



COMPETITIVE ADVANTAGES

ALUTECH ROLLER SHUTTER SYSTEMS

- OWN PRODUCTION
- PRODUCT QUALITY CONTROL
- WIDE RANGE OF PROFILES AND COMPONENTS
- COLOUR RANGE – MORE THAN 30 COLOURS
- VARIETY OF SHUTTER BOXES SHAPES
- COMPLIANCE WITH EUROPEAN QUALITY STANDARDS
- TESTED WIND RESISTANCE

INTEGRATED TECHNOLOGIES

The backward vertical integration of the production processes provides highly competitive prices.

All new components for roller shutter systems – roll-formed and extruded profiles, shutter boxes, end caps, octagonal roll tubes, hand operators – are produced at the manufacturing enterprises of ALUTECH group of companies. Own production ensures efficient quality control of manufactured products at all life-cycle stages – from concept to completion and delivery of finished products to customers.



Aluminium and steel coil-coating line

Coating and slitting of cold rolled aluminium and steel strip to any size for the production of shutter boxes, roller shutter profiles, windowsills and other applications.

11 roll forming lines

Manufacture of roller shutter roll-formed profiles and shutter boxes, octagonal roll tubes from steel galvanized lath.

Facilities for the production of shutter boxes and windowsills

Manufacture of shutter boxes from aluminium lath, window and balcony sills from aluminium and steel galvanized lath.

Foundry workshop

Melting of primary aluminium and casting of aluminium bars for the further extrusion of various profiles.

Powder coating lines (horizontal and vertical)

Powder coating of aluminium extruded profiles and end caps in automated chambers.

Extrusion lines for manufacture of aluminium extruded profiles

Manufacture of a wide range of profiles, monitoring of surface defects and profile geometry, stretching of profiles, temperature stabilization.

Aluminum anodizing workshop

One of the largest in Russia and CIS countries. The installed equipment provides for all-around automation of the production processes.

Automated facilities for high-pressure casting of aluminium alloys

High precision production of a wide range of products of different shapes including end caps.

ALUTECH ROLLER SHUTTERS – TIME-PROVED QUALITY

Quality control is performed at all stages of the production process: starting from the purchase of the raw materials to the manufacture of finished products and their packing



All the elements of a roller shutter system are tested for compliance with the European quality standards, compatibility of components and reference colour compliance.

The enterprise has certified its Quality Management System in compliance with ISO 9001 in TUV CERT system, as confirmed by the corresponding certificate.

Quality of the products is confirmed by certificates and test reports issued by accredited laboratories of international companies and research centres from Belgium, Switzerland, Germany, Sweden, Czech Republic.

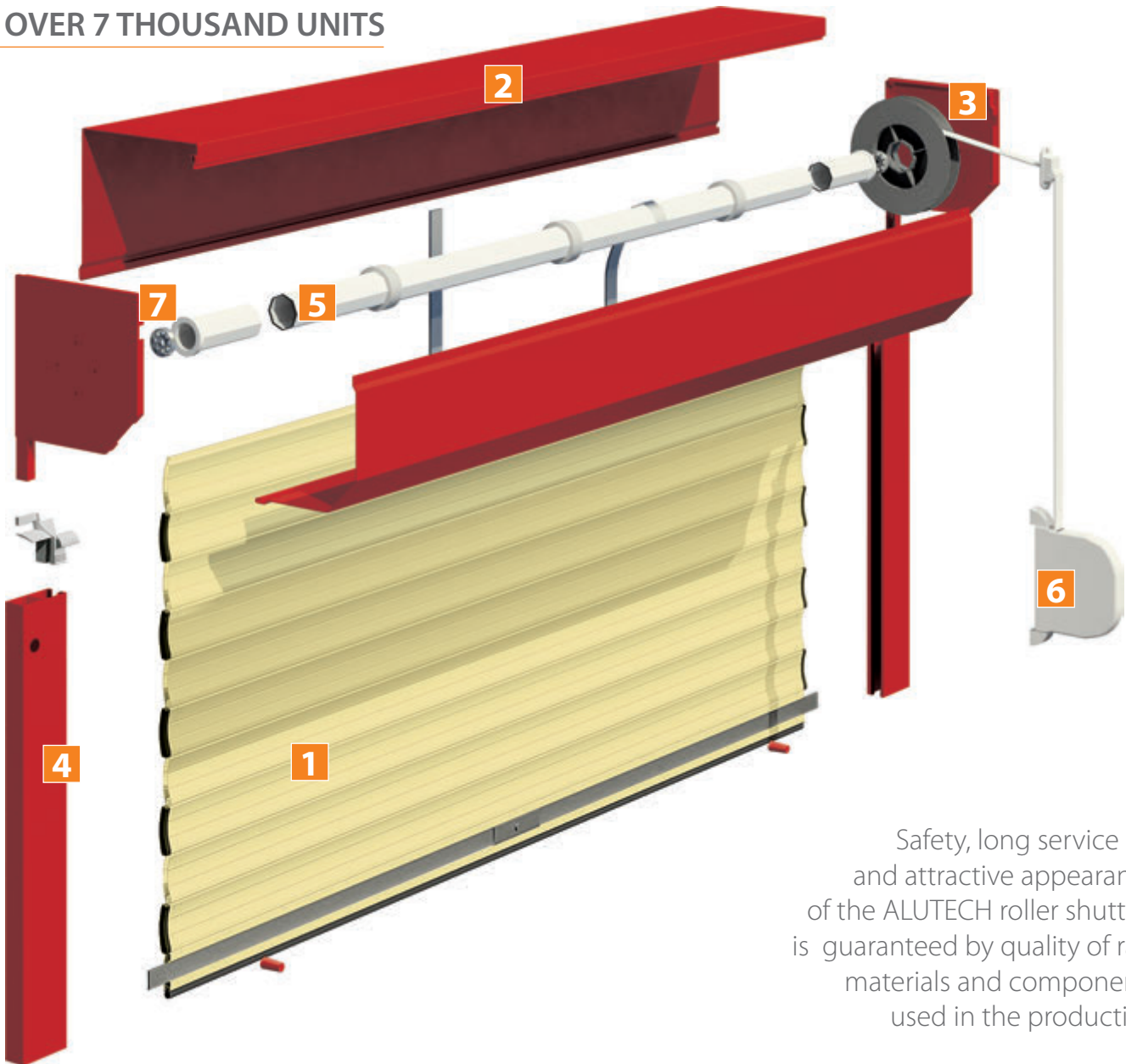
The quality control is performed according to the European standards ISO, ECCA, EN (more than 30 standards).



1

PROFILES AND COMPONENTS FOR ROLLER SHUTTER SYSTEMS

OVER 7 THOUSAND UNITS



Safety, long service life and attractive appearance of the ALUTECH roller shutters is guaranteed by quality of raw materials and components used in the production

1 ROLLER SHUTTER CURTAIN

Wide choice of profiles for openings of different sizes

Roll-formed roller shutter profiles

With standard foam insulation either perforated or non perforated

15 sizes
Colour range:
over 30 Colours

Extruded roller shutter profiles

Single-walled,
Reinforced double-walled,
grillwork

9 sizes
Colour range:
6 Colours with textured finish,
19 Colours with glossy finish

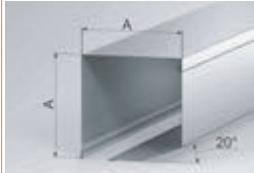
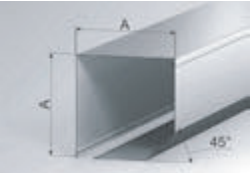
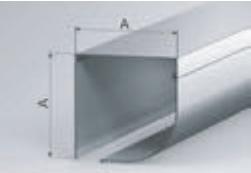
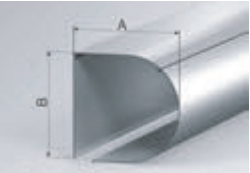
End slats



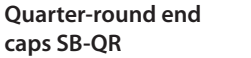


Universal end slats for key lock and joint profiles.
End slats have crimped in inserts in pvc or brush when painted. Mill finish has no insert to allow for painting.

18 sizes
Colour range:
6 Colours with textured finish,
19 Colours with glossy finish

Over 90 % of ALUTECH roller shutter profiles and components are produced by ALUTECH GC enterprises



2 SHUTTER BOXES				Diversity of shapes for any architectural style
				Built-in shutter boxes SB-I
Roll-formed SF20	Roll-formed SF45	Roll-formed SF-QR Extruded SF-P/QRE	Roll-formed SF-R Extruded SF-P/RE	
5 sizes Colour range: 14 Colours	11 sizes from 125 up to 405 mm Colour range: 16 Colours	5 sizes from 137 up to 205 mm Colour range: 6 Colours with textured finish, 19 Colours with glossy finish	5 sizes from 137 up to 205 mm Colour range: 6 Colours with textured finish, 19 Colours with glossy finish	

3 END CAPS					Perfect matching with shutter boxes
					End caps 90° SB90
End caps 20° SB20	End caps 45° SB45	Quarter-round end caps SB-QR	Round end caps SB-R		
5 sizes + end caps with the non centred pins Colour range: 6 Colours with textured finish, 19 Colours with glossy finish	10 sizes + intermediate two-sided and through caps, with the non centred pins Colour range: 9 Colours with textured finish, 19 Colours with glossy finish	5 sizes + end caps with the non centred pins Colour range: 6 Colours with textured finish, 19 Colours with glossy finish	5 sizes + end caps with the non centred pins Colour range: 6 Colours with textured finish, 19 Colours with glossy finish	5 sizes for shutter boxes SB-I	

4 GUIDE RAILS		Optimal solutions for all types of openings
Colour range of guide rails: 6 Colours with textured structure, 19 Colours with glossy finish		Standard guide rails – 11 sizes Reinforced guide rails – 5 sizes Special guide rails – angle, stand off, distance – 7 sizes

5 OCTAGONAL ROLL TUBES		Options for any type of roller shutter systems, rolling doors and rolling grills
Steel octagonal and round roll tubes – 5 sizes, 7 types		

6 CONTROL SYSTEMS		Range of drives for comfortable control and fulfillment of any tasks
Hand operators: strap, rope, cord, crank, assist and push-up spring mechanism. Electric drives and control elements Somfy, Nice, Nero Electronics and AN-Motors.		

7 RELIABLE OPERATION OF ROLLER SHUTTER COMPONENTS		Reliable operation and aesthetic look of the roller shutters
Caps, pulleys, ball bearing supports, retainer springs, distance rings, side locks, security locks, safety plates, entry guides, pvs plug buttons, stoppers, correction fluids etc.		

2

QUALITY ASSESSMENT AND PRODUCT TESTING

Testing of roller shutter systems wind resistance



Wind resistance

All ALUTECH roller shutter profiles are tested for wind resistance in accordance with EN13659, EN12424 on our in house test wall KS PC (Germany).

Wind resistance for roller shutters is as following:

- 600 Pascal according to EN 13659, this corresponds to the wind speed of 31,6 m/sec;
- Rolling doors – 1375 Pascal according to EN12424, this corresponds to the wind speed of 47,8 m/sec.

Control during the production process and in the laboratory



Laboratory control of profiles and accessories quality

ALUTECH quality control system comprises of over 40 control methods and more than 50 testing parameters.

- Testing of the profiles compliance the setted geometric parameters;
- surface quality testing;
- resistance against mechanical and chemical impact;
- foam quality etc.

Regular monitoring and testing of all the new products



Testing of new products

Зкшцк ыarket release all new products developed by ALUTECH are tested for the compatibility of the elements, compliance with technical and performance specifications, functionality etc.

ALUTECH quality assessment is different types and methods of testing, control and measuring.

Good winding parameters of ALUTECH profiles



Testing winding parameters of roller shutter curtain

All the ALUTECH new profiles are tested for winding parameters of roller shutter curtains depending on different sizes of shutter boxes, roll tubes and suspension types.

Operation reliability and high performance guaranteed.

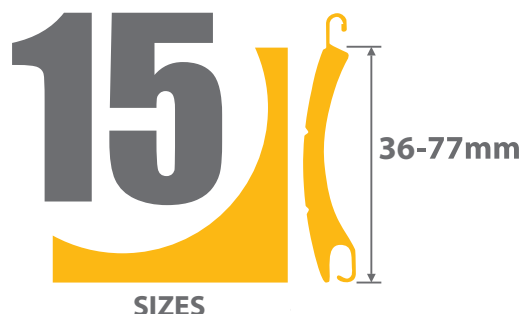
ROLLER SHUTTER SLATS

ROLL FORMED

2

Wide range of the profiles

- 15 sizes – AR/36, AR/37, AR/375, AR/39, AR/40, ARH/40, AR/41, AR/45, AR/52, AR/55m, AR/55, ARH/55, AR/555, AG/77, AG/77H;
- facility to install roller shutters in the openings with width up to 6 m and square up to 18 m²;
- the profiles with standard and high density foam insulation;
- perforated and non-perforated.



Profiles' height – from 36 up to 77 mm and width from 8,5 up to 19 mm



more than 30 colours

The optimal thickness of aluminium coil

The coil of the set thickness is always used in production of ALUTECH profiles. It guarantees stable strength characteristics of each profile – wind resistance and resistance to load impact, dent proof, increases durability of the profile.

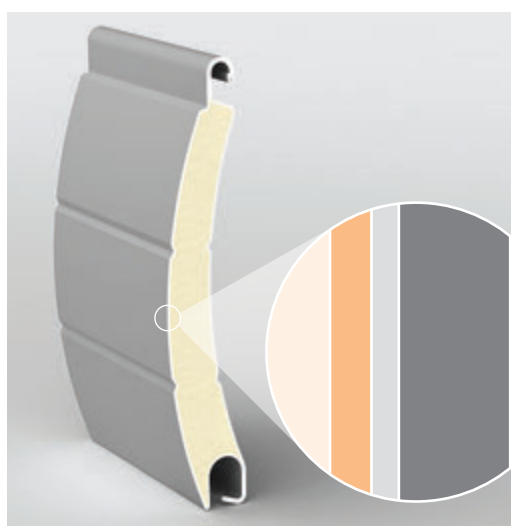
Thickness of the coil with coating is from 0,28 mm (for profile AR/37) up to 0,49 mm (for profile AG/77) depending on size of the profile.

Two-layer coating with polyamide particles

Resistance to rubbing and scratching, splitting and flaking, UV and temperature fluctuations, corrosion and abrasion. High-quality blank lacquering of the internal coil layer preserves foam adhesion and prevents any coil and profile geometry deformation.

High-quality foam filling

ALUTECH profiles are foam-filled evenly, porosity and cavity-free. It guarantees high resistance of the profiles to loads and minimizes deformation.



Quality is confirmed by the Test reports BASF Coating and AkzoNobel

Structure of the aluminium coil with lacquer coating

Front PUR/PA enamel (18-22 mcm)
Priming (3-7 mcm)
Chemical conversion coating (1 mcm)
Aluminium base (0,25-0,46 mm depending on the profile's size)
Blank lacquering (3-6 mcm)

Even, porosity and cavity-free foam-filling

Stable geometry of slats

The characteristics of each profile are always constant and correspond to the declared values. On a daily basis more than 13 values of the profile geometry are checked during the production process. The major values are the profile's thickness and height of the coated surface.

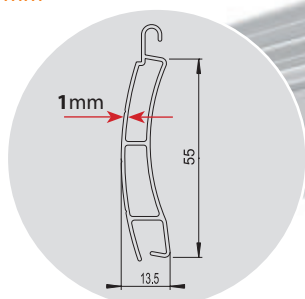


Constant control of the profiles' geometry during production

2

ROLLER SHUTTER SLATS EXTRUDED

One and two-walled slats.
Wall thickness –
1-2 mm



9 types of the extruded profiles

AER42, AER44/S, AER55/S, AEG56, AER56, AEG30/S, AEG84, AER84, AEG45/S

A wide range of the profiles makes it possible to install roller shutters in the openings up to 7 m and curtain surface area up to 21 m².

Roller shutters made of extruded profiles provide increased protection against break-in due to the greater thickness of profile walls and transversal rib.

Only primary alloys are used to produce the profiles



High-quality aluminium alloys

High-quality of the ALUTECH profiles is reached due to usage of only primary aluminium alloys.

Alloys contain 98,8–99,0% of primary aluminium. 1,0–1,2% of Mg, Si, Fe, Mn, Cu, Zn and Ti that improve solidity and flexibility of the material.

Quality of the lacquer coating

The lacquer coating is characterized by:

- resistance to mechanical effect;
- resistance to splitting and flaking;
- resistance to UV and temperature fluctuations;
- high resistance to corrosion;
- resistance to detergents and chemicals;
- stable brightness and constant colour.

Confirmed by QUALICOAT Certificate (Switzerland) and BASF Coating (Germany) and AkzoNobel (Sweden) Test reports.

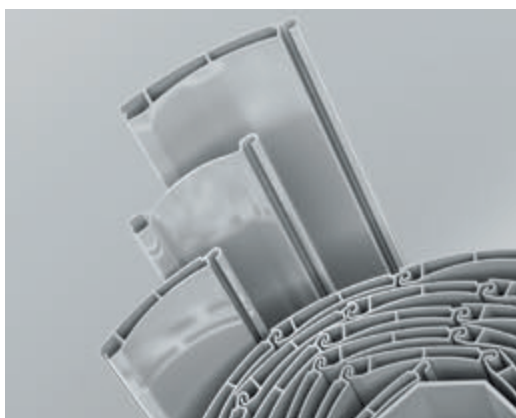
12 methods how to control the coating quality in accordance with standards ISO, ECCA, EN



High anti-corrosion values of the coating

High resistance of the extruded profiles' lacquer coating to corrosion is confirmed by QUALICOAT, SEASIDE CLASS Certificates (Zurich, Switzerland).

Good winding capacities of ALUTECH profiles



Optimal winding capacities of the curtain

Stable geometry and sickle-shaped configuration of ALUTECH profiles in the curtain guarantee good and constant winding capacities. This all leads to minimizing the cost of a roller shutter by applying smaller size end caps and shutter boxes.

SHUTTER BOXES AND END CAPS

3

Wide range of the shutter boxes and end caps

- 20°
- 45°
- Round
- Quarter-round
- 90° for built-in shutter boxes.

A wide range of different sizes from 125 up to 405 mm, end caps with pins, intermediate two-sided and through end caps for combined roller shutter systems. Round and quarter-round shutter boxes either roll-formed or extruded.



Five types of shutter boxes and end caps

Correct alignment of the shutter box to the end caps

Stable geometry and daily quality control of more than 10 parameters guarantee correct fitting of the shutter box to the end caps.



More than 25 sizes and 20 colours

High quality of the lacquer coating

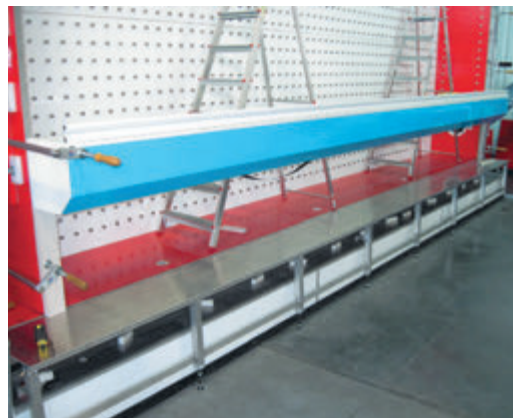
Resistant to splitting and flaking. Stable brightness and colour. Resistant to the detergents and chemicals, UV and temperature fluctuations.



High strength parameters of the shutter boxes

ALUTECH guarantee the stability requirements of their shutter boxes. Several thicknesses of coil are used for producing various sizes, for example sizes 125 to 180 mm use 0,75 mm, 205 mm we use 0.85mm and for 250 to 360 mm it is 0,95 mm thick.

ALUTECH extruded shutter boxes are much stronger than the roll-formed boxes. The wall thickness of the extruded shutter boxes is 2 mm.



Test of ALUTECH roller shutters against bending at a special testing equipment KS PC

Quality of the end caps casting

High quality of the ALUTECH end cap casting is achieved by the use of primary aluminium alloys and hi-tech equipment.

Good quality processing and powder-coating of the end caps emphasizes decorative features.

ALUTECH end caps correctly fit shutter boxes and guide rails.

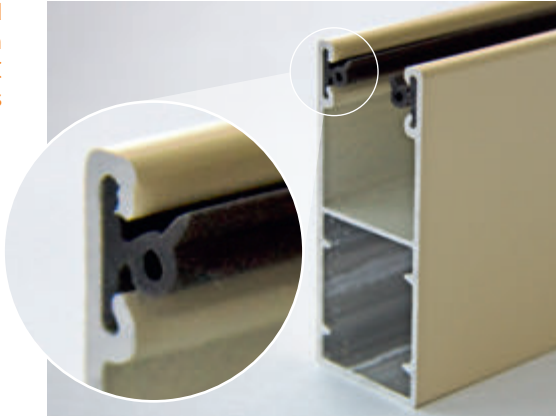


Surface of the ALUTECH end caps is smooth and roughless, edges are regular and even

4

GUIDE RAILS AND END SLATS

Guide rails and end slats with crimped PVC inserts

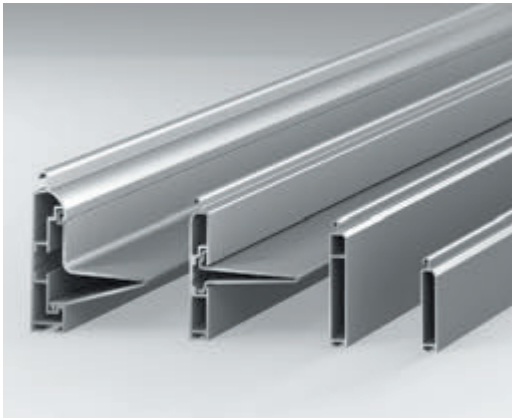


Different types of the guide rails

Wide range of the ALUTECH guide rails – more than 20 types – helps to match the best guide rail size for any roller shutter, for all apertures and those with difficult fixings and strengthened options for burglar resistant requirements.

1. Standard guide rails;
2. Reinforced guide rails to increase the burglar resistance requirements of the sites;
3. Special guide rails for easier mounting.

Wide range of colours – more than 25 colours

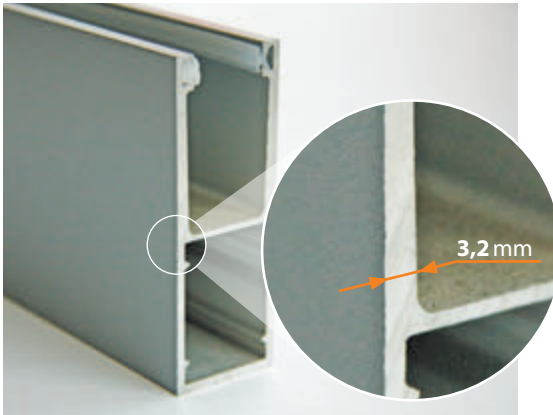


Wide range of the end slats

The end slats for all types of roller shutter profiles taking into account the peculiarities of openings, assembly types and customer wishes.

The colour range is more than 25 colours and there is a possibility to powder-coat in any RAL colour.

High quality of aluminium alloys and polymeric coating is confirmed by QUALICOAT, QUALANOD Certificates, BASF Coating GmbH and AkzoNobel test reports

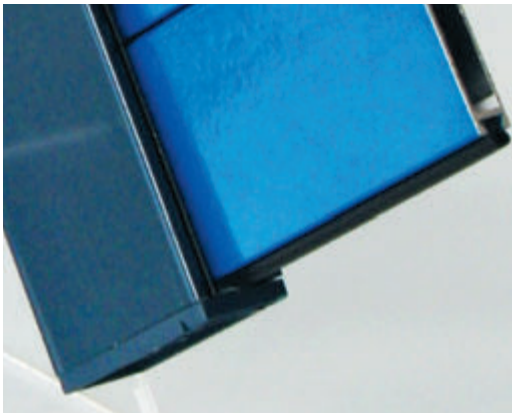


Production and powder-coating quality

ALUTECH guide rails and end slats are characterized by:

- high quality of the aluminium alloys;
- high anti-corrosion values of the coating;
- quality of the lacquer coating resistant to mechanical effect, cracking and flaking, UV and temperature fluctuations and by maintaining the brightness of the gloss coating.

Guide rail end caps for improved external appearance of the roller shutters



Wide range of accessories

- 9 kinds of inserts;
- PVC caps for the drilled and edge holes in 20 colours;
- stoppers in full colour range;
- quarter-round covers for the guide rails.

Most of the ALUTECH guide rails and end slats are supplied with the pressed-in PVC and brush inserts.

High quality octagonal tubes

ALUTECH octagonal tubes are manufactured of high-quality galvanized steel coil.

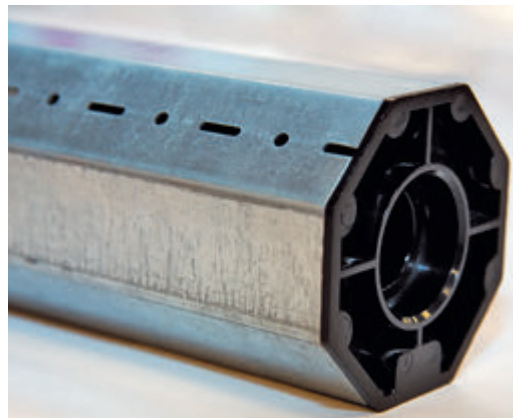
We offer tubes in 7 wall thicknesses from 0,5 mm up to 3,6 mm and in 5 sizes from 40 mm up to 108 mm.



Geometry control of ALUTECH octagonal tubes during the production cycle

Ideal fit of the tubes to the components

Stable geometry of ALUTECH octagonal tubes guarantees tolerance fitting of the tubes to caps, operator adaptors and other components. It also contributes to problem-free working of the operator and extended lifetime use of the roller shutter.



Ideal fit of ALUTECH tube with the universal cap

Wide range of operators for roller shutters

Simple, time-proved solutions for roller shutter operation. Wide range of classic hand operators all made from high quality parts and assemblies.

Plastic coilers, pulleys, caps, strap, rope and cord guides have a compact design and attractive external image.



ALUTECH hand operators: strap, rope, cord and hand crank operators and push-up-spring mechanism

Wide range of the accessories and components for roller shutter systems

ALUTECH offers all components required to make a roller shutter – caps, pulleys, supports, retainer springs, distance rings, side locks, security locks, safety plates, entry guides, PVC plug buttons, stoppers, correction fluids, etc.



Production and assembly are performed at the enterprises of ALUTECH Group of companies. Proved quality of the materials and manufacture



Technology

ALUTECH today has its own hi-tech equipment to produce extruded profiles, powder-coating complex of aluminium and steel coils, 11 roll-formed production lines, automatic equipment of aluminium high-pressure diecasting, lines for powder coating and anodizing.



Quality

Quality of ALUTECH products is confirmed by the Certificates and Test reports issued by the authorized international labs and R&D centers in Belgium, Switzerland, Germany, Sweden and Czech Republic. Quality control is performed in accordance with the European standards ISO, ECCA, EN.



Constant development

Following all modern trends we offer a wide range of profiles and components for roller shutter systems as well as non-standard products developed according to the requirements and wishes of our partners. We assist our customers in promotion, share our experience, train and consult them.

The roller shutters made of ALUTECH components are installed on millions of sites in 35 countries of the world



ALUTECH roller shutter profiles and components are sold in Germany, France, United Kingdom, Austria, Netherlands, Czech Republic and other Western and Eastern European countries, Asia and CIS countries

