



■ ■ ■ ABOUT US:

Aluminum Technology Extrusion ALUTEX 2000 s.a.l. is a company specializing in the production of Aluminum profiles of various shapes and dimensions, beginning with the process of extrusion, followed by either anodizing, powder coating or wood effect surface finishing, depending on the production specifications of the particular aluminum profiles. ALUTEX 2000 s.a.l. is a Lebanese based company located in the middle of the Bekaa Valley, situated in the Industrial City of Zahle around 50km east of Beirut, the Capital of Lebanon.

Our plant is logistically located to meet customers' needs and expectations in terms

sliding doors. Decorative and furniture purposes, fences, frames, grills, air conditioning and heating elements, accessories going to more complex utilities, are dependent on our customers' demands.

ALUTEX 2000 s.a.l. products conform to European, British & Lebanese Standard norms. LIBNOR regular checks and inspections are made by the Lebanese Industrial Research Institution IRI of which we are proud to be granted its certificate that ensures the best quality products for our customers.

Our aim is to achieve customer satisfaction by producing premium quality products through the utilization of a qualified and international work force. Top quality raw

of delivery of the finished products, and facilities of distribution channels.

Currently, we serve a significant proportion of the local market of Aluminum profile demands, our finished products are well known in the neighboring Arab Countries, international distant countries, wide African market, and some European and Far East Countries. The Aluminum profiles produced by ALUTEX 2000 s.a.l. are versatile in terms of shape and utility. Our profiles are used in a wide spectrum of applications ranging from standard profiles, building and architectural materials such as doors,

materials are used, together with our competitive prices, we are expanding and enlarging our production capacity, and penetrating new markets worldwide.





■ ■ ■ EXTRUSION:

The process of extrusion is the crux of the aluminum profile production process. During this process, raw material billets are transformed into the desired aluminum profiles, the combined action of heat and force within the extrusion press, dictate the dynamic flow of aluminum, through the die, producing a specified profile.

Following extrusion, the aluminum profiles which are cut according to specified lengths are loaded into an Aging Furnace and left for an interval range of time,

ALUTEX ALLOYS

Alloy	6063	
Element	MIN	MAX
% Silicon, Si	0.41 – 0.46	
% Iron, Fe	0.15-0.19	
% Magnesium, Mg	0.48-0.52	
% Manganese, Mn	0.02	
% Copper, Cu	0.02	
% Zinc, Zn	0.02	
% Titanium, Ti	0.003-0.02	
% Chromium, Cr	0.02	
% Others	0.10	

*% by weight except where a range is shown

*All values are maximum unless minimum mentioned

*Regular checks are conducted to confirm the chemical composition of the above mentioned alloys.

so that the newly produced aluminum profiles may acquire the property of structural hardness following extrusion. The temperatures applied to the aluminum profiles and the time interval for aging varies according to the type of the profile in question. Aging is followed by series of quality control inspections.

Our plant is equipped with a 1650 ton press and a second press of 1880 ton (brand new), with a capacity of 25 tons extrusion daily, producing high quality aluminum profiles having innumerable shapes and dimensions.

Our range includes building systems, for both internal and external, Industrial, Furnishings, Transport and Mechanical industries.

Quality specifications in ALUTEX meet local and international standards such as LIBNOR (Lebanese norm), DIN (GERMAN norm), BS (British standards).

In order to meet the highest quality finish, ALUTEX uses only the highest quality billet, from the international market.

ALLOYS:

Alloys and compositions according to international aluminum association as shown in the following table:

- Dimensions And Shapes:

Dimensions tolerances are as follows:

I – Standard dimension tolerances according to DIN 1748: this tolerance is applicable to none architectural and all extruded sections, bars and tubes unless stated under II

II – Special dimensions tolerances according to DIN 17615: this is applicable for high precision architectural sections in 6063 alloy only.

- Size Range:

Solid Flat Dies: Extrusion of up to 180 mm wide.

Hollow Sections: Extrusion of up to 150 mm wide.

- Surface Quality:

Surface quality checks are made during every stage of production to ensure that the surface is free from roughness and steps.

■ ■ ■ ANODIZING:

Anodizing is an Electro-Chemical process used to create a protective film up to 30µms of aluminum oxide on the surface of an aluminum profile. This gives the metal a high degree of resistance against corrosion and an attractive finish in a wide range of colors.

In addition to the formation of a protective film, a wide range of colors and shades can be obtained through the process of Electro-color, which is stated below:

To ensure the product quality, the following test and checks are carried out throughout the process daily and periodically.

A- Surface finish: The whole surface of extrusions is checked to ensure that the surface is free from mechanical and metallurgical defects.

B- Coat thickness: Anodic coat thickness on all surfaces is checked by an Eddy current instrument (Iso-scope).

C- Color Variations: The color variation of ALUTEX products is controlled within a close range of ALUTEX's own prepared samples.

D- Sealing Quality: A sealing (Stability) test is done by measuring samples throughout the process.

E- The effect of sunlight, heat, salt and atmospheric conditions: our process meets local and international standards. This is periodically confirmed by having our product samples consequently checked in European Laboratories.



■ ■ ■ POWDER COATING:

The polyester powder coating on Aluminum extrusion offers an excellent protection and a wide range of color choice.

Special Polyester resins which have a proven record of corrosion protection and resistance against UV radiation are used along with binders and pigments.

The polyester powder is electro-statically sprayed on to the cleaned and chromated aluminum extrusions, and then it is thermally cured to produce the final product.

The polyester powder coating on aluminum extrusions produced at ALUTEX conforms to local and international aluminum finishing standards such as QUALICOAT.

A- PRE-TREATMENT: Prior to powder coating, the pre-treatment baths are regularly checked to ensure a clean chromated production.

B- COAT THICKNESS: Powder coat thickness on significant surfaces is checked by Eddycurrent instrument (Iso-scope) to ensure a minimum of 60µm coat on exposed surfaces.

C- GLOSS: Periodical checks are made to confirm that gloss is within a specified range.

D- ADHESION: Routine cross-hatch tests are done to confirm a good adhesion quality.

E- ELASTICITY: Routine tests are carried out such

as bending and impact testing to confirm acceptable elasticity of the coating.

F- HARDNESS: Periodical tests are made to confirm the surface hardness of the coating.

G- COLOR: An international color code system is followed (Ral code).

H- CORROSION AND WEATHER: Continuous tests in European Labs are made to check the powder coating resistance to corrosion and different weather conditions.

Regular
quality checks
are made during
production to ensure a high
quality product as follows:

■ ■ ■ WOOD EFFECT:

DURABILITY OF ALUMINUM & THE BEAUTY OF WOOD INTRODUCE OUR WOOD EFFECT PROFILES.

WOOD EFFECT TREATMENT:

Then, unlike other technological decoration processes by sublimation which for example use the performed decoration film, having the same shape of a bag, sock or envelop, the process used by our machine simultaneously creates the wrapping or the bag around the object, considering its dimension.

The so prepared profiles are then transferred to an oven

by means of a depression system to assure the adhesion of the film to the external shape of the profiles, as well as to eliminate the gasses produced during the heating of the painted metal.

When the profiles reach the sublimation temperature indicated by our film supplier, they are automatically driven out of the oven, and all of the film wraps can be removed. At this point all the profiles are ready to be packed and sent to the final client.

A wide range of Wood Effect colors can be requested according to customers' requests.







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