

TECHNICAL STANDARD
ELEMENTS OF THE BRAND COVER
“GULF”

TERRITORY OF GAS STATION

- 1 GENERAL REQUIRMENTS
- 2 PRICE SIGN
- 3 CANOPY COVER
- 4 FREE-STANDING STRUCTURES
- 5 UNDER CANOPY SPACE
- 6 BUILDING



1 GENERAL REQUIRMENTS

Purpose

This document describes the essential elements, design standards, required materials, and material and manufacturing requirements for GULF products.

Responsibility for ensuring the conformity of manufactured products standards and requirements regarding safety, fulfillment of warranty and other obligations lie with the Supplier.

Application area

This standard is binding on all Product Suppliers.

Administrative, local regulatory and other internal documents must not contradict these Technical Regulations.

Procedure for changes

These Technical Regulations are a local regulatory document of permanent effect. Product designs must meet the following performance requirements:

Visible surfaces of products should not retain dirt and provide self-cleaning through rainwater.

The design of products must ensure that there is no impact condensation and other climatic phenomena on the performance of products.

All lighting elements must be protected from water penetration, resistant to dust and insects.

The design must provide compensation for thermal expansion of materials to eliminate stress, avoid deformation of elements and backlight abnormalities.

All products must ensure safe operation and maintenance in throughout the entire service life.

All fastening elements used in the assembly, as well as components and hardware, used for installation of products must be resistant to corrosion throughout the entire service life.

The design of products must be designed for wind loads in accordance with the region of operation.

The design of products must be designed for snow loads in accordance with the region of operation.

Any material or product that does not meet the requirements of this documents are subject to immediate replacement at the expense of the Supplier.

The supplier must provide with the supplied products all necessary documentation for installation and operation.

The supplier must ensure easy disposal and/or recycling of production and packaging waste both in production and at the installation site.

1 GENERAL REQUIRMENTS

Electronics requirements

Requirements for internal communication protocols

The interaction of electronic elements of the product must be organized using one standard interaction protocol.

LED Requirements

LED's should be used in displays and light panels. produced by CREE, Osram, Samsung, LG.

The emission spectrum and optical system of the LEDs used should provide uniform illumination with the required brightness with a decrease in the luminous efficiency coefficient within 7 years within 20%. What should confirmed by LM80 test results for the corresponding LED type.

The performance of products must be ensured at temperatures from minus 40 to plus 60 Celsius.

All elements must provide uniform illumination of the products, without the presence of shadows, halos, bright or dark spots during the entire service life.

To place light sources inside products, reflectors made of metal coated with a polymer coating RAL 9003 should be used.

Product housings and reflectors must be designed to ensure the most efficient use of light output and eliminate light leakage and safety.

The backlight on LED modules must meet the following requirements:

Level of dust and moisture protection of LED modules: not lower than IP67 standard .

Light angle provided by secondary optics: at least 140°.

Lifetime of LED modules: at least 80,000 hours.

Time between failures of LED modules: at least 20,000 hours.

Electronics switching requirements

Switching of electronic elements must be carried out using standard connectors with their pinout indicated in the connection diagram.

Requirements for external protocols

Interaction with external sources of control and monitoring of products must be organized using one standard interaction protocol.

Requirements for multimedia screens (if present)

Product designs should use modular LED screens of a single

manufacturer who carries out maintenance and operation of screens throughout the entire service life of the products.

1 GENERAL REQUIRMENTS

Electrical requirements

Electrical systems installation requirements

The power supply design of the products must include a power supply system for the product elements using the method of wiring current-carrying lines. Switching of elements must be carried out using standard connection connectors with a degree of protection IP67.

Internal wiring should be divided into low voltage DC circuits and 230V, 50Hz AC circuits. To power the backlight of advertising blocks, signs and logos, as well as light profiles, switching power supplies with power 60 to 200 W and output voltage 12 – 15 V manufactured by MeanWell, CZCL, G-Energy.

Power supplies should be located in places that allow easy access to them in case of replacement. To control the backlight, it is possible to use a separate light-sensitive machine, which switches the backlight depending on the external illumination.

The price sign frame must be connected to the ground loop.

Power supply protection requirements

The power supply structure of the price sign must include a power protection unit with elements intended for:

- protection of electrical equipment from surge current;
- limitations of starting currents of switching power supplies of the price sign;
- voltage deviation control;
- Short circuit protection;
- automation of backlight switching depending on lighting conditions.

Electrical cable lines requirements

Cables with insulation made of faunophobic materials must be used in the power supply and control systems of products..

1 GENERAL REQUIRMENTS

Requirements for unification

Requirements for connecting products to the power and control system

Information communication must be carried out via a fiber optic line (single-mode cable with 4 optical cores, the cores are terminated with LC type connectors) - for pedestals with LED screens, or UPT twisted pair cable - for pedestals without LED screens.

The products must be powered by a VVGngLS cable, with a cross-section from 1.5 to 6.0, depending on the load. For loads exceeding the design values, cables with a larger cross-section are used.

Aesthetic requirements and visual requirements

The distance for visual examination of products is 3 meters. Assessment of the quality of materials and identification of defects is carried out from a closer distance.

The paintwork must not have visible defects such as uneven color or gloss. Quality control of the appearance of the coating is carried out visually in daylight or artificial diffused light, comparing the coating with a standard or control sample.

Film coatings must be made without any visible bubbles or cuts. Joints must be made according to the standard of the material manufacturer.

The materials used in the lighting and visual design of the product must retain their visual properties regardless of the ambient light level.

1 GENERAL REQUIRMENTS

Requirements for packaging and transportation

Packaging requirements

Requirements Manufactured products must be properly packaged in bags, crates, cartons to eliminate the risk of damage during handling and transportation.

Each box (box) must contain a list of the products packed in it, the date of production and shipment, batch number and manufacturer's data.

All packaging materials must be easily disposed of in accordance with the laws of the country of delivery and must not contain hazardous chemicals.

The supplier is responsible for ensuring that the packaging of materials and products meets the requirements to ensure their safety and protection from damage during delivery and installation.

Transportation requirements

The product must be able to be transported in the manufacturer's packaging:

- by sea and river transport - in a hold or container without distance limitation; when transporting by sea, packaging must be provided that protects against the effects of salt fog;
- transportation by railway – without distance limitation;
- by road transport over a distance - without distance limitation.
- **transportation is carried out to the customer's site.**
- **Unloading is carried out at the expense of manufacturer.**

1 GENERAL REQUIRMENTS

Requirements for warranty and service life

The products included in the price sign must be designed taking into account interchangeability with already developed and installed products and manufactured from such materials and in such a way as to ensure a service life of at least 10 year.

The warranty period should be at least 2 years.

Requirements for interchangeability concern the geometric dimensions of products and their elements, fastening points, mass of elements, switching of electrical circuits.

Determination of service life is carried out as follows:

Loaded structural elements should not show signs of aging, threatening the safe operation of products. The visual characteristics of elements and materials should not show signs of color degradation beyond tolerance limits, due to aging, exposure to daylight or exposure climatic phenomena.

To organize timely maintenance of the stele, a set of spare parts and accessories must be completed and manufactured. The composition of the spare parts kit is determined by the calculated replacement rate for product elements under warranty and post-warranty service throughout the entire service life of the products.

Marking Requirements

All items must be marked. Marking must be applied using a method that allows information to be identified throughout the entire service life of the product. The label must contain the following information:

- product name;
- manufacturer;
- Contact Information.

Information on the marking can be printed in the form of a QR code.

1 GENERAL REQUIREMENTS

Requirements for product installation

The supplier develops an installation manual taking into account their characteristics and requirements in the field of labor protection and fire safety regulations. To ensure the quality of installation work and adherence to operational deadlines, the Supplier, at the request of the Customer, provides training and accreditation of construction and installation organizations.

For all price signs, the supplier must provide a full set of installation drawings and engineering calculations, as well as the conclusion of an expert organization for: product frames; support flanges; foundations; attachment points; electrical part.

Requirements for ferrous metals products

The design and production of steel building structures must be carried out in accordance with the requirements of GOST 23118, SNiP II-23-81, with necessary, designed accordingly for the load-bearing capacity in accordance with the region of installation in accordance with SP 16.13330.2011. All sheet and profile products used in the production of steel structures must comply with the current technical norms and have the necessary documents and certificates confirming its quality and characteristics. Pass mandatory incoming inspection in accordance with GOST 24297. In the process of production of steel structures, to ensure high quality of products, equipment must be used that ensures the following characteristics: Shot blasting should ensure that the metal surface is cleaned to grade Sa 3 according to ISO 8501-1. Equipment for cutting sheet metal should allow process sheets of the required dimensions and thickness ensuring accuracy of ± 0.5 mm and quality of parts corresponding to EN 1090-2 p 6.4.3 and EN ISO 9013. Equipment for processing profiled metal products must be capable of processing rolled products of appropriate sizes, ensuring accuracy of ± 0.5 mm and quality of parts corresponding to EN ISO 9013.

1 GENERAL REQUIRMENTS

Equipment for bending sheet and profile metal must allow the manufacture of parts in accordance with the design documentation; bending parameters must comply with EN 1090-2 clause 6.5.4.

Welding in shielding gases must be carried out using modern welding machines that provide consistently high quality welds.

Equipment for cutting edges for welding must ensure processing of the edges of the metal being welded in accordance with the requirements of GOST 14771, GOST 23518.
Welding stations must be equipped with the appropriate kit.

Fixtures and tools for assembling and welding metal structures.
Technical supervision of welding work must be carried out by engineering and technical workers who have been trained in welding technology.

Performers of work (welders) are required to observe safety precautions when carrying out welding work, the technological process, and also carry out visual control of the quality of the finished weld.

Welders must be qualified through an appropriate test.

Certification of welders is planned and carried out in accordance with the frequency established by TNLA and industry regulations on the certification of welders.

Welded joints made during factory production must
comply with GOST 14771, GOST 23518, are subject to mandatory acceptance by the quality service (hereinafter referred to as QS) of the plant that manufactures the structures, with the preparation of appropriate control documentation. If necessary, carry out non-destructive testing

welded joints in accordance with GOST 14782.

Acceptance of structures is carried out in accordance with the requirements of GOST 23118, EN

1090-2, respectively, for products supplied to the CIS countries or the EU.

For welded structures, accompanying documents for finished products corresponding to the region of installation are drawn up.

1 GENERAL REQUIRMENTS

Requirements for non-ferrous metal products

All aluminum supplied in sheets or rolls and aluminum profiles used at the enterprise for the production of products must comply with the current technical regulations, grades of aluminum supplied in sheets and rolls used for the production of products must comply with AMts GOST 4784-97, AMtsN2 GOST 21631-76 (EN-AW 3104 according to EN 573-3, 3104N24 according to EN 485-2) in accordance requirements specified in the specification of materials, have the necessary documents and certificates confirming its quality and characteristics. Pass mandatory entrance control in accordance with GOST 24297.

In the production process of aluminum products, to ensure high quality of products, equipment must be used, providing the following characteristics:

Equipment for cutting and bending sheet and profile aluminum should allow the production of products of the required accuracy in accordance with the design documentation.

Welding in an inert gas environment should be carried out with modern welding machines that ensure consistently high quality welded joints.

Resistance welding must be performed using modern equipment and ensure consistently high quality of welded joints.

Welding posts must be equipped with the appropriate kit fixtures and tools for assembly and welding of aluminum structures.

Mechanical stations must be equipped with an appropriate set of devices and tools for subsequent processing (cleaning and grinding) products after welding.

All welded connections of aluminum structures must comply with GOST 14806, GOST 27580-88.

Welding of hardware is carried out using the contact capacitor welding method in accordance with GOST 15878-79.

All welded joints, burrs, and sharp edges must be processed by cleaning and grinding in accordance with the requirements in the design documentation.

1 Общие требования

Requirements for color and paintwork

During producing products related to style-forming elements, it is allowed to use only the colors specified in the technical regulations. Deviation from the specified colors within the deviation ΔE is no more than 1. The colors of all materials used must match each other within deviation ΔE no more than 1.

The polymer coating must ensure the preservation of the original color.

coating for 10 years when used in atmospheric conditions - color change ΔE no more than 4 units..

Polymer powder coatings must be Qualicoat Class 1 approved and comply with AAMA 2604 and EN 12206. The coating must withstand temperature range from -40 to +60 degrees C with relative air humidity from 40% to 90%. Allow cleaning with conventional means (water, surfactants). Coating thickness not less than 60 microns.

The surface must be resistant to gasoline, diesel fuel, liquefied gas, alcohol and their vapors.

For exposed metal structures the following coating system should be used:

epoxy primer - polyurethane topcoat. Painting is carried out in accordance with ISO 12944-5 to obtain protection in a corrosive environment C3 class medium*** (5 or more years of operation) a coating system is used (corresponds to system number S3.17 in the table):

Surface preparation Sa2 ½.

The resulting thickness is at least 160 microns

Film material requirements

All film materials used must match the substrate materials to which they are applied. Compatibility includes all aspects regarding aging, color fastness, durability of the adhesive bond, having the corresponding certificates confirming the properties and characteristics must retain color and quality characteristics during operation for at least 7 years

1 Общие требования

Requirements for plastic and molded components

Plastics used in products must have the necessary documents and certificates confirming their quality and characteristics, have the required resistance to weathering, UV radiation, and retain color and quality characteristics for at least 7 years.

Glass elements requirements

Tempered mineral glass must be used in steel products in accordance with the specification of materials specified in this Technical Regulations.

Tempered glass supplied to the enterprise for the production of products must comply with GOST 30698-2014, be of adequate quality (without streaks, chips, scratches, foreign inclusions, chemical stains and other defects), the edges of the glass must be processed (polished, grinded), have the necessary documents and certificates confirming its quality and characteristics, and undergo mandatory incoming inspection in accordance with GOST 32529 2013.

Adhesive joint requirements

In structures, it is allowed to use only adhesive materials that have certificates confirming the required characteristics in accordance with their scope of application.

During manufacturing products using adhesive joints, be sure to comply with the requirements for preparation of application, application and gluing in accordance with the instructions in the manufacturer's technical sheet/passport. adhesive material.

Serviceability Requirements

During the design and production of products, the Supplier must ensure maintainability and interchangeability of mounted products and their elements during the maintenance of facilities. These requirements apply to geometric dimensions of products and their elements, attachment points, mass of elements, switching of electrical circuits and are given in Appendix 1 of this document.

General Maintenance Requirements:

Work at height when performing maintenance or repairs must be kept to a minimum. Maintenance carried out from the ground level is a priority.

To carry out maintenance, access to structural elements must be provided in such way as to eliminate the risk of damage to any parts of the product during work..

Access to components must be ensured without risk of injury to maintenance personnel and third parties.

The price sign design must ensure compliance with technical procedures services in the shortest possible time and at minimal cost.

2 Standard price sign

General characteristics of the standard price sign

1. Price sign height: 7m;
2. The price sign must be equipped with an automatic power protection unit (ensures a smooth start of the stele without overloading the power supply network, protects power supplies from: short circuit and long-term excess of the permissible current; voltage drop in the event of a “0” break; lightning strike)
3. The price sign must be equipped with **100% interchangeable components, regardless of the delivery batch..**
4. The price sign is manufactured in 2 versions:
 - one-sided (with price lines on one side);
 - double-sided (with price lines on both sides).
5. The number of rows of fuel types on the stele is variable - up to 6 on each side..
6. Information communication must be carried out via a fiber optic line (single-mode cable with 4 optical cores, the cores are terminated with LC type connectors) - for pedestals with LED screens, or UPT twisted pair cable - for pedestals without LEDscreens for managing price lines and monitoring
7. Remote control from the cash register system - RS485, DOMS protocol
8. Non-volatile data storage memory – when the power supply to the column is turned off, all price display data is saved.
9. The design of the price sign provides technological holes for natural ventilation of price sign batteries.
10. External panels are made of aluminum (at least 1.8 mm thick) with polymer coating, thickness of at least 60 microns, architectural series (60% gloss).
11. “Gulf Wave” is made using UV printing.
12. Installation of the price sign is carried out without high-rise work (the stele must be equipped fastening elements (hinges) for installation).
13. The materials used in the cladding of the price sign prevent resistance to ultraviolet radiation and external pollution installed on the stele sink.
14. The price sign structure (including electronics) must be designed to withstand temperature range from – 40 to +60 °C with humidity from 40% to 90%
15. The design and materials used must be designed for a service life of up to 10 years.

2 Price sign 7m



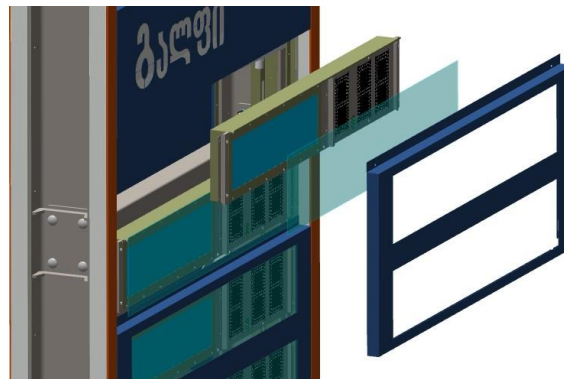
	RAL 5002 CMYK 100 90 0 10
	RAL 2004 CMYK 0 75 100 0
	RAL 7024 CMYK 71 61 52 36
	RAL 9003 CMYK 0 0 0 0
	RAL 5015 CMYK 90 40 0 0
	RAL 9005 CMYK 100 40 50 90

2 Price sign 7m

Price sign components description

Price line tablet

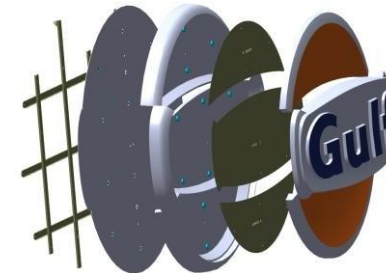
1. The front side of the tablet is made of mineral glass tinted with Kaylon graphite film on the inside in an aluminum frame with anti-corrosion polymer coating. Glass provides minimal reflection of natural light from the external surface, for maximum possible display and reading of information.
2. The price line is made in a single design and consists of a price block and a fuel type block.
 - 2.1 Fuel type plates are replaceable, made of mineral glass with UV printing. The backlight is made of white LED modules (IP 23).
 - 2.1 The cost of fuel (0.00) is displayed on segment boards (IP 23), the color of the glow is white CCT: 6500K. Height of numbers – 200mm.



3D LOGO

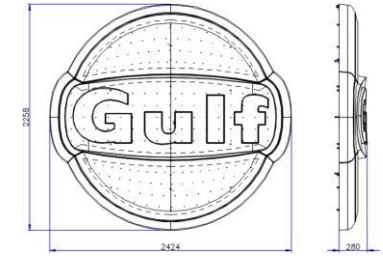
Gulf sign (IP 54) - illuminated, composite. Consists of thermoformed front elements (face and box), thermoformed boxes, reflectors, back wall and prefabricated frame.

1. Front molded elements are made of organic glass, 4 mm thick. with application films ORACAL 8300-034 (orange), ORACAL 8300-057 (blue).
2. The molded boxes and the back wall are made of PMMA plastic, 4 mm thick.
3. Reflectors are made of galvanized steel with a white anti-corrosion coating and backlit with white LED modules (IP 65).
4. The prefabricated sign frame is made of galvanized steel with an anti-corrosion coating, white. The design of the frame includes eyes for removing the sign when carrying out maintenance.



2 Price sign 7m

Price sign components description



2 Price sign 7m

Price sign components description

Embedded letters "Gulf"

The Gulf letters are made of molded, white organic glass, 3 mm thick and installed in a milled outer panel. The lighting is made on a reflector made of galvanized steel with anti-corrosion coating, white, backlit with white LED modules (IP 65).



Advertising tablet

Available in two versions:

- with removable advertising;
- with LED display .

Implemented the ability to replace removable advertising with an LED screen without making modifications to the design of the price sign.

The front part is made of mineral transparent glass, 4 mm thick, built into a panel made of aluminum panel, 1.8 mm thick. Glass provides minimal reflection of natural light from the external surface, for maximum possible display and reading of information.

The inner part of the tablet with replaceable advertising is made of milk-white PMMA, 4 mm thick, with UV printing of an advertising image.

The illumination is made on a reflector made of galvanized steel with a white anti-corrosion coating and backlit by white LED modules (IP 65)

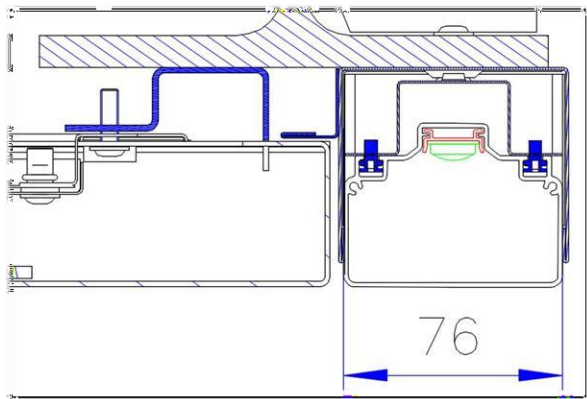
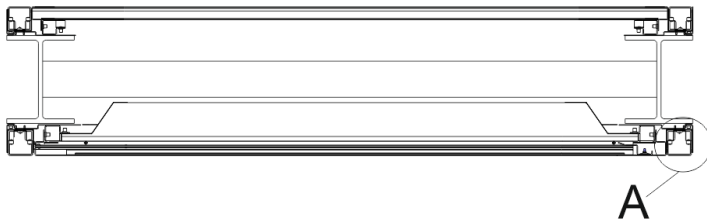
2 Price sign 7m

Price sign components description

Light strobe

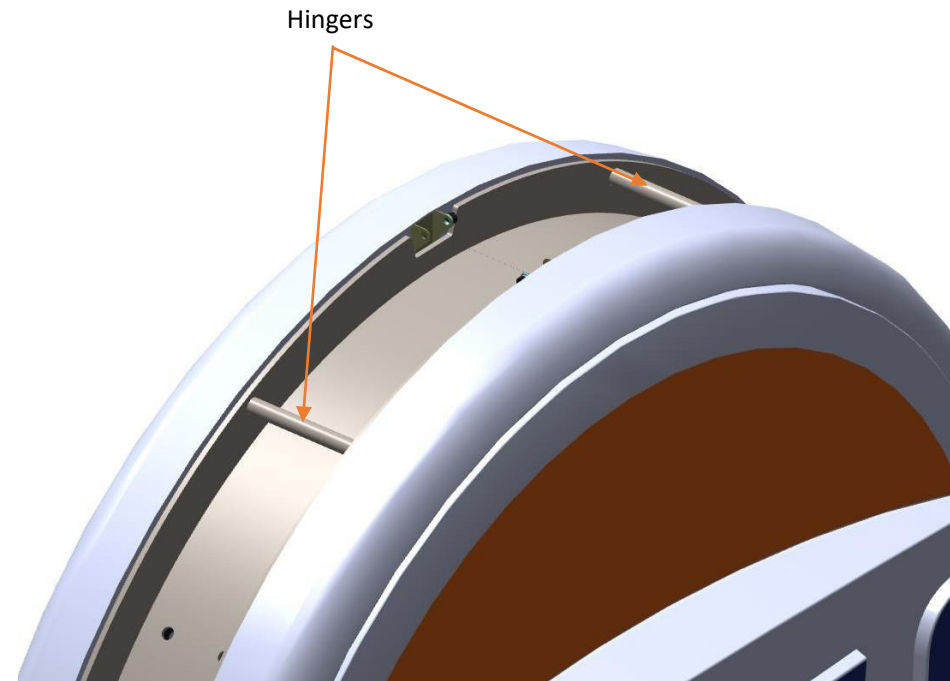
The light strobe is made of an extruded, closed profile of orange color. The body is made of galvanized steel, 0.9 mm thick, with an anti-corrosion polymer coating.

LED lighting is made on an extruded aluminum profile filled with compound (IP67)



Hinges for mounting of price sign without working at height

The design of the price sign includes hinges for mounting the stele without working at height



2 Price sign 7m

Price sign components description

Price sign frame

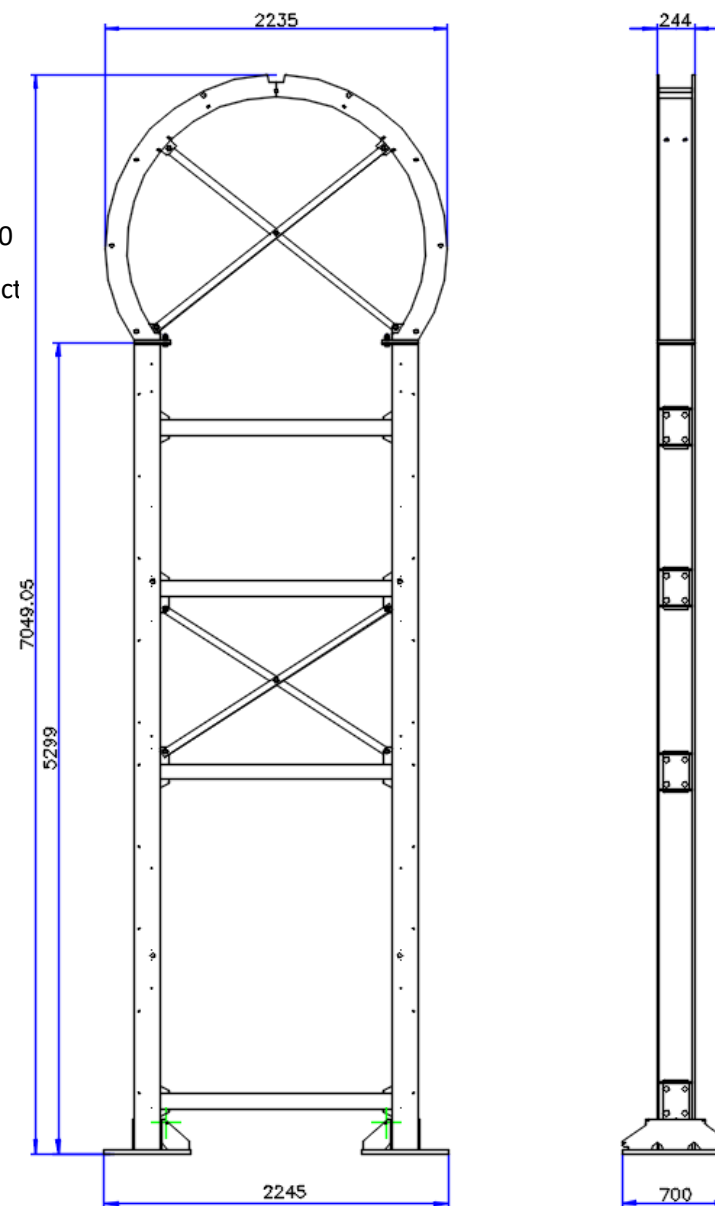
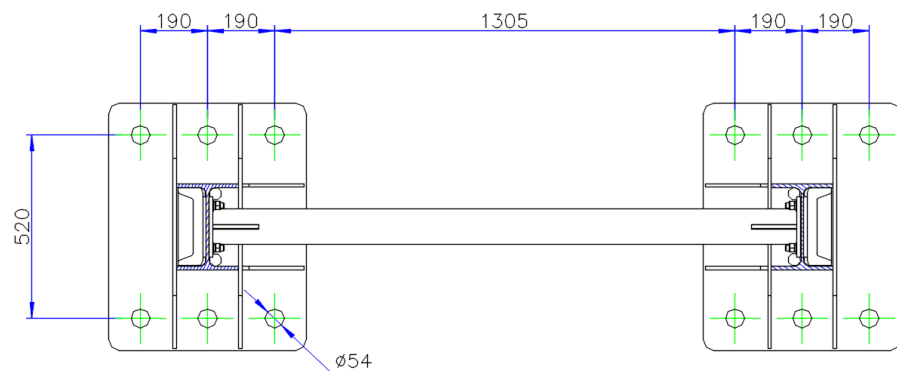
The price sign frame is made of steel.

The frame structure is prefabricated with bolted connections from complex welded structures.

Anti-corrosion protection of the frame is made by hot-dip galvanizing (lifetime operation of the zinc coating for at least 20 years), it is also possible to use a coating system in accordance with GOST 34667-2021 (ISO 12944:2019) to obtain protect average service life (from 5 to 15 years of operation) for climatic operating conditions UHL 1* according to GOST 15150-69.

Frame contour is closed

Price sign base



2 Price sign 7m

Price sign components description

Price sign electronics

Harness wiring

AC circuit 230V, 50Hz.

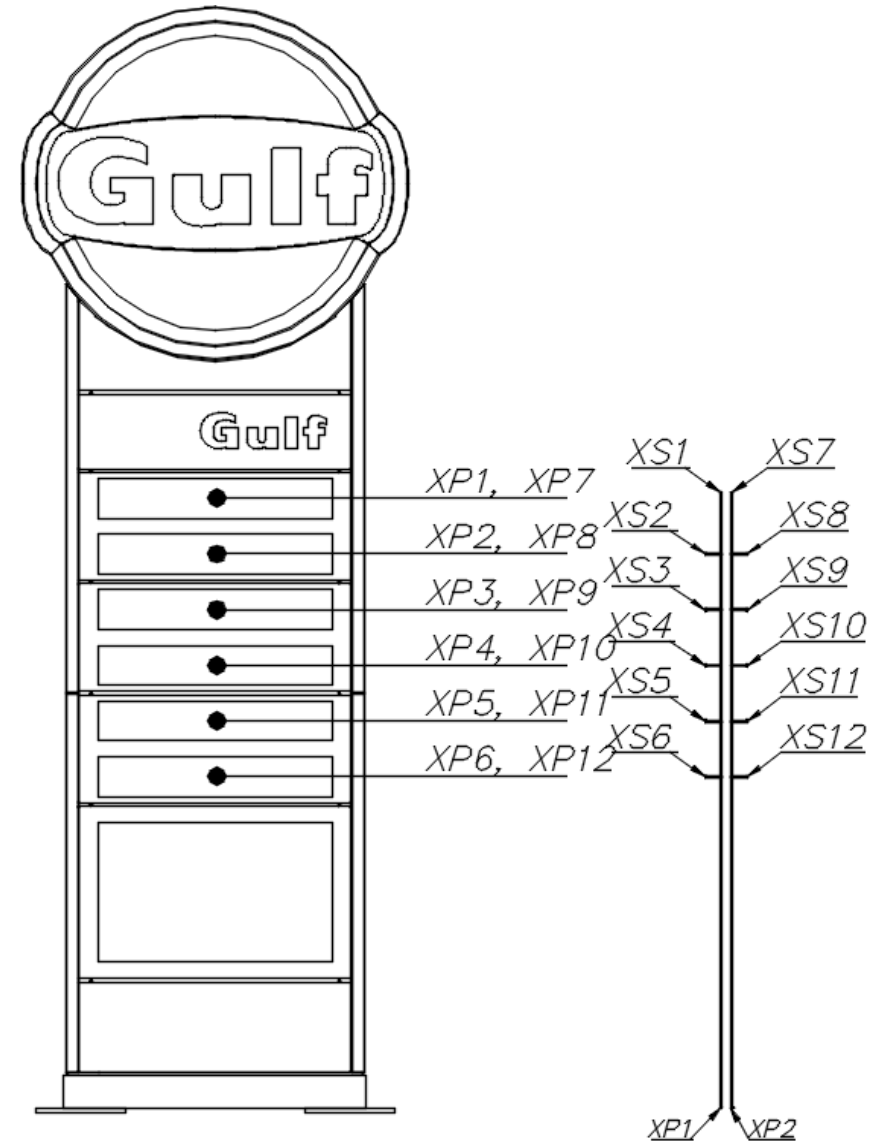
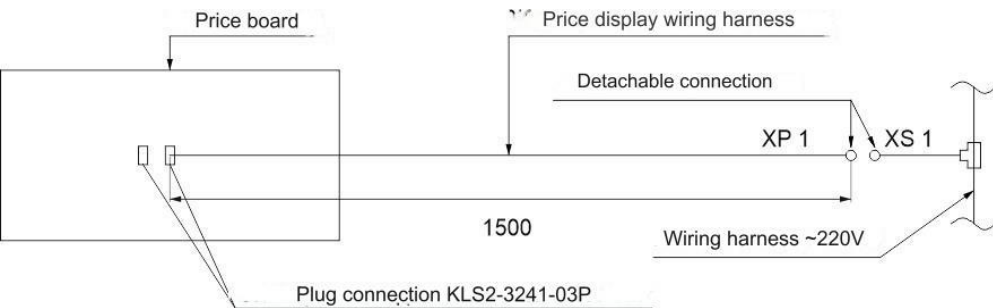
Price line connectors:

XP - plug connector
art. 1-967402-1 - housing
art. 0929968-1 - contact
art. 0-0828921-1 - seal
art. 0-0965786-1 - adapter
art. 0-0828922-1 - plug

XS - female connector
art. 1-967325-1 - housing
art. 0-0929975-1 - contact
art. 0-0828921-1 - seal
art. 0-0965786-1 - adapter
art. 0-0828922-1 - plug



Switching diagram for the price line to the ~230V harness:



2 Price sign 7m

Price sign components description

Price sign electronics

Wiring harness

Low voltage DC 12V

Backlight connectors:

XP - plug connector
art. 282080-1 - housing
art. 282166-1 - contact
art. 281934-4 - seal



XS - female connector
art. 282104-1 - body
art. 282466-1 - contact
art. 281934-4 - seal

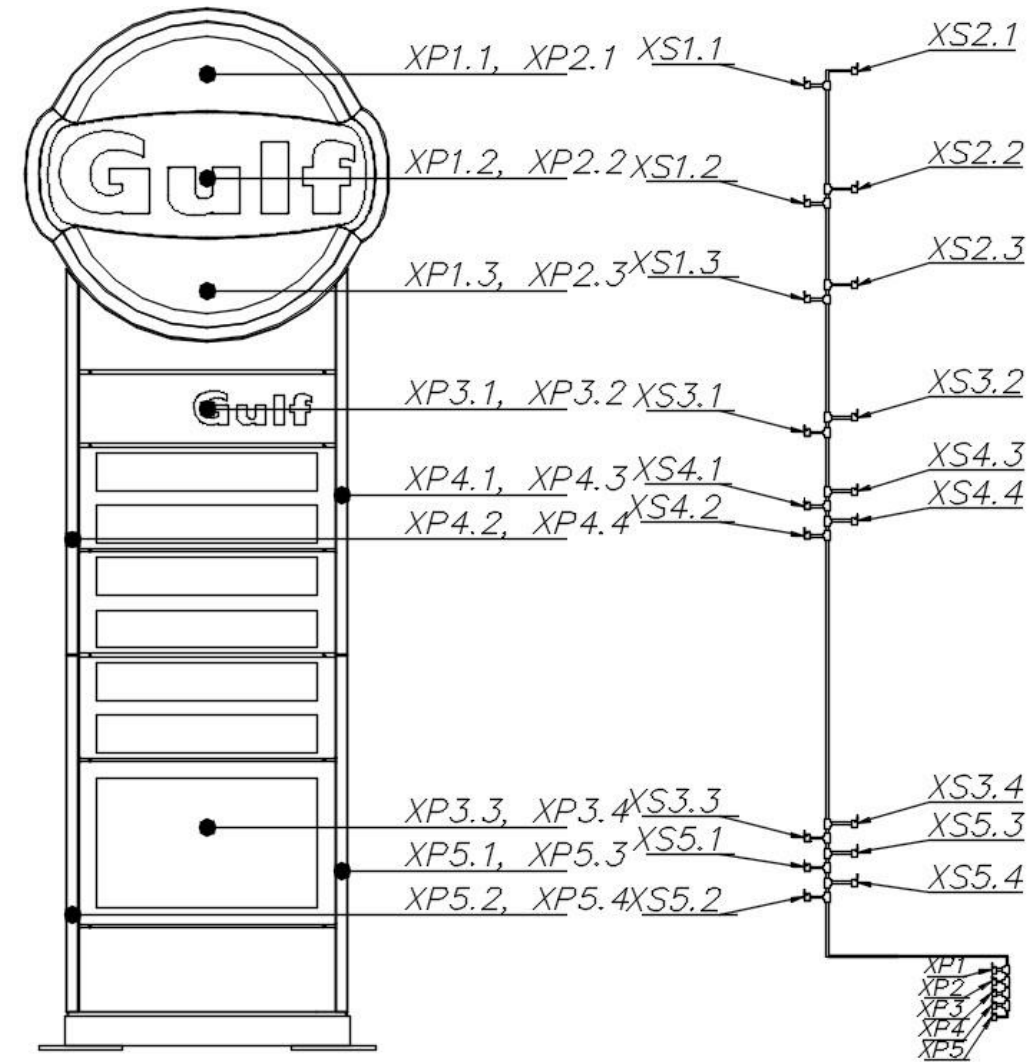


Power supply connectors:

XP - plug connector
art. 282106-1 - housing
art. 282109-1 - contact
art. 281934-4 - seal



XS - female connector
art. 282088-1 - housing
art. 282110-1 - contact
art. 281934-4 - seal



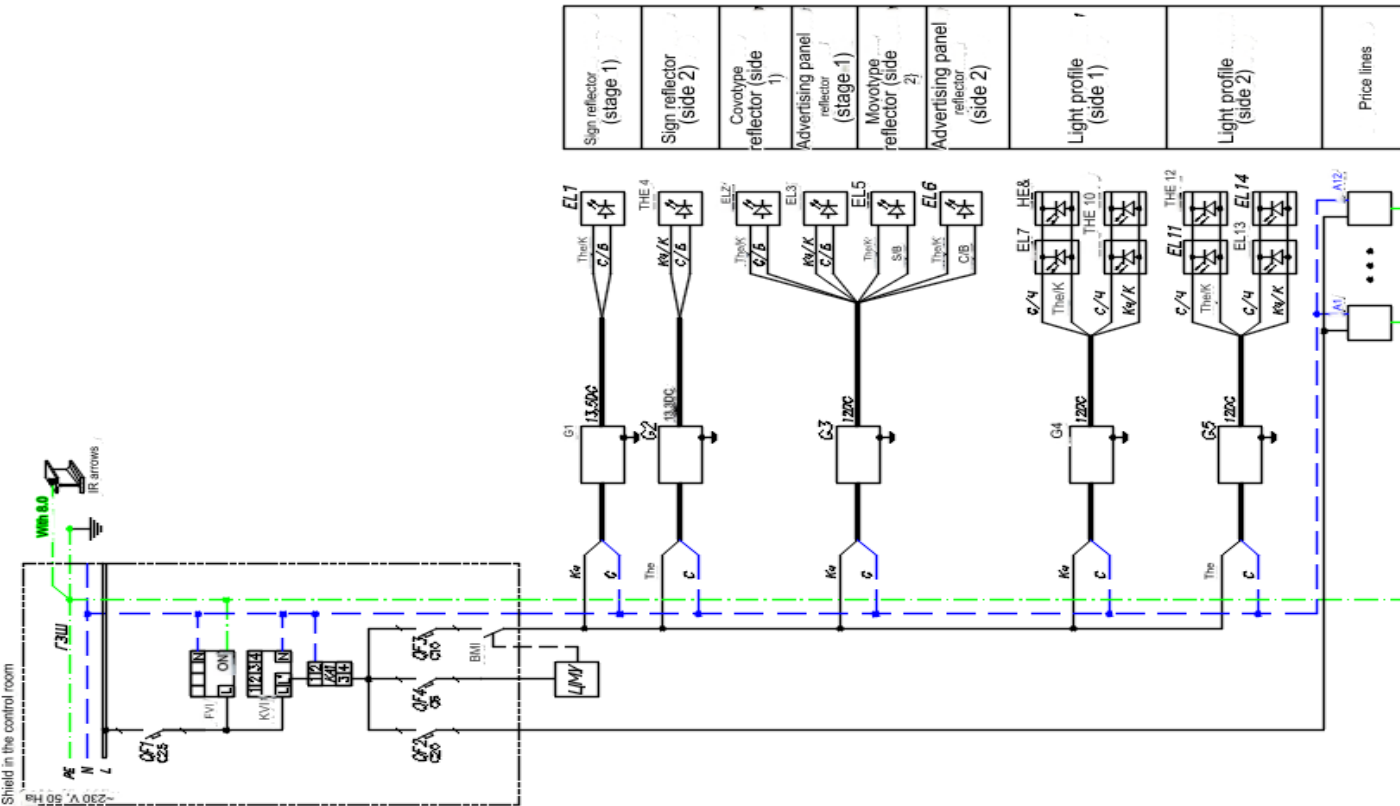
2 Price sign 7m

Price sign components description

Price sign electronics

Harness electrical installation

Electrical circuit diagram



2 Price sign 7m

Price sign components description

Price sign electronics

Power protection unit

Elements of the power protection unit and their purpose:

1. FV1 – protection of electrical equipment from impulse current.

SPD V20-1+NPE-280, 2P, UN=230V, IMAX=80KA, UP<1.3KV, CLASS C (prevents short short circuit on the power cable side).

2. KA1, KA2, KA3 – limiting the starting currents of the stele.

Starting current limiter, 28A, ICL-28R, Starting current limiter, 16A, ICL-16R (a large number of sources, starting currents exceed operating currents).

3. KV1 – voltage relay.

Voltage control relay CP-721-1, supply voltage 100-450 V, contact 1NO, 63 A, built-in timer. Registration of accidents in memory. Indication of the current voltage (control of voltage deviation within +-5% of the base).

4. QF1, QF2, QF3, QF4 – automatic switches.

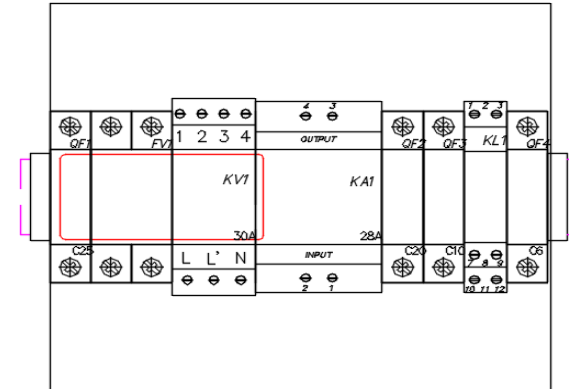
QF1: AUT. SWITCH GYM8-1P-40C, 1P, 40A, CHARACTER C, 4.5KA, 1M QF2: AUT. SWITCH GYM8-1P-32C, 1P, 32A, CHARACTER C, 4.5KA, 1M QF3: AUT. SWITCH GYM8-1P-16C, 1P, 16A, CHARACTER C, 4.5KA, 1M

QF4: AVT. SWITCH GYM8-1P-6C, 1P, 6A, CHARACTERISTIC C, 4.5KA, 1M (protection electrical equipment of the price sign from short-circuit currents, from cable line overheating)

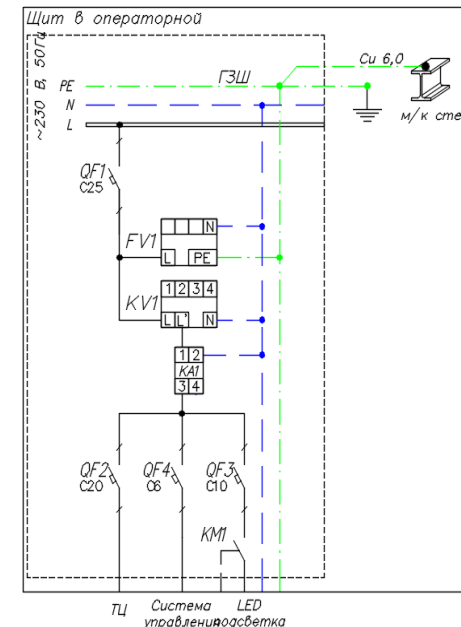
5. KM1, KL1 – contactors.

Remote photosensor AZ-112, maximum load current - 16 A (automation turning on/off the backlight depending on the ambient light).

Protection unit diagram:



Protection unit diagram:



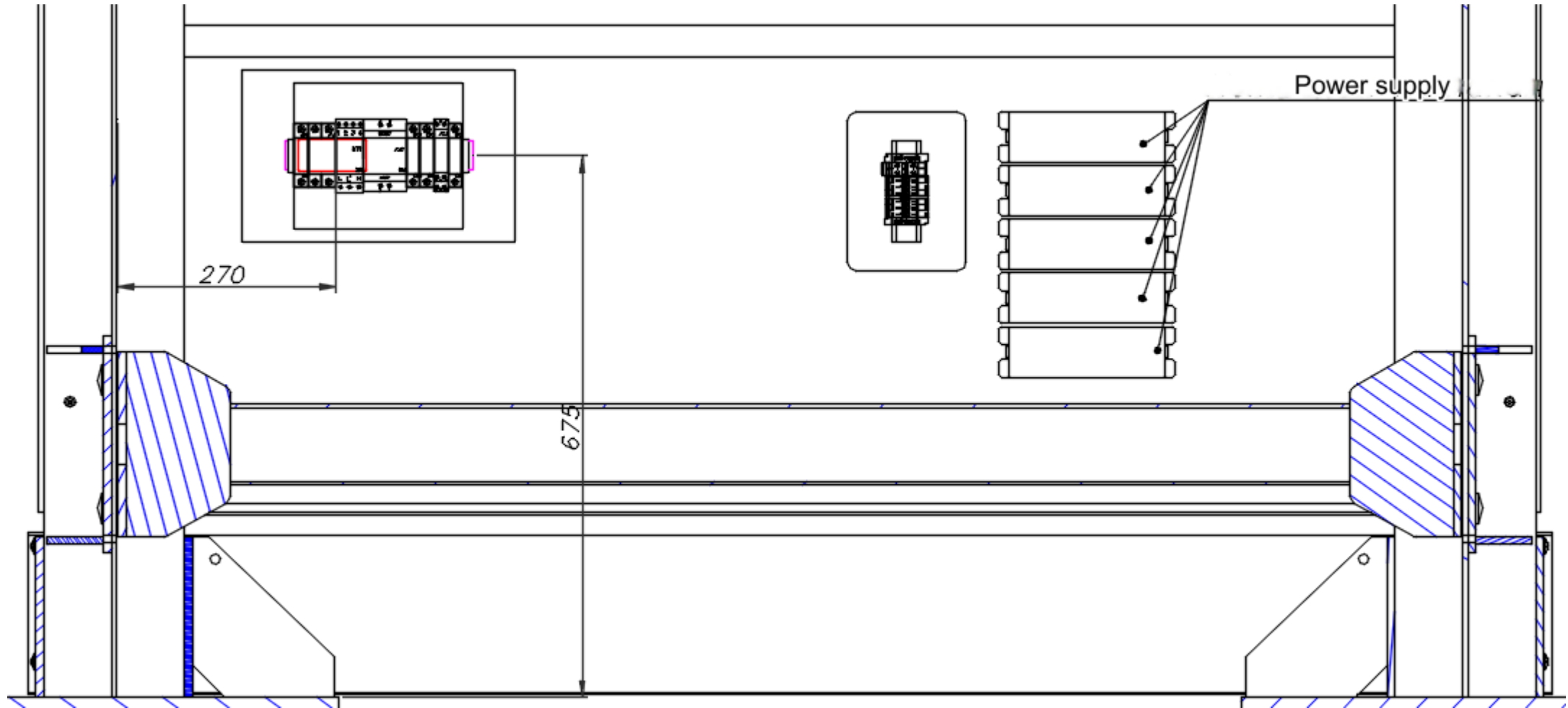
2 Price sign 7m

Price sign components description

Price sign electronics

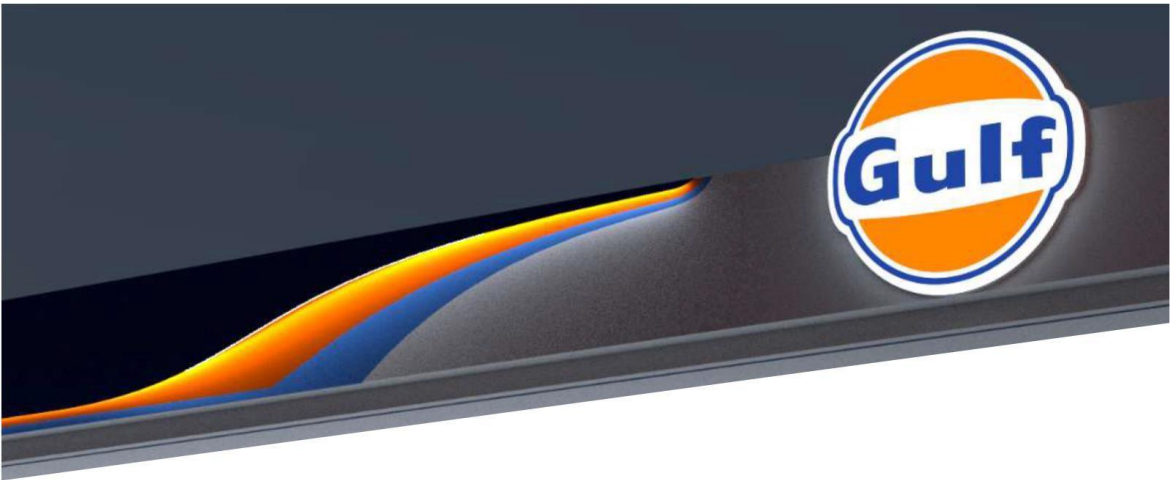
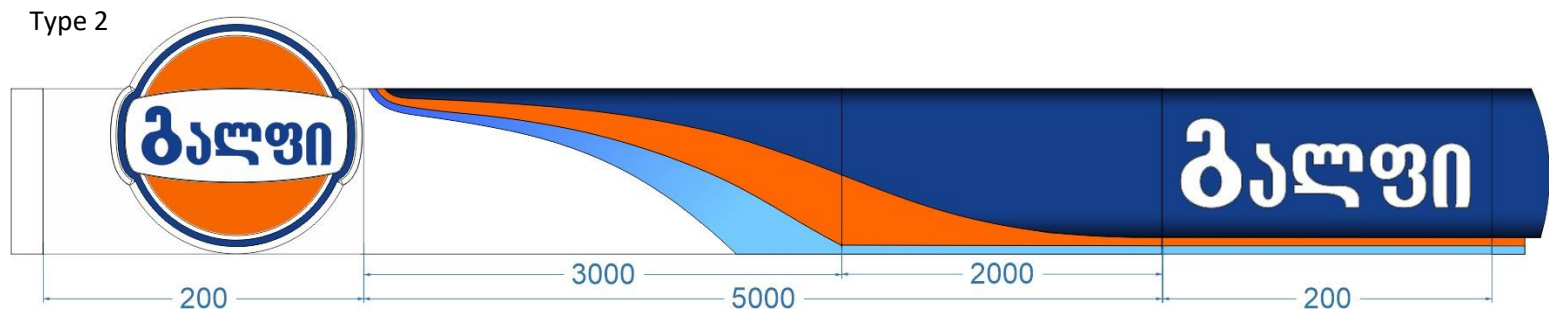
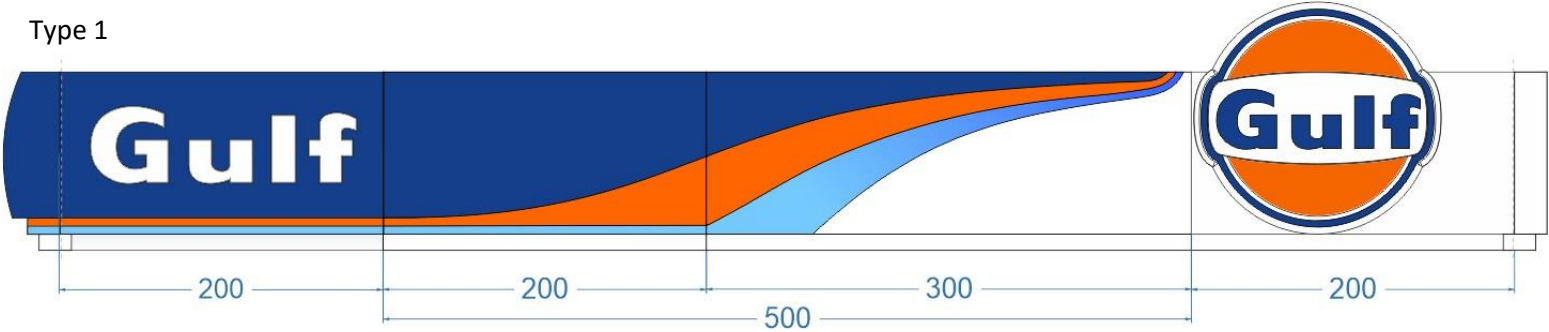
Power supply protection unit

Power supply lines location:



3 Canopy cladding

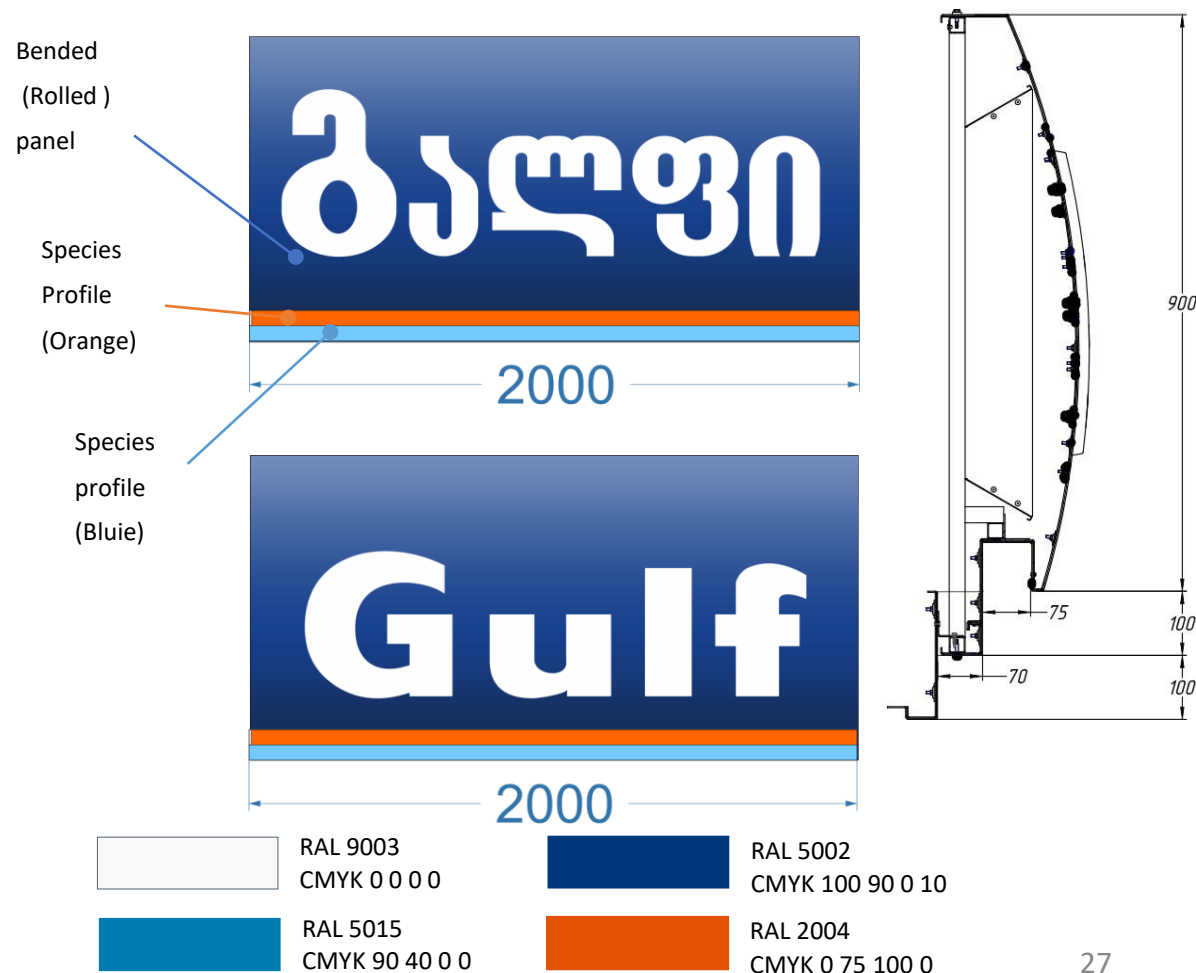
Visualization of canopy frieze



3 Canopy cladding

3.1 Typical panel with logo and illumination

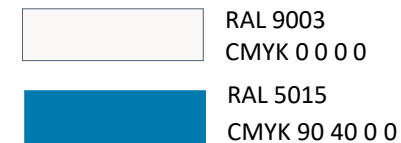
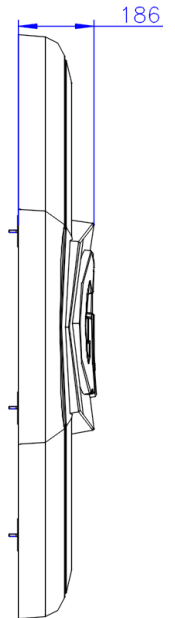
1. The panel of the canopy is made of steel with a 0.8 mm thick zinc-aluminum-magnesium coating. Allowed to be made from aluminum with a thickness of at least 1.8 mm.
2. Height of frieze - 1000 mm.
3. Anti-corrosion coating – polymer, at least 60 microns thickness..
4. The frieze is made of a prefabricated panel, made from a rolled, three-dimensional panel and specific profiles with a separate one. final assembly of painting elements.
5. During manufacture of the panel, the technology of laser welding of panel fasteners is used.
6. Mortise letters Gulf, made of molded, white organic glass 3mm thick.
7. The letters are made in two versions: Latin and Georgian languages.
8. The backlight is made on a galvanized steel reflector with a white anti-corrosion coating, backlit by white LED modules with a dispersion angle of at least 140 degrees, CCT: 6500K, IP65.
9. Brightness on a white surface is at least 200 cd/m2.
10. The panel includes a subsystem for fastening to a canopy made of **galvanized steel**.
11. Panel includes mounting kit.
12. The design of the canopy frieze (including electronics) must be designed for operation in a temperature range from –40 to +60 °C and a humidity from 40% to 90%.
13. The design is standardized and interchangeable.
14. 14. The design and materials used of the canopy frieze are designed for a service life of up to 10 years.



3 Canopy cladding

3.2 Gulf logo , illuminated

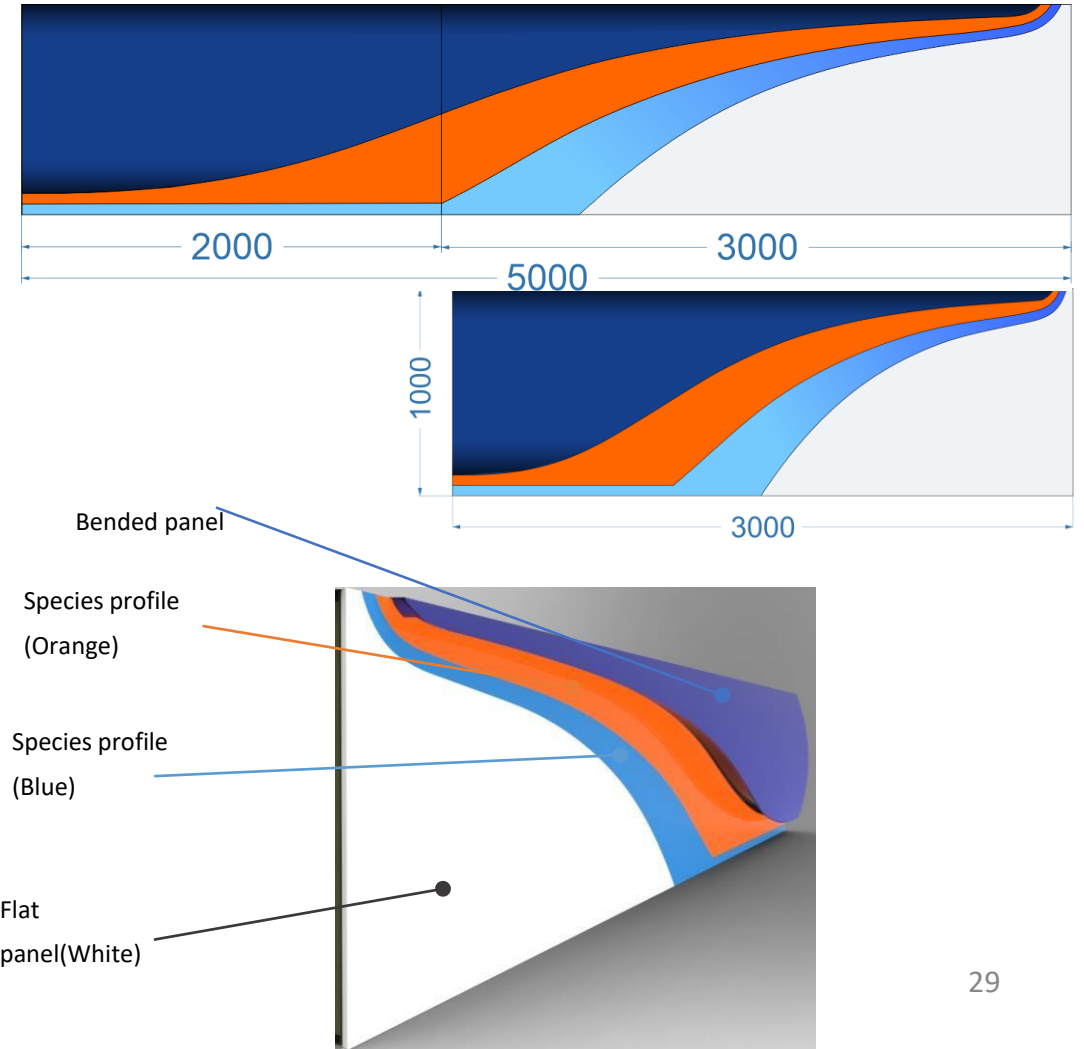
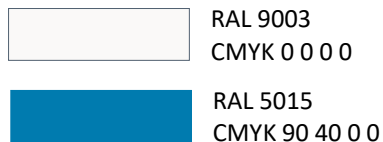
1. Illuminated logo in the frieze of the canopy.
2. The front part of the sign is made of molded organic glass, 3 mm thick, with application of films ORACAL 8300-034 (orange), ORACAL 8300-057 (blue).
3. The sign body is made of molded PMMA plastic, 4 mm thick .
4. The backlight is made on a galvanized steel reflector with a white anti-corrosion coating, backlit by white LED modules with a scattering angle of at least 140 degrees, CCT: 6500K, IP65.
5. The sign includes a prefabricated galvanized steel frame for attachment to a canopy.
6. The sign includes a mounting kit.
7. The design of the canopy sign (including electronics) must be designed for operation in temperatures ranging from −40 to +60 °C and humidity from 40% to 90%
9. The construction and materials used of the canopy sign are designed for a service life of up to 10 years



3 Canopy cladding

3.3 Typical canopy panel , transitional and volumetric

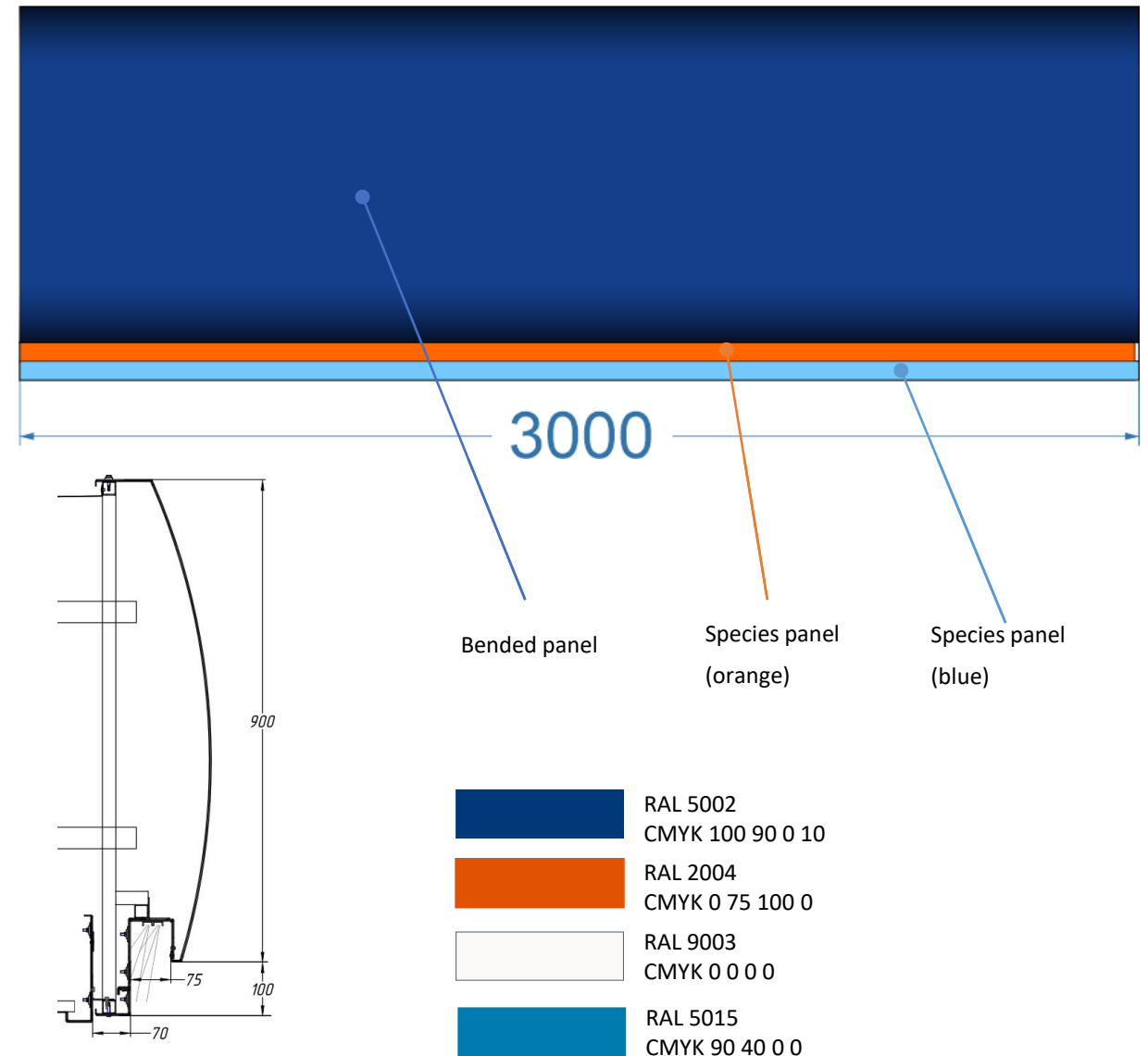
1. The transition panel of the canopy is made of aluminum with a thickness of at least 1.8 mm.
2. Frieze height - 1000 mm
3. Anti-corrosion coating – polymer, at least 60 microns thick.
4. The panel is made as a prefabricated panel, consisting of a rolled, volumetric panel, view profiles and a flat panel with elements painted separately before assembly.
5. In the manufacture of panels, the technology of laser welding of panel elements is used.
6. The transition panel of the canopy is manufactured in two versions depending on the lengths of the sides of the main canopy:- 5 meters long, composite, installed on a frieze length of more than 9.5 m;- 3 meters long, installed on a frieze length of up to 9.5 m.
7. The panel includes a galvanized steel subsystem for attachment to the canopy.
8. The panel includes a mounting kit.
9. The design of the canopy frieze must be designed for operation at temperatures from –40 to +60 °C and humidity from 40% to 90%.
10. The design is standardized and interchangeable.
11. The design and materials used of the canopy frieze are designed for a service life of up to 10 years.



3 Canopy cladding

3.4 Typical canopy panel , volumetric , blue

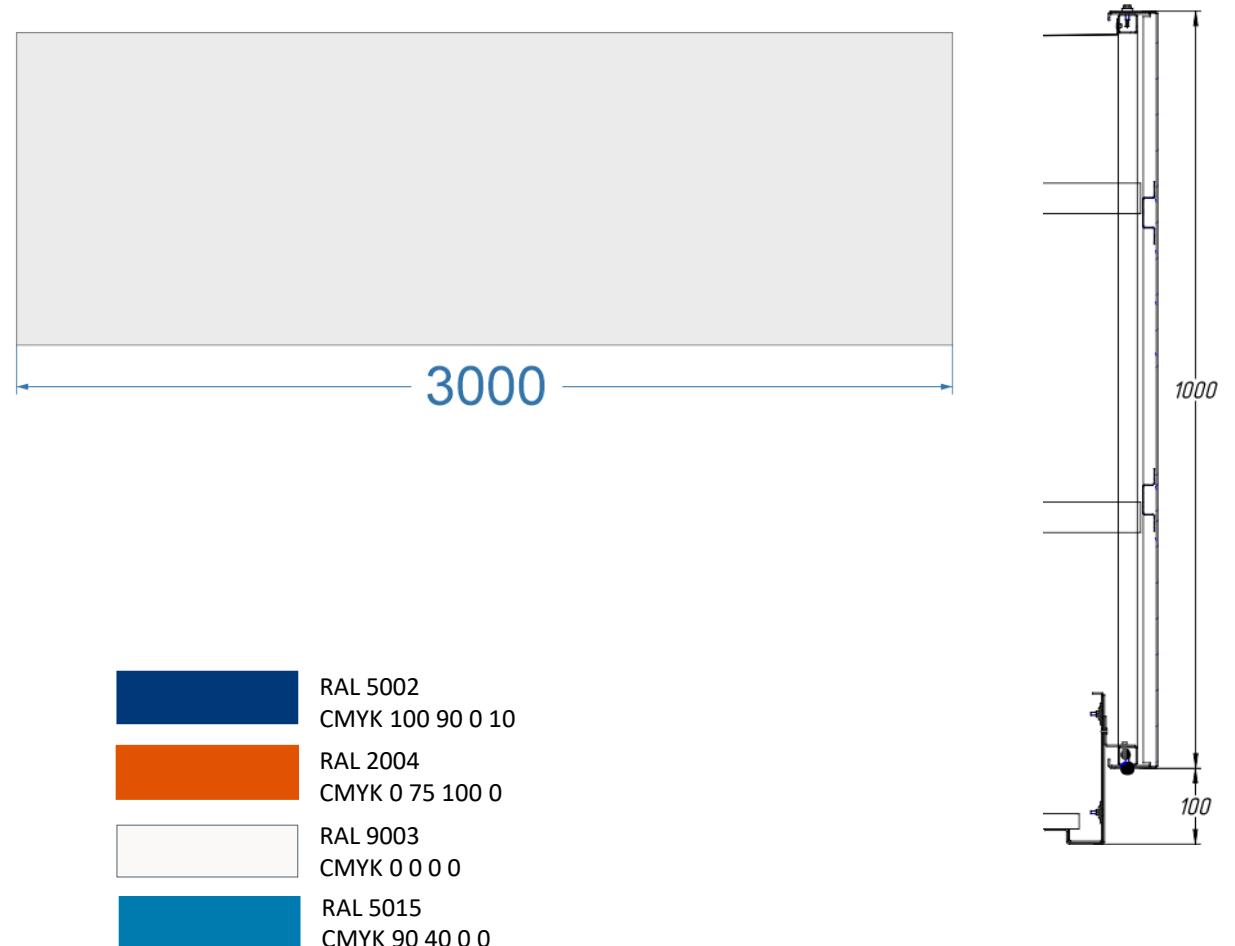
1. The volumetric canopy panel is made of steel with a zinc-alumina-magnesium coating 0.8 mm thick. It is allowed to be made of aluminum with a thickness of at least 1.8 mm.
2. Height - 1000 mm.
3. Anti-corrosion coating – polymer, at least 60 microns thick.
4. The panel is made as a prefabricated panel, from a rolled, three-dimensional panel and specific profiles with separate painting of the elements before assembly.
5. In the manufacture of panels, the technology of laser welding of panel elements is used.
6. The length of the frieze is achieved using standard panels (3m). The outer panel of the frieze is
- trimming Depending on the size of the cutting area, the panel is selected
- length from 0.5 to 3 m in increments of 0.5 m.
7. The panel includes a galvanized steel subsystem for attachment to the canopy.
8. The panel includes a mounting kit.
9. The design of the canopy frieze must be designed for operation at
- temperature range from – 40 to +60 °C with humidity from 40% to 90%.
10. The design is standardized and interchangeable.
11. The design and materials used of the canopy frieze are designed for a service life of up to 10 years.



3 Canopy cladding

3.5 Typical canopy panel , volumetric , white

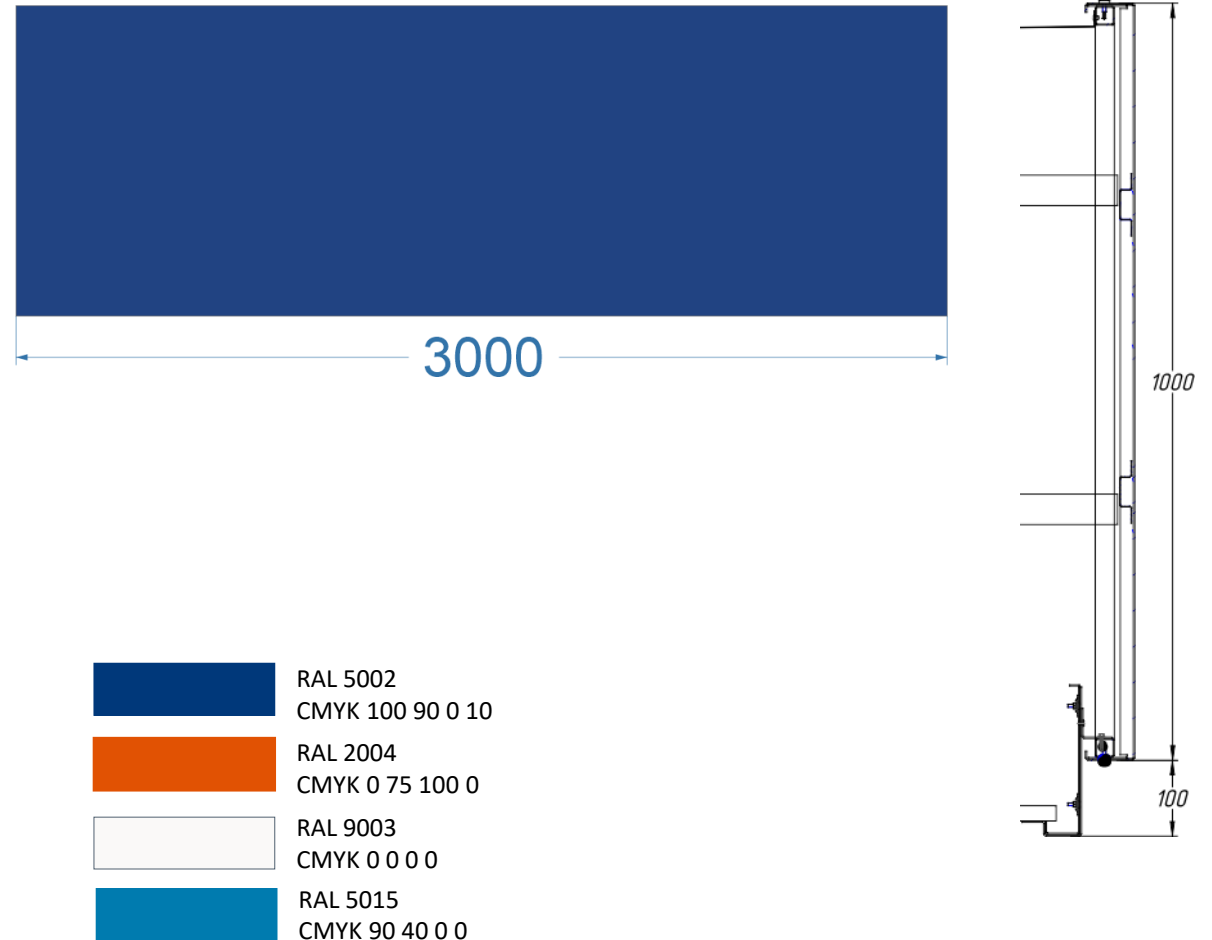
1. Flat panel of the canopy, made of steel with zinc-alumina-magnesium coating 0.8 mm thick. It is allowed to be made of aluminum with a thickness of at least 1.8 mm.
2. Height - 1000 mm
3. Anti-corrosion coating – polymer, at least 60 microns thick.
4. To ensure structural rigidity, stiffening ribs are installed on the rear side of the panel.
5. The length of the frieze is achieved using standard panels (3m). The outermost panel of the frieze is trimmed. Depending on the size of the cutting area a panel with a length of 0.5 to 3 m is selected in increments of 0.5 m.
6. The panel includes a galvanized steel subsystem for attachment to the canopy.
7. The panel includes a mounting kit.
8. The design of the canopy frieze must be designed for operation at temperatures from –40 to +60 °C and humidity from 40% to 90%.
9. The design is standardized and interchangeable.
10. The design and materials used of the canopy frieze are designed for a service life of up to 10 years.



3 Canopy cladding

3.6 Typical canopy panel , flat , blue

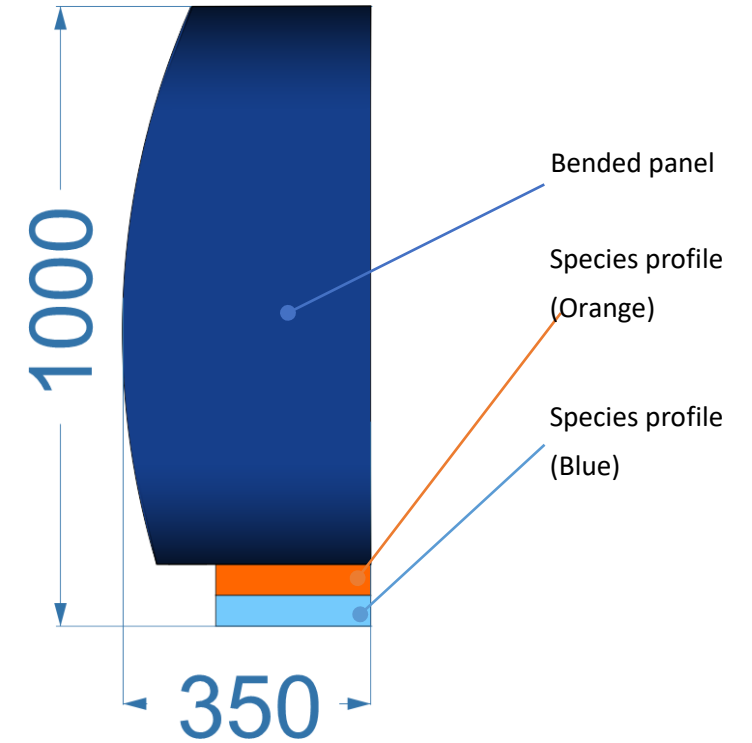
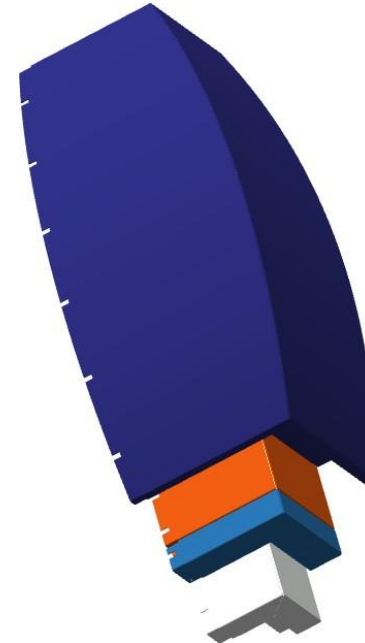
1. Flat panel of the canopy, made of steel with zinc-alumina-magnesium coating 0.8 mm thick. It is allowed to be made of aluminum with a thickness of at least 1.8 mm.
2. Height - 1000 mm
3. Anti-corrosion coating – polymer, at least 60 microns thick.
4. To ensure structural rigidity, stiffening ribs are installed on the rear side of the panel.
5. The length of the frieze is achieved using standard panels (3m). The outermost panel of the frieze is trimmed. Depending on the size of the cutting area, a panel with a length of 0.5 to 3 m is selected in increments of 0.5 m.
6. The panel includes a galvanized steel subsystem for fastening to Aweigh.
7. The panel includes a mounting kit.
8. The design of the canopy frieze must be designed for operation under temperature range from – 40 to +60 °C with humidity from 40% to 90%.
9. The design is standardized and interchangeable.
10. The design and materials used of the canopy frieze are designed for a service life of up to 10 years.



3 Canopy cladding

3.7 Canopy corner panel, three-dimensional, blue

1. Corner panel of the canopy, made of aluminum with a thickness of at least 1.8 mm.
2. Height - 1000 mm.
3. Anti-corrosion coating – polymer, at least 60 microns thick.
4. The panel is made as a prefabricated panel, from a rolled, three-dimensional panel and specific profiles with separate painting of the elements before assembly.
5. In the manufacture of panels, the technology of laser welding of panel elements is used.
6. The panel includes a galvanized steel subsystem for attachment to the canopy.
7. The panel includes a mounting kit.
8. The design of the canopy frieze must be designed for operation under temperature range from – 40 to +60 °C with humidity from 40% to 90%.
9. The design is standardized and interchangeable.
10. The design and materials used of the canopy frieze are designed for a service life of up to 10 years

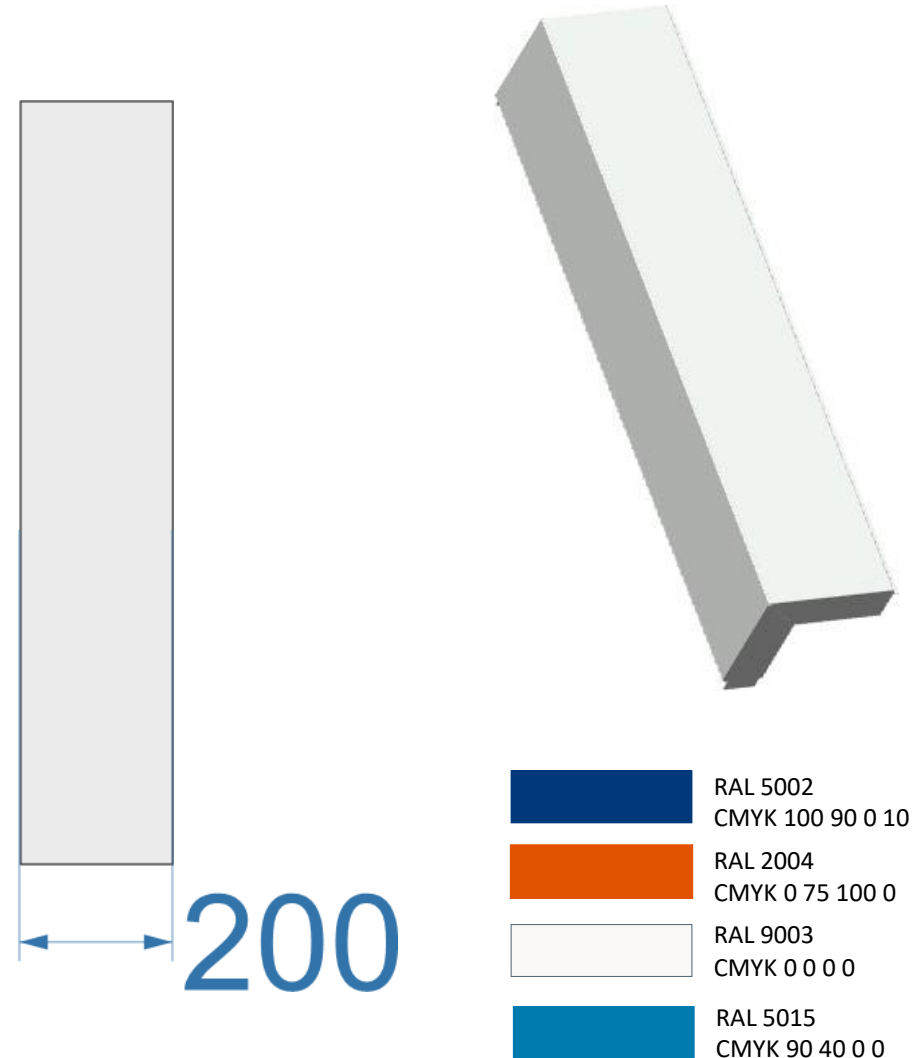


RAL 5002
CMYK 100 90 0 10
RAL 2004
CMYK 0 75 100 0
RAL 9003
CMYK 0 0 0 0
RAL 5015
CMYK 90 40 0 0

3 Canopy cladding

3.8 Canopy corner panel , flat, white

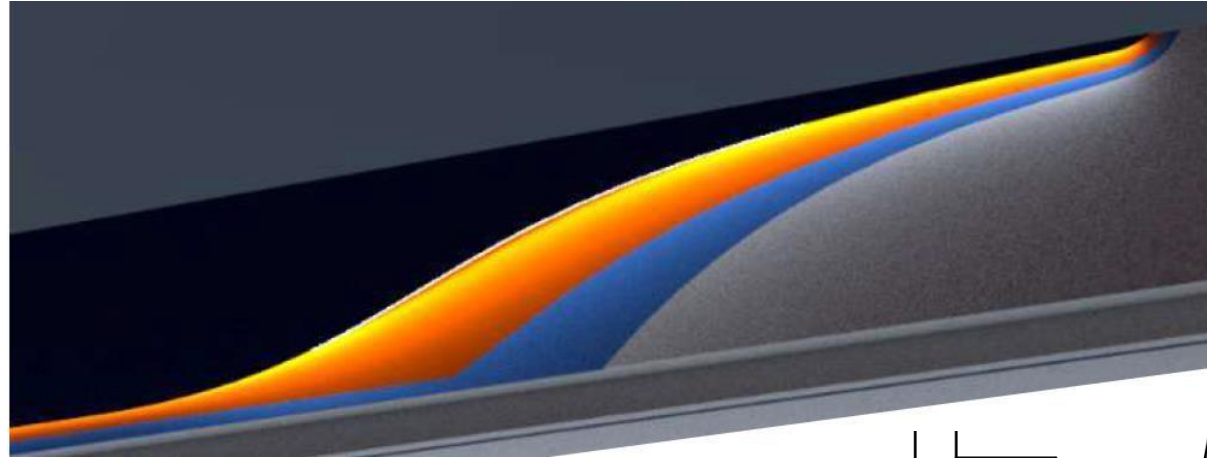
1. Corner panel of the canopy, made of steel with zinc-magnesium coating 0.8 mm thick. It is allowed to be made of aluminum with a thickness of at least 1.8 mm.
2. Height - 1000 mm.
3. All-welded corner, made using laser welding technology.
4. Anti-corrosion coating – polymer, at least 60 microns thick.
5. The panel includes a galvanized steel subsystem for attachment to the canopy.
6. The panel includes a mounting kit.
7. The design of the canopy frieze must be designed for operation at temperatures from –40 to +60 °C and humidity from 40% to 90%.
8. The design is standardized and interchangeable.
9. The design and materials used of the canopy frieze are designed for a service life of up to 10 years



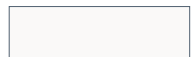
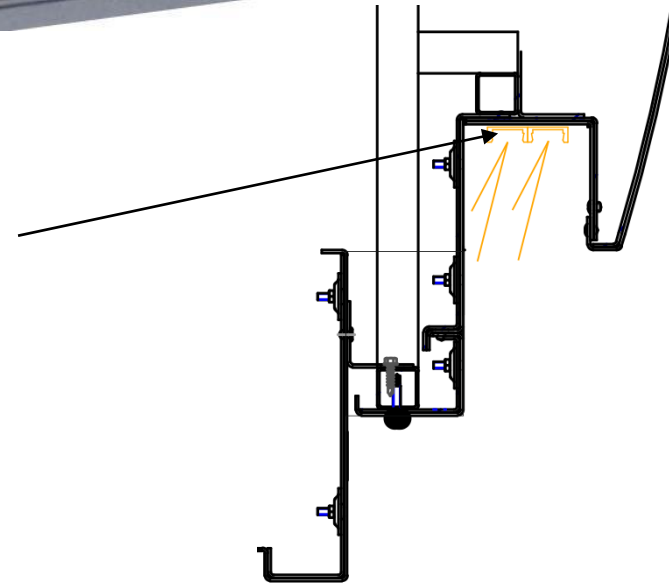
3 Canopy cladding

3.9 Canopy frieze backlight

1. The backlighting of the canopy frieze is made on LED, extruded aluminum profiles with compound filling.
2. To increase the brightness of the glow, two lines of LED profiles are installed on the frieze.
3. LED illumination with warm white and cool white glow with a dispersion angle of at least 120 degrees.
4. Warm and cold LEDs are arranged in an alternate LED profile.
5. Warm white LED glow temperature – 3000K.
Cold white LED glow temperature – 6500K
6. Dust and moisture protection level not lower than IP 67.
7. The lighting includes an installation kit with elements for fastening the gates to the frieze panels, power supplies for the gates, switching boxes with connectors.



LED PROFILES



RAL 9003
CMYK 0 0 0 0



RAL 5002
CMYK 100 90 0 10



RAL 5015
CMYK 90 40 0 0

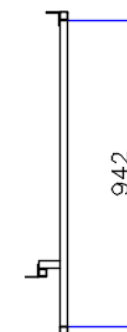
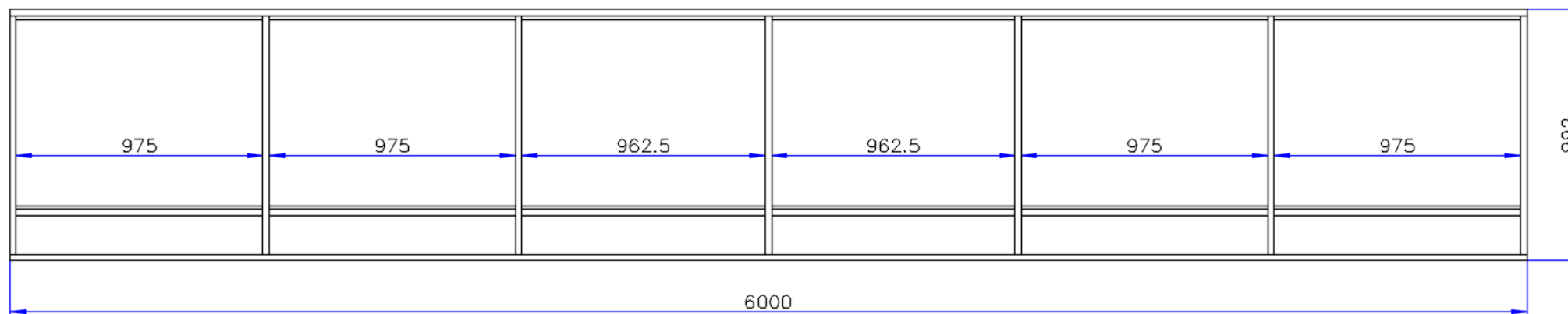


RAL 2004
CMYK 0 75 100 0

3 Canopy cladding

3.10 Canopy frieze attachment subsystem

1. The canopy subsystem is made of rolled, galvanized steel profile, section 25x25x1.5mm and rolled, galvanized steel anglesection 40x40x2mm.
2. The length of the frieze is determined using standard frames (6m). The outermost frame of the frieze is trimmed.
3. The frame is made in 3 versions - used depending on the type of frieze panels:
flat panels, transition panels, row panels, volumetric panels.



RAL 9003
CMYK 0 0 0 0

RAL 5015
CMYK 90 40 0 0






RAL 5002
CMYK 100 90 0 10

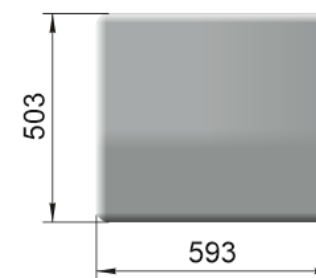
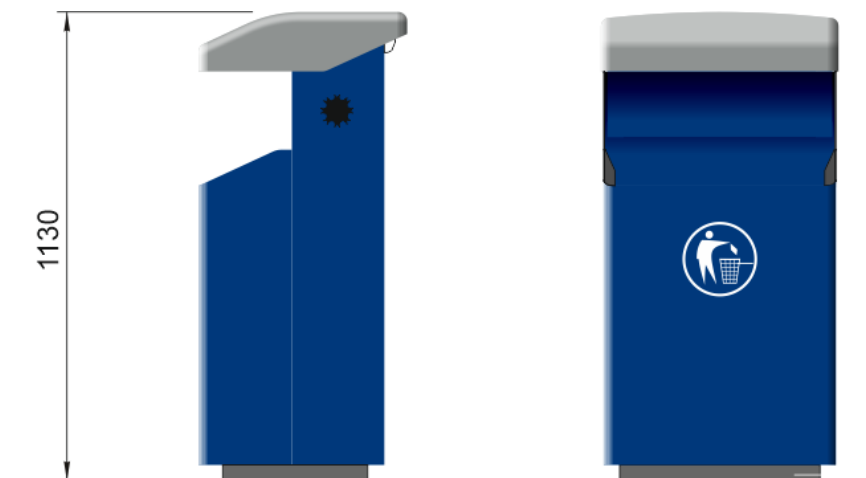
RAL 2004
CMYK 0 75 100 0

4 Stand alone structures

4.1 Trash bin

1. The body of the trash bin is made of steel with a polymer, anti-corrosion coating.
2. The lid of the trash bin is made of aluminum, 1.8 mm thick, with a polymer, anti-corrosion coating.
3. The container of the trash bin is made of steel with a zinc-alumina-magnesium coating 0.8 mm thick. The volume of the removable container is 160 liters.
4. Applications are made of film.
5. The trash bin includes an installation kit.

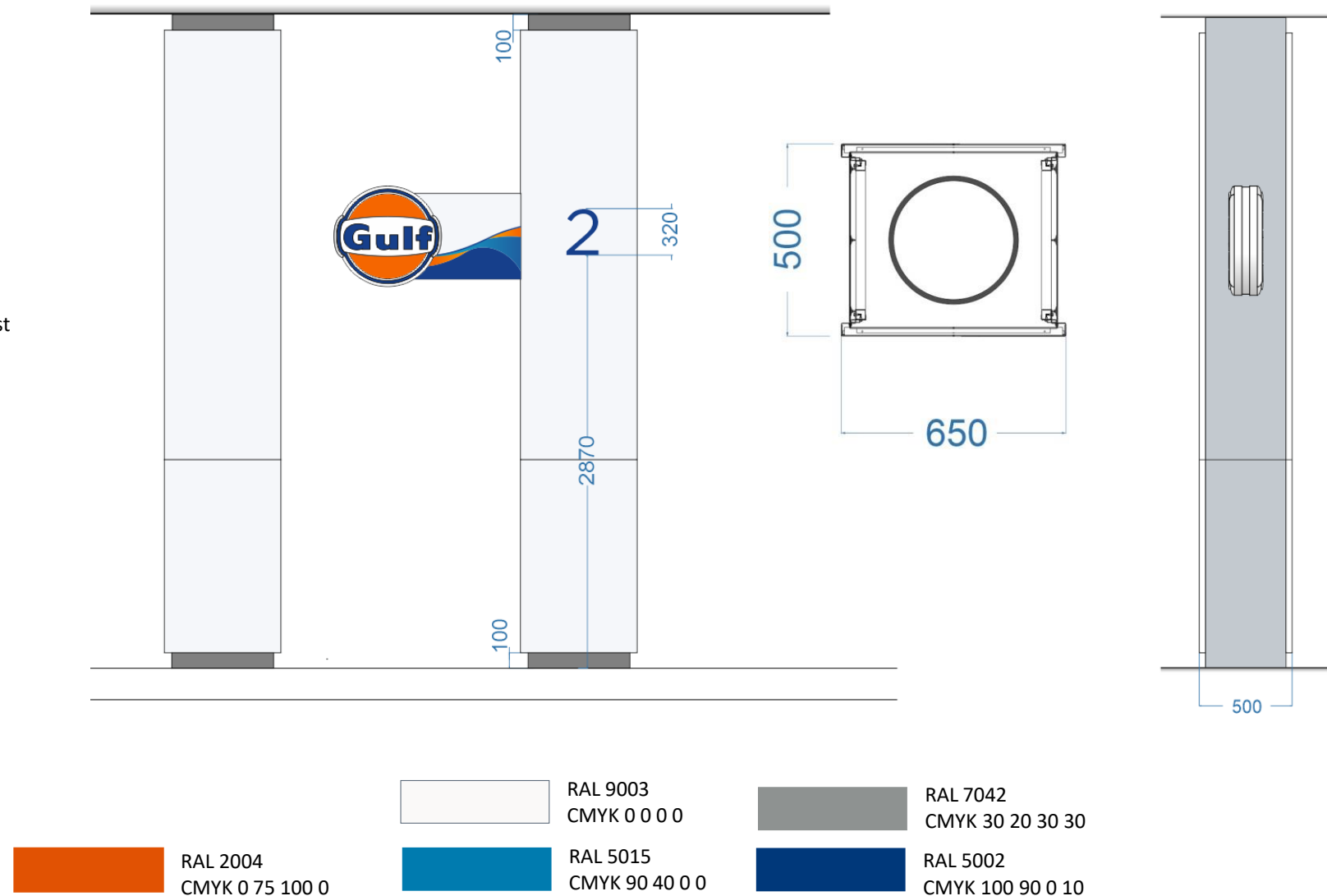
	RAL 7042 CMYK 30 20 30 30
	RAL 5002 CMYK 100 90 0 10
	RAL 2004 CMYK 0 75 100 0
	RAL 9003 CMYK 0 0 0 0
	RAL 5015 CMYK 90 40 0 0



5 Under canopy space

5.1 Column cladding

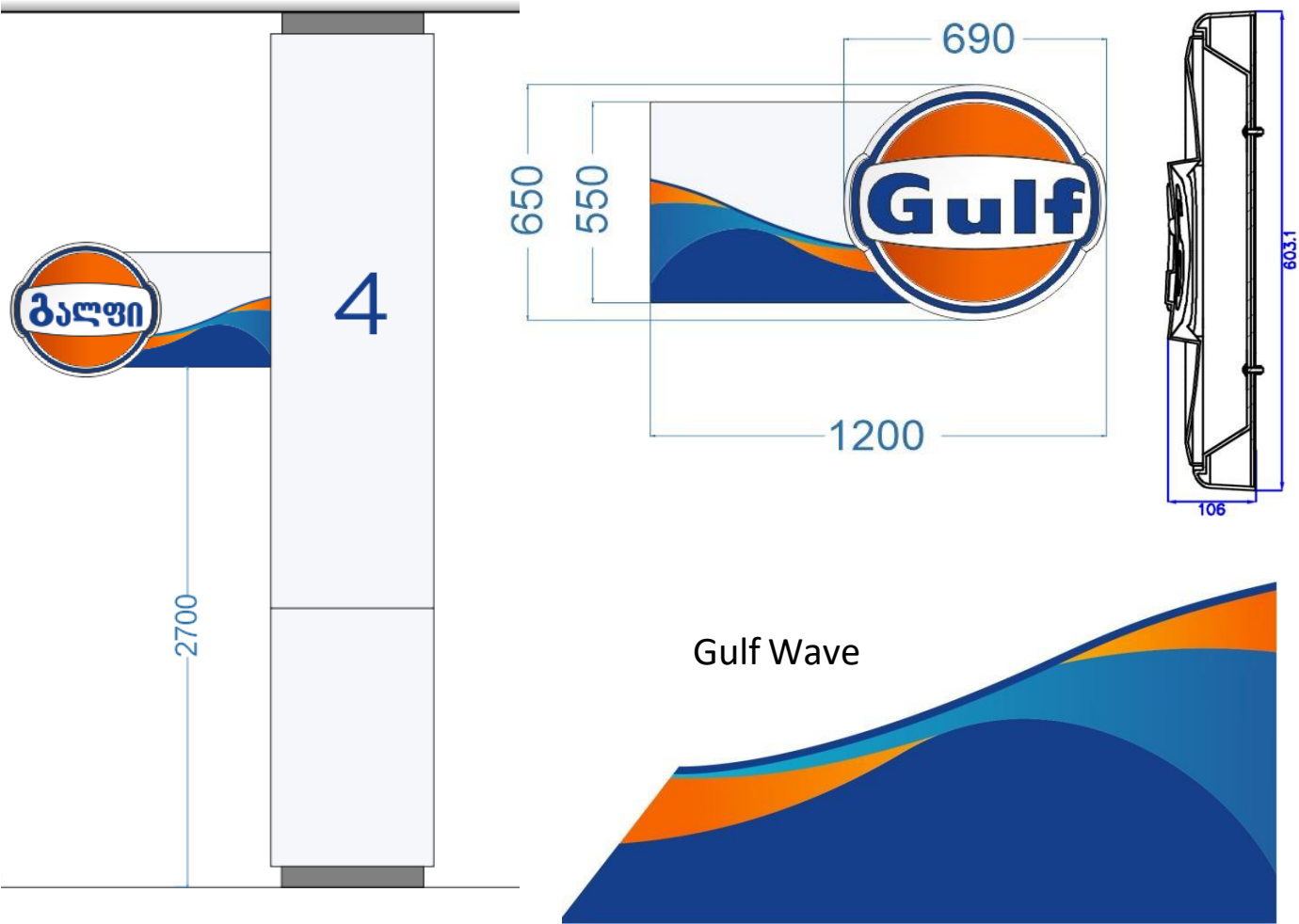
1. The sheathing of the canopy columns is made of rectangular panels made of steel with a zinc-alumina-magnesium coating 0.8 mm thick. It can be made from aluminum with a thickness of at least 1.8 mm.
2. Nominal size of canopy column cladding: 650x500mm. IN Depending on the overall dimensions of the supporting column of the canopy, the size of the cladding can be increased.
3. The panels are painted with a polymer, anti-corrosion coating, at least 60 microns thick.
4. The dispenser numbers are made using OraCal 8500 - 005 film.
5. The support sheathing subsystem is made of galvanized steel, with a cross-section of 25x25.
6. The design of the cladding provides for hidden installation of panels.
7. The sheathing includes an installation kit for fastening the sheathing panels.



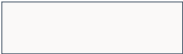
5 Under canopy space

5.2 Light box

- 1. The box body is made of steel with a 0.8 mm thick zinc-alumina-magnesium coating with a polymer coating. It is allowed to be made of aluminum with a thickness of at least 1.8 mm.
- 2. The box body is painted with a polymer anti-corrosion coating, thickness of at least 60 microns.
- 3. “Gulf Wave” is made using ORAJET 3640 - 010 film with solvent printing.
- 4. The frame of the box is made of galvanized steel.
- 5. The prefabricated Gulf sign on 2 sides of the box consists of a front molded, milk-white PMMA, 3 mm thick with application of films, a molded, milk-white PMMA, 4 mm thick, of the sign body and white-milk PMMA, 4 mm thick, of the back wall of the sign.
- 6. The image on the Gulf sign is made using films ORACAL 8300-034 (orange), ORACAL 8300-057 (blue).
- 7. The design of the box provides for hidden installation of elements fastenings
- 8. The box includes an installation kit.



RAL 2004
CMYK 0 75 100 0



RAL 9003
CMYK 0 0 0 0



RAL 7042
CMYK 30 20 30 30



RAL 5015
CMYK 90 40 0 0

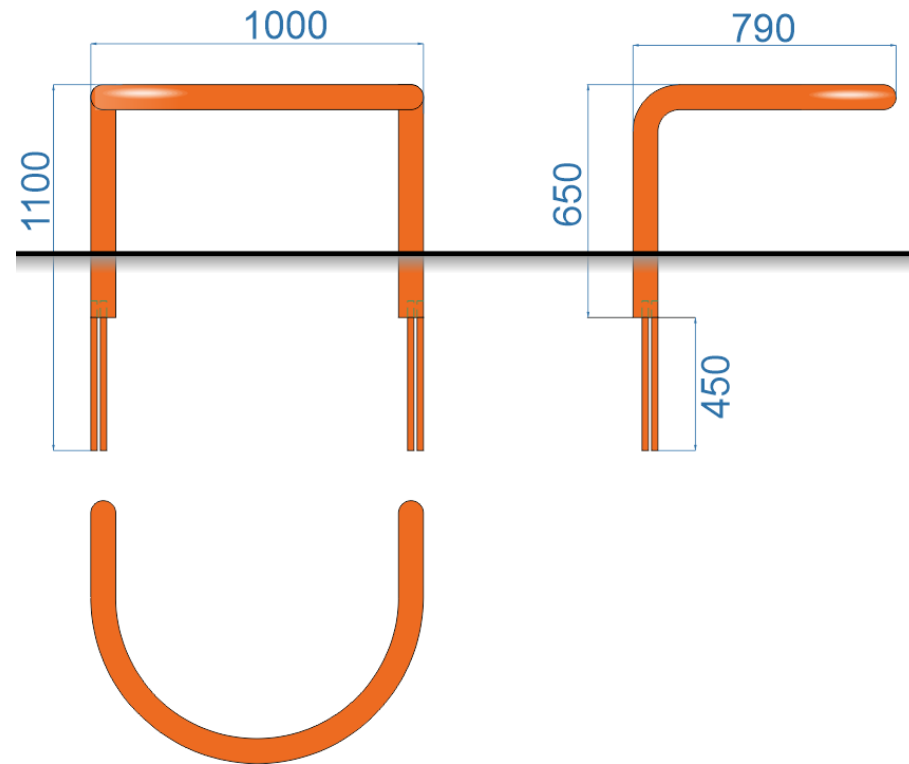


RAL 5002
CMYK 100 90 0 10

5 Under canopy space

5.3 Safety bar

1. Дуга выполнена из стальной трубы диаметром 76 мм и толщиной стенки 4 мм с полимерным, антикоррозионным покрытием.



 RAL 2004
CMYK 0 75 100 0

 RAL 9003
CMYK 0 0 0 0

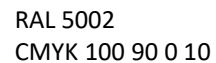
 RAL 5015
CMYK 90 40 0 0

 RAL 7042
CMYK 30 20 30 30

 RAL 5002
CMYK 100 90 0 10

5.3 Canopy ceiling

-

[illegible]

5 Under canopy space

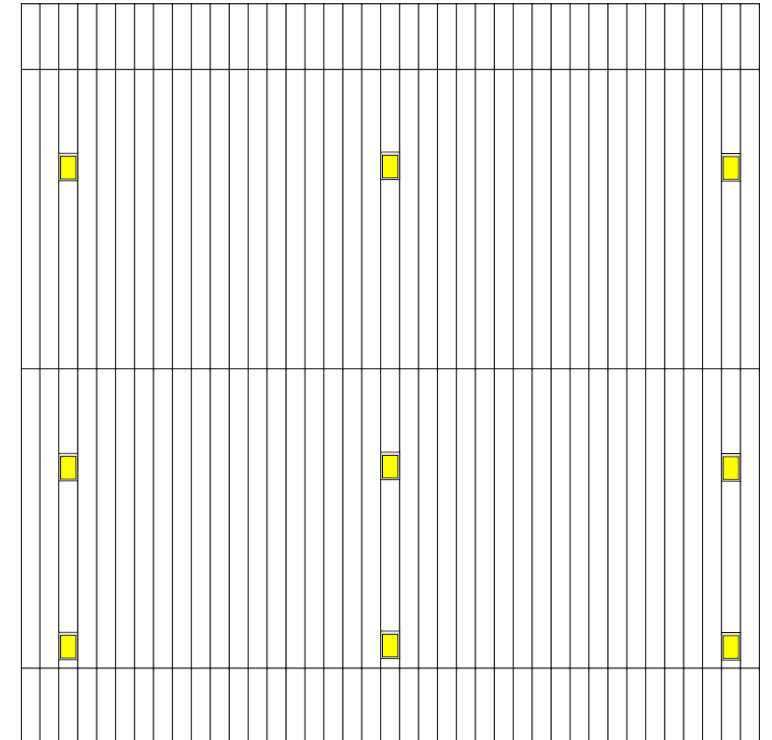
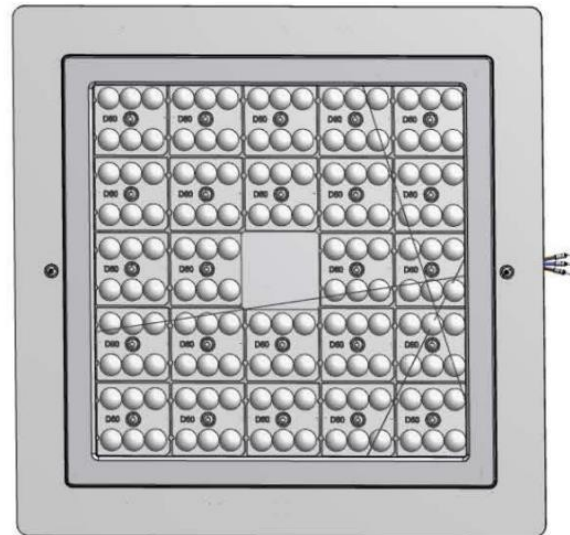
5.4 Canopy light

1. Illumination of the suspended space is carried out with LED lamps.

2. Overall dimensions: 300x312x92mm, 300x400x92.

3. Technical characteristics of lamps:

- the body is made of aluminum by injection molding;
- visible parts are powder coated RAL9003, gloss 20%;
- the diffuser is made of silicate glass with white silk-screen printing;
- The power supply has a power control function.
- secondary optics provide light distribution for the best illumination of the horizontal and vertical surfaces of the fuel dispenser;
- the lamp has the ability to automatically and manually adjust the brightness by connecting to the lighting system control unit, the lighting system control unit is included in the delivery package;
- Includes galvanized steel mounting brackets for mounting to the canopy.
- Includes installation kit.
- 144 LEDs in the lamp, light temperature 5000K;
- luminous flux of at least 11,000 lm;
- power 85 W;
- operating temperature from -40 to +50 °C;
- service life not less than: 50,000 hours;
- MTBF at least 12,000 hours;
- degree of protection: IP 65.o.



 RAL 2004
CMYK 0 75 100 0

 RAL 9003
CMYK 0 0 0 0

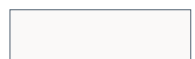
 RAL 5015
CMYK 90 40 0 0

 RAL 7042
CMYK 30 20 30 30

 RAL 5002
CMYK 100 90 0 10



RAL 2004
CMYK 0 75 100 0



RAL 9003
CMYK 0 0 0 0



RAL 5015
CMYK 90 40 0 0



RAL 7042
CMYK 30 20 30 30



RAL 5002
CMYK 100 90 0 10

5.1 Фриз здания

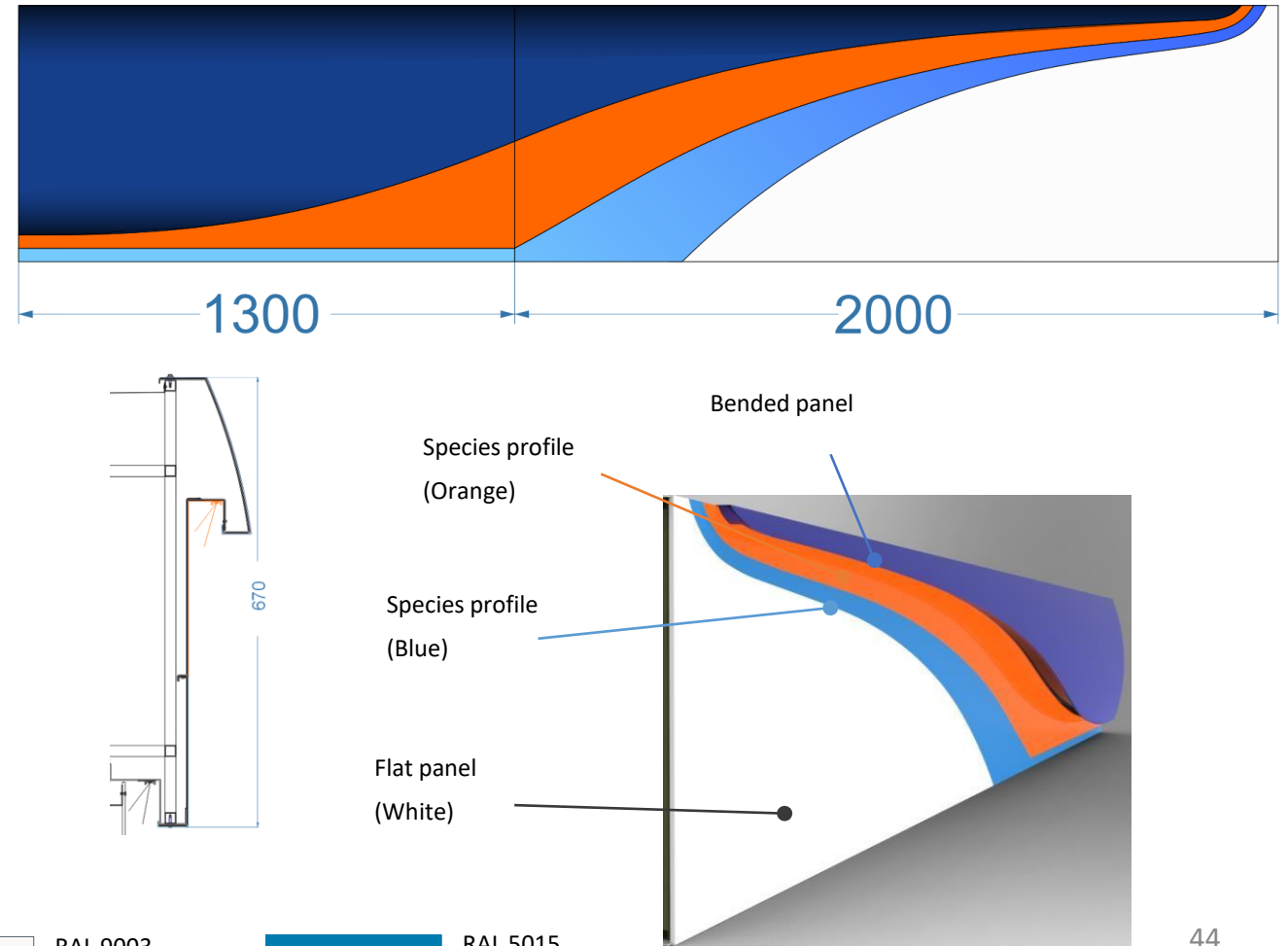
5.2 Обшивка стен здания

6 Building

6.1 Frieze of building

Typical building panel, transitional, volumetric

1. The transition panel of the canopy is made of aluminum with a thickness of at least 1.8 mm.
2. Frieze height - 670 mm.
3. Anti-corrosion coating – polymer, at least 60 microns thick.
4. The panel is made as a prefabricated panel, from a rolled, three-dimensional panel and specific profiles with separate painting of the elements before assembly.
5. In the manufacture of panels, the technology of laser welding of panel elements is used.
6. The transitional panel of the canopy is composite.
7. The panel includes a galvanized steel subsystem for attachment to the building
8. The panel includes a mounting kit.
9. The design of the canopy frieze must be designed for operation at temperatures from -40 to +60 °C and humidity from 40% to 90%.
10. The design is standardized and interchangeable.
11. The design and materials used of the canopy frieze are designed for a service life of up to 10 years



 RAL 5002
CMYK 100 90 0 10

 RAL 2004
CMYK 0 75 100 0

 RAL 9003
CMYK 0 0 0 0

 RAL 5015
CMYK 90 40 0 0

6 Building

6.1 Frieze of building

Typical Office building panel, backlighted

1. The building light logo panel is made of steel with a 0.8 mm thick zinc-alumina-magnesium coating. Allowed to be made from aluminum with a thickness of at least 1.8 mm
2. Height of frieze - 670 mm.
3. Anti-corrosion coating – polymer, with a thickness of at least 60 microns..
4. Laser welding technology is used in the manufacture of panels..
5. Gulf Store mortise letters, made of molded PMMA, 3mm thick application of blue film OraCal 8500 - 005.
6. The letters are made in two versions: Latin and Georgian
7. Backlight on a reflector made of galvanized steel with a white anti-corrosion coating, backlit by white LED modules with a dispersion angle of at least 140 degrees, CCT: 6500K, IP65.
8. Brightness on the surface is at least 200 cd/m2.
9. The panel includes a subsystem for fastening to the building made of galvanized steel.
10. Panel includes mounting kit.
11. The design of the canopy frieze (including electronics) must be designed for operation at temperatures from –40 to +60 °C and humidity from 40% to 90%.
12. The design is standardized and interchangeable.
13. The design and materials used of the canopy frieze are designed for a service life of up to 10 years.

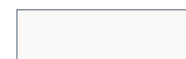
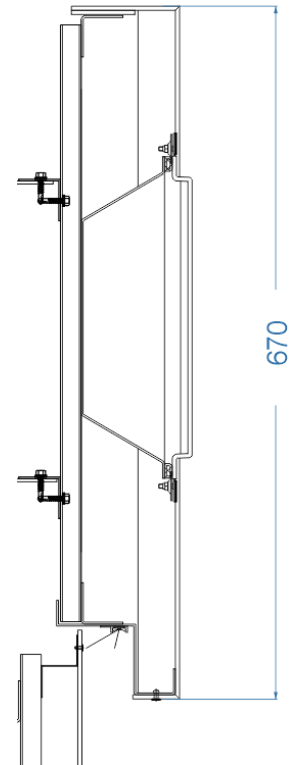


6 Building

6.1 Frieze of building

Typical Gulf Store panel, backlighted

14. The canopy light logo panel is made of steel with a 0.8 mm thick zinc-alumina-magnesium coating. Allowed to be made from aluminum with a thickness of at least 1.8 mm
15. Height of frieze - 670 mm.
16. Anti-corrosion coating – polymer, with a thickness of at least 60 microns..
17. Laser welding technology is used in the manufacture of panels..
18. Gulf Store mortise letters, made of molded PMMA, 3mm thick application of blue film OraCal 8500 - 005.
19. The letters are made in two versions: Latin and Georgian
20. Backlight on a reflector made of galvanized steel with a white anti-corrosion coating, backlit by white LED modules with a dispersion angle of at least 140 degrees, CCT: 6500K, IP65.
21. Brightness on the surface is at least 200 cd/m2.
22. The panel includes a subsystem for fastening to the building made of galvanized steel.
23. Panel includes mounting kit.
24. The design of the canopy frieze (including electronics) must be designed for operation at temperatures from –40 to +60 °C and humidity from 40% to 90%.
25. The design is standardized and interchangeable.
26. The design and materials used of the canopy frieze are designed for a service life of up to 10 years.



RAL 9003
CMYK 0 0 0 0



RAL 5002
CMYK 100 90 0 10



RAL 5015
CMYK 90 40 0 0



RAL 2004
CMYK 0 75 100 0

6 Building

6.1 Frieze of building

3D logo, backlighted

1. The light sign on the frieze of the building is assembled.
2. The front part of the sign is made of molded organic glass, 3 mm thick, with application of films ORACAL 8300-034 (orange), ORACAL 8300-057 (blue).
3. The sign body is made of molded PMMA plastic, 4 mm thick.
4. The backlight is made on a reflector made of galvanized steel with a white anti-corrosion coating, backlit by white LED modules with a dispersion angle of at least 140 degrees, CCT: 6500K, IP65.
5. The sign includes a prefabricated galvanized steel frame for attachment to the building.
6. The sign includes a mounting kit.
7. The design of the canopy sign (including electronics) must be designed for operation at temperatures from -40 to $+60$ °C and humidity from 40% to 90%.
8. The design and materials used of the canopy sign are designed for a service life of up to 10 years.

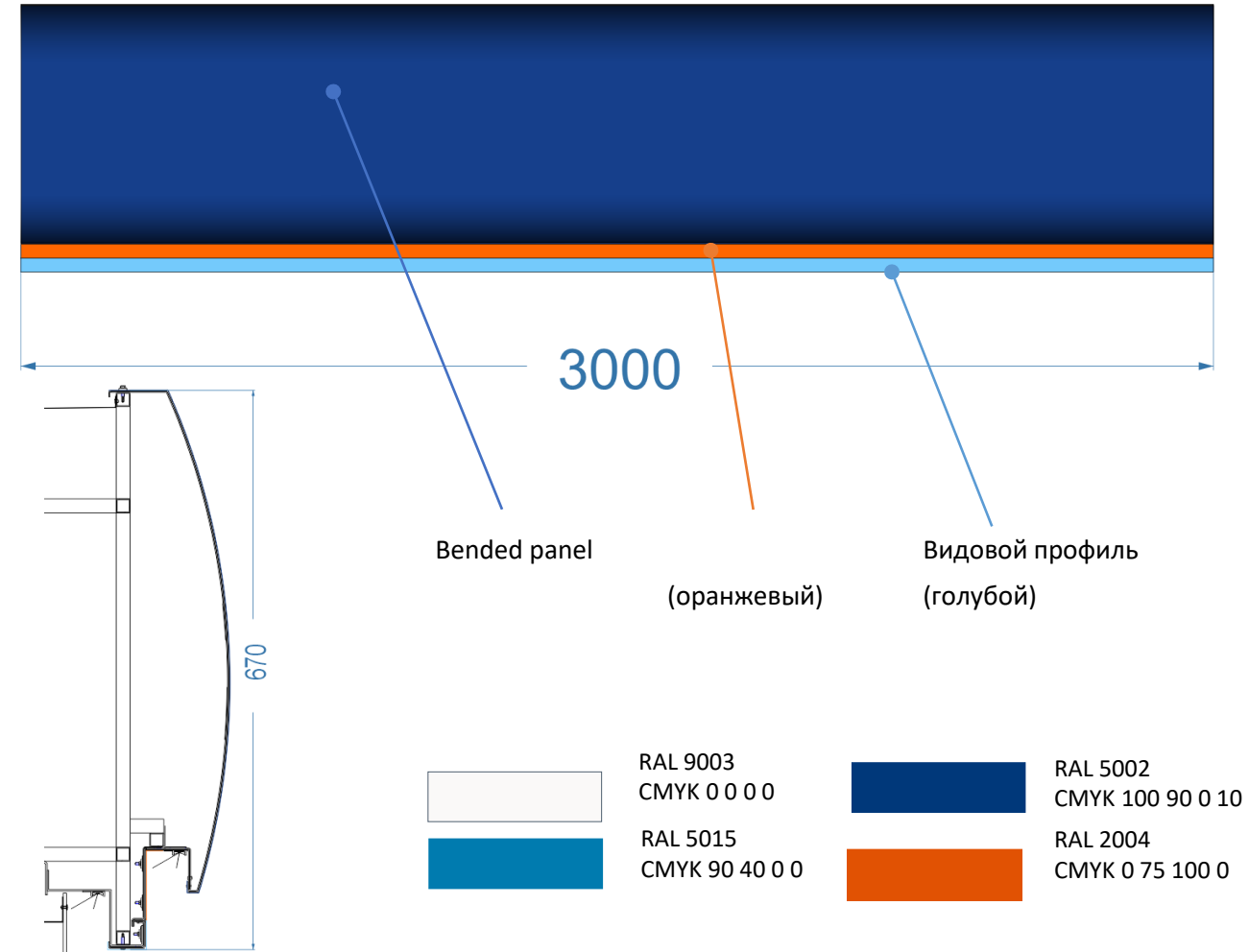


6 Building

6.1 Frieze of building

Typical building panel, three-dimensional, blue

1. The volumetric building panel is made of steel with a zinc-alumina-magnesium coating 0.8 mm thick. It is allowed to be made of aluminum with a thickness of at least 1.8 mm..
 2. Height - 670 mm.
 3. Anti-corrosion coating – polymer, at least 60 microns thick.
 4. The panel is made as a prefabricated panel, from a rolled, three-dimensional panel and specific profiles with separate painting of the elements before assembly.
- The technology of laser welding of elements was used in the manufacture of panels.
5. The length of the frieze is achieved using standard panels (3m). The outermost panel of the frieze is trimmed. Depending on the size of the cutting area, the panel is selected.
 6. Panel includes mounting kit.
 7. The design of the canopy frieze must be designed for operation at temperatures from –40 to +60 °C and humidity from 40% to 90%.
 8. The design is standardized and interchangeable.
 9. The design and materials used of the canopy frieze are designed for a service life of up to 10 years.



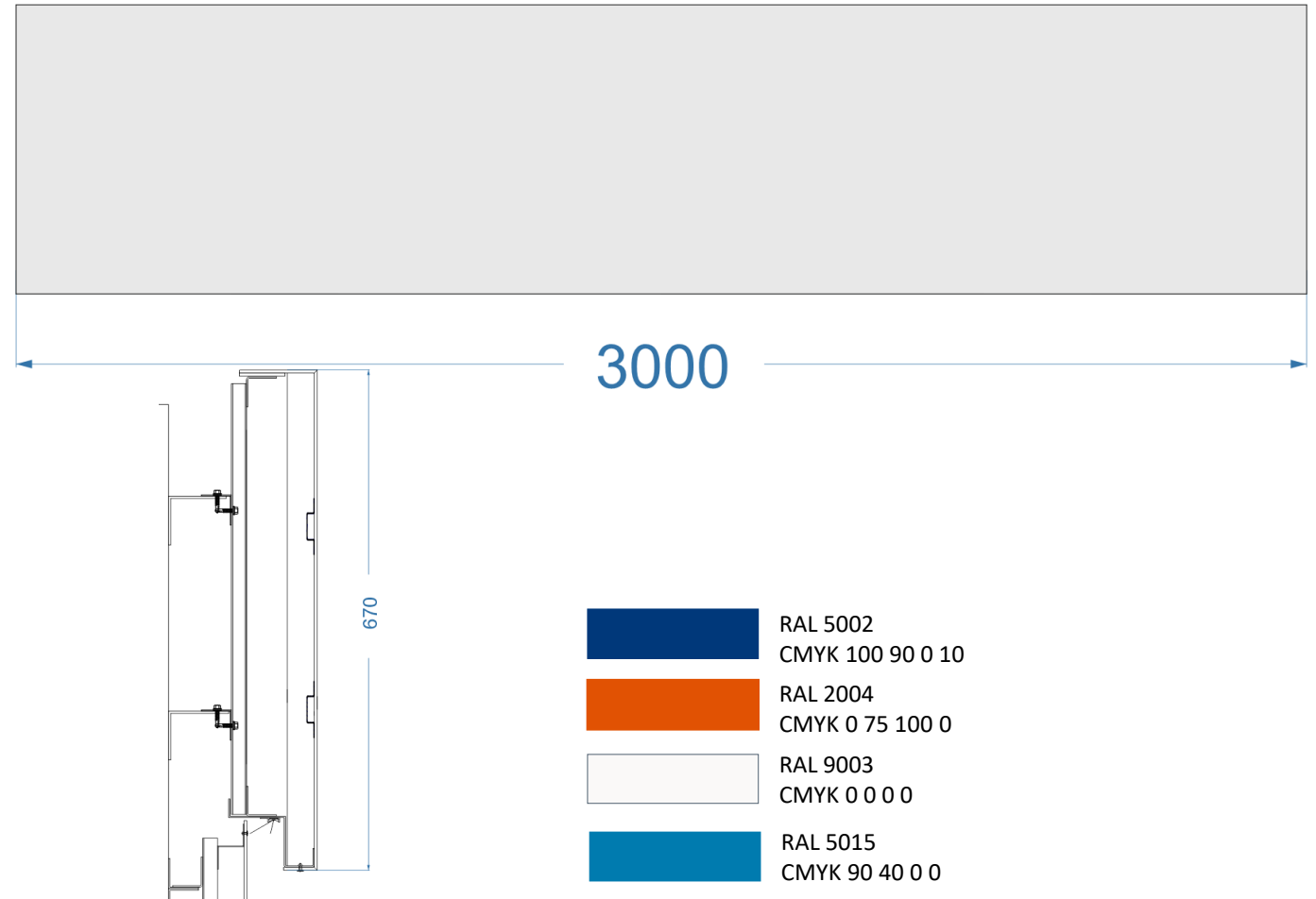
6 Building

6.1 Frieze of building

Typical building panel, flat, white

1. The building flat panel is made of steel with a zinc-alumina-magnesium coating 0.8 mm thick. Allowed to be made from aluminum with a thickness of at least 1.8 mm.
2. Height - 670 mm
3. Anti-corrosion coating – polymer, at least 60 microns thick.
4. To ensure structural rigidity, stiffening ribs are installed on the back side of the panel.
5. The length of the frieze is achieved using standard panels (3m). End frieze panel is undercut. Depending on the size of the cutting area, a panel with a length of 0.5 to 3 m is selected in increments of 0.5 m.
6. The panel includes a galvanized steel subsystem for attachment to the canopy.
7. Panel includes mounting kit.
8. The design of the canopy frieze must be designed for operation at temperatures from -40 to $+60$ °C and humidity from 40% to 90%.
9. The design is standardized and interchangeable.

The design and materials used of the canopy frieze are designed for service life of up to 10 years.

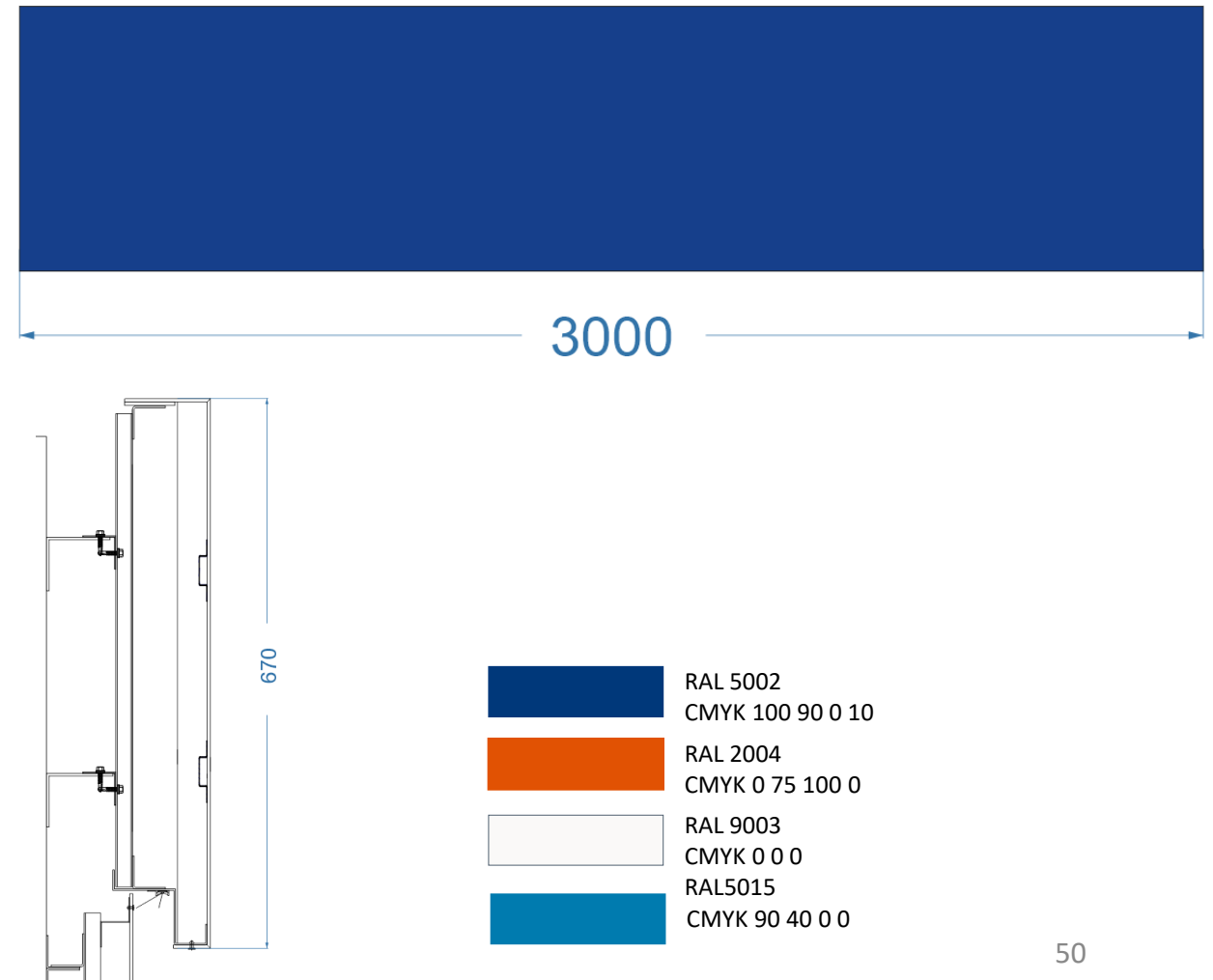


6 Building

6.1 Frieze of building

Typical building panel, flat, Blue

1. Flat panel of the building, made of steel with zinc-alumina-magnesium coating 0.8 mm thick. It is allowed to be made of aluminum with a thickness of at least 1.8 mm.
2. Height - 670 mm
3. Anti-corrosion coating – polymer, at least 60 microns thick.
4. To ensure structural rigidity, stiffening ribs are installed on the rear side of the panel.
5. The length of the frieze is achieved using standard panels (3m). The outermost panel of the frieze is trimmed. Depending on the size of the cutting area, the panel is selected length from 0.5 to 3 m in increments of 0.5 m.
6. The panel includes a galvanized steel subsystem for attachment to the canopy.
7. The panel includes a mounting kit.
8. The design of the canopy frieze must be designed for operation at temperatures from –40 to +60 °C and humidity from 40% to 90%.
9. The design is standardized and interchangeable.
10. The design and materials used of the canopy frieze are designed for a service life of up to 10 years .

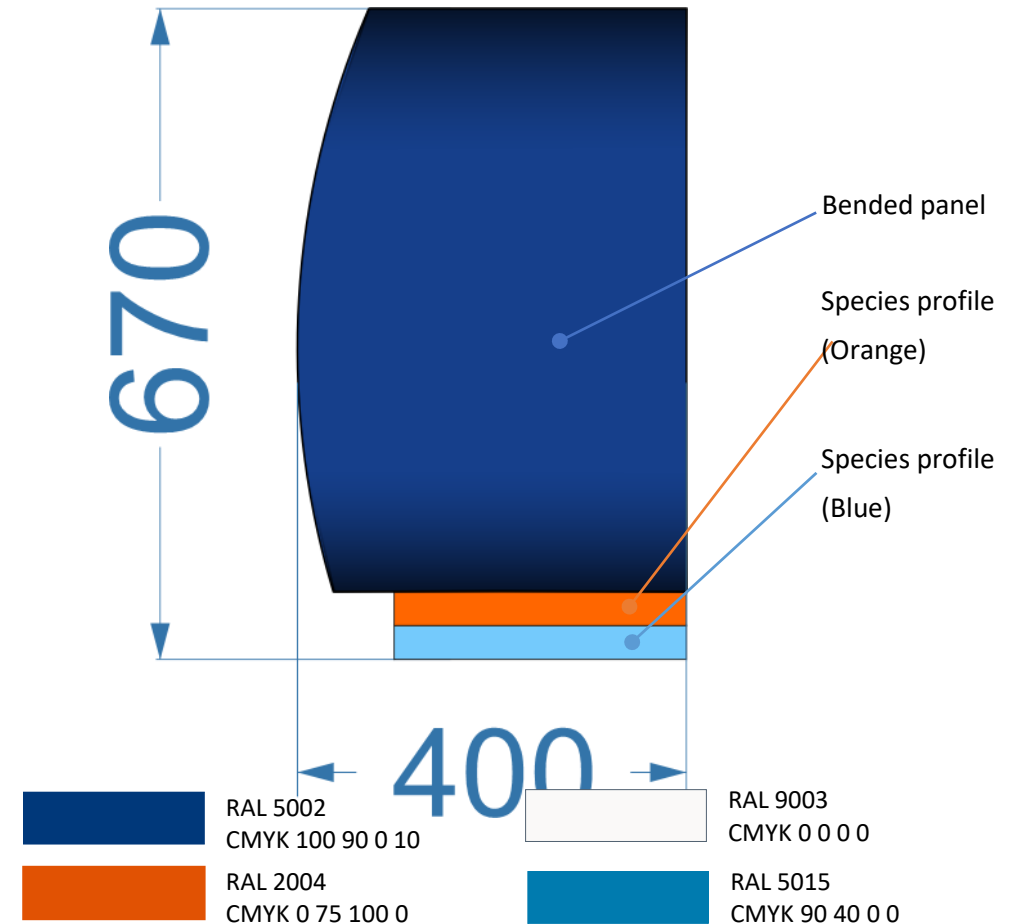


6 Building

6.1 Frieze of building

Corner panel of the building, three-dimensional, blue

1. Corner panel of the building, made of aluminum with a thickness of at least 1.8 mm.
2. Height - 670 mm.
3. Anti-corrosion coating – polymer, at least 60 microns thick.
4. The panel is made of prefabricated, rolled, volumetric panels and specific profiles with painting elements separately before assembly.
5. In the manufacture of panels, the technology of laser welding of panel elements is used.
6. The panel includes a galvanized steel subsystem for attachment to the canopy.
7. The panel includes a mounting kit.
8. The design of the canopy frieze must be designed for operation at temperatures from -40 to $+60$ °C and humidity from 40% to 90%.
9. The design is standardized and interchangeable.
10. The design and materials used of the canopy frieze are designed for a service life of up to 10 years.



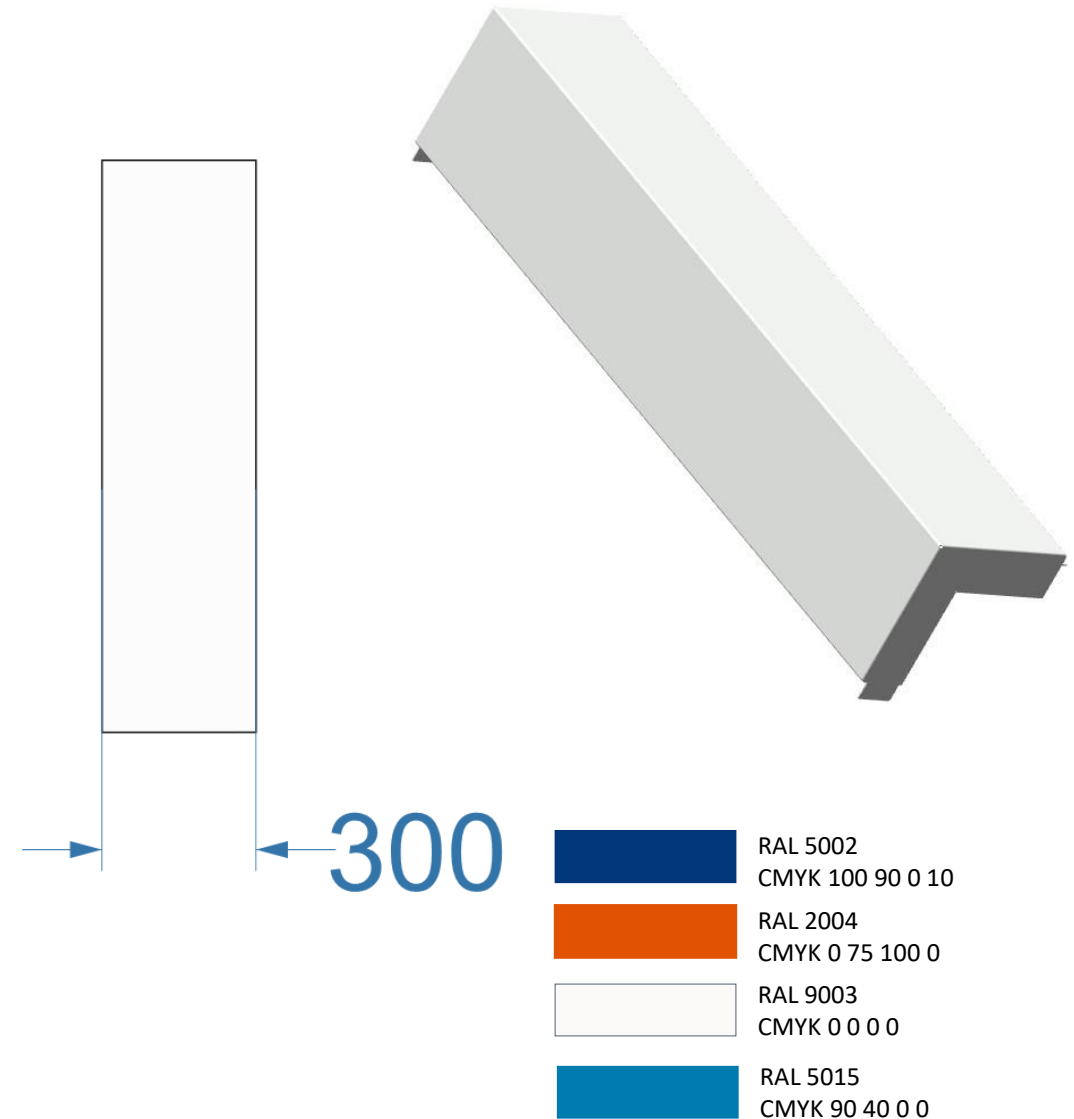
6 Building

6.1 Frieze of building

Building corner panel, flat, white

The corner panel of the Building is made of steel with a zinc-alumina-magnesium coating 0.8 mm thick. It is allowed to be made of aluminum with a thickness of at least 1.8 mm.

2. Height - 670 mm.
3. All-welded corner using laser welding technology.
4. Anti-corrosion coating – polymer, at least 60 microns thick.
5. The panel includes a galvanized steel subsystem for attachment to the canopy.
6. The panel includes a mounting kit.
7. The design of the canopy frieze must be designed for operation at temperatures mode from – 40 to +60 °C with humidity from 40% to 90%.
8. The design is standardized and interchangeable.
9. The design and materials used of the canopy frieze are designed for a service life of up to 10 years.



6 Building

6.1 Frieze of building

Backlighting of the frieze of the building

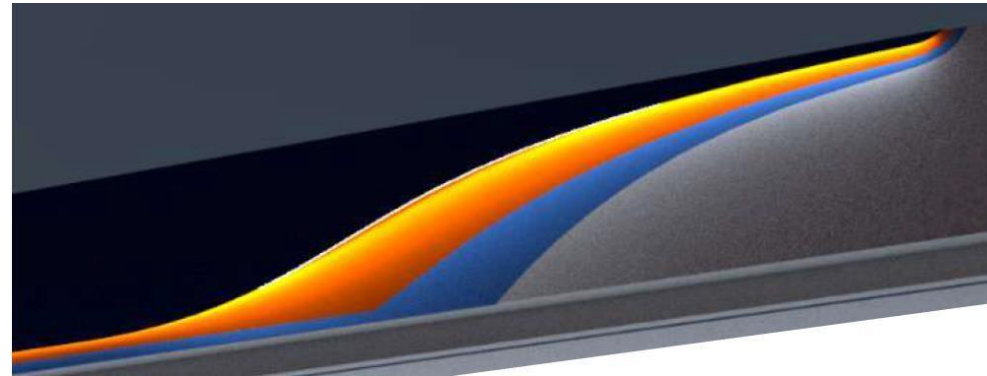
1. Backlighting of the canopy frieze is made using LEDs, extruded aluminum profiles filled with compound.
2. Illumination of the building's frieze with warm white and cool white LEDs with a dispersion angle of at least 120 degrees.
3. Warm and cool LEDs are arranged in an alternating LED profile
4. The degree of dust and moisture protection is not lower than IP 67.
5. Illumination of the building skin with LEDs of a white cold glow with a dispersion angle of at least 120 degrees.
6. The glow temperature of warm white LEDs is 3000K. The glow temperature of cold white LEDs is 6500K.
7. The degree of dust and moisture protection is not lower than IP 67.
8. The lighting includes a mounting kit with fastening elements grooves for frieze panels, groove power supplies, switching boxes with connectors.

 RAL 9003
CMYK 0 0 0 0

 RAL 5015
CMYK 90 40 0 0

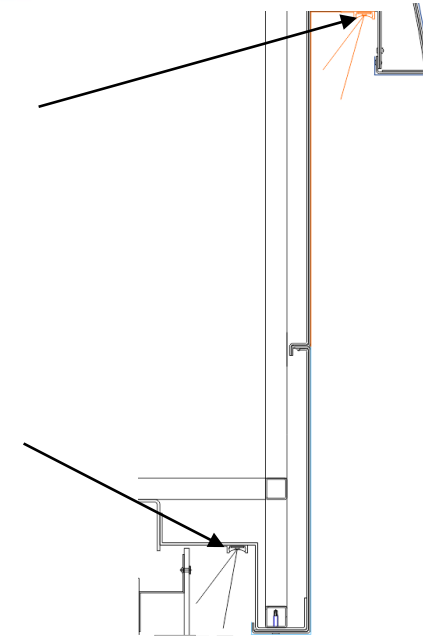
 RAL 5002
CMYK 100 90 0 10

 RAL 2004
CMYK 0 75 100 0



LED profile of warm white and cool white glow

Cool white led profile

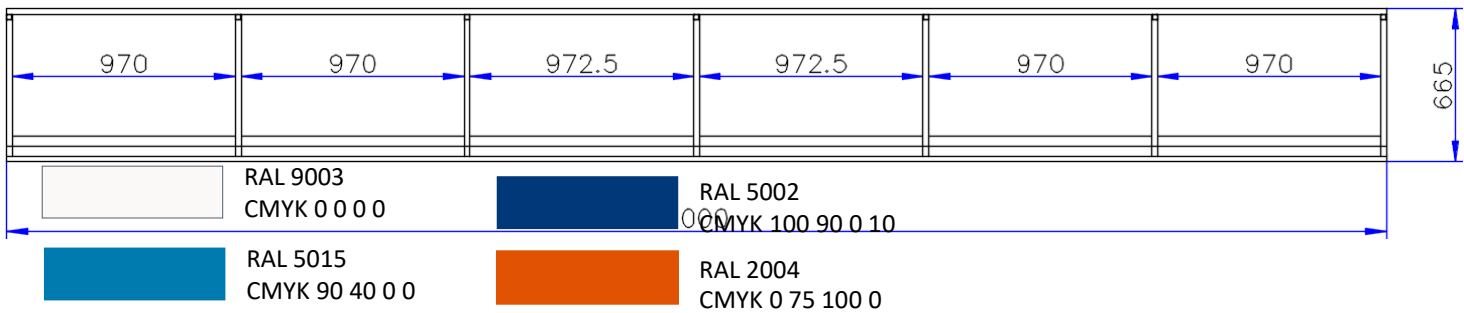
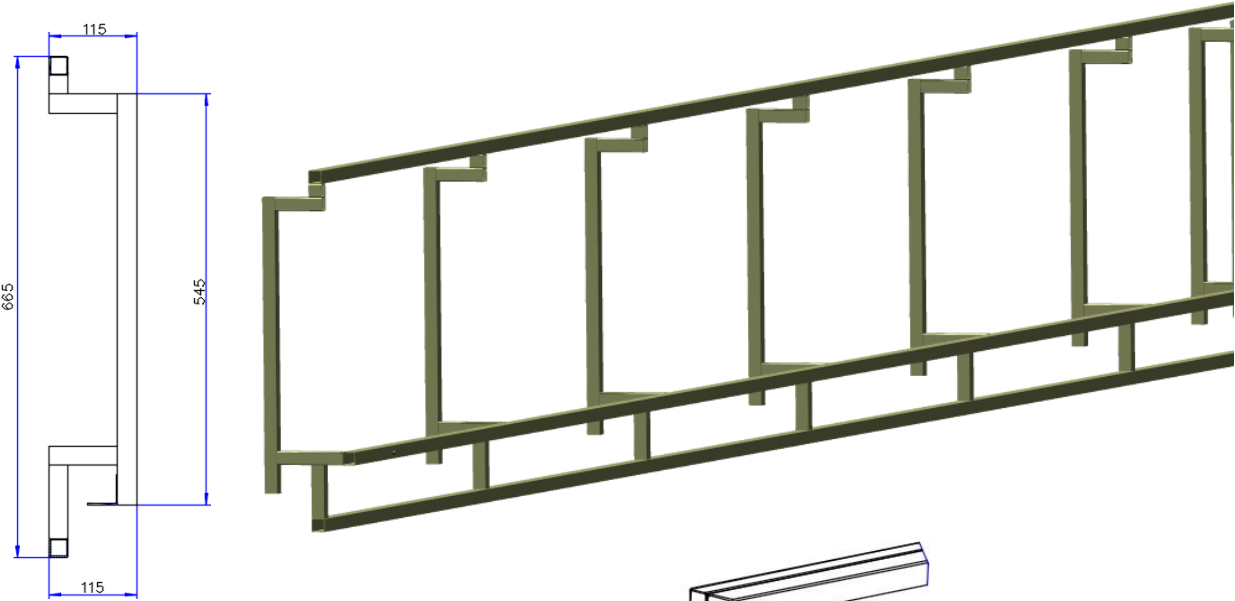


6 Building

6.1 Frieze of

Building frieze fastening subsystem

- 1. The canopy subsystem is made of rolled, galvanized steel profile, section 25x25x1.5 mm and rolled, galvanized steel angle, section 40x40x2mm.
- 2. The length of the building frieze is determined by standard frames (6m). The outermost frame of the frieze is trimmed.
- 3. The frame is manufactured in 3 versions - used depending on the type of building frieze panels: flat panels, transition panels, ordinary,volumetric panels.

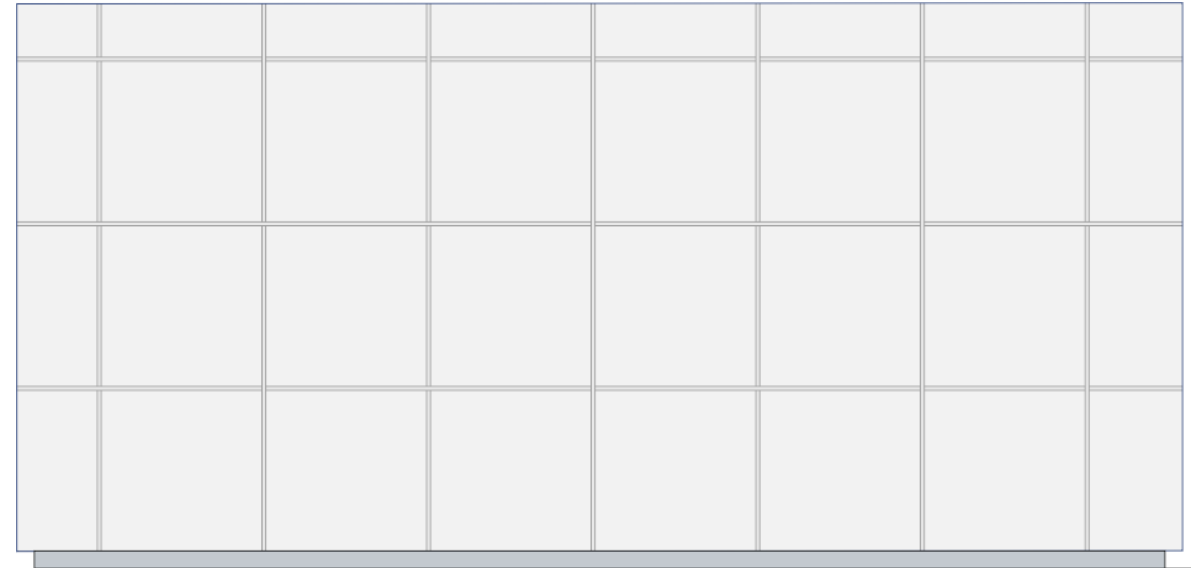
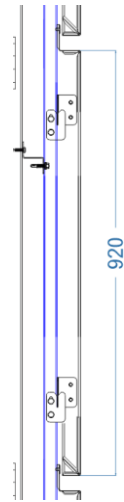
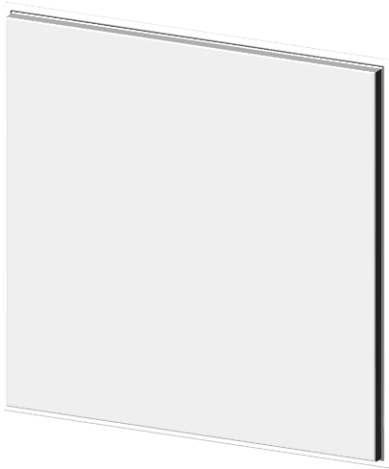


6 Building

6.2 Wall cladding

Wall cladding panels

1. The cladding of the building walls is made of standard composite panels, 4 mm thick with an anti-corrosion coating. Flammability class – NF
2. Cassette size – 920x920mm.
3. The width between cassettes – 20 mm.
4. The panel includes a subsystem made of galvanized steel for fastening to the building.
5. The subsystem consists of horizontal and vertical profiles with panel fastening hooks
6. The panel includes an installation kit.



RAL 2004
CMYK 0 75 100 0



RAL 9003
CMYK 0 0 0 0



RAL 7042
CMYK 30 20 30 30



RAL 5015
CMYK 90 40 0 0



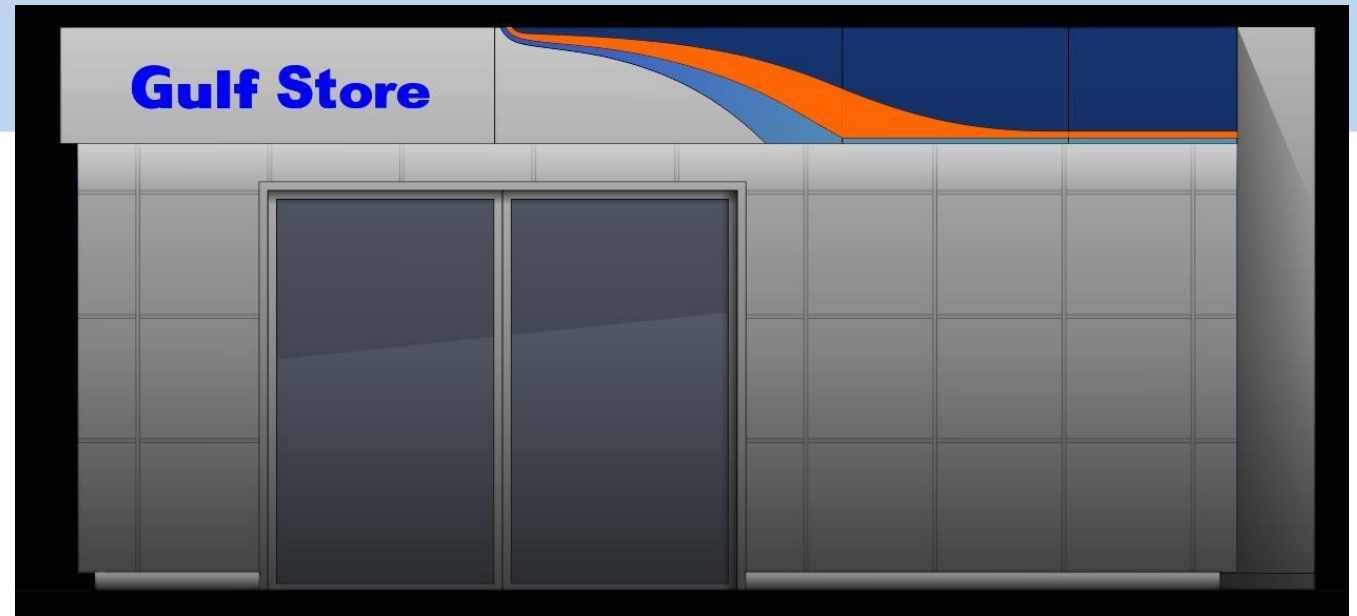
RAL 5002
CMYK 100 90 0 10

6 Building

6.2 Wall cladding

Backlight og building basement

1. Backlighting of the building's base is made using LED extruded aluminum profiles filled with compound.
2. Illumination of the building plinth with white LEDs with a dispersion angle of at least 120 degrees.
3. LED glow temperature 6500K.
4. The degree of dust and moisture protection is not lower than IP67.
5. The lighting includes an installation kit with elements for fastening the strobes to the building cladding, power supplies for the strobes, switching boxes with connectors.



 RAL 7042
CMYK 30 20 30 30

 RAL 9003
CMYK 0 0 0 0

 RAL 5015
CMYK 90 40 0 0

 RAL 5002
CMYK 100 90 0 10

 RAL 2004
CMYK 0 75 100 0

