

# The future will be ours!



Stekloplast®
Call center: +380 800 501 539
www.stekloplast.ua







## **About Stekloplast Company**

Stekloplast company - is a family company founded in 1997. It is a leader in energy-saving and translucent constructions, and it is the largest Ukrainian engineering company according to the amount of the executed works.

### Stekloplast Company produces:

- metal-filled plastic constructions: windows, entrance and interior doors, recessed balconies and balconies.
- aluminum constructions: windows, entrance and interior doors, recessed balconies and balconies, front elevations, rollets, garage doors and internal partitions (light weighted, all-glassed, as well as made of specialized and classical profile).

## Powerful Complete-Cycle Manufacturing Complex

A manufacturing complex with a total area of 15.000 square meters includes a workshop for production of metal products, a workshop for glass units manufacturing, a manufacturing site for non-standard products production, a workshop for rollets and aluminum products manufacturing, as well as automated laminate - line.

## High-quality materials and component parts

Suppliers of Stekloplast Company are leading European manufacturers of PVC and of aluminum profile, accessories and glass: Aluplast, WDS, Winkhaus, Axor, Guardian, Schuco, Alutech, Reynaers, Alumil, Алюмаш.

### **Logistics Adjusted**

Delivery of goods from Stekloplast Company manufacturing site is performed by means of car fleet owned by Stekloplast Company. In car fleet of the Company there are more than 70 vehicle units of varying cargo carrying capacity.

### International quality certificates

Since 2007 Stekloplast Company manufacturing is certified for compliance with International Quality Standards ISO 9011:2001 and with IFT Rosenheim. In 2019 received a certificate ISO 9001:2015



sq. meters - area of production complex

units - glass packets/day

items/day (windows, doors, facades)

people - staff of the Company

of experience in Construction Market

## Sales channels

### Dealers' channel

more than 650 partners all over Ukraine.



## **Construction organizations**

more than 100 large facade objects glazing in the company's portfolio.





## **About Stekloplast factory**

Stekloplast - is a high-capacity plant of complete production cycle, which produces PVC and aluminum windows and doors, glass-packets, rolling shutters, gates and facades.

> Stekloplast factory is situated in Dnipropetrovsk. Huge production complex contains of several shops. The most advanced engineering and technical solutions was used on projecting stage and was taken into account all european standards and requirements to translucent constructions.

> Special software, modern equipment and automatisation of all the processes allow to produce high-quality goods and improving them all the time. There are tens of large-scaled buildings all over Ukraine in the Company's portfolio.

> Stekloplast factory was built after the project of Germany company -Aluplast, and was certified by ISO 9001:2015 system and IFT Rosenheim. The equipment of the plant was produced by the leading worldwide manufactures.













### Stages of double-glazed window's production

### 1. Cutting of glass

Accurate cutting is made on automatic tables for cutting works which size is 6000\*3210 mm. Adjustable pressing of cutter allows to prevent glass chipping. Transportation on air-pillow exclude any scratches.

Automatic removal of metal spatter on the depth of sealed seam along the perimeter of double-glazed window, protects end product against energy-saving and multifunctional coating damage.

### 2. Production of distance-type frame

Distance-type frame is produce on automatic bending machines. Thanks to using bend method and fillig up frame with molecular sieve of good quality we reach ideal hermiticity of double-glazed window.

### 3. Washing, fitting, sealing

When glass is cleaned with pure water and dried up, double-glazed window is pressing, fills up with dry air or argon and goes on secondary sealing.

Glas's purity and quality of sealing provides automatic washing and assembly line. It is include washer with special brush and soft coverage of height 2500 mm, flat press for high quality pressing of double-glazed windows, extruding machine for double-level sealing, machine for filling double-glazed windows with argon.

### 4. Marking

All elements of end product should be marked on each production stage, without errors of production cycle.





### Stages of standard metal-plastic window's production

### 1. Cutting

Cutting of PVC window profile and metal reinforcers performed with help of two-headed automatic saw Emmegi CLASSIC MAGIC 500. Accuracy in sizes holds to millimetre.

#### 2. Reinforcing

High-tech machining center Sturtz connect reinforcement with PVC-profile with help of automatic screwdriver and it is also make marking for counter-catch, drills drain ports and holes for transom bar and handle, does shaping for locking bar.

#### 3. Welding and cleaning of seams

Frames and shutters weld simultaneously in four corners to provide hermeticity and firmness to end products. Operation is made on four-headed automatic welding machine Sturtz SE-HSM-30/26 Compact. Heating conditions of welding controlled by program. This is exclude presence of bad welding seams. Then frame goes to cleaning machine Sturtz 2AS-JS.

#### 4. Furniture installation

Furniture should be placed on frame' and shutter's parts after cleaning of seams. Operation is made on straping tables FM 3002 and frame station RM 4000. Such equipment allows to install furniture with defined by producer accuracy.

### 5. Assembling, glazing

Assembling of construction - is final stage of window's production. Installation of leaf on the frame, assembling of additional elements, installation of folding layer, double-glazed window and glazing beads accompanied by checking of geometrical parameters and correspondence to technical enquiry.

#### 6. Quality control

After glazing bead installation QC department check product and window goes on warehouse of finished products.

## Multifunctional Complex «Parkoviy» 4 545 m<sup>2</sup>

Kiev, Park Road, 16A











Exhibition and Convention Centre «The park» is a flagship project in the premium class professional congress and exhibition facilities market segment, and at the same time it is a unique project in the commercial real estate market of Ukraine.

Total area of project: 27 794 m<sup>2</sup> The area of facades works: 4 545 m<sup>2</sup>

Ventilated facade system: U-kon, HPL plates, Resoplan

Aluminum vitrages system: Reynaers

Sun-protection profiles' systems: Reynaers B5 100

Glass packets:

Guardian 8 ESG BrightGreen40/29 - 18 Ar -6, 8 ESG Guardian BrightGreen40/29 - 18 Ar - 6 cellulose dope glass



### MFC "Pushkinskiy" 18 000 m<sup>2</sup>

Donetsk, Gurov ave., 17





An original facade solution was developed by one of the most well-known world engineering companies – Permasteelisa Group (Italy). Technology of frontal double glazing was firstly used in Ukraine.

The main scope (about 80%) of glazing on the object is covered by an element-facade (single and double with integrated sunlight protection systems). The ele-ment-facade – is a finished element of the face of specified overall dimensions with built-in doors, windows, rolling-shutters, engines and others, which are simply mounted on a building. Elements are treated and assembled in the workshop and transported to the object ready for mounting. As a result mounting terms are signifi-cantly reduced. Due to this the element-facade beneficially differs from a conven-tional column-beam facade system. For understanding: if "Pushkinskiy" was glazed with application of the column-beam facade system, delivery terms of the object would be prolonged for at least one year. Besides, it is quite difficult to mount the column-beam facade system in construction of a very high-rise building, but the element-facade is mounted inside of the building, i.e. technically there is almost no matter which storey is being glazed: first or one hundred first.

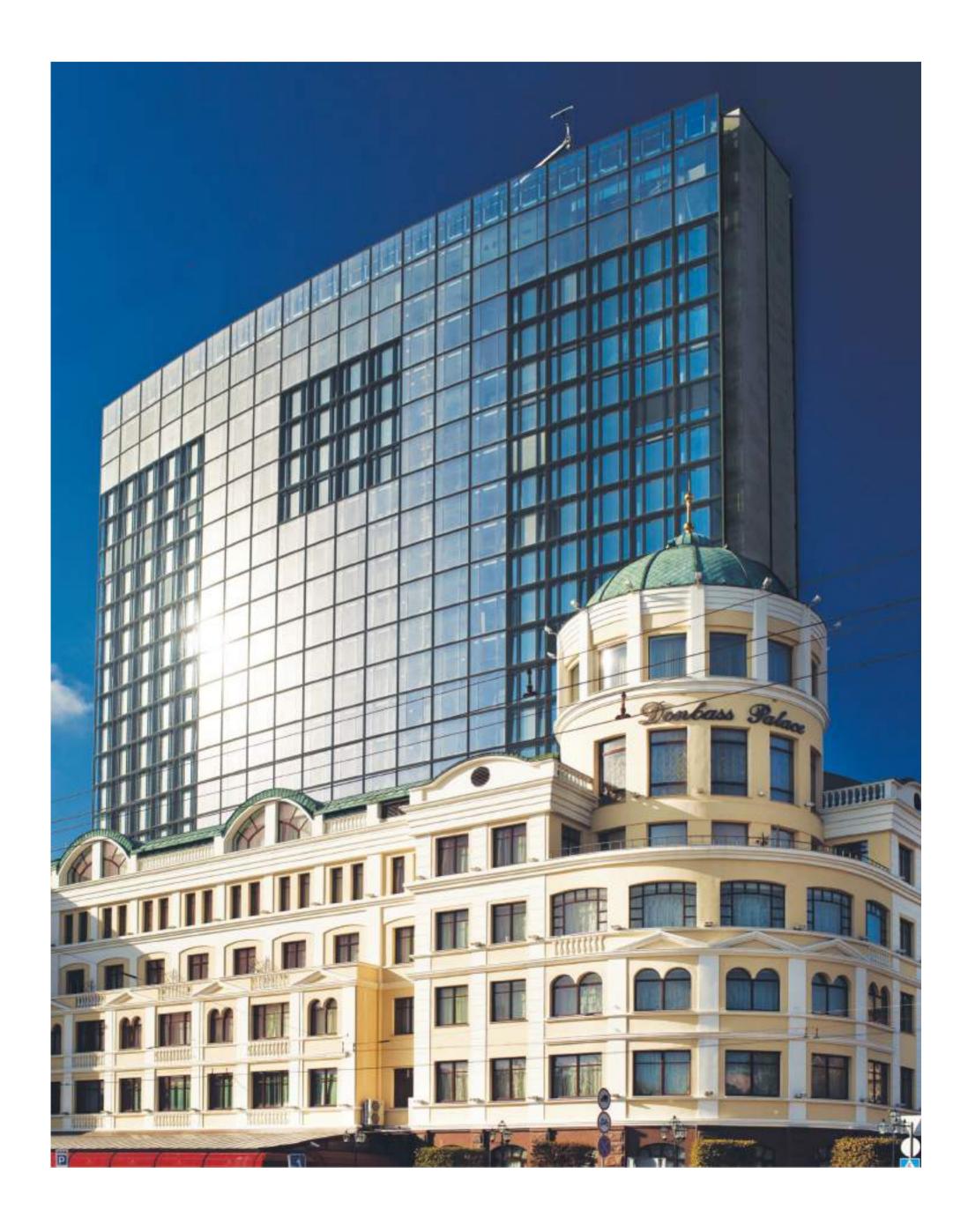
For mounting of the element-facade Stekloplast company purchased:

- crawler-mounted minicrane Unic;
- counterloading crane of "Pioneer" type (customized, considering peculiarities of mounting the element-facade on high-rise buildings);
- loading platforms for conveying packages with element-facade panels to storeys of the building (customized, special dimension of loading platforms considers sizes of element-facade panels, maximum size of panels 2.0 x 3.75 m, weight of the panel 650 kg);
- electric stackers;
- specialized equipment for unloading, transportation and lifting of panels.











## Cultural-business center "Menora" 5 603 m<sup>2</sup>

### Dnipro city, st. Sholom Aleichem, 4/26





Complex "Menora" that is situated in Ukrainian city of Dnepropetrovsk is one of the largest Jewish multifunctional centers in the world. The building, which total area is 42 000 m², can be named "a city inside the city". The twenty-two-storey building of the center, consisting of seven towers, raises above synagogue "Golden Rose".

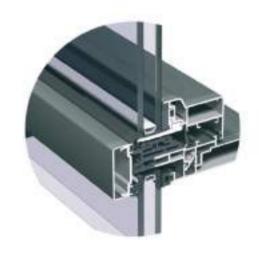
Project "Menora", finished in 2012, was performed as a part of vast building activity, which was carried out in that period for the European Football Championship.

During construction of the building a special facade system Reynaers CW5O-HA with hidden hardware was used.

#### CW 50-HA hardware

This variant of the system is used for embedding tilt and turn windows in translucent facades.













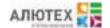




### Club House Chelsear

### Odessa, side street May, 4





Odessa, side street Mayskiy, 4

Work on the device of translucent aluminum structures.

Windows and balcony doors - window-doorthermally insulated system
Alutech W62 (Belarus), glazing 4 CG Solar -14 - 4 (spros 8 mm) - 1 203.90 m<sup>2</sup>.
Sliding structures - Reynaers CP 96 LS (Belgium), glazing 6 CG Solar - 14 - 6 (spros 8 mm) - 152.30 m<sup>2</sup>.

Additions:

mosquito nets - 954.96 m<sup>2</sup>; galvanized tide - 473.55 m.













## Business center 3 987 m<sup>2</sup>

Dnipro city, st. Mechnikova, 8





### Tension cable support system

Tension cable glazed facades are a type of spider glazing facades. The difference is that the installation of spiders is carried out not on capital construction elements of the building, i.e. columns, profiles and the like, but on the tightly stretched cable trusses. Therefore it is also called cable-truss support glazing.

Tension cable support system, in other words frameless glazing, does not use mullion-transom system (they are not divided by partitions or frames). This type of glazing is self-supporting structure as cable trusses and point fixings allow to create incredibly large and sturdy construction made of glass.



### Ventilated facades





Ventilated facades is the technology of performing facade system consisting of coating materials. They are mounted on galvanized steel, stainless steel or aluminum frame to the carrying layer of the wall or monolithic slabs. In the gap between the cladding and the wall, the air freely circulates allowing to remove moisture and condensation from constructions.

All brackets and anchoring elements of ventilated facade systems are universal, that allow to solve complex architectural and designing tasks ranging from classic to modern.

Ventilated facade today is one of the most popular and effective way to trim the outside finish of the buildings. Ventilated facades are composed of insulating, anchoring and facing materials. Ceramic granite is often used as for the latter.





Dnipro city, st. Dolnika, 15





## Business center 3 217 m<sup>2</sup>

Donetsk, Pushkin Boulevard, 7-b

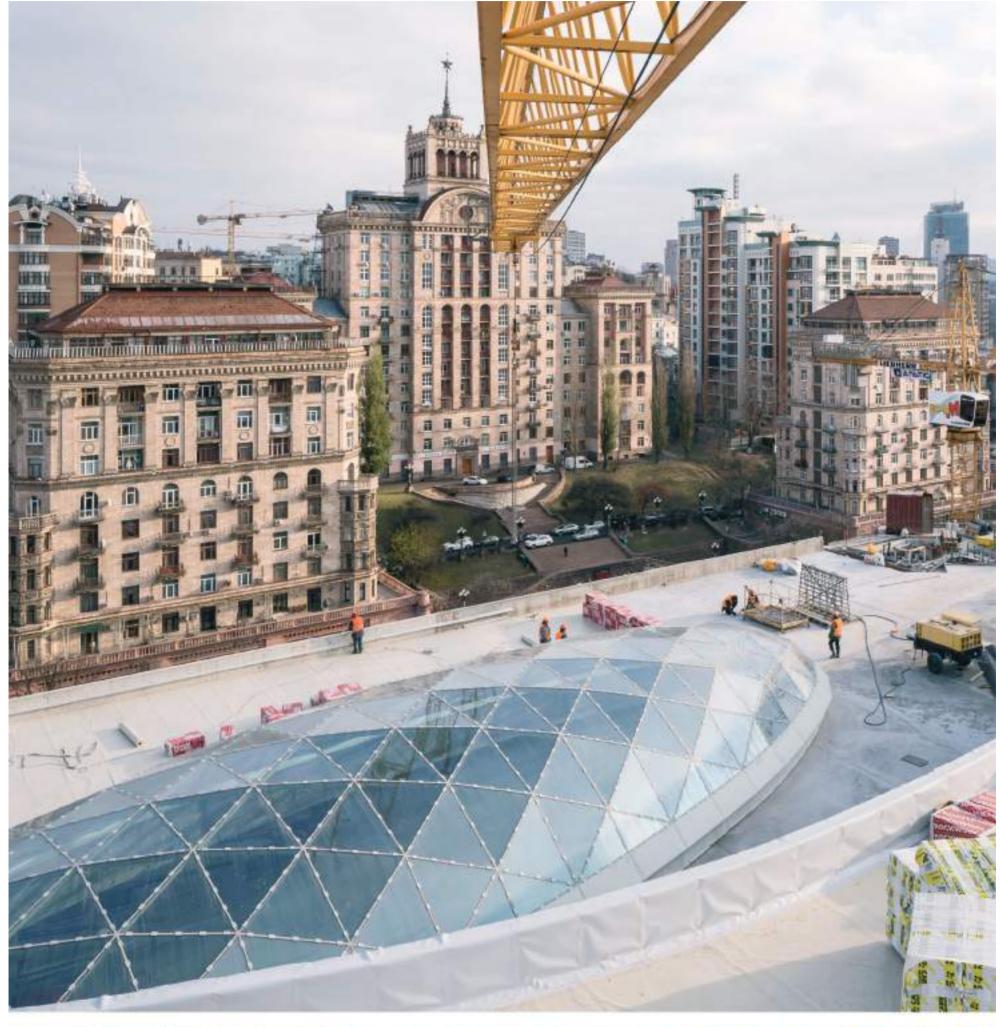




## Central department store 256 m<sup>2</sup>

Kiev, Khreshchatyk street, 38













## Eastern national university after V. Dahl 2 450 m<sup>2</sup>

Severodonetsk, Central Avenue, 59-a





## AKSELKHOF hotel 824 m<sup>2</sup>

Dnipro city, st. Mechnikova, 14



## Shopping center «Severnuy»

### Donetsk, Kievsky prospect, 1







Plastic windows
Aluplast System - 3,726 sq.m
Hardware Wink Haus



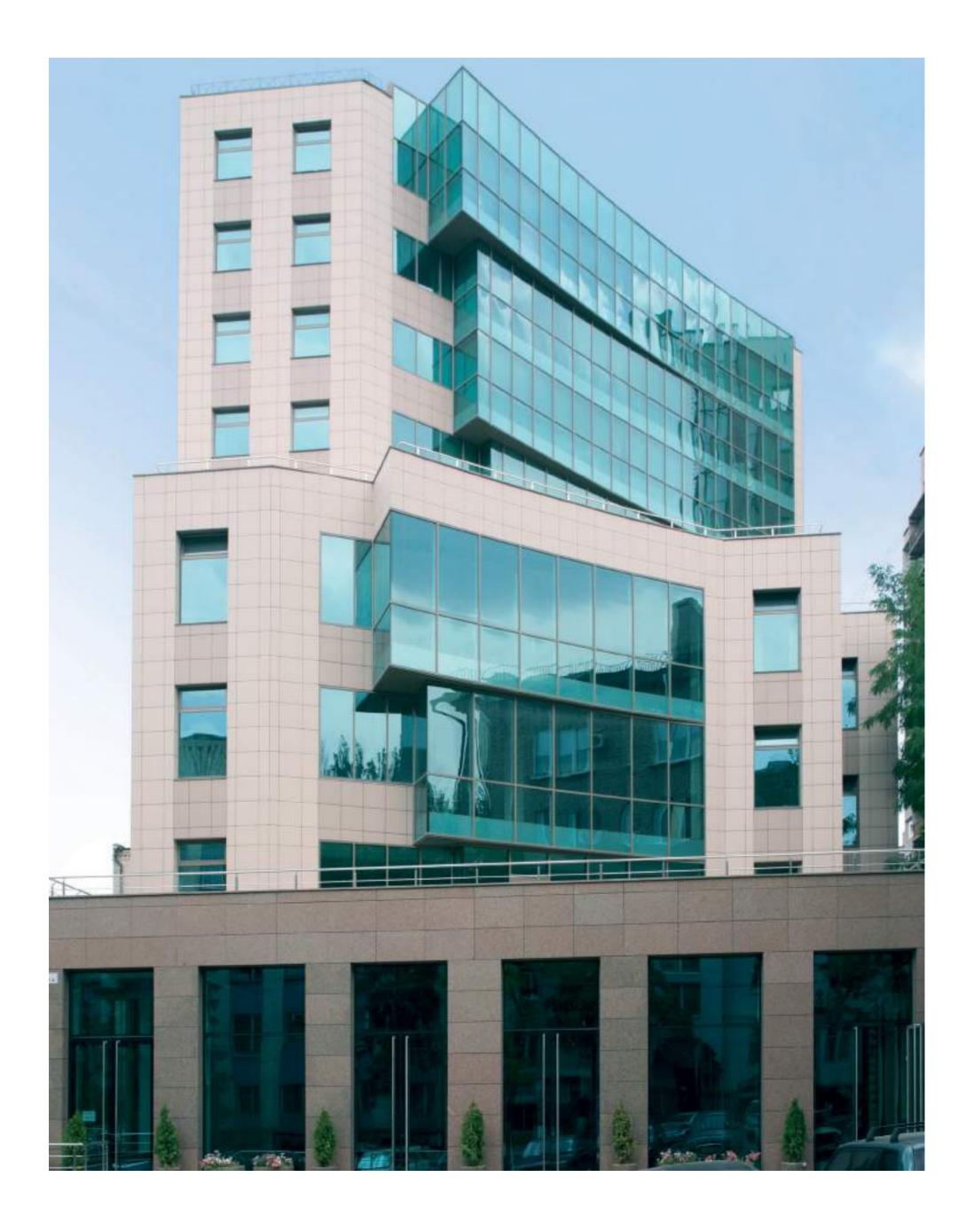








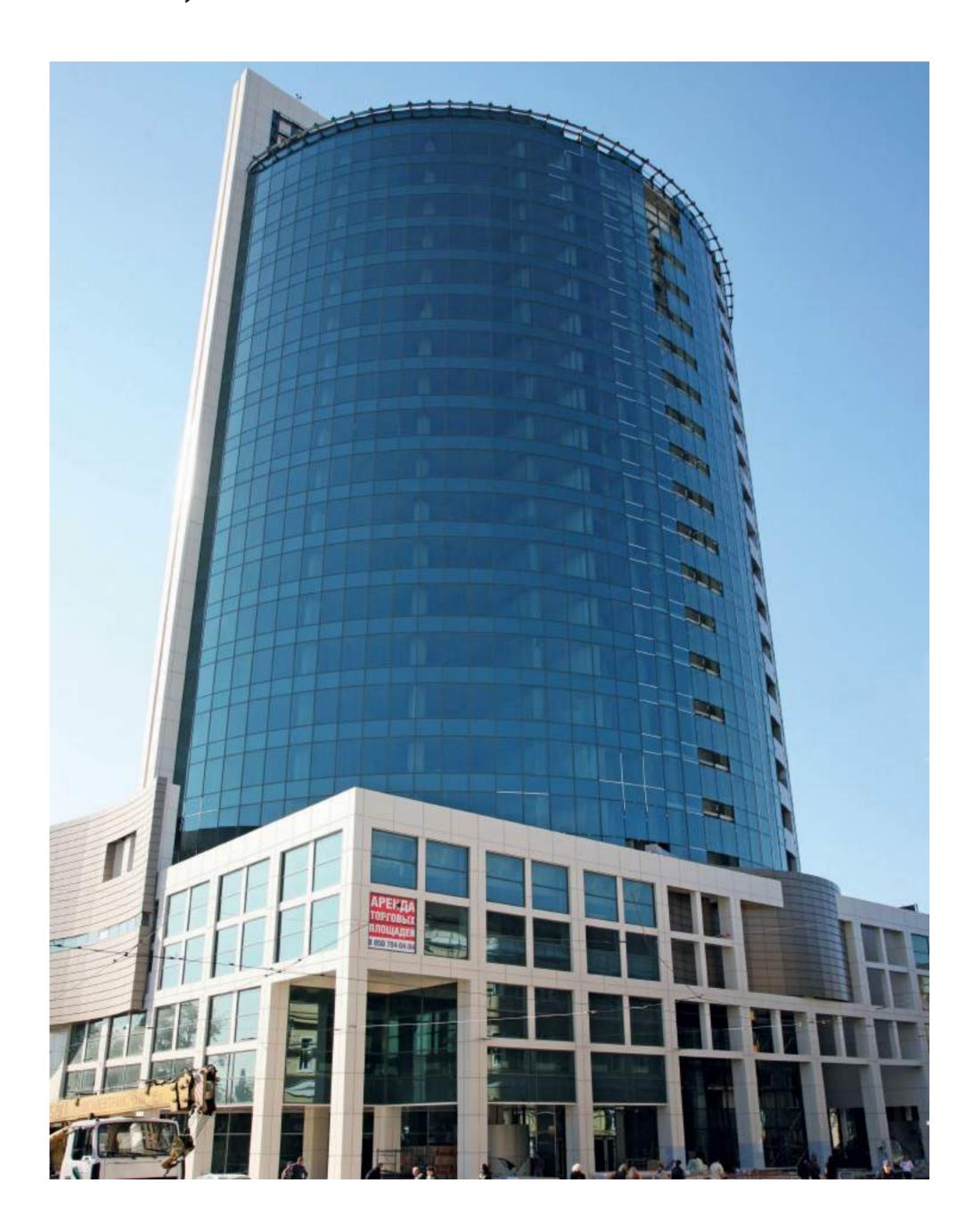
## Office building Front glazing - 1 507 m<sup>2</sup> Dnipro city, st. Shevchenko, 16



## Shopping Center «PLAZA International» Front glazing - 7 716 m<sup>2</sup>



Donetsk city





## PASSAGE Shopping Center Front glazing - 3 171 m<sup>2</sup>

Dnipro city, Dmitri Yavornitsky ave., 50





# LCD «Obolon Residence» Reynaers Aluminum System - 5 080 m² Kiev, Obolonsky Prospect, 26







## LCD «Linden» Reynaers Aluminum System - 5 600 m² Kiev, st. Lutheran, 14-B



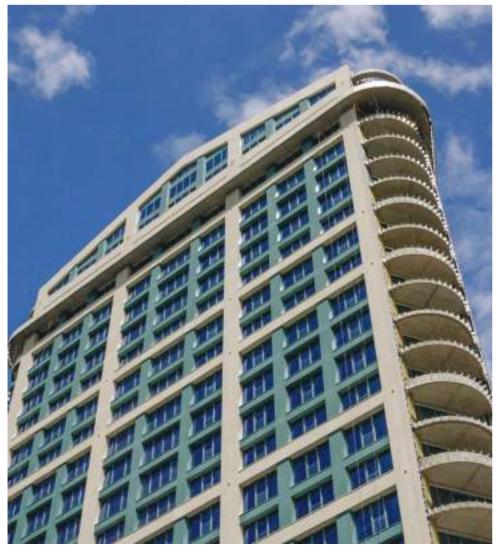


### Bartolomeo best river resort



**FACADE**Laminam hinged ventilated facade









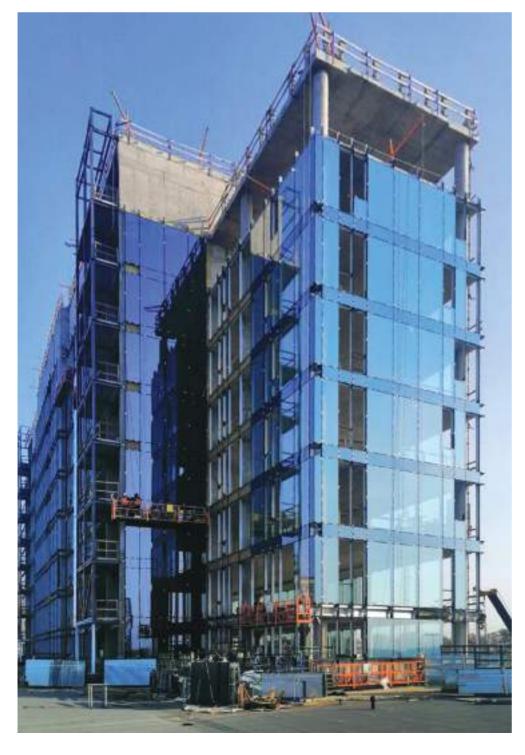
## LCD «Signature» Schuco aluminum system - 11 000 m² Kiev, st. Mechnikov, 11-A



## SEC «Retroville» Aluprof aluminum system - 7 757 m<sup>2</sup> Kiev, pr. Pravda, 47











## Riga Plaza Front glazing – 993 m<sup>2</sup> Tbilisi, st. Taktakashvili











«ALUTECH W62» Area =  $112 \text{ m}^2$ «SCHUECO ASS-50, F50+, AWS/ADS-50» Area =  $881 \text{ m}^2$ RAL 7016 (gray)



## «Kazakhstan Halyk Bank» 4 631 m²

Shymkent, Kazakhstan





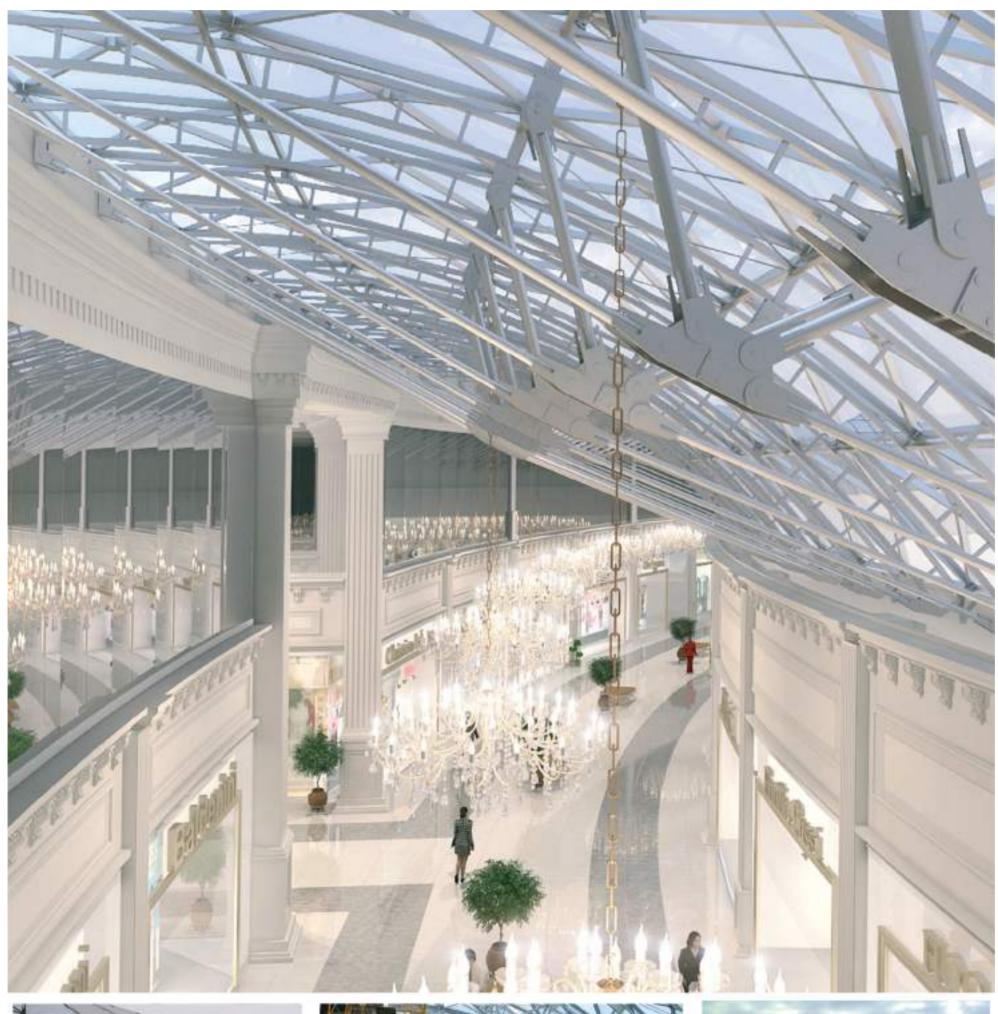




## «Lavina» shopping center 1 138 m²

Kiev, st. Berkovetskaya, 6 D













## The complex of apartments "Olympic" 26 000 m<sup>2</sup>

Odessa, Shevchenko Avenue, 31





The customer is STIKON construction company. The project "Reconstruction construction in progress for sports and recreation premises and apartments at the address Odessa, Shevchenko Avenue, 31.

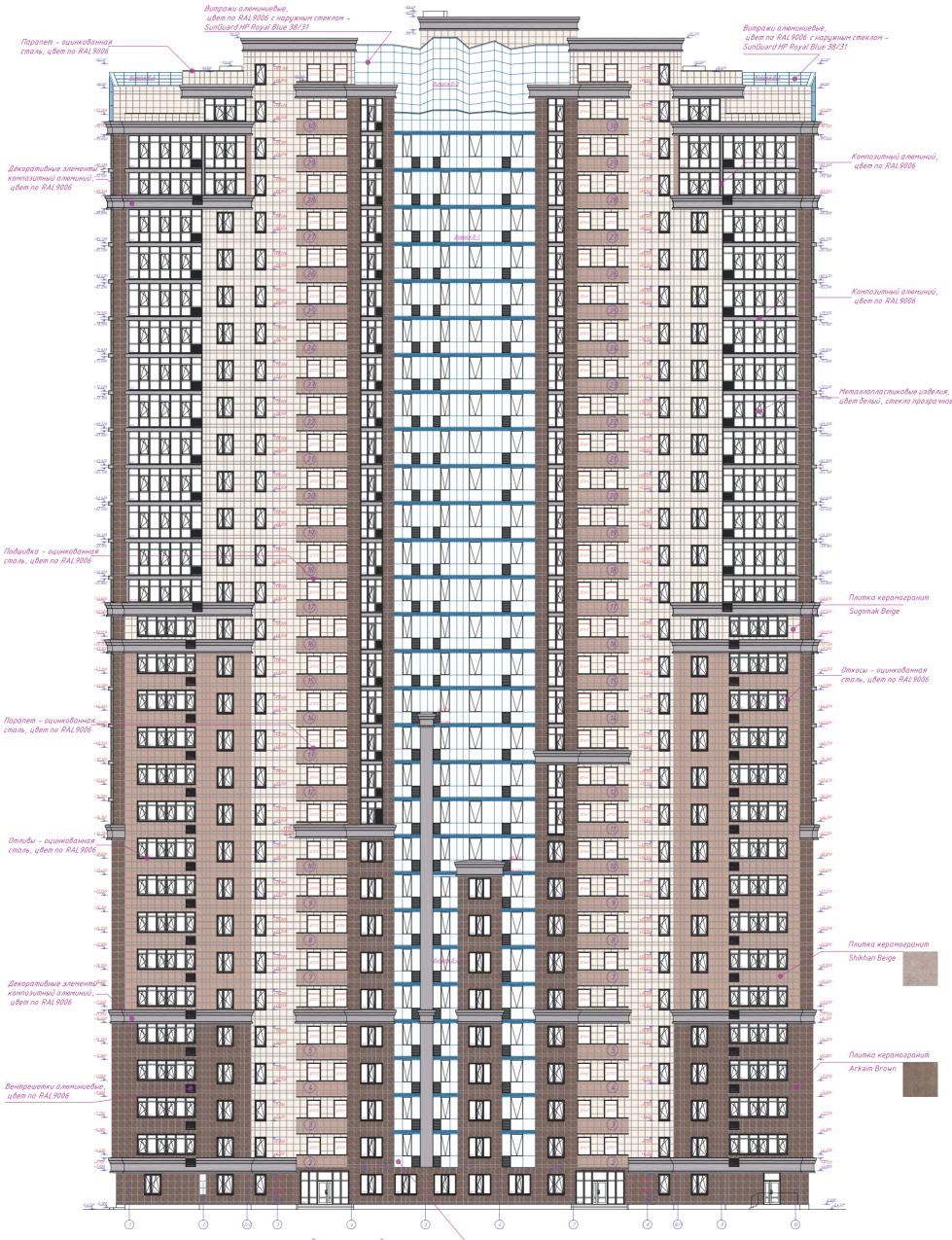
#### Design Areas:

metal-plastic products - 7 806.25 sq.m.; aluminum stained-glass windows - 1,453.63 sq.m.; hinged ventilated facade from porcelain tile - 10 203.05 sq.m.; decorative elements of a hinged ventilated facade - 2 785.87 sq.m. The total design area of 26,000 square meters.





#### Фасад 1 - 10



Витражи алюминиевые, цвет по RAL 9006 с наружным стеклом SunGuard HP Royal Blue 38/31

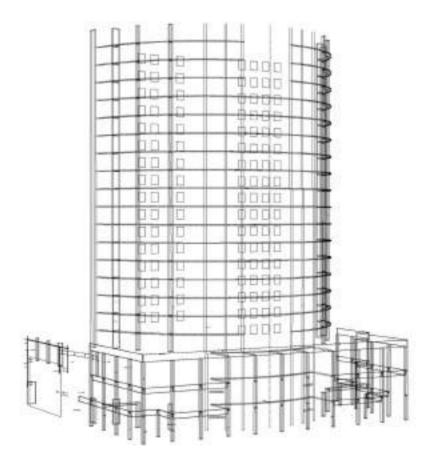




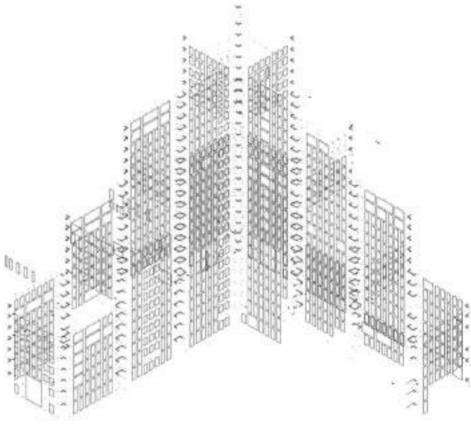
#### **Tacheometric works:**

- Acceptance and transfer of structural axles, grade elevation at the General Contractor's.
- Tacheometry of the building. Measuring instruments of Japanese production are used (tacheometer TOPCON GPT 7501, device for vertical projection SOKKIA LV1, a set of stationary reflecting prisms).
- A digital informational 3D model of the building is plotted in DWG format based upon tacheometric data.
- Preparation of a statement of defects (digitized value of deviations of actual di-mensions from the design ones).
- ntermediate control of designed arrangement of mountable structures.
- Executive survey of the mounted structures.















### Leica TS09plus R500

Best-in-class laser range finder (LRF)

With rangefinder PinPointFlexLineplus provides an optimum balance of accuracy, range, reliability, beam visibility, laser dot size and measurement time

- Precision 1.5 mm + 2 ppm to reflector
- Precision 2 mm + 2 ppm to any surface
- Speed 1 second
- Focusing range 1000 m without reflector
- The coaxial visible laser and measurement beam



### **TOPCON GPT 7501**

Electronic tacheometers Topcon of series GPT-7500 ensure a new level of flexibility in operation of geodetic equipment.

Tacheometers of series GPT-7500 have two modes of reflectorless measurement – from 1.5 up to 200 meters and from 5 up to 2000 meters. On the one hand, such range of measurement increases efficiency of field works in comparison with tacheometers of other models and, on the other hand, significantly broadens possible fields of application of instruments.



#### **SOKKIA LV1**

Laser instrument for vertical projection LV1 transmits a horizontal location of observa-tion point of the instrument at a zenith. LV1 has a laser red beam of visible range, which allows an executor to observe intersection of all planes by the beam at a dis-tance of up to 100 mm. Centering above the point is performed by a built-in laser colli-mator for a distance of up to 5 m. A combined, air-magnetic damping is used in the compensator.

- Zenithal centering in construction of high-rise buildings and structures
- olution of specific tasks in industrial survey
- Zenithal centering in mining
- Deformation monitoring

#### Prism system HD19

Prism system to be mounted on a support has a reflecting constant 30/0 mm. When screwing in the prism to the opposite side of the holder the reflecting constant of the system changes, because it has a bilateral measuring mark, from every side of which the value of the system reflecting constant is indicated.

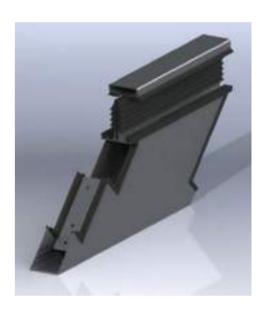


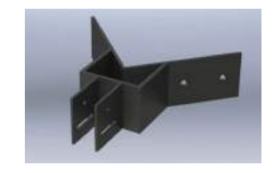






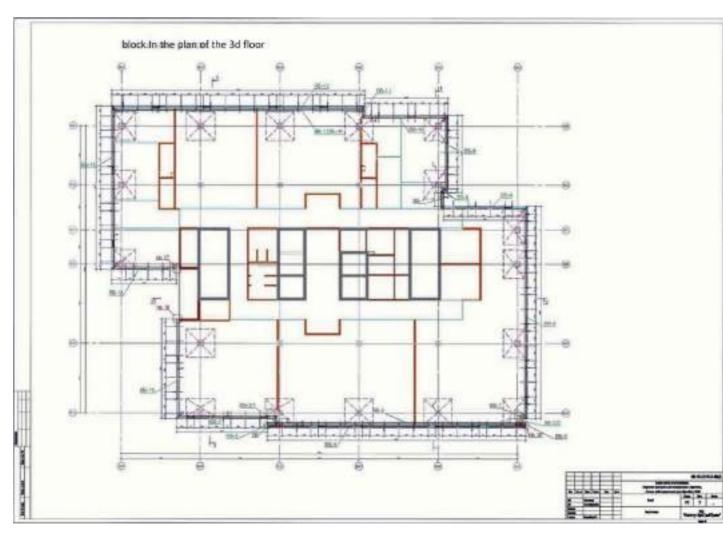






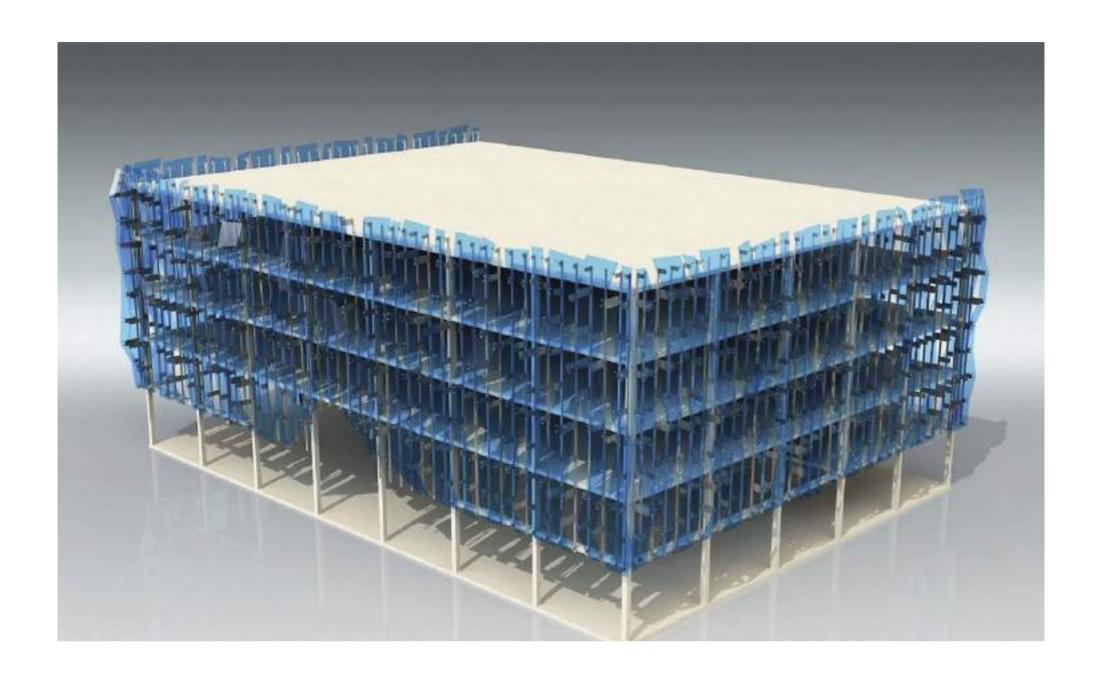


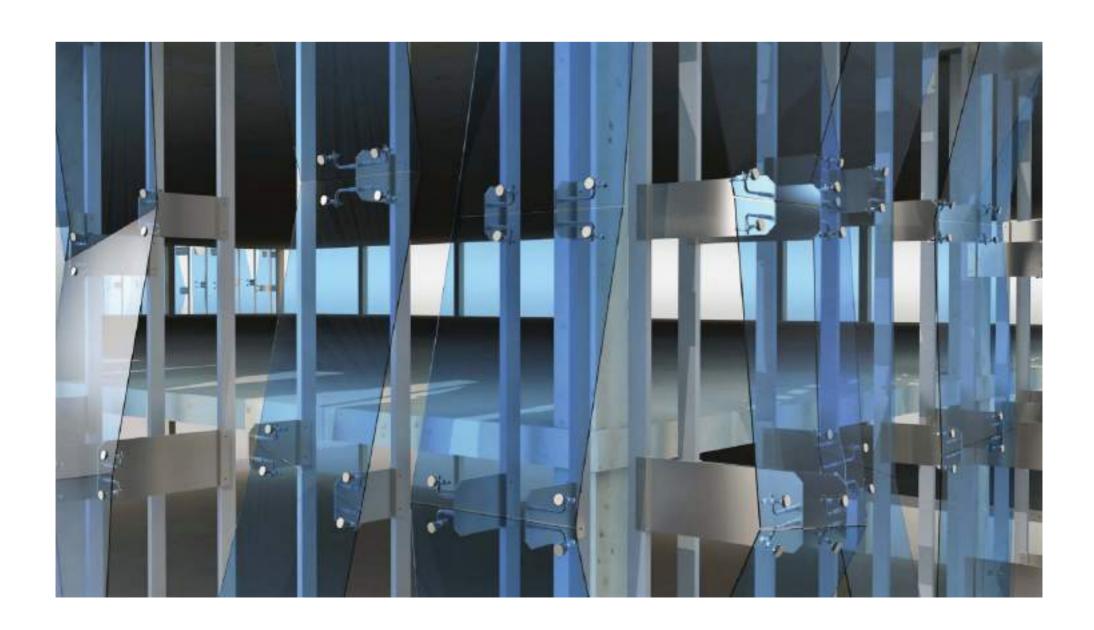




## 3D Projection

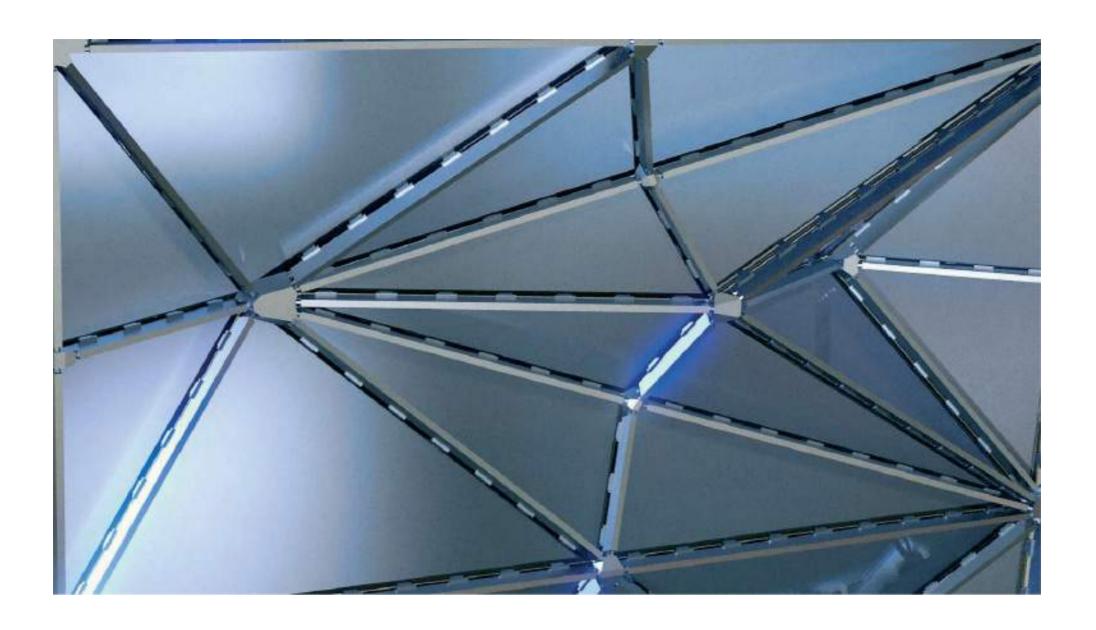




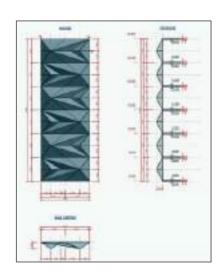














## Mounting works







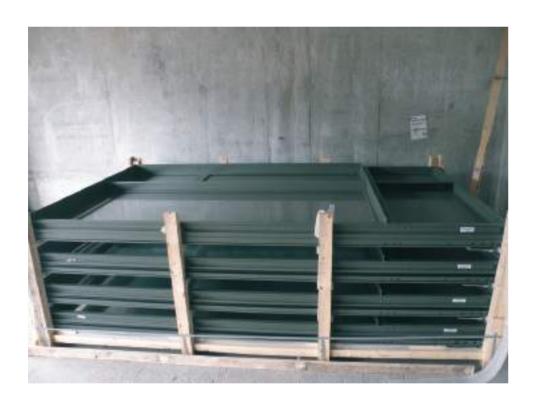


## Mounting works

















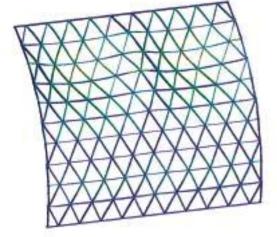




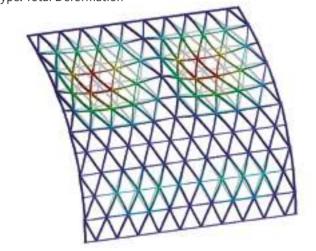


### Calculation of structural elements

A: Static Structural Equivalent Stress Type: Equivalent (von-Mises) Stress



A: Static Structural Total Deformation Type: Total Deformation



A: Static Structural Total Deformation Type: Total Deformation



B: Submodel Б Equivalent Stress Tvpe: Eauivalent (von-Mises) Stress



B: Submodel 5 Total Deformation Tvpe: Total Deformation



C: Submodel A Equivalent Stress Type: Equivalent (von-Mises) Stress



C: Submodel A Total Deformation Type: Total Deformation



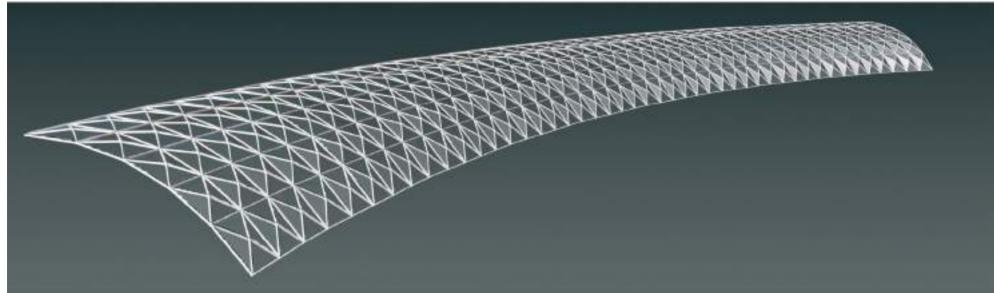
Test







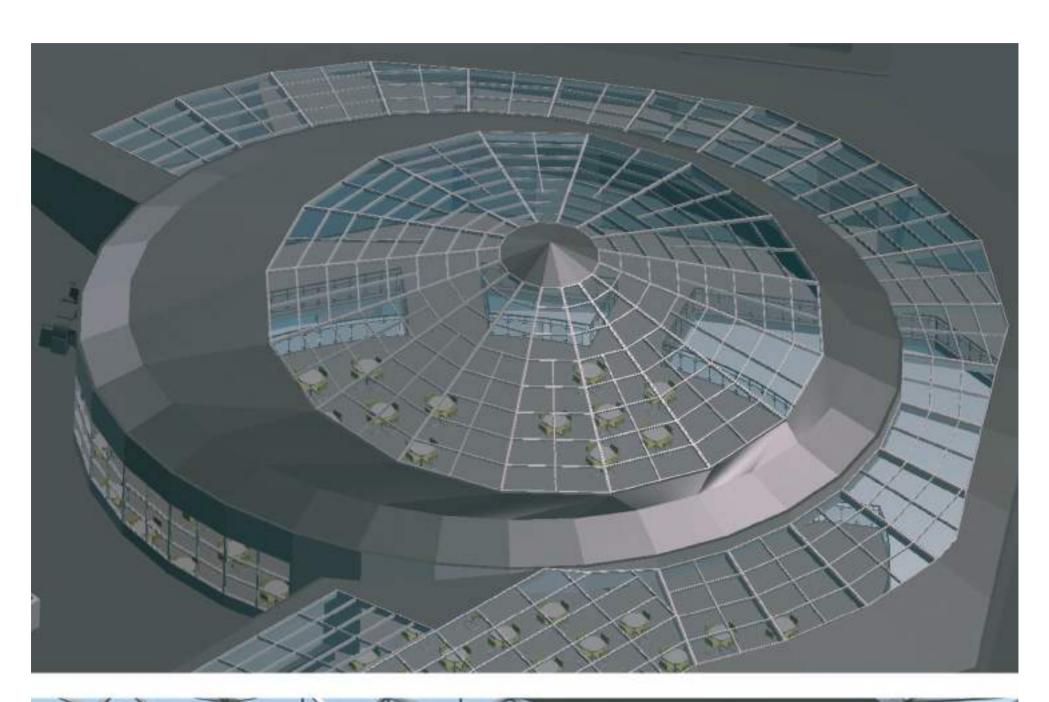








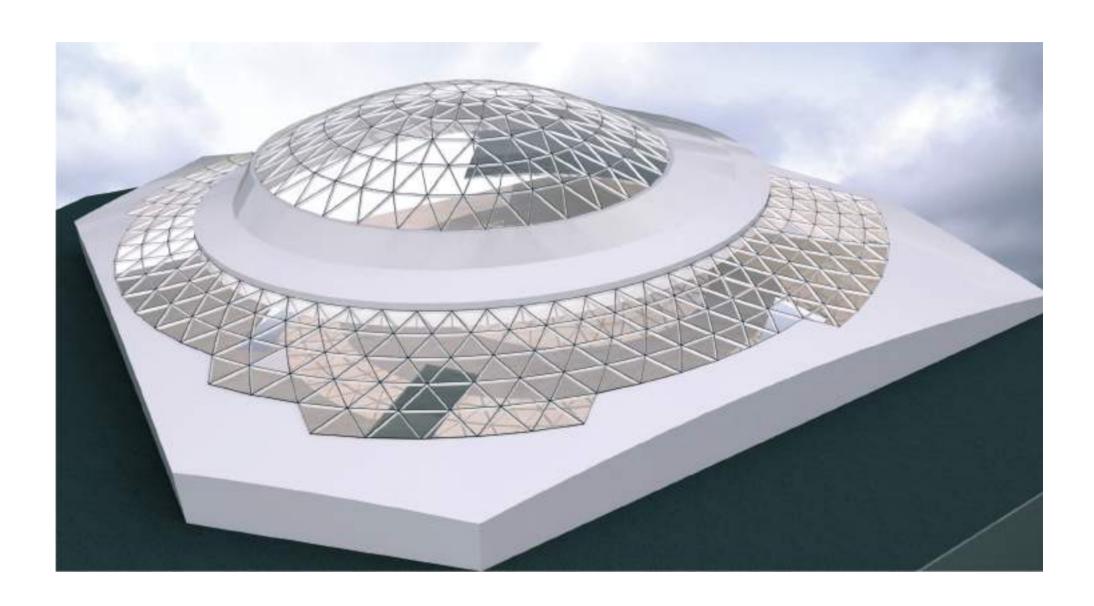
## TEC "Lukianivka". Dome, atrium





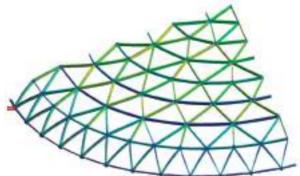
### TEC "Lukianivka". Dome, atrium

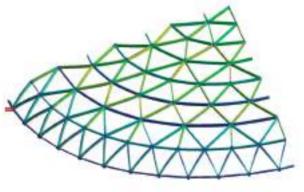




#### Calculation of structural elements

A: Static Structural **Equivalent Stress** Type: Equivalent (von-Mises) Stress





C: Submodel Б



Submodel A Equivalent of maximum-tension by Mises, MPa





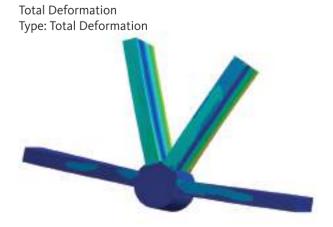
Bending (deformed shape of dome), mm



Submodel **B** Equivalent of maximum-tension by Mises, MPa

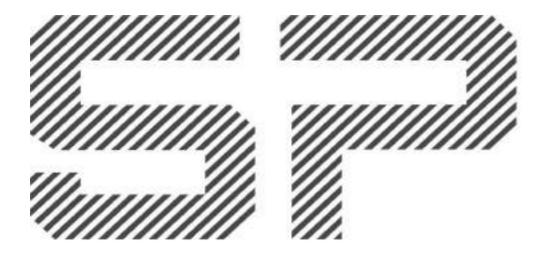


Equivalent of maximum-tension by Mises, MPa



Submodel **B** Total deformation, mm

C: Submodel **B** 



### Certificates of Stekloplast





















### Awards and social actions

- · Leader of the Ukrainian market of energy efficient windows
- · Most innovative company in the market of translucent constructions in Ukraine
- · Coordinator of the Association of windows and facades of market participants
- · Member Ukrainian Building Community





Stekloplast.

Windows according to the rules. Since 1997.