



«URBAN INFRASTRUCTURE FACILITIES» Severodonetsky Stekloplastic



Scientific Production Association "Severodonetsky Stekloplastic" Ltd. is an innovative company that satisfies customers' demands in composite products used in construction, energy, agriculture, transport and other sectors of the economy in Ukraine and Europe as well as all over the world. With our activity, we aim to change the vision of consumers as to the possibilities of application composite materials, opening new areas of application for the products on the base of glass fiber.

Our reputation as a reliable partner is backed by high professional competence and vast experience of our staff as well as availability of organization structure and material resource base that makes it possible to manufacture products according to the unique requirements of consumers, at a high quality level, in due time, with proper engineering support.

We develop the company, relying on: continuous improvement in the field of manufactured products, applicable technologies and equipment, increasing the efficiency of our activities at all organizational levels, studying and implementing the experience of top composites leaders.

Director
of SPA "Severodonetsky Stekloplastic" Ltd.
Igor A. Chernega

This modern composite material, used in urban infrastructure, has been developed and manufactured by the Ukrainian company Scientific Production Association "Severodonetsky Stekloplastic" Ltd., which successfully produces composite materials since 1960. Due to its special properties, composite material is optimal when used in the components of outdoor furniture and possesses a number of advantages:

- moisture resistance, corrosion resistance, resistance to ultraviolet radiation;
- does not need painting (it is painted in mass) and rust removing;
- does not hinder the propagation of electromagnetic waves of mobile communication;
- low thermal conductivity, does not subject to magnetization;
- the surface of the material is easily cleaned from graffiti applied by the marker with the help of solvents.

Urban infrastructure objects have been developed in cooperation with the leading experts of O.M. Beketov National University of Urban Economy in Kharkov.

The catalog includes the following objects:

- Pavilion of public transport stops
- Benches of two types: free-standing and modular
- Three types of fencing: for flower beds, trees and pedestrians
- Street lanterns for pedestrian areas, ornamental flower beds, shrubs and trees

The team of designers will provide help in development and fitting the infrastructure object into a specific urban environment, selecting the best color solutions and concept, as well it will help to arrange the installation and conduct the necessary consultations.



Pavilion of public transport stop

The concept of public transport stops is in demand in towns where a problem of narrow sidewalks exists. This solution provides the most rational use of urban space. In addition, the pavilion can be placed both by its face side and back side to the carriageway. The latter method of installation reliably protects passengers from splashing of passing cars in rainy weather. As to other options, it is possible to equip the pavilion with charging system for mobile devices, Wi-Fi modules, interactive information displays and solar panels.

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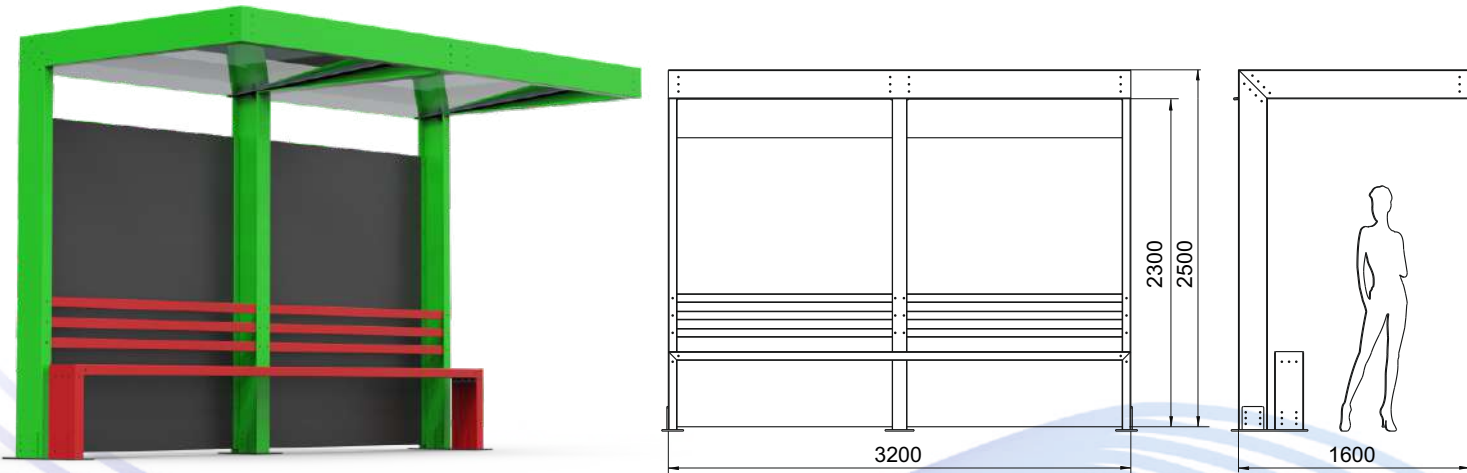
Sheets of glass, fiberglass reinforced plastic and other materials may be used as infilling panels for the pavilion planes.

Color code

Basically, the idea the corporate color of one or another territorial community can be used as the color code of the proposed concept of a public transport stop.

In Kharkov, for example, it is two types of green color:
Green (on the coat of arms)
Pantone: 354 CVS 2X
Light green (on the flag)
Pantone: 360 C.

In other cases the classical principle of combining the basic black color in the stress-bearing structural units and the accent of any spectral color in the additional elements of the public transport stop pavilion can also be applied.



This concept allows minimizing the cost on location transport stops for different modes of transport. Pavilion can be used both in single, and in double embodiment.





Separately standing benches



The concept of benches allows diversifying modular solutions. It may be one bench without a backrest or a bench with a backrest. Such proposal provides the most rational arrangement of urban space, creates various combinations of places for sitting. As an option, it is possible to equip the benches with heating systems.

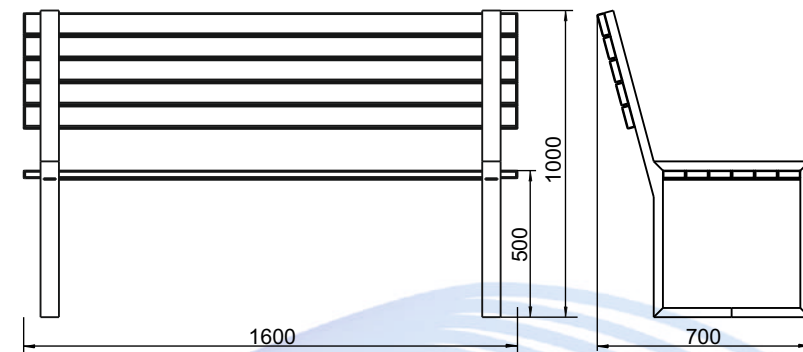
Proportions, sizes and ergonomic indicators have been designed within the framework of so-called Akerblom line, and they maximally correspond to the human anatomical and physiological characteristics.

Color code

It is possible to use J. Itten color circle as a basis for the color code of proposed concept.

In other instances it is possible to use the classical principle of combining the basic black color in the load bearing elements and the accent of any spectral color in other parts. Structural members in this case are painted with powder polymers of black or dark gray (graphite) color.

The idea of application the corporate color of a particular territorial community can be also used in a color scheme.



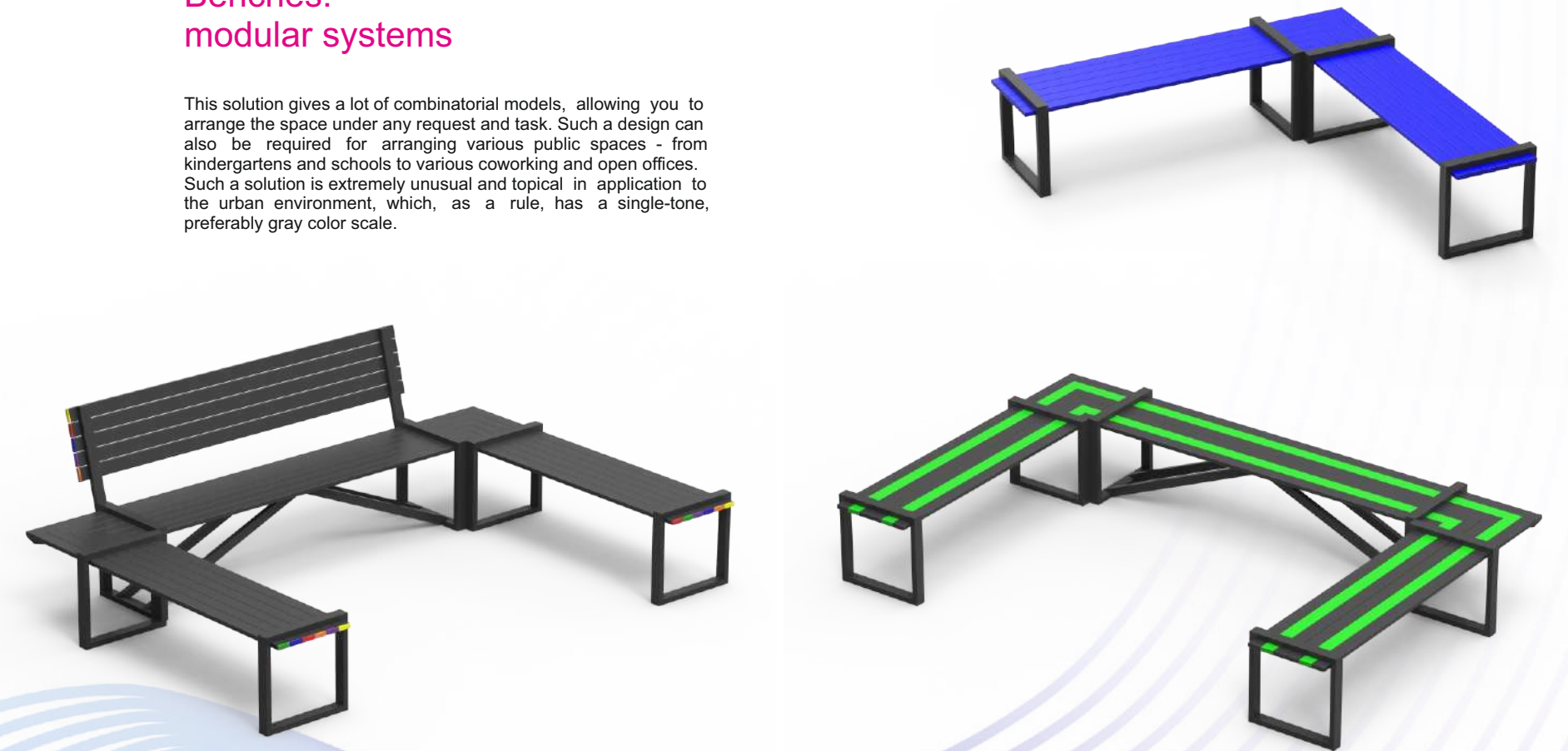
Benches: modular systems

The design in this case is based on the pattern of benches without backrest, which are typical for garden and park areas of the urban environment. They can be made in different lengths corresponding to the ergonomic parameters of a person. This solution provides comprehensive arrangement of urban space according to any request and task, providing it not only with seating places, but also with other functional objects.



Benches: modular systems

This solution gives a lot of combinatorial models, allowing you to arrange the space under any request and task. Such a design can also be required for arranging various public spaces - from kindergartens and schools to various coworking and open offices. Such a solution is extremely unusual and topical in application to the urban environment, which, as a rule, has a single-tone, preferably gray color scale.





Fencing for flower beds, trees and pedestrians



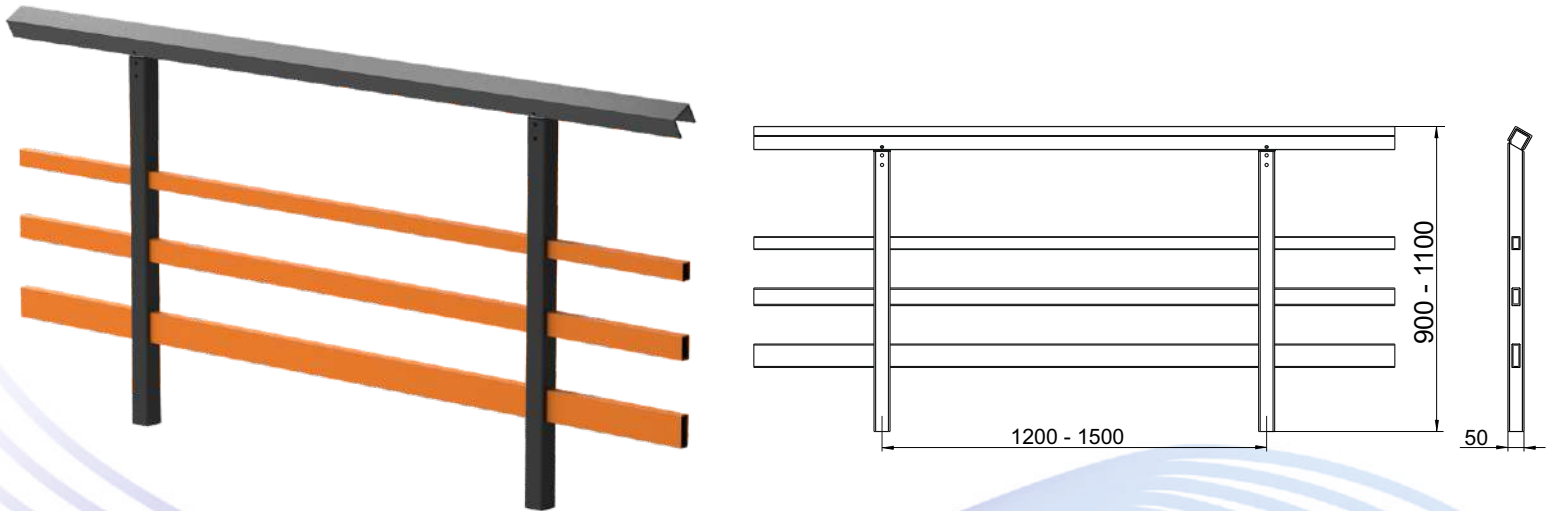
The concept of the fencing system uses in its design transition/connecting elements made of steel. These elements can be arranged not only in one but in different planes, forming the necessary three-dimensional structures used in any urban environment. Such combinations will effectively solve any problems in arranging of a new or upgrading an existing urban infrastructure in any places and in any parts of the city.

Special inserts, used in fences, provide an opportunity to place symbolic information (for example, the emblem of the city), which corresponds to the identification of the territorial community as a whole or a separate territory or site, public institution or other entity.

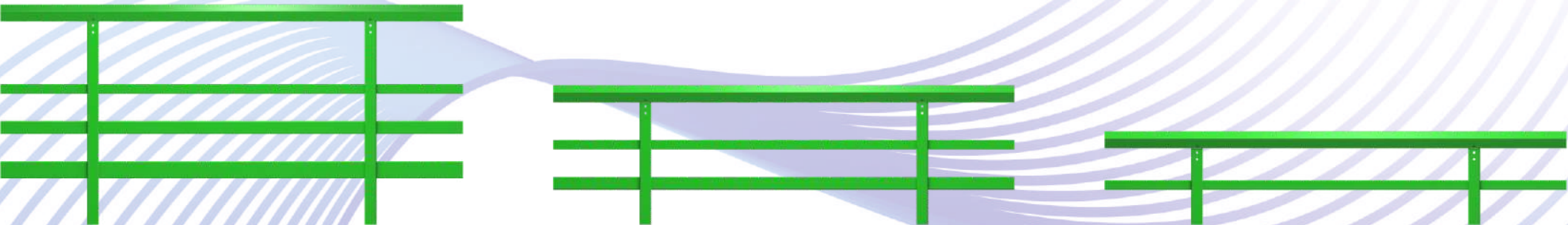
Color code

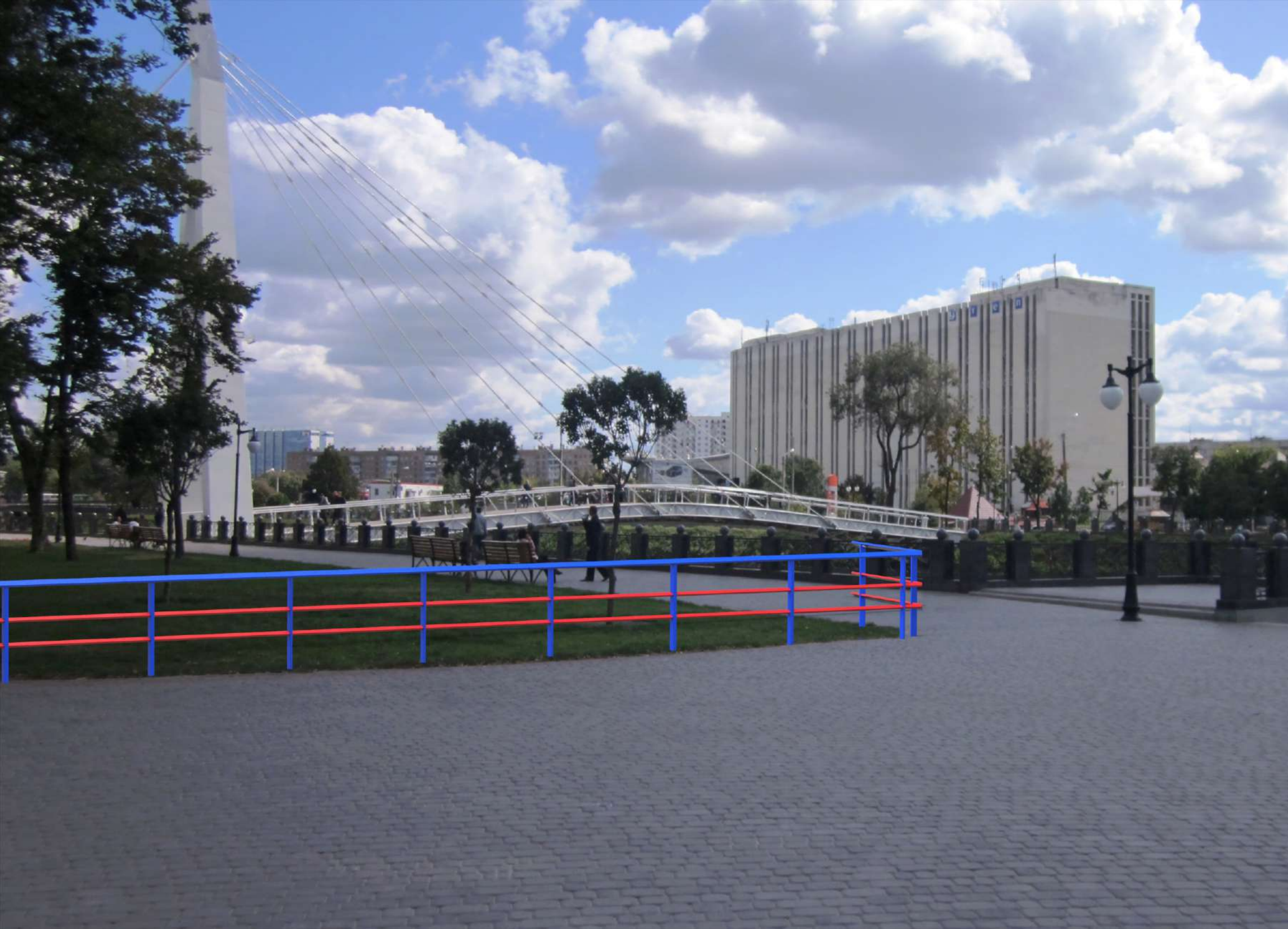
The concept color code is based on the classic principle of combining the basic black color in the bearing elements and the accent of any spectral color. When making a selection of these colors, it is possible to use the color combination scheme of Johannes Itten's color circle (Itten, Johannes). Itten's circle is divided into 12 color sectors. The whole variety of color palette is obtained by mixing them.

Using the corporate color of territorial community can be a good idea as to color scheme.



Such a constructive concept makes it possible to implement various fencing systems of three main sizes:
High fencing - for pedestrians and carriageways.
Fencing of average height - for flower beds, lawns and shrubs.
Low fencing - for trees and flower beds in sidewalks zones.





Fences for sidewalks, pedestrian areas and the roadways

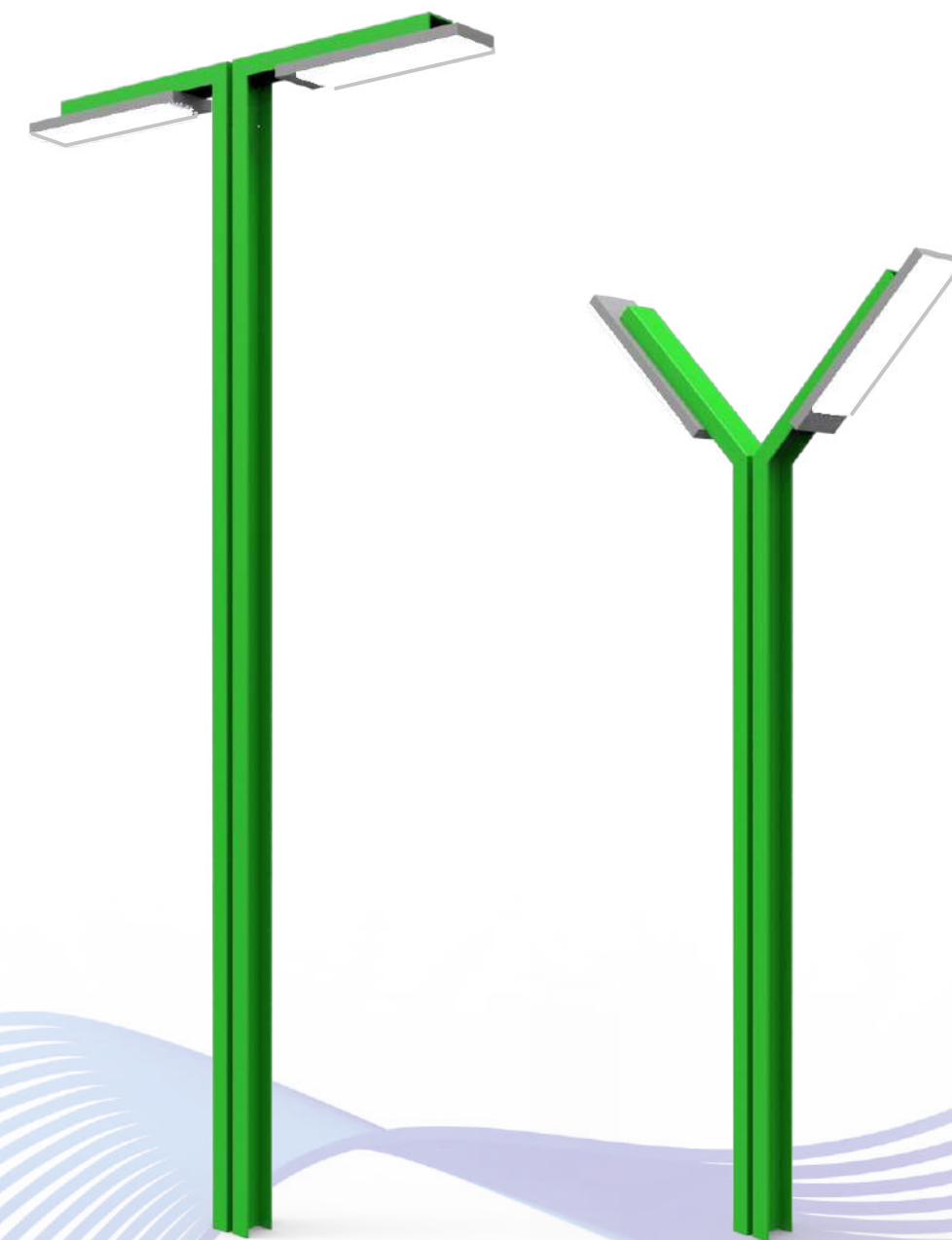


The concept of this fencing system uses reinforced profiles manufactured by our company:

- PSK-P-2-73x25x3x5 – fencepost;
- PSK-P-2-85x25 – handrails;
- PSK-P-2-55x25x3x5 - fence cross member.

The use of these elements makes it possible to create a reliable and stable design of fences; form the necessary protective and demarcating systems used in the arranging of road transport infrastructure of the urban environment.

This solution will be able universally and effectively meet the challenge in the arranging of a new or upgrading an existing urban infrastructure at any sections of the city's roads and pavements.



Street lanterns
for pedestrian areas,
ornamental flower beds,
shrubs and trees

The concept of outdoor luminaire pole is based on the idea of a universal solution that allows to mount thereon both existing lighting fittings (lamps), and specially made lighting elements based on LED technology. These elements can be mounted not only in different directions of one plane, but also in several planes, forming the necessary volumetric-and-spatial light structures that can most effectively illuminate a given space.

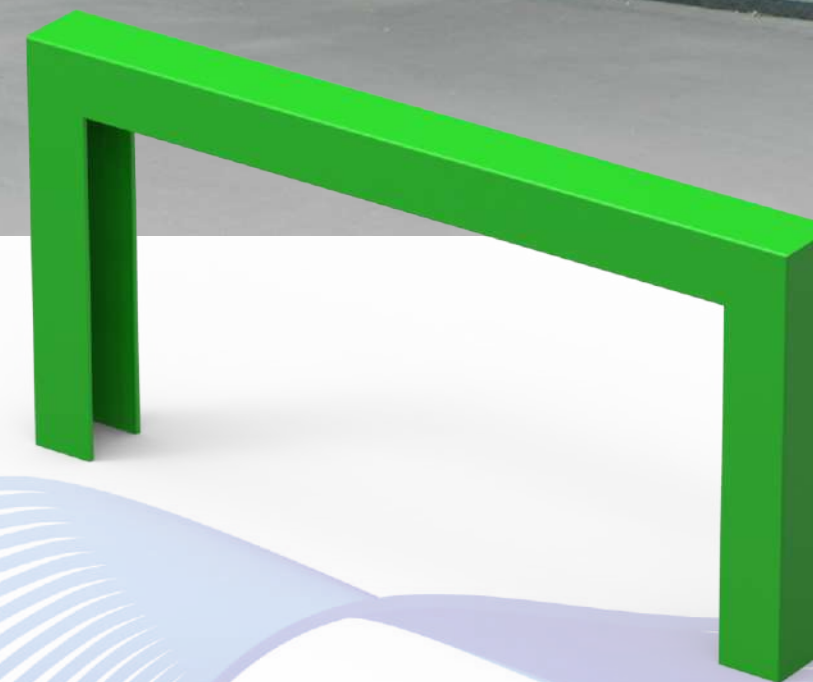
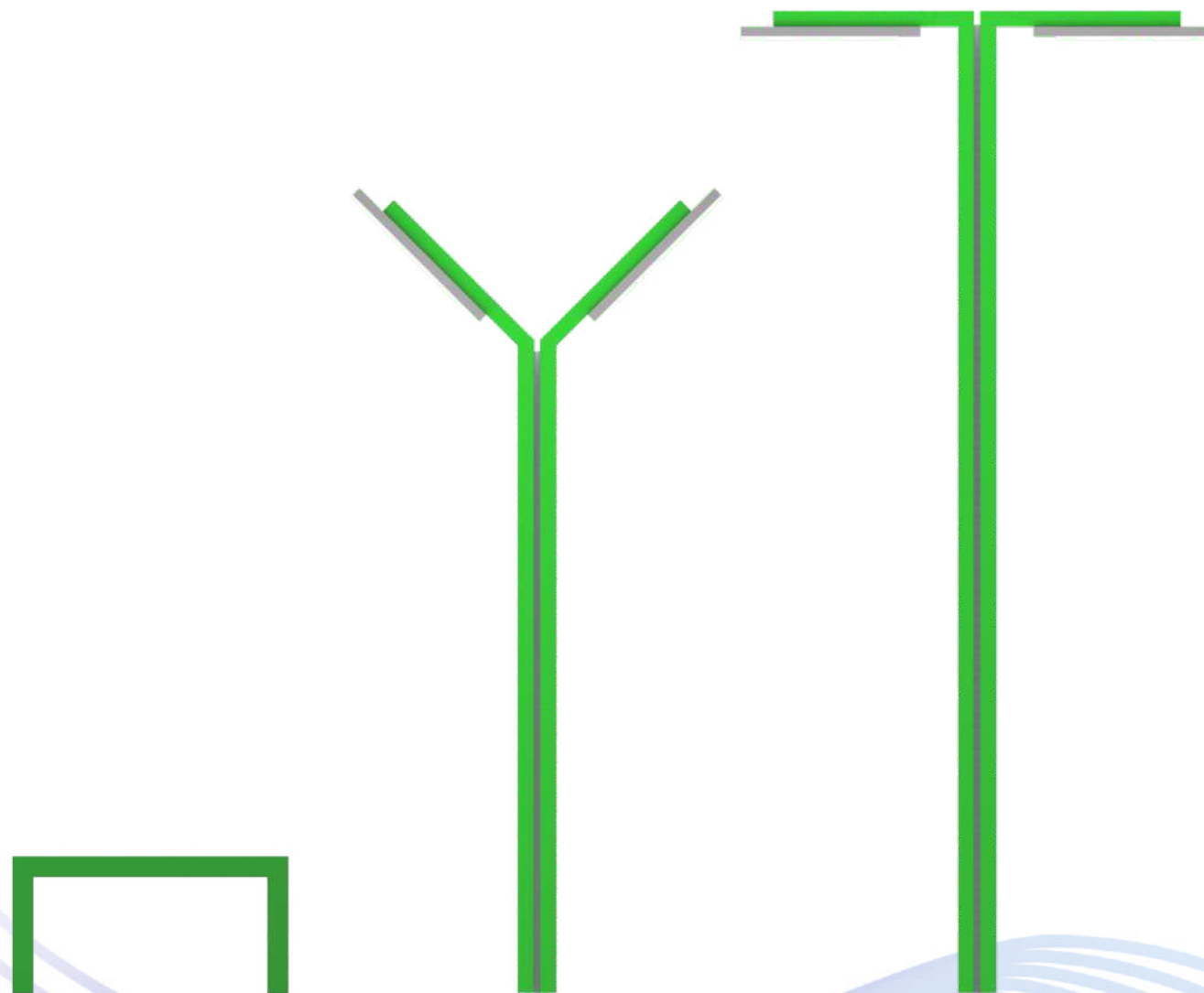
This principle provides effective illumination and energy consumption of required zones, as well as objects located thereon.

Color code

The color code of the proposed concept of street lighting lamps should be based on the functional requirements to the illuminated areas. For pedestrian areas, sidewalks and the roadway, poles color must be neutral towards the environment: white, shades of gray (silver) and black (graphite).

For the illumination of ornamental shrubs and trees, flower beds and lawns, you can use combinations of colors in the color circle of J. Itten.

Usage of corporate colors of a community in the color scheme can be a good idea.



This design solution makes it possible to implement urban illuminating systems in the range of three main sizes:
High luminaire poles (up to 30 m) are designed for walkways and carriageways.
Luminaire poles of average size (from 1.5 to 2.2 m) - for trees and shrubs in areas of sidewalks and pedestrian paths in parks, squares and gardens.
Low poles (from 0.5 to 1.2 m) - for flower beds with flowers, lawns and shrubs.

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