

TERRAN[®] CENERON

Make your roof ready for the sun



R3D

Energy efficiency is no longer a matter of style!

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

We got here through a century of continuous development.



2020 GENERON

The next 100 years begin with you!

STYLISH



WHY IT IS A GOOD CHOICE?

- Aesthetics: The product provides a premium appearance to the property, in addition to the DARK, now in the RED color.
- 25-year product and performance guarantee.

A modern solution for both roofing and energy consumption.

Has received numerous domestic and international recognitions.

Complete assurance of the original protective function of the roof over the entire roof surface.

Reliable. It already supplies energy to more than 430 homes, and the number of installed modules exceeds 210.000 units.

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.

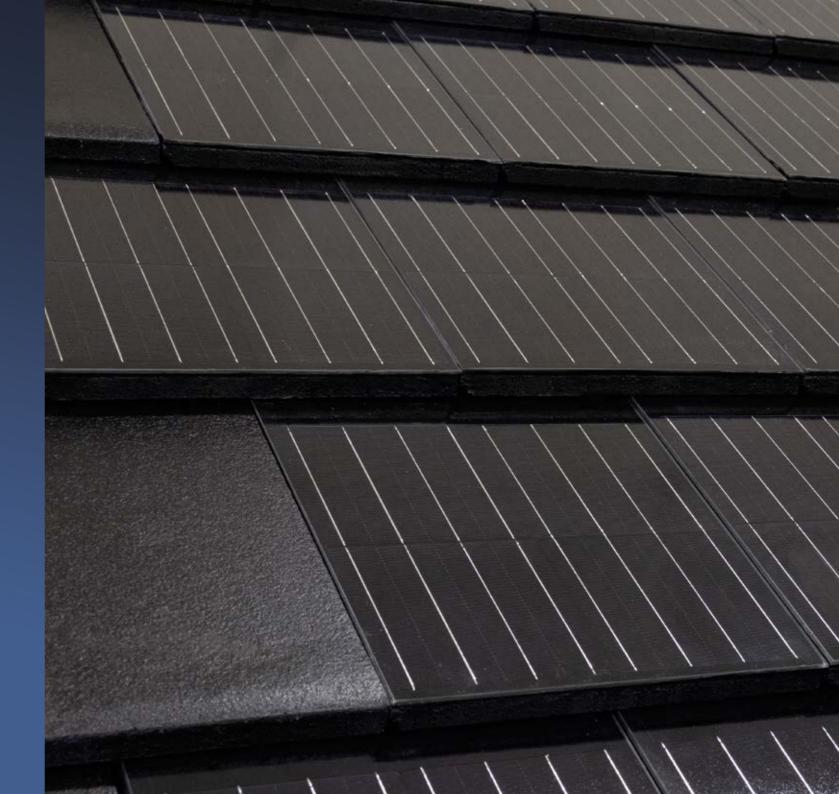
Our most prestigious recognition so far is that the stylishness of the Terran Generon has won the RedDot Product Design 2021 award at the international competition of the German organization with a long history.











AESTHETICS

Come home each day to a sight to behold and to be proud of!

It is time to forget the huge solar panels added above the surface of the roof.

Terran Generon goes head to head with traditional solar panels in effectiveness and efficiency and it surpasses them in aesthetic appearance. Your home can be beautiful to the last detail – from a birds' eye view to close inspection – no need to compromise for the sake of technology.

Because Generon solar cells are integrated into the roof tile, there is no need to drill holes into the roof structure, adding superior appearance to your home and increasing its value. The greater curb appeal distinguishes your home from the ordinary.

The beam of sunlight reflecting off your Generon roof carries the message of a family who cares about the environment, uses renewable energy, thus reducing the household's carbon footprint.

Take advantage of our progressive and innovative solutions when building or renovating one of your greatest assets, your home.





WARRANTY

Modern solar cell on a premium roof tile.

25 YEAR PERFORMANCE GUARANTEE Another argument in favor of Generon: while most solar panels are made abroad by foreign firms outside of Europe, Generon is made and assembled by a 100% Hungarian-owned enterprise.

Your investment is protected; in case of questions or problems, the solution is easily and quickly accessible.

Our solar roof tiles come with a 25-year product and performance guarantee.*

*Further information on our warranty is available at www.terran-generon.com.

COMPATIBILITY

Why would you cover something beautiful?

THINK OF THE FUTURE NOW!

For builders not ready to commit to Generon solar roof tiles, but may want to upgrade in the future, the smart choice is between Terran Zenit Max or Rundo concrete tiles, whether renovating or building anew.

Zenit Max and Rundo family tiles can later be easily upgraded to Generon without having to replace the entire roof.

A Generon product with a different design is compatible with Terran Zenit Max and Rundo roof tiles. This difference can also be seen in the product images displayed above.

ENVIRONMENTAL AWARENESS

The base of Terran Generon is concrete tile – in itself eco-friendly.

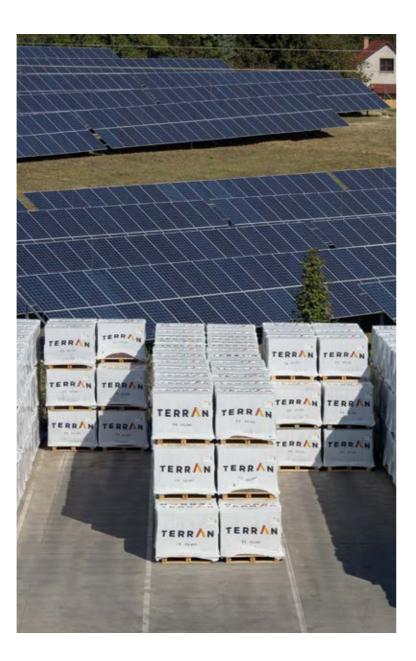
In 2020, the year of progressively worse crises of climate change, it is especially important to consider what is above our heads. Weather protection and cozy warmth involve more than the choice of roof tile and energy supply. The future vision is made real by new construction and renovation, which are more eco-friendly than houses built long ago.

Think of future generations when you build. You are leaving an ecological footprint, a legacy for our children and grandchildren.

In order to reduce the carbon footprint of its operations, Terran has built a solar park in Bóly that now supplies its nearby factory's total electricity needs.

Generon is the result of this environmental consciousness, besides its many innovations.

Generon raises the roof to a new level: increases the percentage of renewable energy used by the home, reducing its carbon footprint as well as its electric bill.



FINANCING OPPORTUNITIES

Terran Generon improves your quality of life and the value of your home, so it is a great investment

as well. It reduces your home's ecological impact, protecting future generations. When the loan is repaid, the home's energy supply is assured without additional cost.

It is also important to factor in that when building a house (roof included), the incremental cost of Generon is around 1%. In case of renovation, to cost to upgrade to Generon is merely 10%. It is in your hands: is the increased cost

worth the aesthetic, environmental and energy-saving benefits? Remember, the roof is a defining part of your home and contribute a large part of its curb appeal.

Naturally, the value of your home is increased by the investment in the roof. When it comes to resale, the investment in Generon can be built into the selling price while positively differentiating the property from others in the market.

Just think: from two similar buildings on the market, wouldn't you choose the one with modern and appealing features?





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.

How big of an energy storage (battery) should be installed?

The electricity storage to be installed should generally be optimized for the household's general, non-heating electricity consumption. In the case of an average home, the solar power system is sized based on past consumption.

To supply household consumers, a storage capacity of 1.1-1.4 kWh is recommended for an installed solar panel peak power of 1 kWp. Oversizing the system is generally neither technically nor economically justified, but it is possible if consumers are installed in the household in the future that have different needs than the usual daily energy consumption. Such consumers can be electric car chargers, additional electric heating devices, saunas, jacuzzis, etc.



More details:

terran-generon.hu/akkumulator-ismerteto

MONITORING CAPABILITY



Real-time information about the system's energy production even by smartphone.

CENERON the solar roof APP

The image is for illustration only.











TECHNICAL DETAILS

Monocrystalline

4 pcs

Of the Generon DARK product, compatible with Zenit Max.*



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Front surface	3.2 mm thick tempered
Open-circuit current	7.14
Open-circuit potential	2.71 \
Overload current	7.83
Idle potential	2.77 \

Photovoltaic module

Number of cells

Type

Cabling 520 mm long, 4 mm² solar cable with PV4 connector

GENERON DARK

Solar contracte roor the	
Size	330 x 420 mm
Coverage width	300 mm
Base product	High-density colored concrete element
Harmonized technical regulation	EN 490:2011
Nominal performance	15.5 Wp
Mechanical rigidity	> 1200 N
Water resistance	> 20 hours
Fire protection	B-s1, d0 MSZ EN 13501-
classification	1:2007+A1:2010
Behavior under	B _{roof} (t1) MSZ EN 13501-5:
external fire	2005+A1:2010

Solar concrete roof tile

^{*} Terran Generon is compatible with Terran Zenit Max and Terran Rundo roof tiles as well. However. Depending on the compatible roof tile, the technical data and price of the Generon product are different. Please download our Generon Installation Guide from terran-generon.com!



TECHNICAL DETAILS

Of the Generon RED product, compatible with Zenit Max.*

10.5 Wp/module 106 Wp/m² 9.4 m²/1 kWp

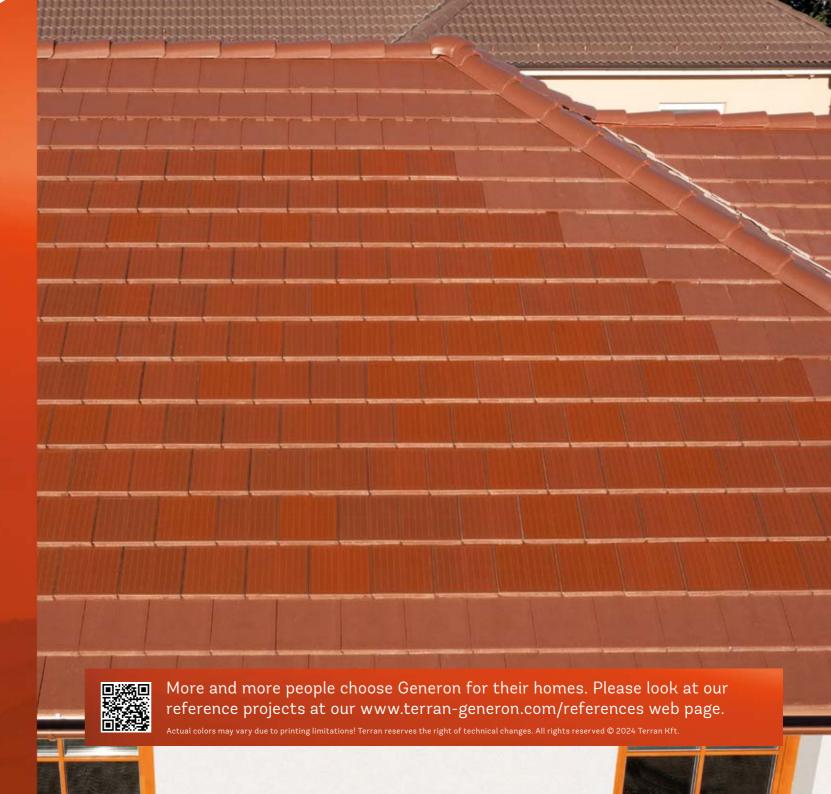
Photovoltaic module

Туре	Monocrystalline
Front surface	3.2 mm thick tempered glass
Open-circuit current	5.14 A
Open-circuit potential	2.71 V
Overload current	5.71 A
Idle potential	2.77 V
Number of cells	4 pcs
Cabling	520 mm long, 4 mm² solar cable with PV4 connector

GENERON BB

Solar concrete roof tile 330 x 420 mm Size Coverage width 300 mm High-density colored Base product concrete element Harmonized technical EN 490:2011 regulation Nominal performance 10,5 Wp Mechanical rigidity > 1200 N Water resistance > 20 hours Fire protection B-s1, d0 MSZ EN 13501classification 1:2007+A1:2010 B_{roof} (t1) MSZ EN 13501-5: Behavior under 2005+A1:2010 external fire

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