofing products.

If technical questions arise, our construction engineers and consultants are ready to help via email at sales@terrantiles.com or by phone at +36 69 569 950.

Ordering

Terran products are sold nationwide by building products suppliers. Following the calculation of the materials required, you can place your order with one of our partner resellers. In calculating order quantities, attention must be paid to the number of units per batch for each product. Thus, the ordered quantity must be evenly divisible by 36 in case of RUNDO and ZENIT MAX tiles, 40 for SYNUS, 42 for COPPO and RENOVA PLUS and 4 for hip and ridge tiles.



On-site delivery

When ordering four pallets or more, we deliver to your site within Hungary free of charge. We advise you of the status of your shipment via SMS if you provide your contact information to our reseller. In the rare case of products damaged in transit, kindly notify us in writing as per the General Terms and Conditions.

Quality

We continuously inspect the quality of our raw materials, in-process and final products to ensure that only impeccable quality products are delivered to you. All Terran roofing tiles meet the requirements of MSZ EN 490. Independent auditors inspect the products to ensure conformance to MSZ EN 491.

WARRANTY

50-years warranty

People choose a roof not just for a year but for a lifetime. This is why Terran offers a written 50-year warranty for Terran roofing tiles'

- ➔ dimensional accuracy
- ➔ water resistance
- ➔ frost resistance



Having delighted our customers for decades, we can proudly claim that the TERRAN product families are an excellent choice even for the long term. World-class technology, the knowledge, skills and dedication of highly skilled specialists and engineers has propelled us to become one of Hungary's most modern building products manufacturers. This has enabled us to offer an exceptionally **long-term guarantee for TERRAN products, a first from a Hungarian roof tile manufacturer.** Yet another testament for Terran being the best choice for generations to come.

Colors

Everyone can find the most appropriate form in our portfolio of roofing tiles from wavy to beavertail to flat profile tiles. The palette of options is multiplied by the **wide choice of colors.** From traditional red hues to lively Mediterranean colors to dark tones, all "roof colors" can be found at Terran.

Actual colors may vary due to printing limitations! The color of samples displayed at our reseller partners, especially in the case of rustic or Coppo colors, may vary slightly from the color chosen.

APPLIED SURFACE TREATMENTS

Our four coating options vary in composition and quality and guarantee to various extent the colorfastness and durability of our concrete roof tiles. Innovative surface treatment technologies and new colors are offered to continually satisfy the rigorous demands of the market for quality products.



ClimaControl

Terran ClimaControl surface treatment, thanks to non-degradable raw materials, provides long-term protection against the Sun's infrared radiation that heats up the roof. Buildings covered with ClimaControl treatment save energy and provide a more comfortable environment for you and your family.



Resistor

Terran Resistor surface treatment technology represents the most advanced science – over and above its colorfast properties – and it is way ahead of its time. Terran Resistor treatment, with its specially designed raw materials and production process, offers the greatest protection and highest quality in the market.



Elegant

Our newest surface treatment process, the Terran Elegant, makes the roof tiles exceptionally smooth and resistant to wear. It is unique in its silky appearance and it gives the home a truly elegant curb appeal – as the name implies.



ColorSystem

The evolution of the technology and manufacturing processes made possible the use of advanced materials that yield specific advantages to the building industry. The Terran ColorSystem primarily aims to preserve the hue and newness of the roof tiles. Tiles treated with ColorSystem provide superior weather protection.

WE CONSIDER THE ENTIRE ROOF SYSTEM

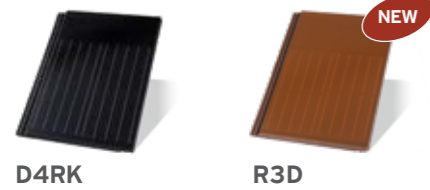
Terran not only sells concrete roofing tiles but also the concrete, metal and plastic accessories essential for a complete, professional installation of the roofing system. All accessories have been designed to fit with the concrete roof tile chosen, in function as well as color and style.

- | | |
|---|---|
| 1. Attic skylight | 8. Wall, chimney and gable flashing |
| 2. Attaching elements (tile and storm clips) | 9. MediFol underlayment (for all needs) |
| 3. Rib and ridge forming accessories | 10. Snow retention |
| 4. Security grid system | 11. Installation of eaves |
| 5. Complete set of concrete accessories | 12. Terran Generon solar roof tile |
| 6. Valley formation | |
| 7. Roof breach (antenna, aeration and solar access) | |



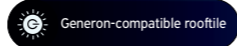
TERRAN ROOF TILES

THE SOLAR GENERON ROOF TILE



GENERON

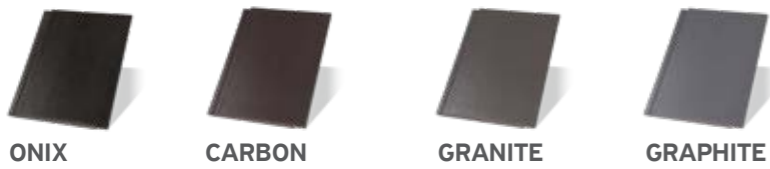
You can get more information about our newest innovation, the solar roof tile on pages 16-23 or at our website, www.terran-generon.com. Our Generon product is compatible with the Zenit and Rundo families of tiles. Look for the Generon-compatible icon in the product portfolio.



MODERN VONALÚ ZENIT MAX



RESISTOR®



ELEGANT



NOSTALGIC BEAVERTAILED RUNDO



RESISTOR®



ELEGANT



STRONG AND LIGHT-WEIGHT SYNUS



RESISTOR®



ELEGANT



colorsystem protection



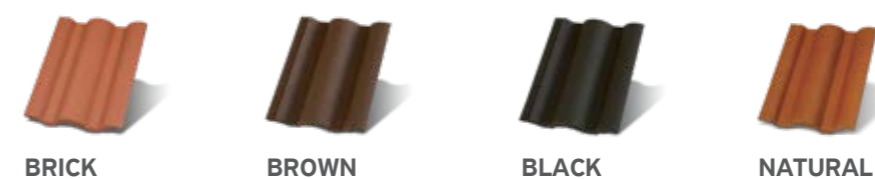
MEDITERRANIAN AMBIANCE COPPO

colorsystem protection



THE ECONOMIC CHOICE FOR ROOFING RENOVA PLUS

colorsystem protection



STYLISH
ATTRACTIVE
ENERGY-SAVING
GENERON
Let your roof profit from the sun



LARGE PANELS FOR THEM, GENERON FOR YOU!

Terran is Central/Eastern Europe's leading brand of roof tile and it is a 100% Hungarian owned building products enterprise. Started 100 years ago as a dream of an entrepreneur, today the company plays a defining role in the construction industry. **Our mission is to offer superior quality and value while preserving our traditions.**

Terran Generon goes beyond the traditional role: it generates energy for the home's residents, all without compromise.

The pioneering development has won grand prizes in 2019 at the Hungarian Construma and the Slovakian Coneco building expos, in addition to the recognition bestowed upon us by the E.ON ENERGY GLOBE award.

In 2020 the Florida-based Energy CIO Insights magazine recognized Terran with its Generon roof tile, as one of Europe's top 10 solar technology providers.

Our most prestigious recognition so far is that the stylishness of the Terran Generon has won the RedDot Product Design 2021 award at the international competition of the German organization with a long history.



“We think for the long-term, in cost-effective solutions.”

INSTEAD OF TRADITIONAL SOLAR PANLES MODERN AND ENVIRONMENTALLY FRIENDLY GENERON

Aesthetics

Terran Generon is comparable to classic solar panels in terms of efficiency and performance, but its aesthetic experience is more pleasing. There is no unnecessary roof penetration, so the product provides a premium appearance to the property.

From 2024, it will also be available in a brick shade under the name GENERON RED, thus we will also offer an aesthetic solution to harness solar energy with more traditional colored roof tiles.

Environmental awareness

The base of Terran Generon is concrete roof tile, its automated manufacture is powered by solar energy, protecting our environment.

Fully inegrated system

A turn-key solution for roof covering and energy production: protection and renewable energy under one roof.

Traditon

100 years ago, a man's dreams came true when he founded the company. Preserving that tradition, our mission is to delight our customers with high quality products and professional service.

Compatibility

When considering roof replacement or new construction, choose with confidence our Terran Zenit or Rundo line of roof tiles which are fully compatible with the Generon solar roof tile.

Warranty

25-year product and performance guarantee come with the “Made in Hungary” Generon solar roof tile. In the rare case that service is needed, response is quick and easy.

Professional support

We are with you all the way: we can help with the design as well as the installation, even on site!

COME HOME EACH DAY TO A SIGHT TO BEHOLD AND TO BE PROUD OF!



Large solar panels on top of the roof

GENERON
Let your roof profit from the sun

Choose the multi-award-winning, modern Terran Generon solar roof tiles if, in addition to innovative and eco-conscious roofing, aesthetics also matter!



red dot winner 2021
urban design



TOP 10
SOLAR TECH
SOLUTION PROVIDERS
IN EUROPE
2020

E.ON ENERGY GLOBE
Hungary



THE ROOF IS THE APEX OF THE HOUSE IN SOLAR TECHNOLOGY TOO

Where to buy?

It can be purchased nationwide at nearly 200 Official Terran Generon Sales partners!

Terran Generon solar roof tiles can only be ordered from our Official Terran Generon Sales Partners.

In various parts of the country, nearly 200 dealerships have already received the opportunity to sell Terran Generon solar roof tiles.

The title of Official Terrán Generon Sales Partner can only be awarded to dealerships that have participated in training organized by Terrán Kft. and then successfully passed an exam.

With this, we ensure that our customers have access to all important and relevant information about our solar system and our compatible Rundo and Zenit Max roof tiles before placing an order.

Who can install it?

A constantly expanding contractor network!

Although the installation of Terran Generon solar roof tiles is the same as the compatible Terran Zenit Max and Rundo tiles, the connection still requires special knowledge.

That is why we continuously educate roofing professionals about the unique construction and installation details related to Generon. Among the highly qualified Terran Roofing Specialists, many contractors have completed our practical installation training and received the title of **Official Terran Generon Construction Partner.**

These specialists are not only masters of the installation of Terran system elements, but also confidently carry out the construction of roof systems which include Generon solar tiles.



„My son thinks environmentalism is cool.”

Financing

Today, there is at least as much demand for the energy modernization of homes as there is for preserving their character and improving their aesthetic appeal.

In 2024 as well, state subsidies are available with which you can not only make your home beautiful, but also create an eco-conscious home for your family by using renewable energy, thereby reducing our ecological footprint.

*Take advantage of state subsidies and grants when purchasing Generon solar roof tiles!**

* Information about available subsidies can be found at www.csalad.hu and www.palyazat.gov.hu.

MODERN SOLAR CELL ON A PREMIUM ROOF TILE

BATTERY PACK

Store and use the generated electricity later!

By installing the electricity storage (battery) we can smooth out the production and consumption peaks, thereby making better use of the opportunities offered by the solar power system. With a battery, it becomes possible to use the energy produced during the day in a delayed manner, at night or during the peak consumption period (afternoon).

With the battery energy storage, the real self-sufficiency rate can be increased to 70-75% on an annual basis, thereby making household energy supply more economical.



ENERGY EFFICIENCY IS NO LONGER A MATTE ROF STYLE

FURTHER INFORMATIONS

Choose a solar roof tile that matches your style! Besides the black Generon DARK, now available in the unique Generon RED version too.



* Terran Generon is also compatible with Terran Zenit Max and Terran Rundo base tiles. However, depending on the base tile, the technical data and price of the compatible Generon product may be different. Please download our Generon Installation Guide from www.terran-generon.com!

Pricing

If you would like a modern roof, request a personalized, automatic and free individual price quote on our website www.terran-generon.hu. Just enter some sizing data and the automated system will prepare the calculation for you. Of course, if you wish, it is also possible to have a personal or telephone consultation.

If you are not yet ready to buy Generon solar tiles, but you may want to install them in the future, choose the Terran Zenit Max or Terran Rundo tiles to ensure the possibility of retrofitting Generon modules. To calculate the Zenit Max and Rundo roof tiles required for covering, use our Roof Calculator application, or request a free material requirement calculation at the email address kizsamoljuk@terranteto.hu.



TERRAN-GENERON.COM

Technical data GENERON DARK*

| Solar concrete roof tile | | Photovoltaic module | |
|---------------------------------|--|------------------------|---|
| Size | 330 x 420 mm | Type | Monocrystalline |
| Coverage width | 300 mm | Front surface | 3.2 mm thick tempered glass |
| Base product | High-density colored concrete element | Nominal performance | 15,5 Wp |
| Harmonized technical regulation | EN 490:2011 | Open-circuit current | 7,14 A |
| Mechanical rigidity | > 1200 N | Open-circuit potential | 2,17 V |
| Water resistance | > 20 hours | Overload current | 7,83 A |
| Fire protection classification | B-s1, d0 MSZ EN 13501-1:2007+A1:2010 | Idle potential | 2,77 V |
| Behavior under external fire | B _{roof} (t1) MSZ EN 13501-5:2005+A1:2010 | Number of cells | 4 pcs |
| | | Cabling | 520 mm long, 4 mm ² solar cable with PV4 connector |

Technical data GENERON RED*

| Solar concrete roof tile | | Photovoltaic module | |
|---------------------------------|--|------------------------|---|
| Size | 330 x 420 mm | Type | Monocrystalline |
| Coverage width | 300 mm | Front surface | 3.2 mm thick tempered glass |
| Base product | High-density colored concrete element | Nominal performance | 10,5 Wp |
| Harmonized technical regulation | EN 490:2011 | Open-circuit current | 5,14 A |
| Mechanical rigidity | > 1200 N | Open-circuit potential | 2,17 V |
| Water resistance | > 20 hours | Overload current | 5,71 A |
| Fire protection classification | B-s1, d0 MSZ EN 13501-1:2007+A1:2010 | Idle potential | 2,77 V |
| Behavior under external fire | B _{roof} (t1) MSZ EN 13501-5:2005+A1:2010 | Number of cells | 4 pcs |
| | | Cabling | 520 mm long, 4 mm ² solar cable with PV4 connector |

S L E E K M O D E R N Z E N I T

NEW

! Thanks to the improved groove design of the re-designed Zenit Max roof tiles, fewer are needed per 1 m² of roof surface. You can find additional important information about the construction and installation of Zenit Max roof tiles on page 56 of the Product Guide and in the Terran Application Guide.

SLEEK MODERN ZENIT MAX

ClimaControl



MOON



MARS

RESISTOR



ONIX



CARBON



GRANITE



GRAPHITE

ELEGANT



ANTRACITE



CHESNUT



Thanks to the improved groove design of the redesigned Zenit Max roof tiles, fewer are needed per 1 m² of roof surface. You can find additional important information about the construction and installation of Zenit Max roof tiles on page 56 of the Product Guide and in the Terran Application Guide.



Reflects refined taste, clean style

Sleek, strong and attractive. Developed specifically for the most modern lifestyle. These roof tiles set the standard in roofing.




Scan the QR code to view the drone video of the building.

NOSTALGIC
BEAVERTAIL
RUNDO



NOSTALGIC BEAVERTAIL RUNDO

 Generon-compatible roof tile

RESISTOR®



CORALL



MOCCA



CARBON

ELEGANT



BRICK



DARK BROWN



ANTRACITE

Further product information can be found at our website, www.terrantiles.com, or inquire at any of our many dealers.



Scan the QR code to view the drone video of the building.

Stylish roof

Clean lines, fresh new colors. Conforming to the building needs of the modern age yet classy and stylish.



Scan the QR code to view the drone video of the building.

LIGHTWEIGHT
YET STRONG
SYNUS



LIGHTWEIGHT YET STRONG SYSNUS

ClimaControl



MOON

RESISTOR



CORALL



MOCCA



CARBON

ELEGANT



BRICK



DARK BROWN



BLACK

colorsystem
protection



SOUR CHERRY



PEANUT BROWN



ANTRACITE



To make roofing a snap

Synus is the best choice for roof tiles when weight is a concern but durability is a must.



MEDITERRANEAN AMBIANCE OF COPPO



Scan the QR code to view
the drone video of the
building.

THE MEDITERRANEAN AMBANCE OF COPPO

color system
protection



FERRARA



ANTIQUE

Further product information can be found at our website, www.terrantiles.com, or inquire at any of our many dealers.



Scan the QR code to view
the drone video of the
building.

Zest for life

Coppo tiles give your home a uniquely Mediterranean character. Spontaneous selection of colors of limited variability evoke images of the Italian countryside with an enduring, cozy style.



Scan the QR code to view
the drone video of the
building.



Scan the QR code to view
the drone video of the
building.

THE ECONOMICAL
CHOICE FOR
ROOFING
RENOVA PLUS



Scan the QR code to view
the drone video of the
building.

THE ECONOMICAL ROOF TILE, RENOVA PLUS

color system
protection



BRICK



BROWN



BLACK



NATURAL

Further product information can be found at our website, www.terrantiles.com, or inquire at any of our many dealers.



Scan the QR code to view
the drone video of the
building.

Economical product, cost-effective installation

Cost-conscious yet discerning buyers who demand high quality are drawn to Renova Plus – for durability, appearance and most importantly, the low cost of ownership.



METAL AND
P L A S T I C
ACCESSORIES



METAL AND PLASTIC ACCESSORIES

To build a safe roof that lasts for generations, the installation needs more than just roof tiles but also concrete, metal and plastic accessories that are essential for a complete roofing system.



COMPATIBILITY

We created our product line of roofing elements to fit the chosen roof tiles'

- ➔ color,
- ➔ form factor,
- ➔ lifespan and
- ➔ quality,

so that upon installation, a roof is created that will **STAND THE TESTS OF TIME OVER MANY GENERATIONS.**



DEVELOPMENT

Our development efforts focus not only on manufacturing quality roofing tiles but also on continuously improving the production processes of accessories to meet the ever-changing demands of the market.

As a result of continuous innovation, we are able to bring to market

- ➔ roofing accessories with an exceptional 25-year warranty,
- ➔ roofing system components under our own brand (MediFol roofing underlayment, MediRoll ridge underlayment) which satisfy the most demanding quality requirements.

QUALITY

In case of roofing accessories, as with our concrete roof tiles, we offer only products of the highest quality.

We continuously monitor changes in market expectations and trends and search for the finest raw materials available for our accessory products.

The most important factors in accessory selection:

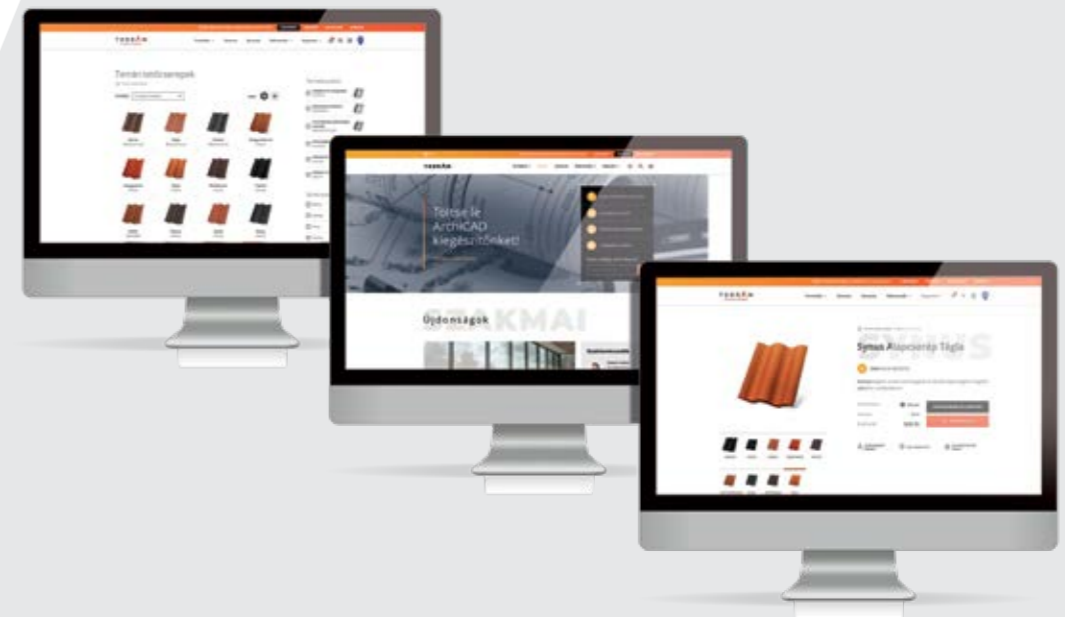
- ➔ favorable price-value ratio,
- ➔ uncompromising high quality,
- ➔ ease of installation,
- ➔ seamless compatibility with Terran roof tiles and
- ➔ ease of use.

RELIABILITY

By installing our high quality, cost-effective roofing accessories, a

- ➔ safe and secure,
- ➔ weather resistant,
- ➔ long-lasting,
- ➔ attractive

roof can be brought to life for everyone.



OUR SERVICE

We offer a comprehensive and free professional service to satisfy even our most demanding customers:

- ➔ material requirements calculation,
- ➔ professional advice (a century of experience!),
- ➔ just-in-time on-site delivery,
- ➔ order tracking and shipment tracing.

In case of questions, engineering and installation consultation is available by email at sales@terrantiles.com or by phone at **+36 69 569 950**.

Technical details and additional information can be found at www.terranteto.hu/tetorendszer-kiegészitok

- ➔ product listing,
- ➔ color palette,
- ➔ required materials,
- ➔ prices,
- ➔ Roof underlayment selector

Nowadays, modern, cost-effective solutions can yield energy savings.

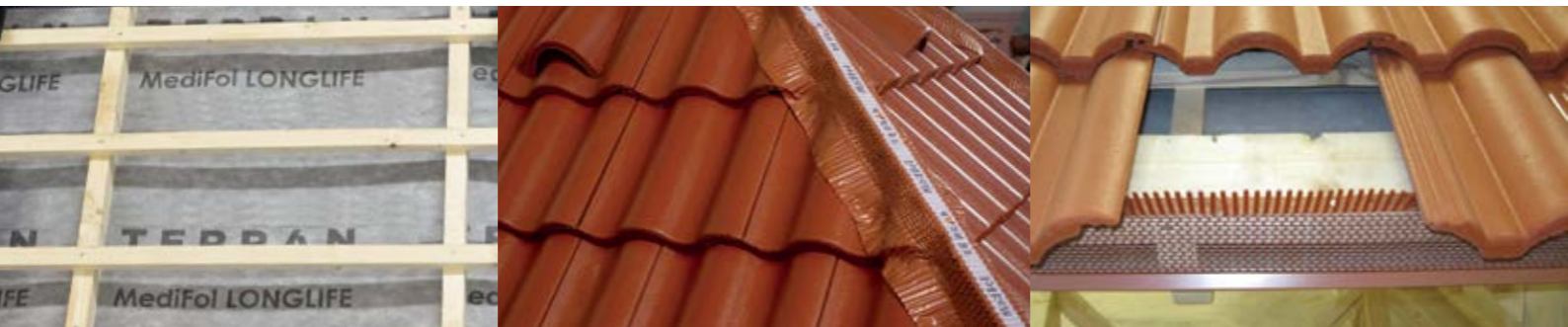
ESSENTIAL ROOFING ACCESSORIES

INSTALLING TERRAN ELEMENTS ENSURES LONG-TERM PROTECTION AT A SMALL COST

Required system components:

- ➔ MediFol roofing sheets and underlayment
- ➔ Gutter and ventilation elements
- ➔ MediRoll ridge and arris rolls
- ➔ Storm safety elements

The above components comprise but a small fraction of the roofing system's cost but increases the roof's effectiveness and durability. You can browse our full range of roof components at our website, www.terranteto.hu/tetorendszer-kiegeszitok.



MEDIFOL SARKING AND WATERPROOFING SHEETS

In order to satisfy the increasing demands on roofing – with very few exceptions – underlayment, or sarking must be used under the tile roof (also).

ROOF UNDERLAYMENT INCREASES THE SHELL'S RESISTANCE TO PRECIPITATION, PROTECTS THE STRUCTURE'S HEAT INSULATION AND AGAINST THE HARMFUL EFFECTS OF DUST AND SNOW DUSTING.

Buy only quality underlayment, do not risk using low-quality, short-lived materials. A roof is intended to last a lifetime. For selecting optimal products for your project, get in touch with our professional staff.

MEDIROLL RIDGE AND ARRIS ROLLS

ENSURES A SECURE WATER BARRIER BETWEEN THE RIDGE AND FLAT TILES ALONG THE HIPS AND RIDGES. With professional installation, birds nesting under the ridge tiles can be avoided.

The perforated variants play a role in venting the roof. MediRoll aluminum arris roll's thermal expansion factor is compatible with Terran roof tiles. Arris rolls with lower thermal expansion factors do not provide equal protection from precipitation as they do not touch the entire width of the tile.

GUTTER, VENTILLATION AND STRUCTURE PROTECTION ELEMENTS

Depending on construction, the ventilating tape or combed or flat eave ventilation **ENSURE AIR MOVEMENT BETWEEN THE UNDERLAYMENT AND TILE LAYER.**

The wood structure between the underlayment and the tile layer can be protected from moisture condensation with the metal vapor drip eaves sheet. With this simple element, **WE CAN PROTECT THE WOOD STRUCTURE OF THE ROOF.**



SNOW RETENTION

If the pitch of the roof is between 25 and 75 degrees, snow retention is a building code requirement. Besides the legal requirement, the homeowner is liable for damages caused by snow falling from the roof. Thus, it is practical to install adequate snow retention elements above pedestrian paths.

SNOW RETENTION CAN BE SOLVED EITHER WITH A LINE OF SNOW RAILS OR WITH SNOW STOPS PLACED OVER THE ENTIRE ROOF AREA.

Snow rails placed along the eaves help as well, however they cannot stop an avalanche accumulated over the roof area.

STORM PROTECTION

Concrete roof tiles have excellent storm resistance, although tiles must be fastened to guard against the lifting power of whirlwinds that may form above certain areas of the roof. Tiles must be fastened using corrosion-resistant materials (e.g.: zinc-aluminum alloy or stainless steel).

AUXILIARY TILES, CUT TILES, RIDGE AND ARRIS TILES AS WELL AS TILES ALONG THE EAVES MUST BE INDIVIDUALLY FASTENED.

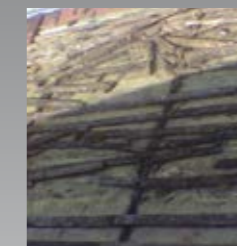
Suitable elements: min. 4,5 mm stainless screws, ridge tile clips, storm clips, gutter clips and cut-tile clips. To estimate the quantity of elements needed, get in touch with our professional staff.

THE DANGER OF USING UNSUITABLE OR INAPPROPRIATE ACCESSORIES



Unsuitable underlayment:

moisture spots and mildew can form in interior spaces, heat insulation is compromised.



Unsuitable grid:

can damage the roof structure, which can only be remedied by demolition.



Unsuitable snow retention:

can cause serious financial loss or personal injury.



Unsuitable tile fastener:

repair and replacement can result in unexpected expense.

TECHNICAL DETAILS AND APPLICATION NOTES

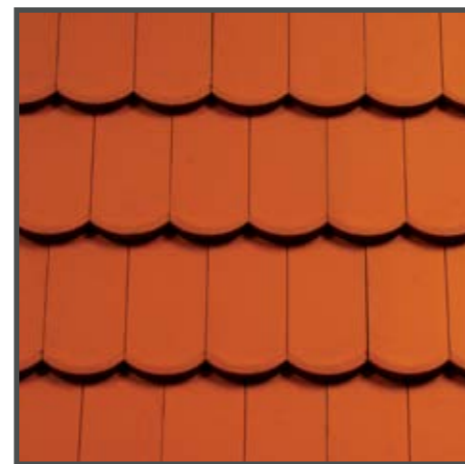
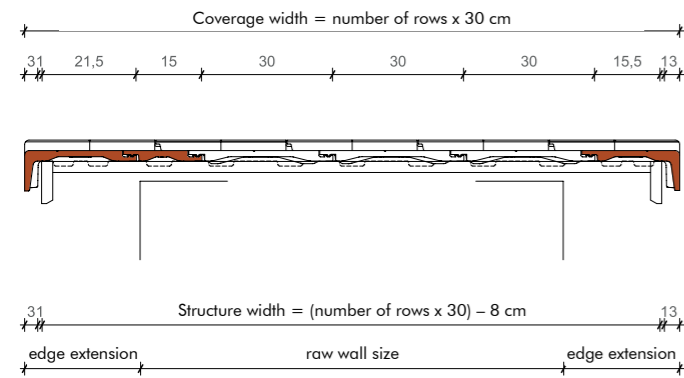
RUNDO

Batten length: min. 30/50 mm **Sidelap:** 30 mm

| Roof pitch | Minimum overlap | Maximum batten distance | Eave board distance | Ridge board distance | Tiles needed (pcs/m ²) |
|------------|-----------------|-------------------------|---------------------|----------------------|------------------------------------|
| 25-30° | 14 cm | 28 cm | 30 cm | 5 cm | 11,90 |
| 30-35° | 13 cm | 29 cm | 30 cm | 5 cm | 11,49 |
| 35-45° | 12 cm | 30 cm | 30 cm | 5 cm | 11,11 |
| Over 45° | 11 cm | 31 cm | 30 cm | 5 cm | 10,75 |

Prior to installation, the silicon strip must be removed from the back of the tile. Connected tiles must be installed with an offset, for RUNDO tiles ¼. For specific roof pitch, refer to the Application Notes for current installation instructions for roof shell structure and underlayment.

Attention! In case of RUNDO edge tiles the minimum batten distance is 28 cm.



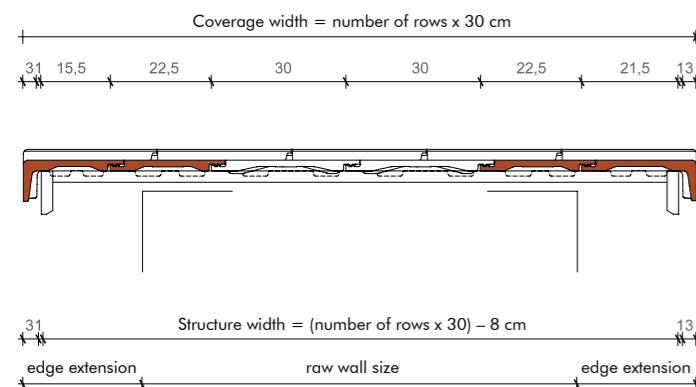
ZENIT MAX

Batten length: min. 30/50 mm **Sidelap:** 30 mm

| Roof pitch | Minimum overlap | Maximum batten distance | Eave board distance | Ridge board distance | Tiles needed (pcs/m ²) |
|------------|-----------------|-------------------------|---------------------|----------------------|------------------------------------|
| 20-25° | 10,5 cm | 31,5 cm | 33 cm | 5 cm | 10,58 |
| 25-30° | 9,5 cm | 32,5 cm | 33 cm | 4,5 cm | 10,26 |
| Over 30° | 8 cm | 34 cm | 33 cm | 4 cm | 9,80 |

Prior to installation, the silicon strip must be removed from the back of the tile. Connected tiles must be installed with an offset, for ZENIT tiles ½. For specific roof pitch, refer to the Application Notes for current installation instructions for roof shell structure and underlayment.

Attention! In case of ZENIT MAX edge tiles the minimum batten distance is 30,5 cm.



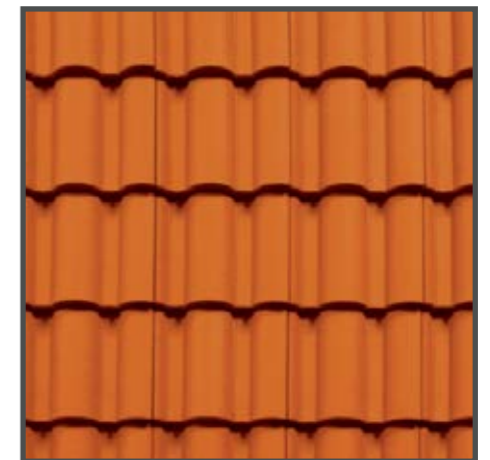
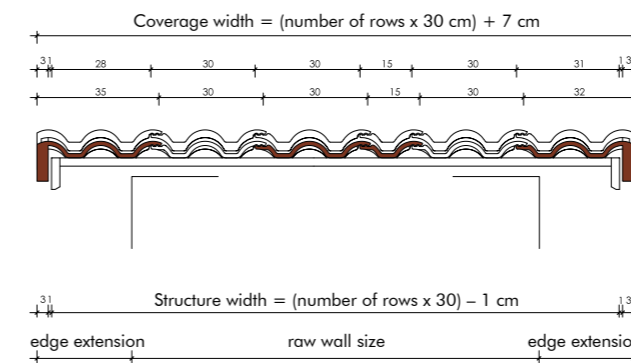
RENOVA PLUS, SYNUS, COPPO

Batten length: min. 30/50 mm **Sidelap:** 30 mm
Coverage length, batten distance: max. 340 mm (depends on pitch) **Headlap:** min. 80 mm (depending on pitch)
Eave board distance: 33 cm

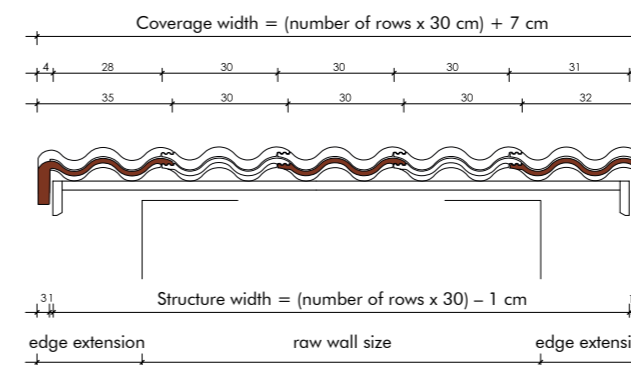
| Roof pitch | Minimum overlap | Maximum batten distance | Ridge board distance | Tiles needed |
|------------|-----------------|-------------------------|----------------------|--------------------------|
| 16-22° | 10 cm | 32 cm | 5 cm | 10,42 pcs/m ² |
| 22-30° | 9 cm | 33 cm | 4,5 cm | 10,10 pcs/m ² |
| Over 30° | 8 cm | 34 cm | 4 cm | 9,80 pcs/m ² |

In case of COPPO colors, the production process uses random tinting, so it is recommended to use tiles from several pallets to ensure a random pattern.

RENOVA PLUS, COPPO



SYNUS



Evolution is in our DNA

Terran is so much more than one of the finest concrete roof tiles in the world. Terran is a state of mind: security, safety, elegance and beauty, enduring value, energy savings and caring for the environment. The Terran state of mind is for your peace of mind.