



ARCHITECTURAL ALUMINUM SYSTEMS



|| | Architectural aluminum systems



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AluminTechno LLC. Company Profile









AluminTechno LLC is an aluminum extrusions manufacturing enterprise with powder coating and anodizing lines and is a part of ALUTECH Group of Companies.

Our high-performance modern enterprise is equipped with machinery produced by the leading manufacturers from the USA, Germany and Italy. Production process and manufacturing equipment have no analogs within CIS countries. The complete production cycle is being performed at AluminTechno plants: from primary aluminum foundry casting works to production of aluminum moldings and their further coating. The main manufacturing components are modern foundry complexes, highperformance press lines, advanced coating and anodizing manufacturing shops.

Currently AluminTechno LLC produces a wide range of aluminum extrusions (more than 1,000 different configurations) used in motor construction, furniture and consumer goods, motor vehicle and machine tool industries, electric-power industry. Enterprise's yearly output is 45,000 tons.

AluminTechno LLC has certified its quality control management system for conformity to the requirements of International Standard ISO 9001:2009 in TÜV CERT system.

Most of top products have successfully passed AAMA tests.

Finish quality of aluminum moldings produced by AluminTechno LLC is proved by three international certificates: QUALICOAT, SEASIDE and QUALANOD. AluminTechno LLC is the only aluminum architectural system manufacturer on the territory of the CIS holding all three certificates.



Manufacturing facilities





Foundry complex

The first manufacturing process stage is a modern foundry complex which consists of gas melting furnace, casting device for aluminum billets casting and homogenizing furnace.

Foundry complex equipment includes advanced modification, finishing, filtration and melt casting systems. Quality of the aluminum billets provides high-stability of mechanical characteristics of aluminum extrusions and high quality factor of their surface.

AluminTechno LLC produces aluminum extrusions in conformity with DIN 17615, EN 755-1, EN 755-2, EN 12020 standards requirements therefore providing high quality of the final products.



Press lines

Six modern high-performance extrusion lines are installed in the manufacturing shops providing production of aluminum profile in accordance with the customer preferences. Two lines have 5" die diameter, three lines have 7" and one 9".

All the press lines are of modern configuration, equipped with units and component parts manufactured by global leaders such as Rexroth, Siemens, Kromshroder, and Marathon.







Vertical powder coating line

AluminTechno LLC offers its customers powder coating of any color (according to RAL color chart) and guarantees coating surface thickness of 60-80 microns along the whole length of an extruded profile.

Polymeric coating is conducted on two fully automatic Trevisan (Italy) coating lines. Advanced coating technology provides high quality surface, meeting the requirements of the European standard Qualicoat.







Aluminum anodizing complex

Two biggest anodizing complexes on the territory of the CIS countries proudly operate at AluminTechno enterprise. The installed equipment by CISART (Italy) includes all the advanced technical solutions and provides full automation of anodizing process.

Anodizing, gold-plating, electrochemical and interference coloring lines allow to treat profiles up to 23' long, getting a wide range of colors.

Architectural aluminum systems

Aluminum extrusions serve as frames for various structures ranging from small trade outlets to multi-storey buildings. Aluminum is a material of high environmental stability and during the maintenance period does not require any maintenance or repair.

Currently there are several trends in the field of construction, where aluminum systems is the most effective solution. Those are facade (curtain wall systems), entrance doors, internal partitions, all-glass look facades (invisible from the outside framing hidden by glass), translucent rooftops, terraces and a great number of other facade constructions which make an integral part of modern architecture.



Curtain Walls



Interior systems

Window and door systems









Curtain wall system ALT F50 has been developed for fabrication of envelope translucent constructions of various complexity: curtain walls, inclined translucent surfaces, skylights, sun rooms.

A huge number of technical solutions have been contemplated while designing the system.

Various door and window types can be integrated in the system.



Curtain wall system ALT F50



Product information

Internal visible width	50 mm
External visible width	50 mm
Back member width	12–270 mm
Glazing thickness	from 4 to 56 mm
Maximum capacity	500 kg
Glass fixing method	Pressure plates and beauty caps.
Types of the opening elements	All ALT window and door systems,
	integrated facade windows and smoke
	removal hatches
Thermal conductivity	$Uf = 0,6 - 1,8 W/m^{2}K$

Facade parameters with a double insulated glass unit

Sound transmission	reduction up to 33dBA
Air proofing Class A	Class A
Water proofing Class A	Class A

System components and color options

- Aluminum extrusions
- EN AW 6063 T6 AlMgSi F20
- Gaskets
- EPDM DIN 7863
- Insulating moldings
- PVC-U-HI long-lasting, temperature resistant, plasticized material with low thermal conductivity
- Mounts and brackets
- Aluminum, stainless steel and other corrosion resistant materials
- Coating types
- Qualicoat grade powder coating, over 200 RAL colors. Qualanod grade anodizing, 14 colors

Traditional curtain wall system ALT F50

Vertical mullion section

Horizontal mullion section







ALT F50

ALT F50

Various beauty caps (from 12 to 200 мм) available

Various types of beauty caps allow flexible facade design in numerous options from soft design with smooth junctions to challenging high-tech style with sharp lines and straight angles.







Frame mounted curtain wall

Several solutions have been developed for the system for making a loadbearing structure in the form of steel or wood frame. In this case, it is recommended to use cost effective narrow post and mullion extrusions.

Steel Frame





ALT F50

ALT F50

Wood Frame









Sophisticated architectural design

Pyramidal skylight



Fabrication of pyramidal top



A unique design of various blocks and locks (patented solutions) allows to design, fabricate and install different transitions and adjoin facade constructions to existing structures:

- Pyramids
- Curved surfaces (verticallyinclined posts).Transition from vertical to inclined part of construction
- Rotation of vertical mullions
- Tilted and rotated surfaces

Mullion Tilt and Rotation







• Connection of three and more mullions at one point



- Vertically inclined surfaces. Transition from the vertical to the inclined part of the construction
- Allows to rotate vertical mullions
- Tilted and rotated surfaces



Sophisticated architectural design

Swivel brackets and mounts, continuous mullion stiffeners and heavy duty blocks make heavy glass fillings installation possible.

Ultra heavy fillings installation



Works with: Distance between posts - 3,5 m IGU weight - up to 500 kg

Section of a horizontal mullion with a heavy filling



ALT F50

Impressive thermal performance

Unbeatable thermal performance thanks to thermal brake, multiple gaskets and foamed materials combination (patented solution).

Vertical mullion section



ALT F50

Vertical mullion section with 50 mm IGU





Thermal performance of a typical curtain wall assy with various types of glazing

U-Factor depending on glazing thickness







Structural glazing system ALT F50 SG



This system allows fabrication of all-glass look facades of any configuration without aluminum profiles on the outside surface. Insulated glass is fixed to mullions with hidden clamps.

Product information

Internal Visible Width	50 mm
External Visible Width	20 mm
Glazing thickness	from 6 to 56 mm
Glass fixing method	hidden clamps
Types of opening elements	integrated awning or parallel-set- aside window

Window integrated in structurally glazed curtain wall

Joint is filled with structural sealant

Joint is filled with gasket







ALT F50 SG

ALT F50 SG

Semi-structural glazing system ALT F50 SSG Imitation of structural glazing

The main difference of this solution is that instead of 50 mm pressure plates and beauty caps narrow and almost invisible moldings are used. Plain, glass adjoining profiles create an illusion of structural glazing.

Product information

Internal Visible Width	50 mm
External Visible Width	38 mm
Glazing thickness	from 28 to 50 mm
Glass fixing method	pressure plate and beauty caps
Types of opening elements	integrated awning or parallel-set-aside



Pressure plate with visible screw

Pressure plate with cover cap

Window integrated in semi-structural curtain wall



ALT F50 SSG



ALT F50 SSG



ALT F50 SSG





In this facade modification, a vertical or a horizontal line is outlined with the help of various massive shield bars (oval, hemispheric or rectangular), therefore adding some horizontal or vertical volume. Along other lines the clamping bars are replaced by seam sealing or the space between the IGUs is filled up by silicon seam sealant.

Product information

Internal Visible Width	50 mm
External Visible Width (horizontal)	from 38 to 50 mm
External Visible Width (vertical)	38 mm
Glazing Thickness	from 22 to 50 mm
Glass fixing method	pressure plate and beauty caps
Types of opening elements	integrated awning or parallel-set-aside

Different options for beauty caps



Window integrated in «horizontal line» facade

Joint is filled with structural sealant

Joint is filled with gasket



AI



ALT F50 HL



Integrated windows "Hidden sash" type ALT F50

This F50 system solution provides possibility to manufacture integrated windows with an outside opening. Due to similarity of appearance of the window and the blind parts of the facade this construction is called "Hidden sash". The sash can be furnished with fittings providing awning or parallel-set-aside opening types. Manual mechanism or chain electric drive can be used as an opening element.

Technical characteristic

Internal Visible Width	55 mm
External Visible Width	to 10 mm
Glazing thickness	from 4 to 8 mm, from 22 to 38 mm
Glass fixing method	cap moldings and structural
	sealant
Maximum dimensions	3000×2000 mm
Types of hardware	awning or parallel-set-aside



Thanks to a beneficial materials combination and four lines of gaskets impressive thermal and structural performance was achieved.

U-Factor is $Uf = 2,2 \div 1,9$ Wt/(m²·K), which is better than competitive products thermal performance.



Non-thermally broken curtain wall and window



Thermally broken curtain wall and window



ALT F50

Advantages

- No visible aluminum components on the outside surface
- Surfaces of IGU and facade glass are aligned
- Compatible with any types of facades
- Impressive insulation properties
- Windows with transom are available





This ALT F50 system integrated window solution assumes installation of a rectangular IGU which is followed by 41 mm visible aluminum line.

This option preserves all technological advantages of "invisible sash".

Product information	
Internal Visible Width	55 mm
External Visible Width	45 mm
Glazing thickness	from 22 to 38 mm
Glass fixing method	snap-in molding
Maximum dimensions	3000×2000 mm
Types of hardware	awning or parallel-set-aside

34 mm polyamide thermal breaks help to keep U-factor at 0.299 which is much better than the indexes of European equivalents within facade windows segment.





Thermal performance of a typical curtain wall assy with various types of glazing U-Factor depending on glazing thickness



ALT F50 Smoke Removal Hatch

These windows are installed onto inclined facades and used to equalize pressure inside and outside of buildings, and to provide ventilation and smoke removal.

Product information

Internal Visible Width	74 mm
External Visible Width	74 mm
Hatch Height Above the Glazing	110 mm
Surface	
Filling Thickness	from 22 to 38 mm
Glass fixing method	snap-in molding
Types of hardware	awning or parallel-set-aside







It is recommended to use an electric power drive for the hatch opening and closing. Due to extended surface of the frame profile, the rod actuators, rack rods and chain drives produced by wellknown European manufacturers can be installed into the hatch.





Unitized curtain wall system ALT EF65 was designed to create curtain walls glazing using ready modules (elements), which were assembled in a workshop beforehand. This way of assembling allows to omit the process of scaffold installation and makes high-rise construction a lot easier.

The main components of this system are frame profiles and transom bars which form units. Infill units in such constructions are fixed with the help of glazing beads and wedge gaskets. Gasket kit is used for joining and caulking of the units together.

Unitized curtain wall possesses considerable advantages in assembly speed and rising wall quality by means of high-capacity factory assembly.



Unitized curtain wall system ALT EF65



Product information

Inner visible width	65mm
Exterior visible width	65mm
Frame and transom chambers depth	125 and 150 mm
	(up to 200 mm if necessary)
Possible infill units' thickness	up to 56 mm
Maximum infill units weight	up to 300kg
Glass fastening type	with the help of glazing bead
	profiles
Types of opening elements	all ALT window-door systems, facade
	integrated ALT F50 windows
Thermal conductivity of frame node	Group 2,3 Uf=2,25 W/m ² K according
point	to EN, ISO 10077-2:2003 norm
Thermal conductivity of transom	Group 1.0, Uf =1,55 W/m ² •K
node point	according to EN ISO 10077-2:2003
	norm

Technical details

Aluminum profiles

AlMg0,7SI6063 alloy, T6 temper

Gaskets

Synthetic rubber EPDM according to DIN 7863 norms

Insulating profiles

Are produced with the help of extrusion method from polyamide containing 25 percent of fiberglass

Fastening elements

Are produced from aluminum, stainless steel, and other corrosion-resistant materials

Coating types

Powder coating of any color and anodizing meet Qualicoat and Qualanod requirements.

Unitized curtain wall advantages

- Elements standardization during designing stage, high quality of assembly operations, close control during manufacturing process, final quality inspection;
- Building area assembling with fewer working operations leads to human factor effect (defects occurring) reducing.
- Construction time almost doesn't depend on weather conditions, as all the constructions are assembled in manufacturing workshop.
- Assembling is performed floorby-floor, finishing works could be started earlier with a closed building facade.
- Possibility of assembling at low temperatures without any significant changes in technical process.
- Possibility of faster occupation of the building, it's putting into operation and investment recovery.

Design variants of unitized curtain wall ALT EF65





Traditional facade

visible attachment of window assembly with the help of glazing beads.



Semi-structural glazing "vertical line"

with a vertical profile line on a facade



Semi-structural glazing "horizontal line"

with a horizontal profile line on a facade



Structural glazing

all-glass facade without any aluminum profiles outside



ALT EF65 system particular qualities: Diversity



Frames of different sizes junction

Possibility of different frame sizes junction allows to optimize the choice of materials in central wing of the building and to choose a matching profile in loaded (corner) facade areas.





Two types of transom bars junction

There are two possible types of transom bars junction: Screw junction through a threaded slot and junction with the help of embedded detail. Screw and pin attachments of front, middle and back parts of a transom bar are available in the system in order to guarantee additional security of T-type junction.





Two standard sizes of profiles with air chambers

Two possible standard sizes of chamber profiles, frame chamber depths are 125 and 150 mm. The same amount of embedded details and frame assembly kits for frames with different depths is used in the system.



Multi-chamber frame profiles

Multi-chamber frame profiles used together with angles assembled with the help of three embedded details give additional degree of fixity and durability to the element.

ALT EF65 system particular qualities: Reliability and esthetics



Narrow visible width

Narrow visible width – 65 mm of profile line along the whole facade. It is a minimal possible size for existing unitized curtain walls.



Several possible variants of angle module realization

Several variants of angle modules are realized in the system, starting from vertical use of pressing bars to a structural variant without exterior profiles.



Horizontal profiles chambers completeness

Horizontal profiles chambers completeness in angle modules provides additional level of facade impermeability.



Additional mating element

Using of additional mating element in corner and two-sectional modules allows to provide equal windload distribution on vertical profiles.



Two ways of glazing beads fixation

Using of end self-tapping screws and safety elements allows to prevent glazing beads clicking off and infill units falling off.



ALT EF65 system particular qualities: Power-efficiency and functionality



High thermal performance

Assembly unit "frame-frame" thermal transmittance on $Uf = 2,25 W/(m^{2*}K)$ level and transom assembly unit is $Uf = 1,55 W/(m^{2*}K)$.



High impermeability level of the construction

is achieved through the use of three levels of gaskets and overlapping gaskets principle.



Ventilation equipment installation

Possibility of installation of supply and extraction ventilation equipment both into transom chamber and into nontransparent part of the construction.

Possibility of integration of both cold and warm zones in one block





Horizontal gaskets and junction profiles kit

Allow to detect different sized flooring deformation effectively, maximum allowed span deflection is ± 10 mm.
Integrated constructions types for unitized curtain wall ALT EF65 facade system

Integrated outward opening ALT F50 windows are used as opening elements of the blocks in ALT EF65 system. In case of low-rise buildings glazing with the help of unitized curtain wall it is possible to use ALT W72 windows with inward opening.



Integrated window with hidden sash



There are no visible differences between this construction and dumb parts of the facade. That's why this sash can be used in any type of facades.



Integrated window with visible IGU fastening



Standard glazing is used in this window. It is fixed by a pressing bar with 40 mm visible width. It is advised to use this variant in facades with infill units fastened by glazing beads.



ALT W62 and ALT W72 windows with different types of opening



These constructions are used for inward opening and in case it is needed to visually emphasize opening elements against the whole facade.





Suspended ventilated facade is a modern solution which improve energy efficiency of a building and decreases costs of its maintenance, improves its image and makes it more attractive for clients and tenants creating more comfortable conditions for work and leisure.

Thanks to a wide range of finish materials available for ventilated façades a building can have a unique design and become a signature of a city. There is no alternative to ventilated facade system.





Suspended Ventilated Facade System ALT150



Product information

Max. Height	150 m
Seismic stability	up to 10 on Richter scale
Insulantion Thickness	up to 250 mm
Minimum Life Period	30 years (50 years with anodizing)
Fire Safety Class	Not flammable
Framing weight	up to 1,7 kg/m²

System components and coating

- Aluminum profiles
- EN AW 6063 T6
- Fixing elements
- Aluminum, stainless steel and other corrosion resistant materials
- Coating types
- Qualanod grade anodizing

Suspended Ventilated Facade System ALT150



ALT150 with cassettes made from aluminum composite panels

Traditional aluminum composite cassettes bring modern appearance to any building.







ALT 150





ALT150 with stone panels

Fixing stone panels with visible clips is the easiest and the most inexpensive option which provides nevertheless all advantages of ventilated facade system.



Suspended Ventilated Facade System ALT150



ALT150 with fiber reinforced concrete panels

Fiber reinforced concrete panels is one of the first materials used for facade decoration, but it is still up to date.

Features:

- Wide range of colors
- Safe mounting
- Quick and easy installation







Suspended Ventilated Facade System







ALT 150



ALT150 with hidden hardware

It is the most dependable and highest quality method of facade decoration. It is commonly used for signature design and underlines individuality of a building.

Hidden hardware allows to design ideal architectural solutions.



ALTINGES States States

Glazing system without thermal break for continuous glazing of balconies and terraces

ALT VC65 system is designed for constructing of continuos glazing for non-thermally insulated balconies, loggias, stairs flight.

System combines solutions of mullion-transom facade systems and balcony sliding system.

The glazing structure is assembling of mullions and transoms, the filling is inserted in this structure and fastened inside by glazing beads.





ALT VC65 glazing system for balconies and loggias



Product information

Internal visible width	65 mm
External visible width	65 mm
Back member width	80–160 mm
Glazing thickness	from 4 to 26 mm for fixed parts and from 4 to 6 mm for sliding panels
Glass fixing method	snap in moldings
Types of opening elements	hinges and sliding sashes ALT100 series

System components and color options

- Aluminium profiles
 - AIMg0.7Si6063 alloy, T6 conditions
- Sealing

EPDM in accordance with DIN 7863

Fastening element

Made of aluminium, stainless steel and other corrosion resistible materials

Coating types

Powder coating of divers colors and from divers producers, which quality os confirmed by Qualicoat (Seaside) certificate Anodizing confirmed by Qualanod certificate





Possibility of broken glass replacement without interior finishing damaging

due to the glazing beads outside installation

Mullion section



Transom Section





Installation of two lines of varied types of infill units materials

Glass with 4-6 mm thickness can be used outside infill. Magnezit panel or other plate material with 8-12 mm thickness can be used inside.

Mullion section

Transom Section





Assembling of turning constitutions

Rotation to 4 degree without additional profiles.





Variety of Solutions for construction rotation

Rotation profiles allow to realize turning for -30 to +45 degree on one side.



Various types of built-in elements

The sash of 31 mm visible width is used to realize casement windows. The glazing width may vary from 4 to 26 mm. Hidden sash with 6 mm single glass can be used if necessary.

ALT 100 system profiles and components are used in the assembly of sliding windows.

Special mullion profiles have been developed for sliding elements installation and allow realizing up to 4 m width openings as well as additional profiles for posts.



Hidden fastening elements

Different ways of steel brackets use are proposed to create assembly attachment points to the floor slab. Every way has its own peculiarities.

- 0750 to create a 10-120 mm distance from floor slabs
- 0760 to create a 120-250 mm distance from floor slabs
- 0790 to realize a 90° turn







ALT VC65 system supplementary components

A wide range of additional components is presented by various plugs and a collar.

The collar seals posts' thermal gaps, the plugs seal the post-mullion junction and decorate the junction of posts with various sections.







ALT100 system is designed for balcony glazing and protecting balconies and terraces from wind and rain, noise and dust. It improves acoustical conditions and contribute to comfort and coziness.

The system includes moldings for fabrication of sliding, swing and fixed glazing. All the profiles can be combined with and adjusted to each other using corner adaptors and connectors. Insect screens are available for installation together with ALT 100 system.

The system is easy to assemble and does not require expensive equipment for fabrication.

Balcony Glazing System ALT100





Product information

Visible width	Sliding panels	50 mm
	Swing panels	58,4 mm
	Fixed panels	40 mm
Mounting depth	Two-track frame	60 mm
	Three-track frame	90 mm
	Pivoted and fixed 40 c	or 60 mm
Wind load	tests pending	

System components and color options

- Aluminum extrusions EN AW 6063 T6 AlMgSi F20
- Gaskets
 EPDM DIN 7863

Joints

Corner connectors made of aluminum alloy, steel self-drilling screws, plastic plates

Coating

Qualicoat grade powder coating, over 200 RAL colors. Qualanod grade anodizing, 14 colors



ALT100 System overview

Features

- ALT100 series offers moldings for manufacturing of sliding, swing and fixed panels
- Allows to make connection of a sliding part to a fixed or pivoted one from both sides, and to a fixed part from the top and the bottom
- Corner adaptor moldings make it possible to find a better solution for any project



Sliding Panels

Features:

- reasonable use of balcony space;
- possibility to glaze a narrow balcony with wide panels;
- comfort and safe balcony maintenance



Swing panels

Features:

- glazing options 4,5 to 6 mm;
- horizontal dividers for windows are available
- reinforced moldings for doors



Fixed panel

Features:

- glazing options 4,5 to 6 mm;
- horizontal dividers for windows are available;
- narrow width of frame (to 40 mm);
- easy to assemble

Options

- wide (60 mm) and narrow (40 mm) frame
- 38 mm cost effective type of extrusion for sliding panels is available
- availability of two (60 mm wide) and three (90 mm wide) tracks frame extrusions
- three standard colors: RAL9016 (white), RAL9017 (brown), A00-E6 (silver)



Leaf parameters selection diagram depending on Wh

Advantages

- Dovetail shape of sash allows easy adjustments and provides quick installation of the striker under the lock catch without milling
- Offers installation of horizontal dividers for sliding panels
- Low raised saddle is available



Non-thermally broken window, door and partition system



48 mm frame depth is ideal for installation «euro groove» compatible hardware which gives a wide choice of operation types. Additional moldings are available to upgrade an entrance unit to automatic sliding or swing door in both single and double options. Can be combined with compact door hinges. Glazing (filling) from 4 up to 40 mm.



Non-thermally broken window, door and partition system ALT C48



Product information

Minimum visible frame width	48 mm
Minimum visible sash width	66,5 mm
Frame depth	48 mm
Glazing thickness	up to 30 mm
Glass fixing option	snap in molding
Sound transmission reduction	up to 33 dBA
Air proofing	Class A
Water proofing	Class A

System components and coating options

Aluminum moldings

EN AW 6063 T6 AlMgSi F20

Gaskets

MESTO

EPDM DIN 7863
• Window hardware

Euro groove type 1

Fixing elements

Aluminum, stainless steel and other corrosion resistant materials

Coating types
 Qualicoat grade powder coating, over 200 RAL colors. Qualanod grade
 anodizing, 14 colors

ALT C48 Features

Non thermally broken window, door and partition system ALT C48 allows

- manufacturing of various fenestration units;
- implement contemporary design for entrance groups, portals, shop windows and partitions.

Profile series are of high functionality and have a good performance when it comes to machining and assembly.





Single and double doors with compact hinges



ALT C48



Hopper, tilt and turn, swing in windows



ALT C48

ALT C48 Features

Swing in and out single and double doors with closers

Sliding single and double automatic doors









ALT C48





Non-thermally broken window, door and partition system



ALT C43 system is designed for fabrication of interior and exterior windows, doors, translucent units and privacy partitions for projects with no requirements for thermal performance:

- doors with surface-mounted hinges;
- different types of windows with Euro groove;
- translucent units and privacy partitions.



Non-thermally broken window, door and partition system ALTC43



Product information

Minimum visible frame width	45 mm
Minimum visible sash width	63,5 mm
Frame depth	43 mm
Glazing thickness	up to 24 mm
Glass fixing option	snap in molding
Sound transmission reduction	up to 33 dBA
Air proofing	Class A
Water proofing	Class A

System components and coating options

- Aluminum moldings
 EN AW 6063 T6 AlMgSi F20
- Gaskets
 EPDM DIN 7863
- Window hardware
 Euro groove type 1
- Fixing elements

Aluminum, stainless steel and other corrosion resistant materials

Coating types
 Oualicoat grade powder coating, over 200

Qualicoat grade powder coating, over 200 RAL colors. Qualanod grade anodizing, 14 colors



ALT C43 Optional features



Available fenestration types

- fixed
- single
- double
- double with transom
- window wall



Great water and air proofing





Continuous glazing support



The system is designed for various door and window types including french doors. Euro groove allows installation of popular hardware

ALT C43 Optional features



Doors

- single;
- double;
- Swing in and out;
- With and without threshold



Two options of threshold installation



Prevention of air infiltration through sash



Translucent fenestration units and partitions

- translucent fenestration units with reinforced mullions for installation in openings;
- translucent glazing of balconies with sliding and pivoted panels;
- partitions and entrances with integrated doors.









ALT W62 is a universal complex system for manufacturing windows and doors for commercial and residential buildings; translucent fenestration with numerous doors and windows at projects where facade system is inapplicable; doors and windows where other materials are inapplicable due to design or architectural requirements; different types of frame constructions with tough requirements for thermal and acoustical performance.

Depth of ALT W62 series is 62 mm with 24 mm wide thermal break. Installation of glazing up to 40 mm allows to achieve great thermal and acoustic performance.





Thermally broken window and door system ALT W62



Performance

Acoustic proofing	up to 33 dB
Thermal insulation	0.61 W m²/°C
Wind load	Class A
Light transmission factor	Class 2
Water penetration	Class A0
Air infiltration	Class A

System components and coating options

Aluminum moldings

EN AW 6063 condition of the material T6 AlMgSi F20

- Gaskets
 Synthetic caoutchouc EPDM according to DIN 7863 standards
- Window hardware
- Euro groove type 1
- Fixing elements

Aluminum, stainless steel and other materials resistant to corrosion

Coating types

Qualicoat grade powder coating, over 200 RAL colors. Qualanod grade anodizing, 14 colors



Different assembly solutions for ALT W62 system







The system consists of aluminum moldings connected together with composite profiles. Series of advanced engineering solutions ensure great structural performance of the product and stability of structures it is used for.





Great thermal performance makes this product suitable for most projects.


Visible profile width may vary from 49 to 118 mm



Both out and in swing doors are available as a separate entrance unit or for further integration in curtain wall.

Durable, reliable and maintenance-free products:

- Progressive technology combines polyamide and aluminum moldings without impairing geometrical shape of final products;
- Proved and dependable corner locks and T joints are designed to bear large and heavy fillings and work with various types of openings;
- Long life sealing materials provide high bonding strength in any weather conditions.









Thermally broken window and door system

ALT W72 is a universal complex system, designed for manufacturing of:

- windows, entrance doors and different combined units for modern green buildings;
- different types of frame structures with strict requirements to thermal insulation and acoustic proofing.

The series has 72 mm frame depth and multi sectional thermal break 34 mm wide. Thermal performance and sound proofing were improved thanks to additional foam-based components.

Up to 50 mm glazing option is available to achieve the highest thermal and acoustic performance.

ALThermally broken window and door system

Thermally broken window and door system ALT W72



Performance

Acoustic proofing	up to 43 dB
Thermal insulation	1,0 W m²/°C
Wind load	Class A
Light transmission factor	Class 2
Water penetration	Class A0
Air infiltration	Class A

System components and coating options

- Aluminum moldings
- EN AW 6063 condition of the material T6 AlMgSi F20
- Gaskets
- Synthetic caoutchouc EPDM according to DIN 7863 standards
- Window fittings
- Euro groove type 1
- Fixing elements
- Aluminum, stainless steel and other materials resistant to corrosion
- Coating types
- Qualicoat grade powder coating, over 200 RAL colors. Qualanod grade anodizing, 14 colors



Different assembly solutions for ALT W72 system







Different combinations of moldings, fittings and hardware make it possible to manufacture simple functional units as well as fully automated entrances and units with hidden hardware.

The system extrusions can be produced with different colors from inside and outside which gives a lot of free space for architectural and designer ideas.

ALT W72 system is not only design improvement but truly brings fenestration solutions to a new level.





High thermal performance makes this product a must in green buildings.







Outstanding design of system components saves up to 15% of labor:

- milling process is eliminated;
- no need for equipment adjustment;
- reasonable variety of component and accessories

Impressive thermal performance deriving from know-how engineering solutions



Thermally broken windov and door systen







ALT W72





ALT110 – is an office partition system, designed to organize working space and create various functional facilities providing comfortable working conditions.

The system allows to create fancy interiors in halls, meeting rooms, private offices and to divide shopping malls to separate shopping spaces. ALT110 has been developed for different architectural solutions.

Office Partition System ALT110





System components and coating options

Aluminum profiles

EN AW 6063 condition of the material T6 AlMgSi F20

Gaskets

Synthetic caoutchouc EPDM according to DIN 7863 standards

Connections

Corner connectors made of steel and aluminum alloy, self-drilling screws, plastic plates

Fittings

By European manufacturers Giesse, Fapim, Master, Monticelli, Stublina

Coating types

Qualicoat grade powder coating, over 200 RAL colors. Qualanod grade anodizing, 14 colors Office Partition System

ALT110 System



Features

- Partition is assembled with steel corners using self-drilling screws, without preliminary drilling
- There is a possibility to install single and double translucent and privacy glazing as well as gypsum board, flake board, medium density fiber board (MDF), vinyl covered gypsum board and other materials 4, 5, 6 and 8 mm thick
- Sun blinds installation of various types 4 to 16 mm thick is possible
- Return profiles allow to design angles of the construction 90-270°
- Installation of single and double doors with single and double glazing is possible
- The system provides acoustic proof level up to 40dB

Execution Variants

- The profile system can have a straight and a rounded variants of the clamps
- Saving profile visible width 30 mm (height of the partition 2?7 m, the post pitch is 1,2 m)
- The main post visible width 40 mm (height of the partition 2,85 m, the post pitch is 1,2 m)
- The reinforced post visible width 40 mm (height of the partition 4,5 m, the post pitch is 1,2 m)
- 4 standard colors: RAL9006 (gray metallic), RAL9016 (white), RAL8017 (brown), A00-E6 (silver)



Calculation chart for max. height





Advantages

- Power supply, telephone and computer network cable inlay system
- It is possible to adjust posts to the ceiling and the floor with inserts
- Leveling corner inserts for frames and sashes of doors
- End caps bring a fulfilled design to any project



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Interior partition system ALT111 is a perfect solution for arrangement of working space and it opens ample opportunities for interior design in premises of any purpose.

ALT111 system can be installed in shopping centers, banks, public facilities, industrial and administrative premises, fitness centers, educational and scientific institutions.

ALT111 partition system helps to create an inimitable style of a company and provides cozy and favorable working environment.

Interior Partition SYSTEM ALT111





System components and coating options

- Aluminum moldings
 EN AW 6063 condition of the material T6 AIMgSi F20
- Seals
 Made of thermoplastic elastomer, TPE
- Connections

Corner connectors made of steel and aluminum alloy, self-drilling screws, plastic plates

Hardware

By European manufacturers Oxidal, Fapim, Master, Casma

Coating types

Qualicoat grade powder coating, over 200 RAL colors. Qualanod grade anodizing, 14 colors

Interior Partition System





ALT 111 SYSTEM OVERVIEW

Product information

- The filling is fixed with a plastic clamp providing a handy mounting and dismantling of the partitions. This innovative solution is protected by patent.
- Vertical to horizontal mullion connection is made with detachable brackets and self-drilling screws that completely eliminates mounting sequence
- Can be combined with gypsum board partitions
- Allows to install single and double translucent and privacy glazing as well as gypsum board, flake board, medium density fiber board (MDF), vinyl covered gypsum board and other materials 4, 5, 6 and 8 mm thick.
- Sun blinds installation of various types with from 4 to 12,5 mm thick is possible
- Pivoting profiles enable realization of turn angles of the construction in the range of 90-270°
- Installation of single and double doors with single and double glazing is possible
- The system provides acoustic proof level up to 40 dB

Possible variants of implementation

- Posts visible width 40 mm (max. section height 137", max. distance between posts 1,2 m)
- Intermediate horizontal mullions available
- Two types of plastic clamps symmetric and asymmetric
- 4 standard colors: RAL9006 (gray metallic), RAL9016 (white), RAL8017 (brown), A00-E6 (silver)







Advantages

- Possibility of installation of glass and wood doors
- Simple and convenient way of aluminum doors assembly with double glazing
- Possibility of installation and dismantling of each glass lite separately
- Adjustable posts mounts
- Availability of leveling corners of frames and sashes of doors using inserts
- Milling is required only for door locks installation





ALT115 system is used used for fixing glass lites to the floor and the ceiling. Currently, all glass look partitions is one of the latest trends in the office interior design. These partitions look stylish and light and help to bring daylight illumination, free space, and visibly widen the space.

All glass look partitions ALT115 is a universal system of glass fixation and considerably differs from analog systems at the market. Unique assembly solutions of ALT115 system are patented.

Glass partitions system ALT115





System components and coating options

Aluminum moldings

• EN AW 6063 condition of the material T6 AlMgSi F20

Connections

• Corner connectors made of steel and aluminum alloy, self-drilling screws, plastic plates

Hardware

• By European manufacturers Dorma, Oxidal, Casma, GCC, GMT

Coating types

• Qualicoat grade powder coating, over 200 RAL colors. Qualanod grade anodizing, 14 colors



Glass partition ALT 115 system overview











Product information

- Free inserts positioning in grooves of rails allows to clamp glass in any point
- «Insert-rail» joint gives an opportunity to use minimum of «insertclip» sets for glass fixation
- Inserts and clips are pressed towards glass along the whole surface of paronite interlayer providing lifting capacity of «insert-clip» set of 40 kg
- Symmetrically placed locking elements of beauty cover against the longitudinal axis make both surface finish which ensures maximum mounting convenience

Optional features

- 14 colors of anodizing (silver, 7 tones of mulatto, 3 gold tones, violet, turquoise, green) and four types of surface finish (natural anodizing, beat blasting treatment, quartz treatment, polishing) of moldings allow to choose from 56 varieties of ALT 115 system coatings
- Basic and safe (through holes) options of glass fixation

Advantages

- Inversive clips allow installation of 8, 10, 12 mm glass depending on their position on the rail
- Inversive clips allow basic or safe (through holes) options of glass installation
- Protective filming of visible parts of moldings
- Availability of end caps and glass shims









ALT 118 system has been designed for fabrication of light weight partitions used for arrangement of changing rooms and restrooms in offices, shopping centers, educational institutions and other public facilities. It saves space considerably and is easy to assemble

The main system concept is functionality and contemporary design

The system includes five types of moldings for module cabins fabrication with hinged doors or without doors. Doors are made of the same filling material as the partition itself.

System components and coating options

- Aluminum extrusions Made of alloy AlMg0,7Si 6063
- Connections

Corner connectors made of steel and aluminum alloy, self-drilling screws, plastic plates

Hardware
 By various manufacturers

 Coating Qualicoat grade powder coating, over 200 RAL colors. Qualanod grade anodizing, 14 colors

Light weight partitions ALT118 system overview







Product information

- Visible width of the cap molding 9,5 mm, that visually makes the partition lightweight and at the same time hides possible chips that appear on the filling during the fabrication process
- The cap molding is attached to the edge of the filling which assures that minimum fixing elements are visible
- A unique design of the top molding allows to hide fixing elements
- The corner moldings allow to make aesthetically looking returns
- Designed to accommodate cost a effective 16 mm thick filling

Optional features

• Plastic and metal hardware is available

Advantages

- Stability and reliability of this system is maintained by reinforced top molding and possibility to fix the bottom of partition to the floor. As a result the system performance is pretty much the same as one of 22-25 mm thick partitions
- Appropriate height of the cap molding allows installation of different hardware plastic and steel
- Cost effectiveness of the system is determined by optimization of its assembly solutions





Professional software for structural design of ALUTECH group of companies architectural and interior systems.

ALU PRO is a professional but easy-maintainable program. Its operation system and layout are fully adjusted to aluminium profile systems structural calculations.

Originated by ORGADATA Company (Germany).





Versatility

- Elements' input
- Structural section
- Calculations
- Reports
- 2D CAD module



- Statics calculations
- Profiles' optimization, saw manipulation
- Profiles' treatment schemes
- Programmed numerical control administration

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- 3D module
- Wide range of customized settings
- Possibility of displaying of the documents in different formats
- Networking possibilities





Elements' input

AluPRO program's ease of use allows users to work in the system faster. Element's input embraces windows, doors and facade configurations. You determine properties of each element step by step. Our software leads you through the whole process of construction so that you won't forget a detail.



Sections' generating

You can create sections for all the constructions created in AluPRO program. It's a realistic display of all the designed positions. All the joints, swings, IGUs will be displayed very accurately.



CAD Module

AluPro has an integrated CAD module. It allows both to create new constructions and import DWG and DXF existing ones. It is easy-operated and functional. It is possible to export the files in DWG, DXF, BMP, JPEG, EMF, PS and ZIP formats.



Statics

AluPRO database has integrated statics norms for many countries. Statics norms for your own region can be set manually.

- Profiles' statics: torque requirement (lx) for every mullion and transom is defined with the help of this module. Mounting devices and horizontal thrust (wind) are taken into account.
- Glass statics: statics calculation of glass and IGU is performed according to TRLV.



Profiles' optimization

All the profiles included into the order are divided in such a way that very little chipping is left after sawcut.

Graphic displays profile's position on a saw and a sequence of cut lengths. Chipping from the warehouse can also be used. Each profile has its own bar code, which can be printed on a label (for identification in machining center).



Saw manipulation

AluPRO program has drivers for one- and two-sided saws with the possibility of taking into account the results of sawcut optimization. Profiles cutting information can be transmitted to the equipment with the help of any storage device or through the network. Data controlling the saw contains the information about length, corners and bar codes. This helps with further identification of cut details in processing center.



Programmed numerical control module

The module allows to generate the files for processing centers, which make all the profiles' treatment (shaping, drilling).

Equipment with programmed numerical control allows to minimize timing and increase productivity. All of it leads to ready products costs reduction. AluPRO can administrate all the processing centers.



Report

- Calculations
- Material Specification for production
- Cutting chart
- Glass specification
- Installation Scheme

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- Commercial offer
- Invoice
- Order blank



3D connections for design engineering software

Software Module allows to design space structures. This became possible due to special 3D software module. The software allows importing construction including all designed connections, profiles and other materials. 3D connection is possible with AutoCAD application Athena design by company CAD-Plan GmbH.



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