

Pre Qualification

1. Message for the Management:

Amongst the most outstanding achievements in the UAE is the remarkable boost realized by the national industry, matching and duly competing with the most established companies in the world.

Such a success is certainly the crowning touch of undeniable efforts deployed by the national council in enhancing and keeping high the image of the UAE Cast Aluminium Industries is definitely an eloquent example of the success, it is now regarded as a confirmed landmark in the field.

The comfortable position of Cast Aluminium Industries in the market is the result of the combination of different factors, among these, the highly qualified and hardworking staff. The fluidity and effectiveness of the managerial staff, the inventive and meticulous technical and artistic work and finally perfect execution of the final product.

In order to offer nothing but the best to its clients, Cast Aluminium Industries they live at the rhythm of three commandments, which are, delivery on time, unbeatable prices and unmatched quality.

2. The Quality Management System

By following the schematic procedure, the Company works on different business matters with proficiency. Everything is documented and carefully studied by the Management. The procedure has been made resilient enough.

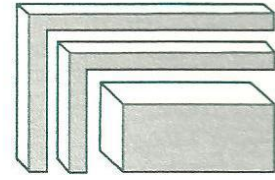
To keep abreast of the profound changes in the spectacular world of business.

3. Marketing and Sales Department

We identify clients' needs and provide solutions whenever and wherever needed. Our experienced sales and marketing team is at your service all the time.

4. Design Department

Each project is meticulously designed considering its features as well as fundamental requirements such as structural stability, air tightness and water tightness. Design and creation of new products possible to help realize the dreams of consultants / clients.



5. Fabrication Department

Equipped with the latest models machinery ensures, precise fabrication and air/water tight hairline joints. All facilities including TIG/MIG welding, material bending, punching are available in-home.

6. Product Department

A highly experienced team of engineers and technicians are always on site taking the challenge right from design, work execution, installation, until the satisfactory handing over to client according to the commitments.

7. Types of our Specialized:

The company main objects of activities are to undertake major projects from all over Emirates and Overseas. Cast Aluminium Industries fabricate supplies and installs the widest range of high quality products to international specifications and standards. We are proud of the quality of our products right from design, material procurements, material processing work execution and our commitment to meet the customer requirements. Our products are categorized as follows:

- a. Aluminium & Cast Aluminium Products (Fences, Gates, Balconies, Screens, ---- etc)
- b. Mild Steel & Wrought Iron Products (Fences, Gates, Balconies, Screens, ---- etc)

Installation is carried out by our skilled & friendly team.

a. Aluminium & Cast Aluminium Products

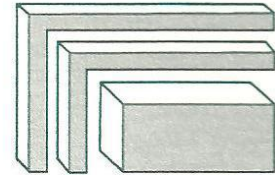
We are specialized in the following:

- ❖ All types of Cast Aluminium Gates (Swing or Sliding) Manual or Automatic.
- ❖ All types of Cast Aluminium Balconies (hollow or solid)
- ❖ All types of Cast Aluminium Staircases Railing (with wooden handrail or Aluminium handrail)
- ❖ All decorative Screens, Fences, Ladders

b. Wrought Iron Products

We fabricate the latest designs of Wrought Iron products such as:

- ❖ Wrought Iron Gates (Swing or Sliding) Manual or Automatic.
- ❖ Wrought Iron Balconies (hollow or solid)
- ❖ Wrought Iron Staircases & Hand Railings (with wooden handrail or Aluminium handrail)
- ❖ Wrought Iron decorative Screens, Fences, Window Grills and Steel Ladders.



METHOD STATEMENT

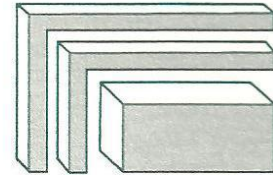
Quality Control of Materials

ALUMINIUM & STEEL:

- a. Aluminium Extrusions will be supplied in accordance to BS 1474:1987, DIN 1748 part 1 & part 4 as general tolerance and special tolerances DIN 17615 part 3 upon request from client for specific requirements.
- b. Cast Aluminium components will be supplied in accordance to BS 1490:1988. These Aluminium components are powder coated with "Super Durable Powder coating" to Jotun powder coating PE-SDF 2003F 88T13 or equal approved. Powder coating components will have guarantee for 10 (Ten) years.
- c. Steel Hollow Sections & Wrought Iron will be supplied in accordance to DIN 17100 RSt 37-2, BS 4360.

FABRICATION & INSTALLATION:

- a. We are responsible for the design, manufacture, and installations to suit each specific condition complying with the requirements specified in the drawings.
- b. Metal members shall be isolated where necessary to prevent corrosion due to different metal to metal contact.
- c. We fabricate and install all members plumb true and square. Accurately fit all members to provide tight installations and provide clearances required due to expansion, contraction, and deflection of building structure and frames.
- d. After adjustments, the anchorage devices shall be positively locked / fixed to prevent movements once alignment is achieved.
- e. Final product shall be free from sharp edges, burn and like.
- f. The anchoring of all Metal elements would accommodate movements of the building structure and of other elements attached without leading on stressing the aluminium construction.
- g. Thermal Movement: The balustrade frame work assemblies shall be fabricated and installed in the prepared locations with sufficient tolerance and when necessary, Expansion joints incorporated within the couplings to provide for expansion and contraction as will be caused by the climatic conditions and temperature changes without buckling, distortion of joints, damage to the sealants (or) other detrimental effects over the temperature range 5°C to 55°C.

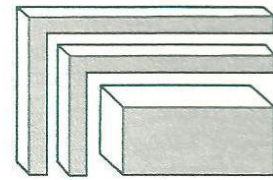


- h. All fixing to the structure, adjacent components etc will be concealed. We will provide concealed fasteners for inter connecting ornamental metal components and for attaching them to other work, unless otherwise indicated.
- i. Exposed Fastening if Occurring: Finished and colored to match the finish and color of the material in which they appear. The finish provided shall be permanent and durable.
- j. We will provide appropriate packing to protect all finished surfaces prior to leaving the factory and such protection shall be maintained until the products are installed, and protected on site until the building is handed over.
- k. Colour and sheens shall be uniform with no variations detectable by the naked eye at 1m distance. Blemishes in Metal are defined as flaws/stains, paints runs on other indication that mars the aesthetic appearance of Aluminium / Steel and may be rejected.
- l. Scratches in Metal are defined as being a mark on the Metal surfaces which penetrates the powder coated on anodized surface, and may be rejected.

METHOD STATEMENT (Site Measurement)

- a. Measurements are taken on site prior to the manufacture of items.
- b. **Site Visit:** Our Site Engineer will visit the site to ascertain site conditions and the scope of the works. All work as Aluminium / Steel to match the specification, samples colours, interpretation of the drawings and material etc. We will allow for all cost in our rates to satisfy the above requirements as no extras shall be entertained due to our failure to do so.
- c. **Specifications:** For general specification (applicable to all items), drawings, other details regarding the specification can be obtained from the customer.
- d. **Sample:** We submit finished samples after acceptance of the tender. All samples to be approved by the Main Contractor / Consultant.
- e. **Grouting:** Base support fixing for Framed Railing to be done on given finish floor level, coring & grouting with approval grout portion shall be uniform homogeneous.
 - Fixing of Aluminium / Steel Railing on base supported with extended Metal spacers having a min length of 60mm to 80mm grouted and sealed with:
 - a) Conbextra H.F.:- mixed with water, dry time (3 hours).
 - b) LokFix S80 :- mixed with powder & chemical, dry time (5 minutes)

This shall be concealed type, if (i.e. any screws & bolts fixed shall not be visible).



- f. **Fixing of Lattice Panels:** This Lattice is to be fabricated as per design. In Cast Aluminium / Wrought Iron 1000mm x 1000mm Panels, as per given floor level, before installation is carried out at site by our skilled team, Panels are to be Powder Coated or in Special Antique color finish. Extended rods will be fixed from the roof structure to hold panels (which are to be provided by others), our panels will be having adjustable setting at appropriate fixing to have parallel adjustments to each other panels, the fixing are to make with adjustable bolts & nuts.

METHOD STATEMENT (Powder Coating)

The process of powder coating on metal consists of three (3) main stages: pretreatment, coating and curing.

Pretreatment forms a chemical conversion coating that cleans and passivity the metal surface, retards corrosion and provides an ideal surface for paint adhesion. To force the water out of the conversion coating, the pretreated metal is then dried in a gas-fired oven at a temperature of 80° – 100° C.

The coating is applied by charging the powder particles with high voltage and low amperage. The forces of the electric field conduct the particle to the work piece. The excess powder is sucked off, recovered and filtered. In special cases, e.g. profiles with inaccessible grooves, this is followed by additional manual coating.

The selection of thermo set powders available for architectural use is as follows:

<u>Powder Types Code</u>		<u>Uses</u>
1. Epoxy	(EP)	Internal
2. Epoxy-Polyester	(MX)	Internal/Appliance
3. Polyester	(PE)	External (No UV resistance)
4. Polyester-Premium	(PE-F)	External (Building Façade)
5. Super Durable	(PE-SDF)	External

The coating is selected depending on the customer needs. For special cases wherein metallic finish is required, an additional clear powder is applied to avoid bleaching of color to ultra-violet (UV) light.

The coating thickness usually ranges from 60 – 120 microns (µm) with a gloss level from matt (30±5%) reduce gloss (77±7%) to full gloss (90 % and above). These parameters may vary as per customer's specification.

The work piece is cure in an infrared and convection oven for 10 – 15 minutes at 180 – 200°C metal temperature. Curing time may vary depending upon the thickness of the profiles being process.

Eng. Ali Merza
General Manager