



CLINKER FOR RAINSCREEN FACADES

The RONSON company is one of the largest Russian manufacturers of rainscreen facades operating on the market since 1992.

The company provides a full range of services for the exterior finish of buildings with the use of the RONSON systems produced from galvanized and stainless steel.

Thanks to high performance and convenient installation, rainscreen facades are firmly and invariably included in the sphere of modern construction. But a rainscreen facade is often associated with certain urbanization tendencies and simplicity of architectural solutions.

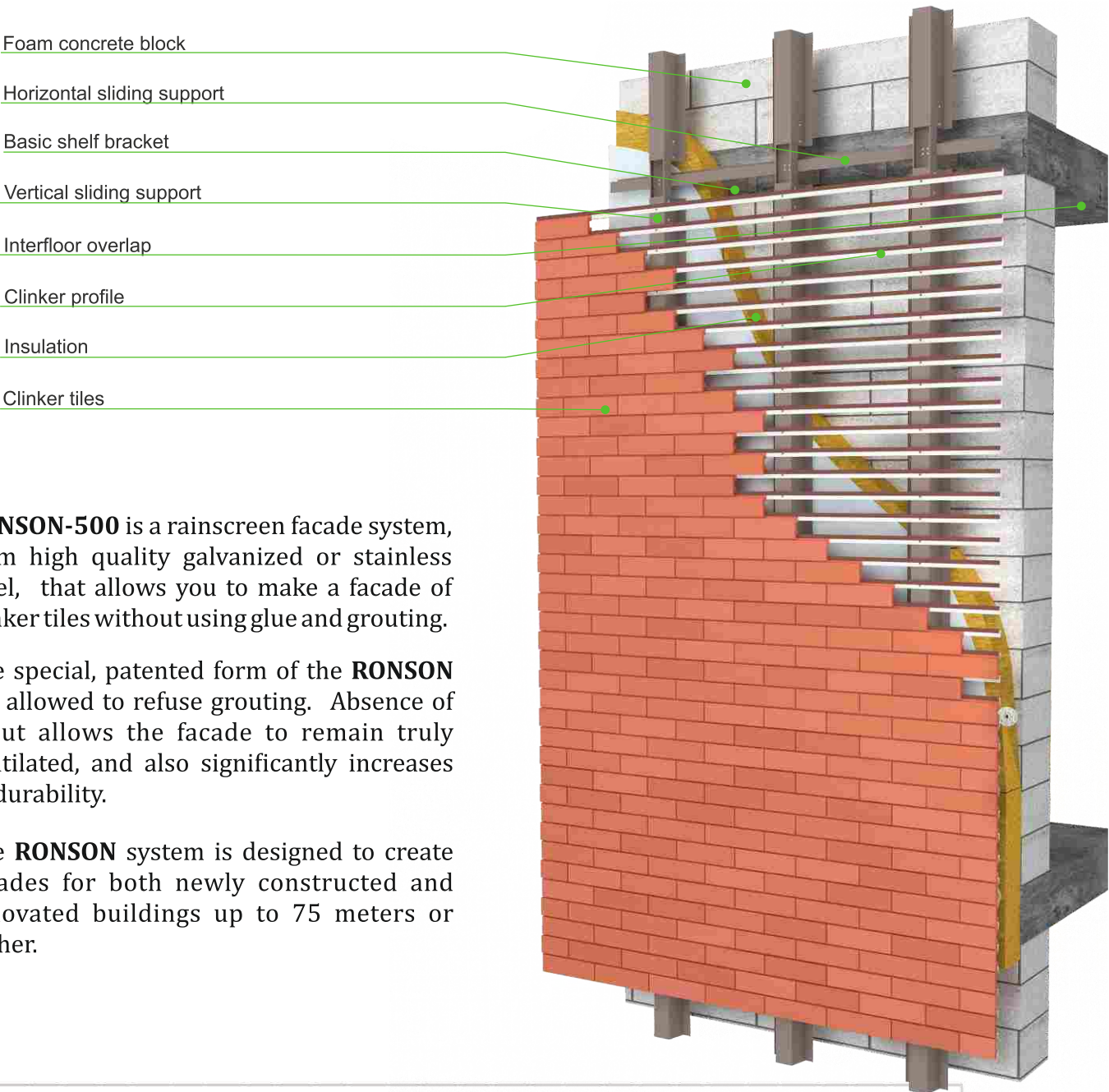
So how could we give the building an interesting, sophisticated look while keeping all the advantages of a rainscreen facade?

RONSON engineers who faced such a task, developed the RONSON-500 facade system that allows to create a rainscreen facade with a facing of clinker tiles, without using grout and glue.

Clinker is a type of ceramic tile manufactured from special types of clays and with the help of special modes of high-temperature firing.

The elegance of the clinker tiles facade lies in the heterogeneity of the texture and color of the clinker; its thoroughbredness, so to speak, which allows to provide the building for the appearance with a touch of time, and to create the so-called "vintage effect".

RONSON-500 SYSTEM for clinker tiles fixing



RONSON-500 is a rainscreen facade system, from high quality galvanized or stainless steel, that allows you to make a facade of clinker tiles without using glue and grouting.

The special, patented form of the **RONSON** tile allowed to refuse grouting. Absence of grout allows the facade to remain truly ventilated, and also significantly increases its durability.

The **RONSON** system is designed to create facades for both newly constructed and renovated buildings up to 75 meters or higher.

What do you get by choosing RONSON-500

During installation

- Easy installation
- No glue, no grout
- Year-round installation option
- Easy quality control of assembly
- Adjusting the plane of the facade
- The ability to easily correct errors
- Compatibility with architectural decor
- Allows to install the communication lines

During operation

- Individual tiles replacement option
- Exclusive aesthetics of the building
- Effective vapor permeability
- Weather protection of walls
- Healthy indoor climate
- Reduced heating costs
- Sound insulation
- Fire safety

NATURAL CLINKER

CLINKER is an environmentally friendly finishing material produced from natural clay by firing it at high temperature.

With clinker, you can easily reproduce the style of classical architecture in a modern building. A rich color palette and choice of textures allows you to create architectural masterpieces with individual non-repeating design.



- Advantages of CLINKER**
are well known:
- Natural, environmentally friendly, non-flammable material
 - Exceptionally dense material structure, no pores inside the product;
 - Low moisture absorption;
 - Frost resistance (more than 150 cycles), resistance to temperature extremes and high humidity;
 - High strength characteristics (bending, load, abrasion, etc.);
 - A huge number of colors achieved during clay firing without the addition of artificial colors;
 - Does not interact with acids and chemicals, is resistant to UF, fungus, mold, weathering.
 - No efflorescence



Problems of a facade when using glue or grouting



In other systems, clinker tiles can be installed on the rainscreen facade only using grout that tends to crack. The cracking occurs due to some atmospheric phenomena, and thermal deformations of load-bearing frame elements. As a result, the facade of the building becomes extremely untidy.



Through the cracks the moisture penetrates into the cuts located on the upper side of the tile. Freezing, the water creates pressure on the cladding material and gradually destroys it.



Efflorescence is another drawback of facades, installed using wet type processes. Whitish spots are formed on the surface of the walls due to the crystallization of salts contained in the grout.



RONSON solution



The design features of the **RONSON CLINKER** guarantee a reliable fixation; at the same time, there are no places on the tiles where water could gather. Precipitation and atmospheric moisture are removed naturally from the surface of the facade, without the slightest harm to the cladding elements.

The **RONSON CLINKER** is made of clay, which does not contain salts, and is installed without glue and grouting, therefore it allows to solve the problem of efflorescence once and for all.

Easy Installation



Due to special tiles configuration and well thought out subsystem design, the installation process is as simple as possible. After installing the insulation and installation the main frame, a special clinker profile is attached. The unique feature of the **RONSON SYSTEM** is that you can install the clinker after the all profiles. This speeds up work and allows you to protect the cladding elements from damage and contamination. Special locking ledges of the profile allow you to securely lock the clinker on the facade.



Operating convenience

The unique shape of the **RONSON CLINKER** provides the facade with one more indisputable advantage. If necessary, individual tiles can be removed and reinstalled without dismantling other cladding elements. To remove the tile, you need to move it up. This will allow to bring the locking ledges of the clinker profile back to the initial position, after which the tile is taken out. Spot dismantling of cladding elements reduces the physical and time costs for the production of the whole range of works.



Thus, the **RONSON CLINKER** allows you to replace individual tiles, fasten scaffolding to the supporting structure of a building at any stage of cladding process, implement the communications lines when you need it, even if the facing stage is already completed.

A COUPLE OF WORDS ABOUT ADVANTAGES...

Altitude

The high mechanical strength of the **RONSON CLINKER** and the reliable technical solutions of the **RONSON-500** system allows to install it on the buildings up to 75 meters and higher.

Seismic resistance

The presence of flexible spring-loaded elements, as well as the use of original and reliable technical solutions, allowed the **RONSON-500** system to successfully pass the tests for seismic resistance and obtain permission to be used in areas with seismicity up to 9 on the Richter scale.

Frost Resistance

The vacuum extrusion technology makes it possible to obtain high density natural clinker without microcracks and voids. That's why the **RONSON CLINKER** has low water absorption and high frost resistance (more than 150 cycles).

Environmental friendness

Only natural components are used in the production of the **RONSON CLINKER**. That's why, by the degree of environmental friendliness, it is on a par with such natural materials as stone and wood.

FIRE SAFETY

The **RONSON CLINKER** does not contain artificial dyes, which accounts for its absolute incombustibility. The system altogether has the highest fire safety class.



The **RONSON-500** system with a clinker tile cladding successfully passed fire tests, seismic impact tests and was approved for use in areas with with seismicity **up to 9** on the Richter scale. It is also passed a full-scale strength tests, allowing to apply **RONSON-500 without limiting of height!**

The RONSON-500 system has the corresponding certificates:

- FCS Technical certificate;
- Expert opinion on fire-technical properties issued by V.A. Kucherenko CSRIBS, Moscow;
- Seismic impact tests 7-9 on the Richter scale conducted by V.A. Kucherenko CSRIBS, Moscow;
- Evaluation of corrosion resistance ExpertCorr-MISaA, Moscow;
- Protocol of control tests of fasteners CJSC Institute for Research and Testing of Building Materials and Products "Composite-Test", Korolev;
- Calculation of the strength of structures, performed on the standard complex "Lira" of RSC "ENERGIYA", Korolev;
- Strength test protocol of the Technopolis testing laboratory;
- Expert opinion of JSC "Central Research Institute of Industrial Buildings", Moscow.



OPERATING SPECIFICATIONS



Frost resistance:	more than 150 cycles
Bending strength:	Not less than 30N/mm2
Water absorption:	Not more than 3%
The thickness of the horizontal and vertical joint:	7 mm

Patent for invention No. 2553695



(System for facing of building, subsystem, and tiles)

Tile dimensions mm:	287x85x22mm
Consumption with account for horizontal joints:	37.8 pcs/m2
Number of pieces in a package:	8 pcs
Weight of 1 tile:	0.955 kg
Package weight:	7.64 kg
Weight 1 m2:	38 kg



The clinker products are made from natural raw materials (highly plastic clay), which, due to its natural features, does not guarantee absolute compliance with nominal sizes. The product changes its size in the process of molding, drying and firing. DIN 105 standards take into account this feature, defining the maximum permissible deviations from nominal (normative) dimensions. **Thanks to the use of special technologies and considerable experience in the production of NATURAL CLINKER, we managed to achieve deviations of no more than 2%!**



ABOUT THE PLANT

NATURAL RONSON CLINKER is manufactured in Germany.

The plant is equipped with the most up-to-date technological equipment, which makes it possible to manufacture products that meet the most stringent international quality standards.



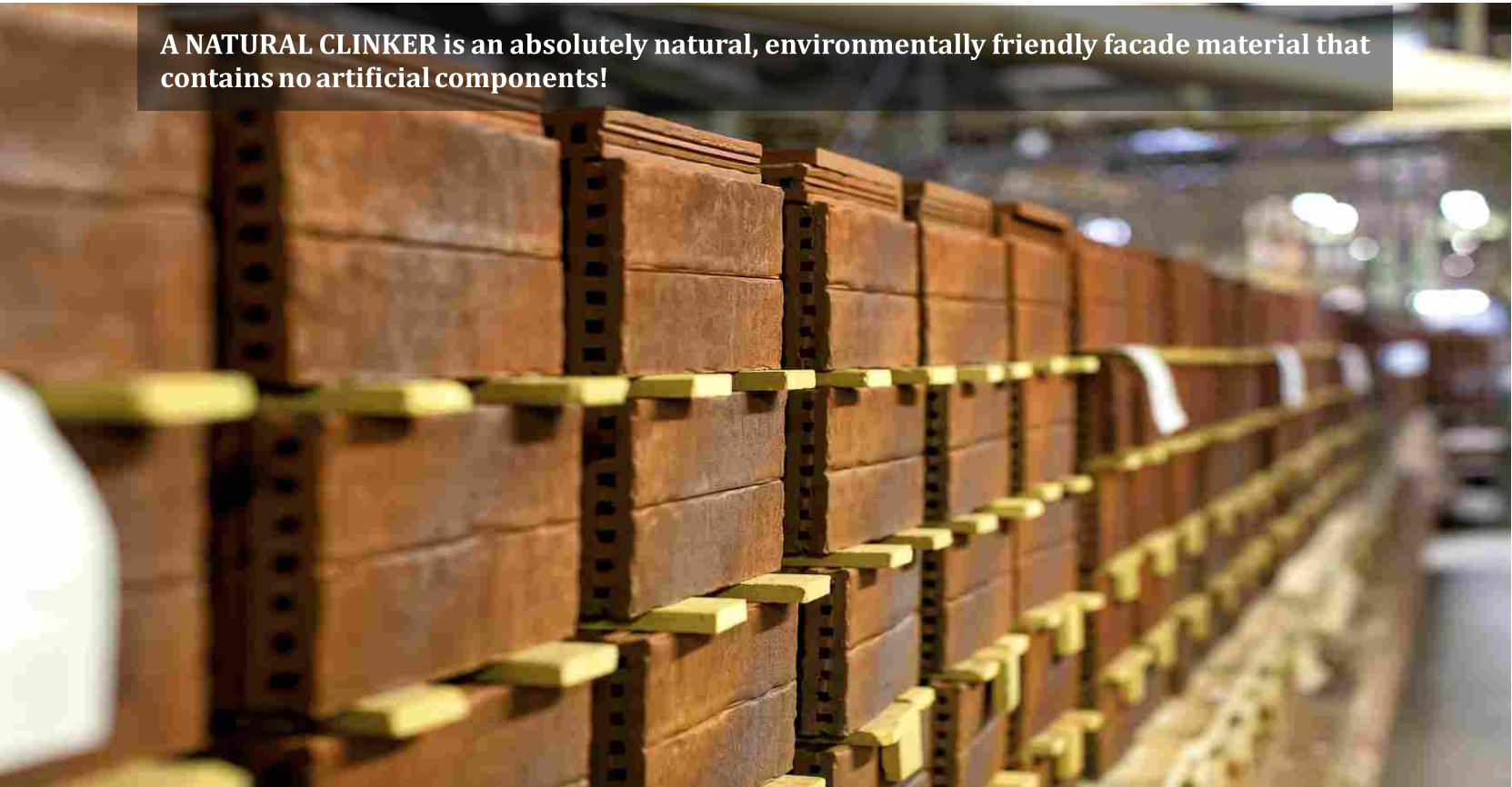
Special multi-colored slate clay, mined in the north-west of Germany, does not contain either salts or chalk, which gives the raw materials and finished products a homogeneous structure without impurities.



The laboratory is equipped with the most modern equipment, and carries out continuous monitoring of product quality at all stages of the production cycle. It makes the effectively control of the composition of raw materials, which allows us to achieve minimal differences between batches.



A NATURAL CLINKER is an absolutely natural, environmentally friendly facade material that contains no artificial components!





Clay is carefully crushed to remove any possible voids in the finished product. We use extrusion technology to achieve maximum product quality. The elimination of air bubbles from the clay mass in a special vacuum chamber and a high temperature firing make it possible to obtain products with a minimum internal porosity.

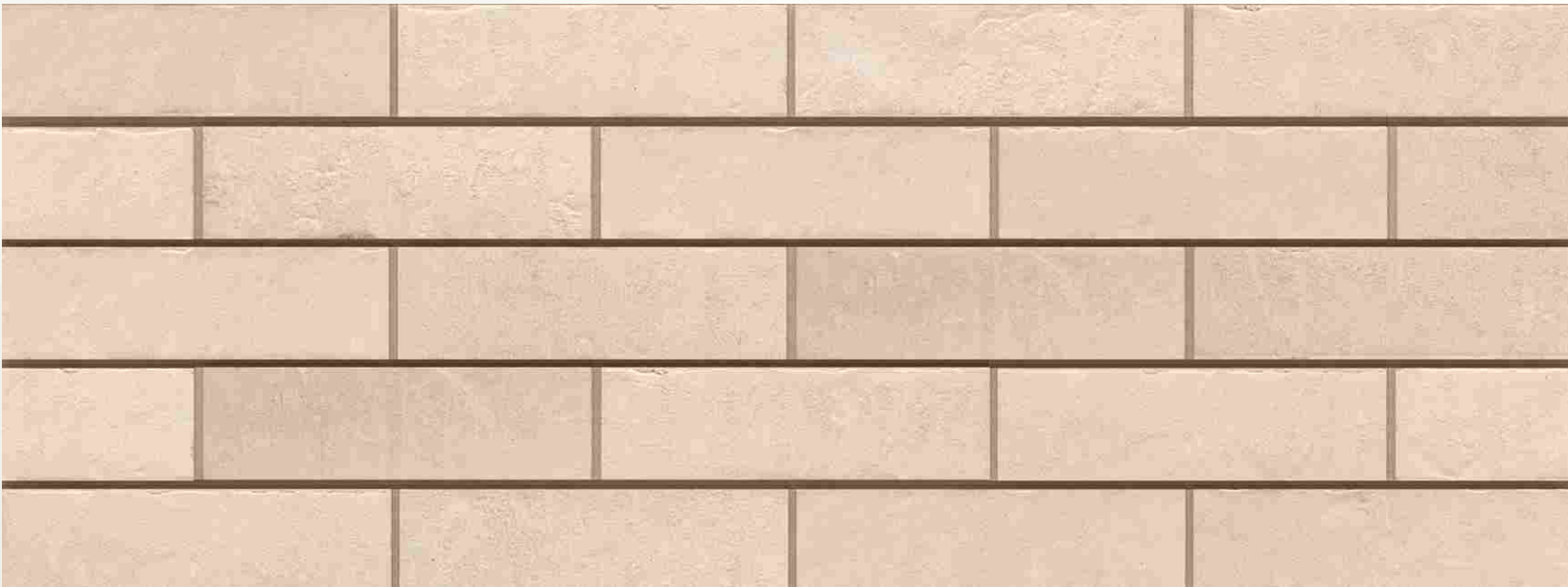


Such clinker is distinguished by its great strength, extremely low water absorption and high frost resistance. It is ideal for all operating conditions.



COLOR PALETTE

351 Kalkbrand



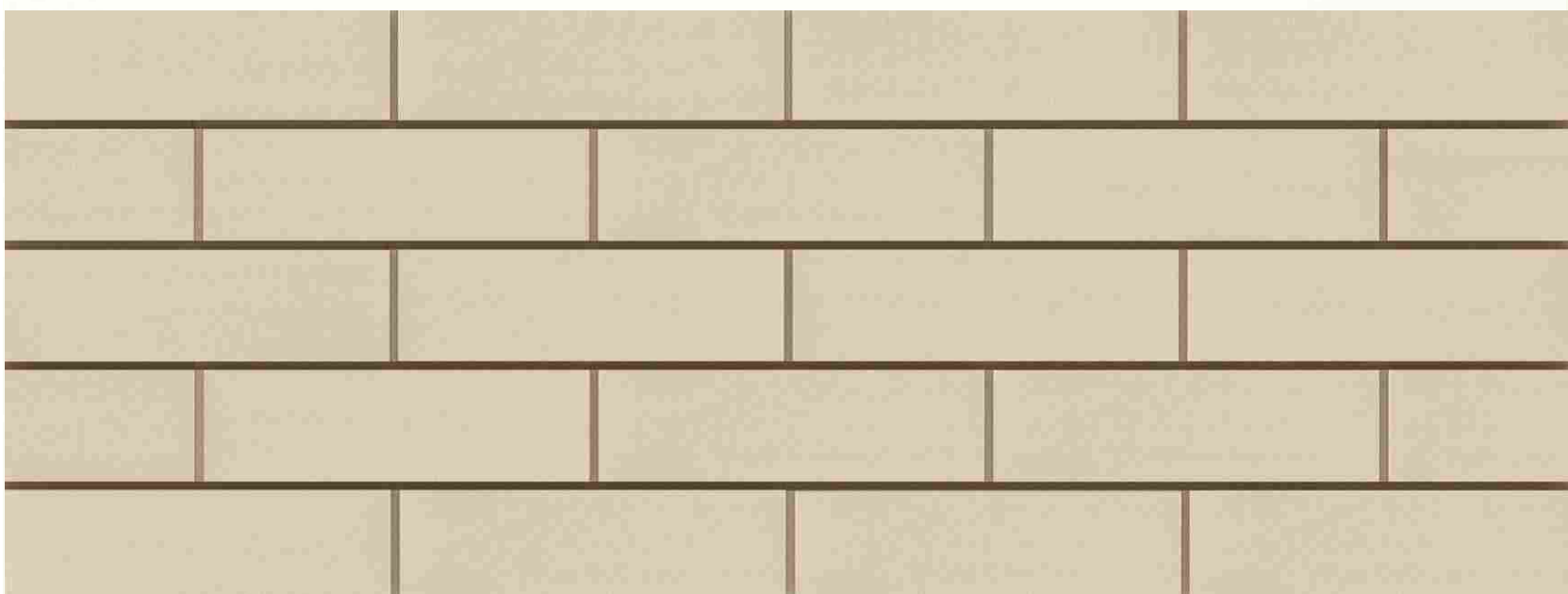
410 Groningen



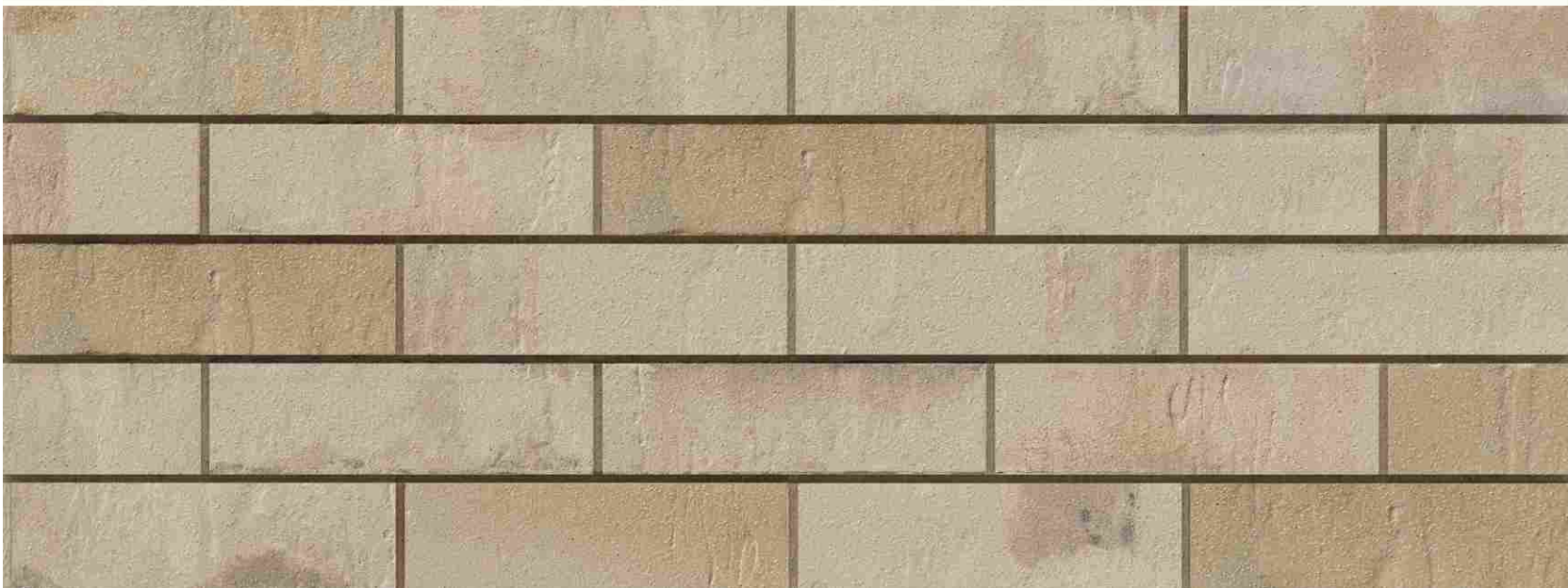
371 Silberbeige



140 Weiß



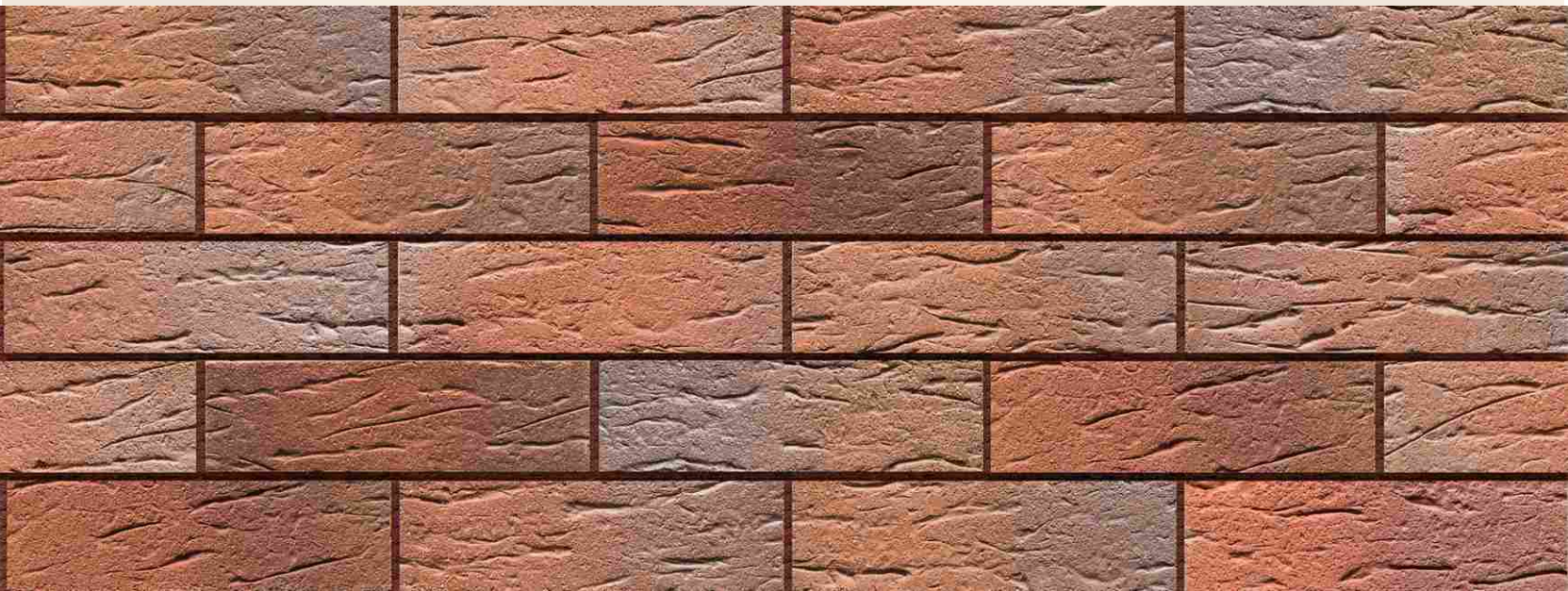
480 Beigebrand



Depending on the initial chemical composition of the clay, the temperature and the duration of its firing in the kiln, a wide variety of colors of natural clinker can be obtained.



417 Eindhoven



357 Backstein



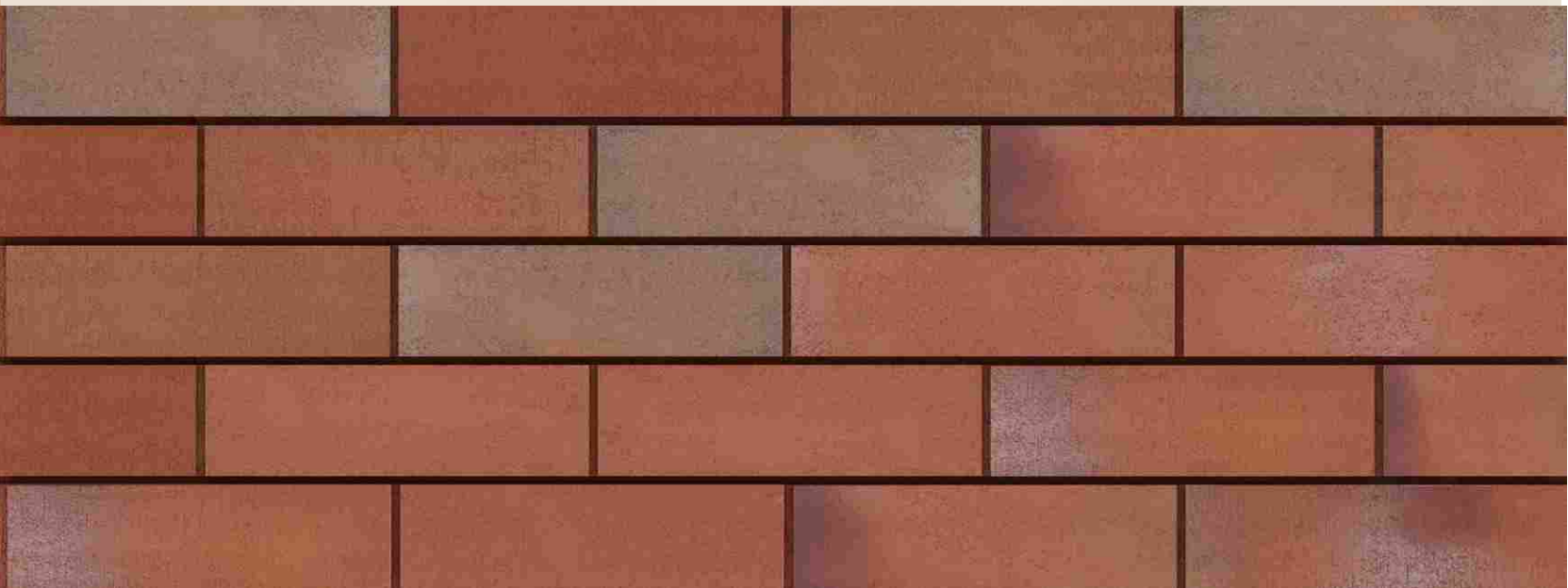
353 Eisenrost



494 Rot-bunt



3152 Palace strukturiert



«The game of color» is a characteristic feature of clinker and is what differs clinker from ordinary ceramics.



352 Kupferschmelz



405 Amsterdam



372 Amberbeige



374 Shabbyrot

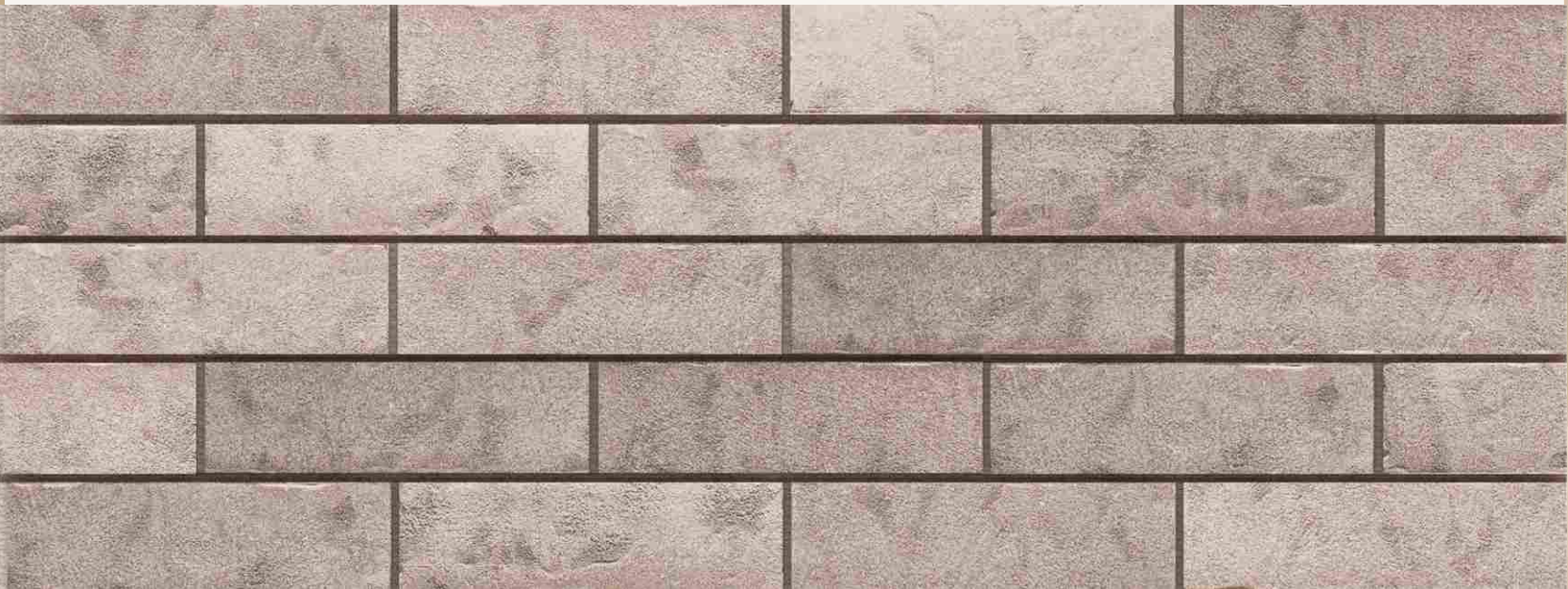


429 Aardenburg

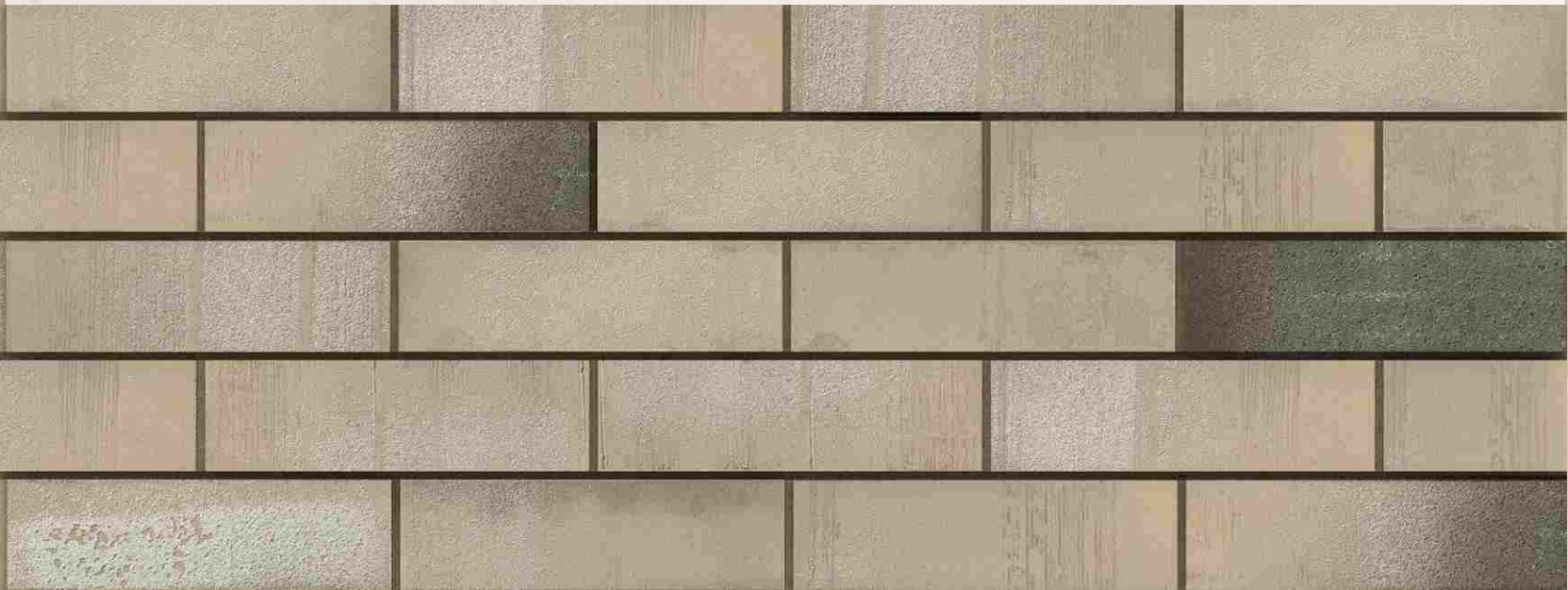


Natural brightness and a huge variety of color variations, the so-called «Mix - facade», are achieved through the use of various modes of tile firing.

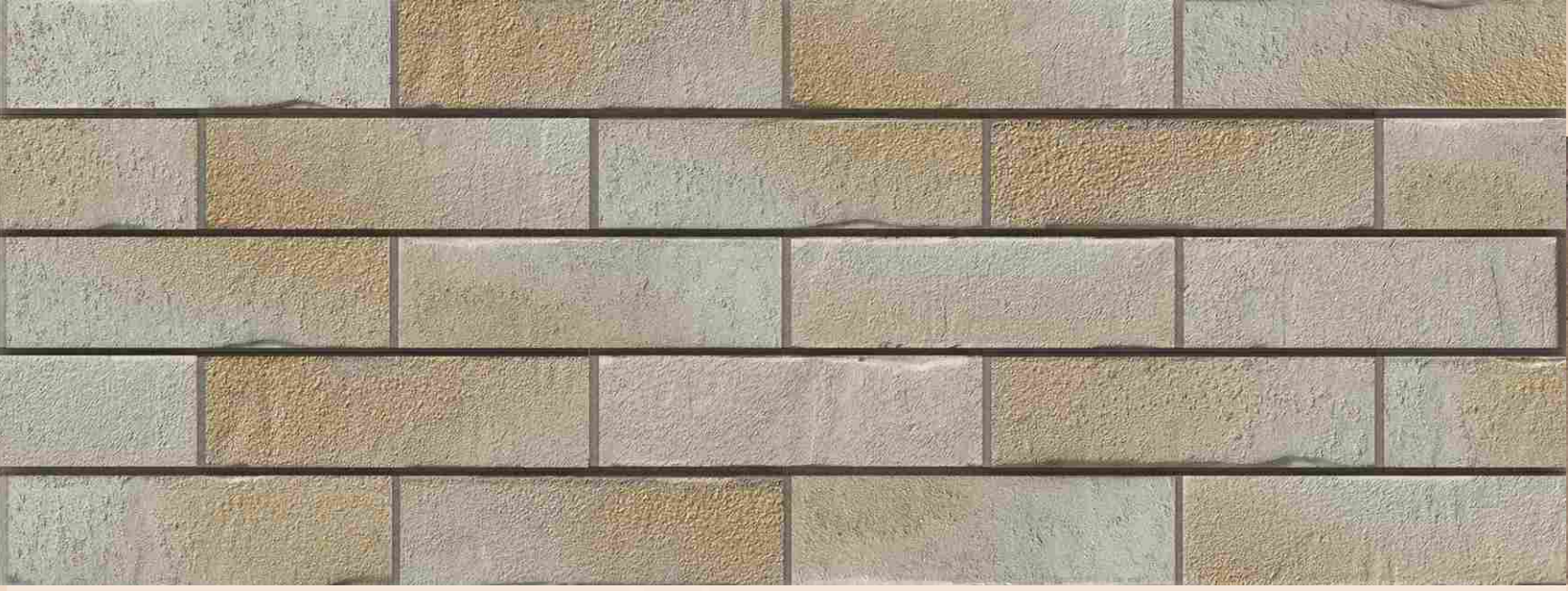
237 Austerrauch



490 Sandgrau



450 Gold-weiß



472 Grau engobiert



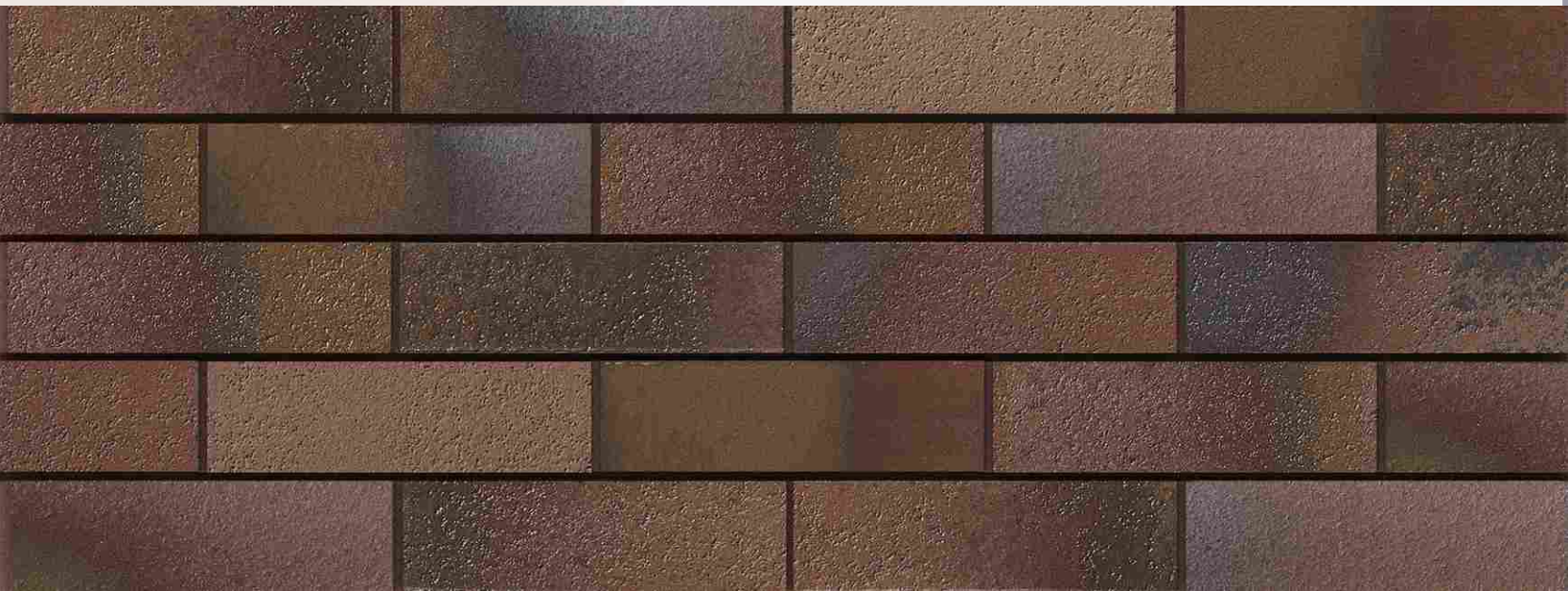
375 Platingrau



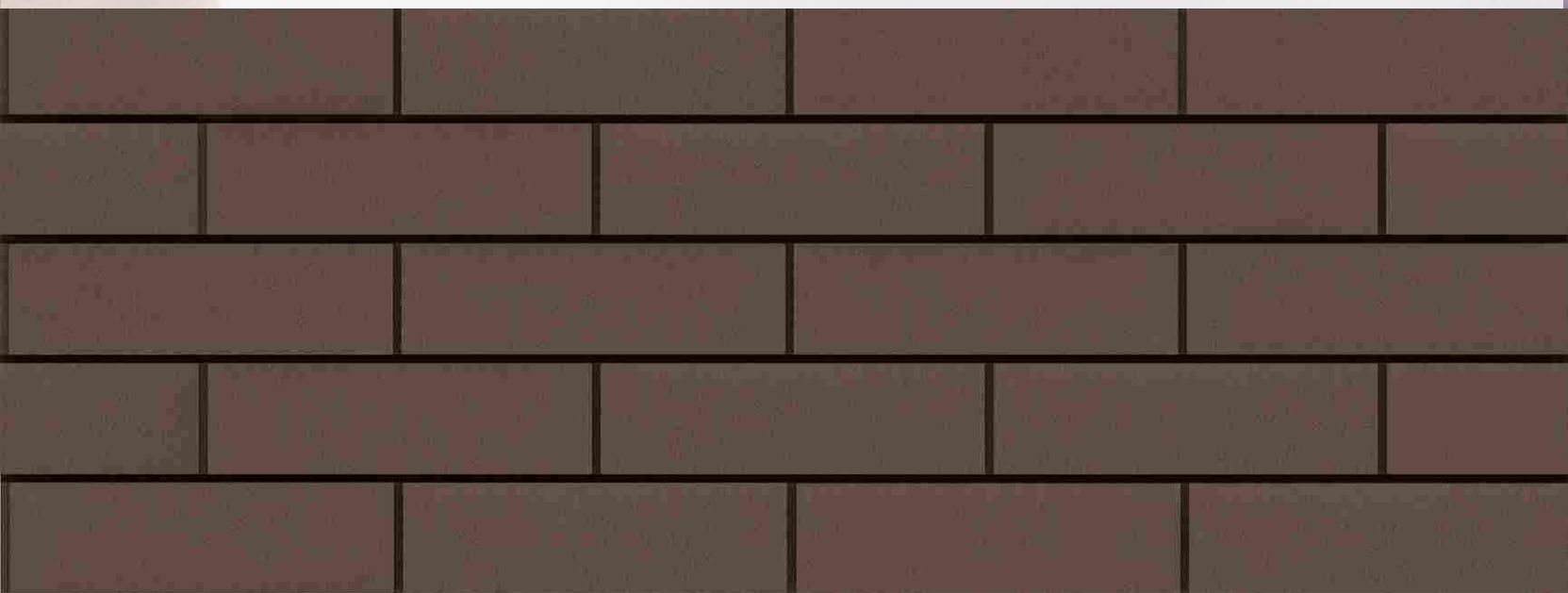
With clinker, you can easily reproduce the style of classical architecture in a modern building..



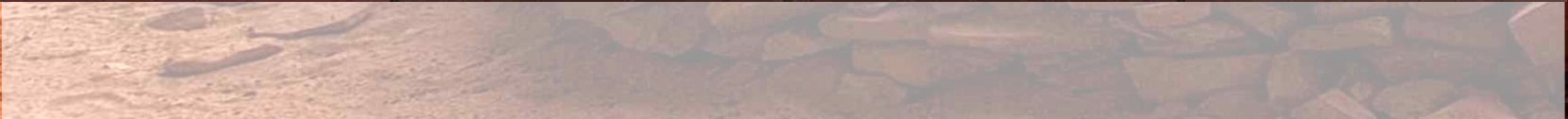
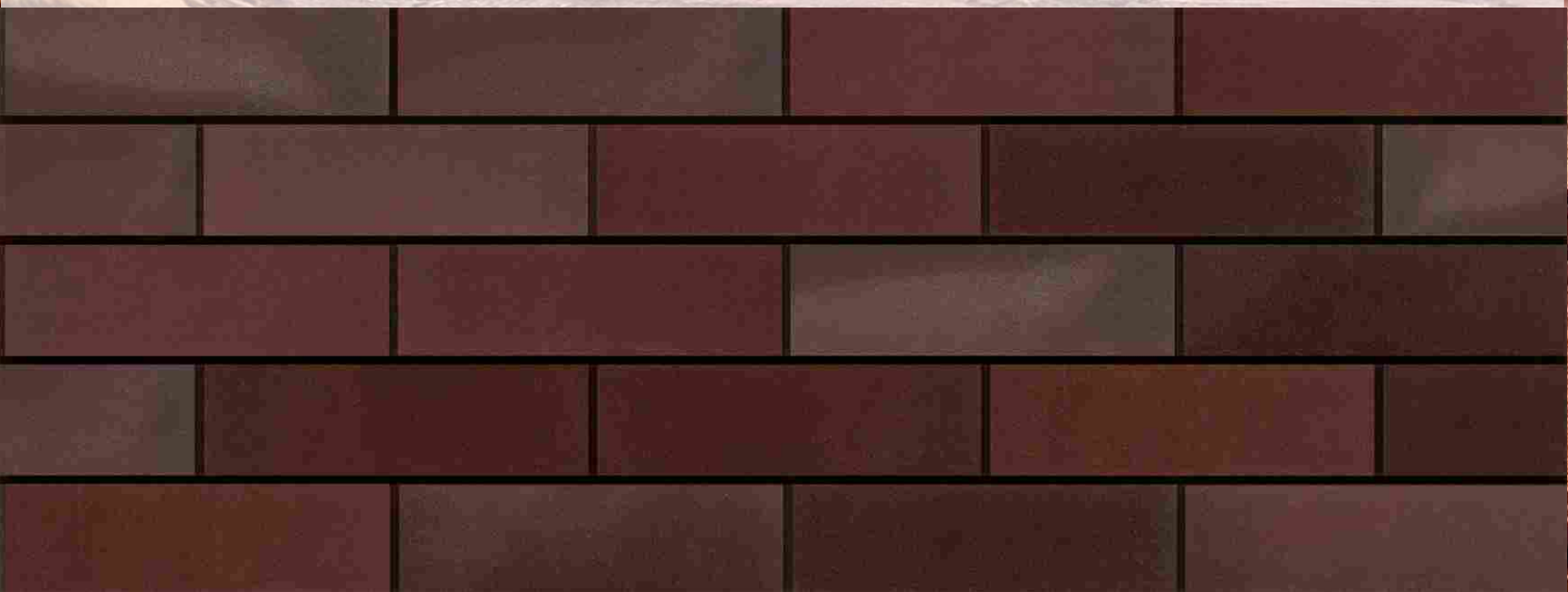
455 Braun-blau



210 Braun



825 Sherry



377 Platinbraun



359 Kohleglanz



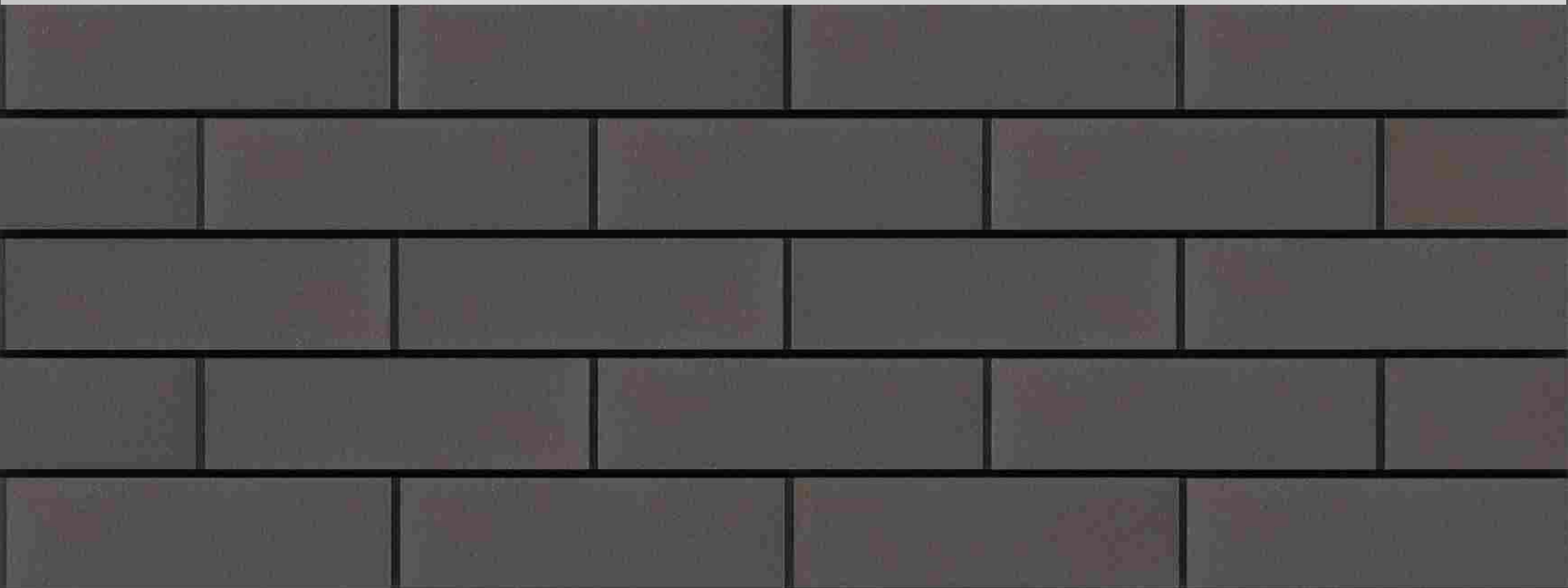
Clinker is durable, beautiful, natural, functional.



336 Metallic-schwarz



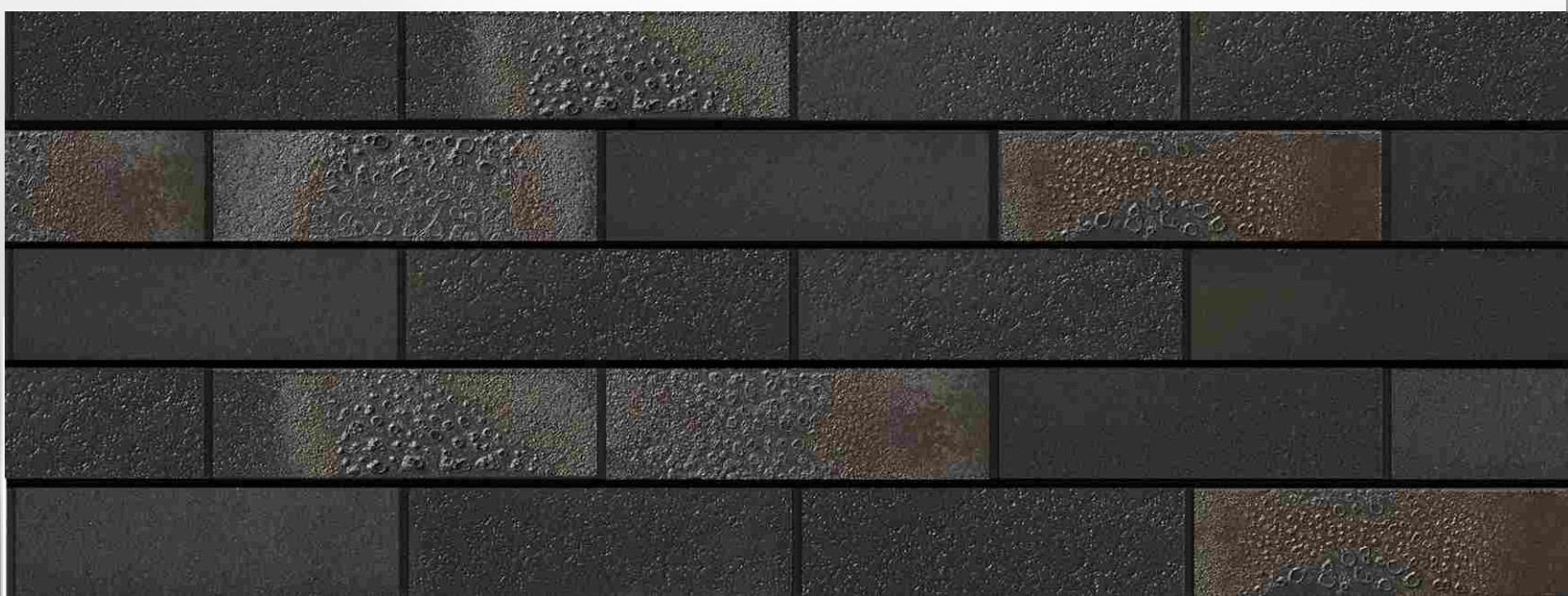
330 Graphit



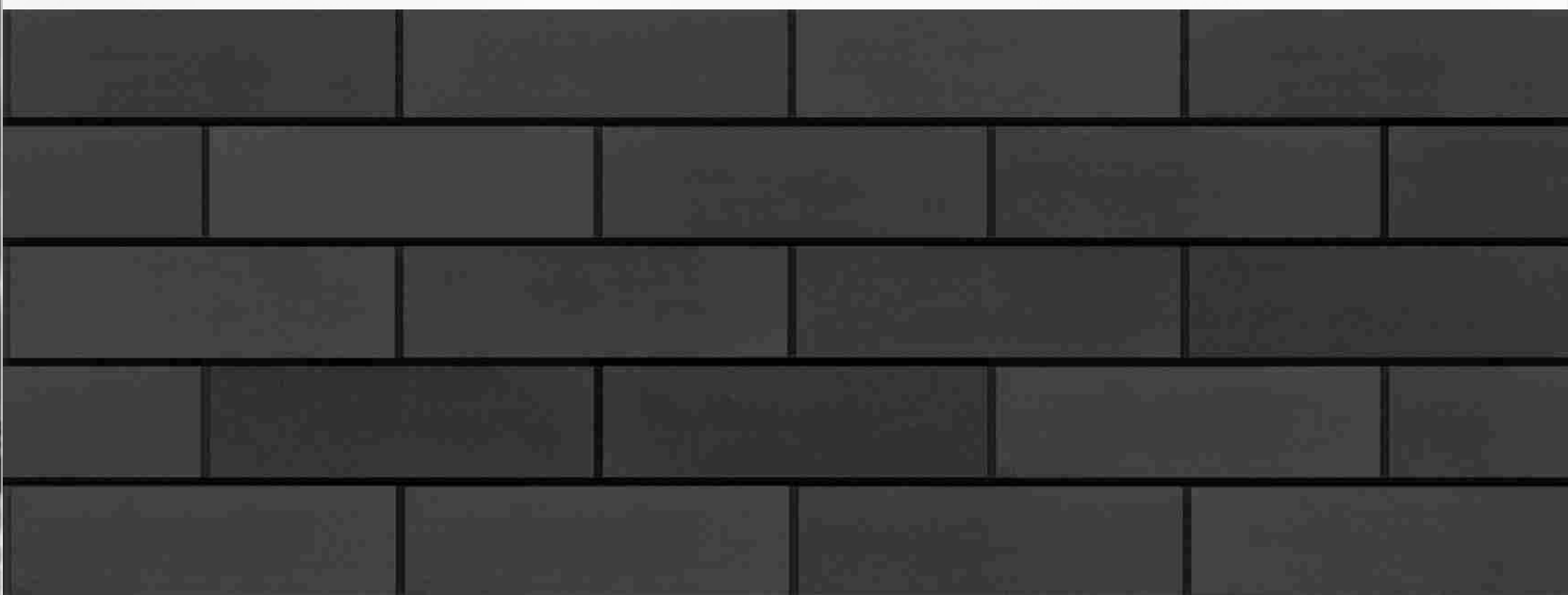
376 Platinschwarz



456 Schwarz-blau



319 Royal





Apart complex «Gorokhovsky 12»
Moscow, Gorokhovsky per.
RONSON-500 system



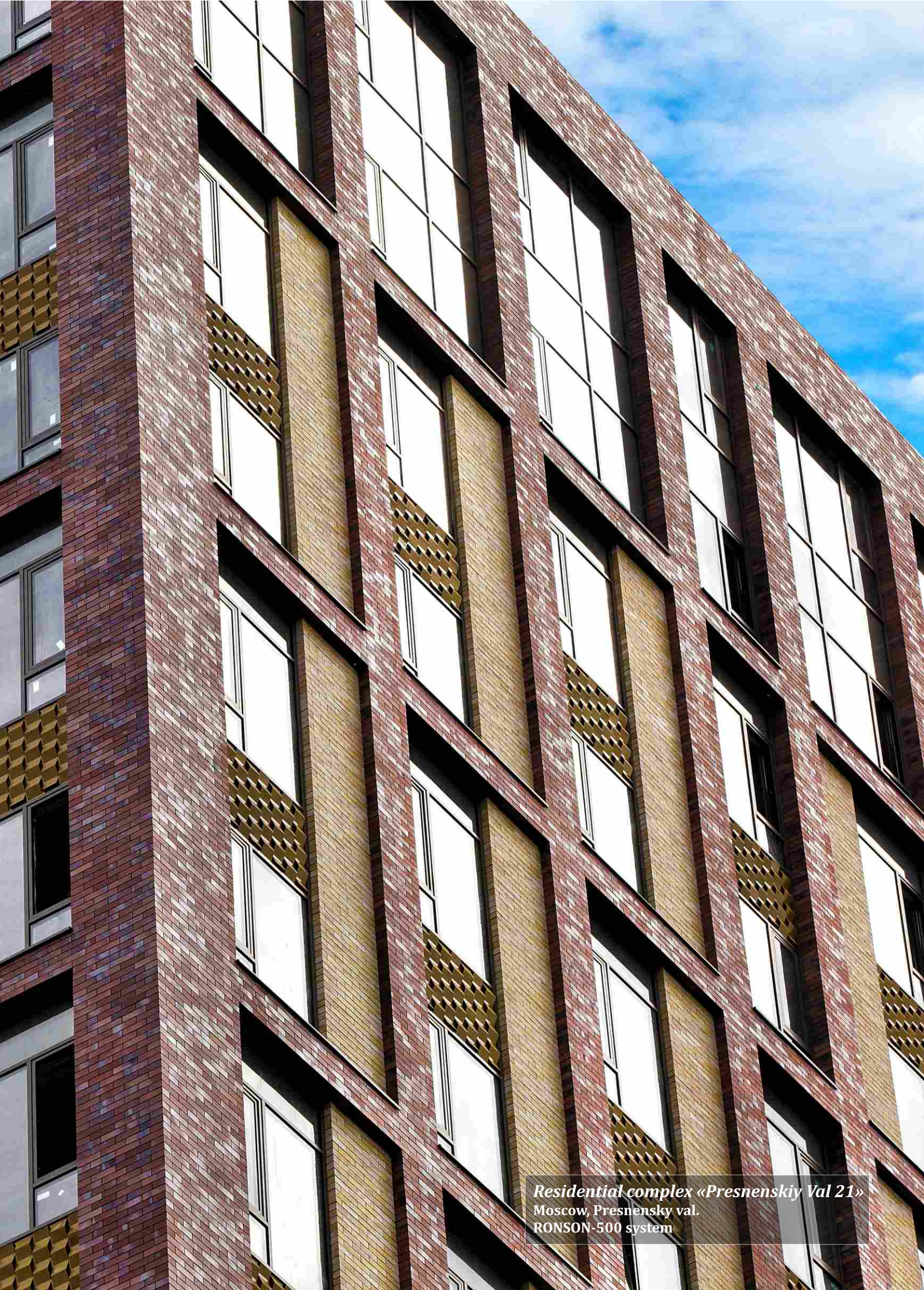
Residential complex «Alye parusa»
Moscow, Aviatsionnaya str.
RONSON-500 system



Residential complex «Serdtsse Stolitsy»
Moscow, Shelepihinskaya nab.
RONSON-500 system



Residential quarter «SREDA»
Moscow, Ryazanskiy pr.
RONSON-500 system



Residential complex «Presnenskiy Val 21»
Moscow, Presnenskiy val.
RONSON-500 system



Residential complex «Vorontsovskiy Park»
Moscow, Profsoyuznaya str.
RONSON-500 system



Residential complex «Peter I»
Moscow, Krasnokazarmennaya str.
RONSON-500 system

ЧИВ ONLY 014 15 46 58



*Residential quarter «ONLY»
Moscow, Fili, Zarechnaya str.
RONSON-500 system*



Residential complex «Nasledie»
Moscow, Krasnobogatyrskaya str.
RONSON-500 system



Residential complex «Maryina Roshcha»
Moscow, 1-y Maryinoy Roshchi pr.
RONSON-500 system



Residential complex «Dom na Lyusinovskoy»
Moscow, 3-y Lyusinovskiy pr.
RONSON-500 system



Apartment building
Moscow, Profsoyuznaya str.
RONSON-500 system



Residential complex «Picasso»
Moscow, Ozernaya str.
RONSON-500 system



Children's hospice
Moscow, Dolgorukovskaya str.
RONSON-500 system



Apartment building
Omsk
RONSON-500 system



 www.ronson-group.eu