



AL **MABANI**  
AL UMUMIYYAH

# DUCT FACTORY

## COMPANY PROFILE



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2nd industrial area - Riyadh



www.almabani.net



Industrial Zone - Yanbu

# CONTENTS...

ABOUT US	04
MISSION & VISION	06
OUR POLICY	08
PRODUCTS & SERVICES	09
1 DUCTS	10
2 DAMPERS	16
3 AIR OUTLETS	19
4 AIR TERMINALS	21
5 ACOUSTIC PRODUCTS	21
6 LOUVERS	22
7 PLENUM & DIFFUSER BOXES	23
8 FILTERS	23
9 METAL COIL & SHEETS	24
10 DUCT ACCESSORIES	25
11 MODULES	26
FACILITY	28
MAJOR PROJECTS	29
WE ARE CERTIFIED	34
WE PROUDLY SERVE TO	34



## ABOUT US

**Al Mabani Al Umumiyah** is Industries which is one of the leading manufacturers of HVAC ducts and duct accessories in Middle-East.

Al Mabani has expanded rapidly today it has branches in UAE, Bahrain and Egypt with headquarters located in Abu Dhabi, UAE from 1994.

**Al Mabani** team are well experienced because they were involved in producing and distributing HVAC products from more than 30 years and it has been associated with some of the prestigious projects and leading MEP contractors in the region throughout this period.

**Al Mabani** team has completed many projects in Saudi Arabia and U.A.E **excess of AED 350 million** and numerous landmarks stand testimony to the firm's engineering capabilities.

**Al Mabani** with **SASCO** has also made considerable **Exports in Foreign Markets**, mostly to Bahrain, Qatar, Oman, Egypt, Libya and North Africa.

**Al Mabani** has maintained a policy of continuous investment in new products, technology, manufacturing expertise and ongoing training. The Riyadh - KSA plant is located in **Industrial Area** with over **10,000 square meter production floor area** equipped with **state-of-the-art CNC** machinery and skilled workforce enable Al Mabani to make its products with the shortest lead time and the highest quality. Owing to the large capacity of the plant and astute management skills.

**Al Mabani** offers most reliable and efficient **HVAC** products manufacturing services in Saudi Arabia. Al Mabani produces a total of **5500 sq.mtr** duct per shift (08 hrs). Approx. 4000 to 5000 sq.mtr Duct per shift (08 hrs) in Al Mabani located in Riyadh, Saudi Arabia and additional 4000 - 5000 sq.mtr Duct per shift (08 hrs) in SASCO Located in Abu Dhabi, UAE with full support of its logistics team to become one of the **largest producers** of Pre-fabricated GI Duct in Saudi Arabia.

## ABOUT US

**Al Mabani** offers all types of High Quality Ductwork conform to various international Ductwork Standards. The other product ranges includes **GI Duct, BS/SS Duct, Pre Insulated Duct, Aluminium Duct, Non Coated Fire Rated Duct, Dampers, Air Outlets, Sound Attenuators, VAV, Plenum Box, Access Door, Louver, Pre fabricated Modules etc.**

**Al Mabani's products & services** are registered and approved in Red Sea, Sulaiman Al Habib, Neom, Amalaa, SWCC, SE, NEOM, Tatweer Education Holdings, Elseif Engineering and with all major developers & authorities.

**Al Mabani** fire rated ducts are tested in APPLUS laboratories, fire Dampers are tested & approved by UL sound attenuators are tested in SRL Laboratories UK and louvers in BSRIA UK.

The products manufactured are tested according to ASHRAE Standards. Duct construction as per **DW144 /ASHRAE / SMACNA** standards. Familiarity of customer requirements in this field has led Al Mabani to adapt their products to suit even the most demanding needs.

**Al Mabani** has been implemented **Quality Management System** to meet the specified requirements of Quality System ISO 9001. Manufacturing and assembly is carried out under strict controls and procedures in accordance with Quality Assurance System **ISO 9001:2015**.

**Al Mabani** has a strong management team with an aggregate experience of over

**60 years** in Air-conditioning Ductwork industry. Projects are completed on time and on budget. With Al Mabani extensive resources and knowledge gained from working in all sectors of the industry, they are able to tailor a project team to meet every client requirement.

**Al Mabani** also have a highly skilled workforce ensure strength and reliability.

# MISSION

In line with our core values, our mission is to innovate and build on our history of product excellence, to provide sustainable, reliable, quality products and services to our customers and set a continuously evolving standard for our industry as a whole

To deliver an integrated solution designed according to specification using state of art machinery of HVAC ductwork

# VISION

Our vision is to be the Middle East leader in the field of **manufacturing HVAC systems** and workplace work quality solutions in order to provide a better, safer and healthier life for people everywhere.

Leading the Air Duct market by continuously providing an innovative optimum solution

# OUR CORE VALUES

## The company ethos stands for:



### Integrity:

In our dealings with customers, employees, authorities, suppliers, neighbors and the public.



### Quality & Accuracy:

In our outcomes, products and services, in our work process, manufacturing methods and general management.



### Technology:

In our particular fields of research, work alternative methods, product development, engineering and manufacturing.



### Growth:

In sales, profits and strength within our areas of special interest and competence.



### Progress:

Toward an environment where our people have increasing opportunities for contribution, fulfillment and reward.



### Productivity:

In order to cater the increase in demand in the region with minimal lead time Al Mabani has two plants in Yanbu & Riyadh with a cumulative daily output of 4000 to 5000 sqm.



### Customer Oriented:

We are dedicated to provide personalized and tailored solutions to meet customer unique needs.

# KEY STRENGTH

All kind of HVAC ductwork and accessories under one roof.

An extensive **Coil Stock** of galvanized iron coil more than **1000 Ton** that can make up to **100,000 square meters** of GI Ducts. We keep stock of all coils from the most trusted brand such as SABIC, Nippon, Jindal-India, AGIS-UAE .Also pre-insulated: black steel and stainless steel ducts are supplied.

Some of the key distinctive characteristics of Al Mabani which makes it the industry leader are, **superior quality of product**, reliability of services, **shortest lead time**, highly competitive price. Large capacity, wide range of size & thickness, Large technical expertise, focused customer needs, Special identification sticker for easy identification and installation, **tailor made solutions**, Skilled workmanship in making tailor made ducts to address the demand, **intensive quality and safety assurance program** and the prominent name Al Mabani as the industrial leader in HVAC duct and duct accessories.

**Al Mabani's** commitment to service and customer care underpins their efforts at every stage. From the inception of a project, their Business Development Managers, backed up by their fully computerized estimating department, provide prompt and accurate handling of pre-contract enquiries, quotations and budgets. With the extensive experience they proud themselves on flexibility and problem solving skills that enable them to offer value from the beginning.

From start to completion, every project undertaken by **Al Mabani** is closely monitored to ensure its smooth progress. From **Electromechanical projects**, HVAC products, ductwork manufacture and installation contracts to the custom manufacture of individual specialized items, uppermost in our priorities are the total satisfaction of their customers.

Certified to **ISO 45001:2018 Health & Safety Standards, ISO 14001:2015 Environmental Management System and ISO 9001-2015 Standards** our commitment to quality never wavers. Al Mabani continuously drive for improvement, actively participating in the Construction best practice program.

We believe that by working in partnership with our clients and suppliers we can achieve the vision of an efficient, innovative and cost-effective industry.

Closely monitoring our customer and project requirements from start to finish also enables us to benchmark our performance using industry standard Key Performance Indicators. The bench marking process allows us to keep abreast with the industries voice and meeting the demand on time without zero discrepancy.



# QUALITY POLICY

To provide high quality products with the shortest lead time and with competitive price to serve the national and international market while continually improve the process with adaptation of latest technology and upgrading the skillset of the personnel

We, the management and employees In Al Mabani are committed to realize from within an effective and up to date Quality management System targeting utmost customer satisfaction

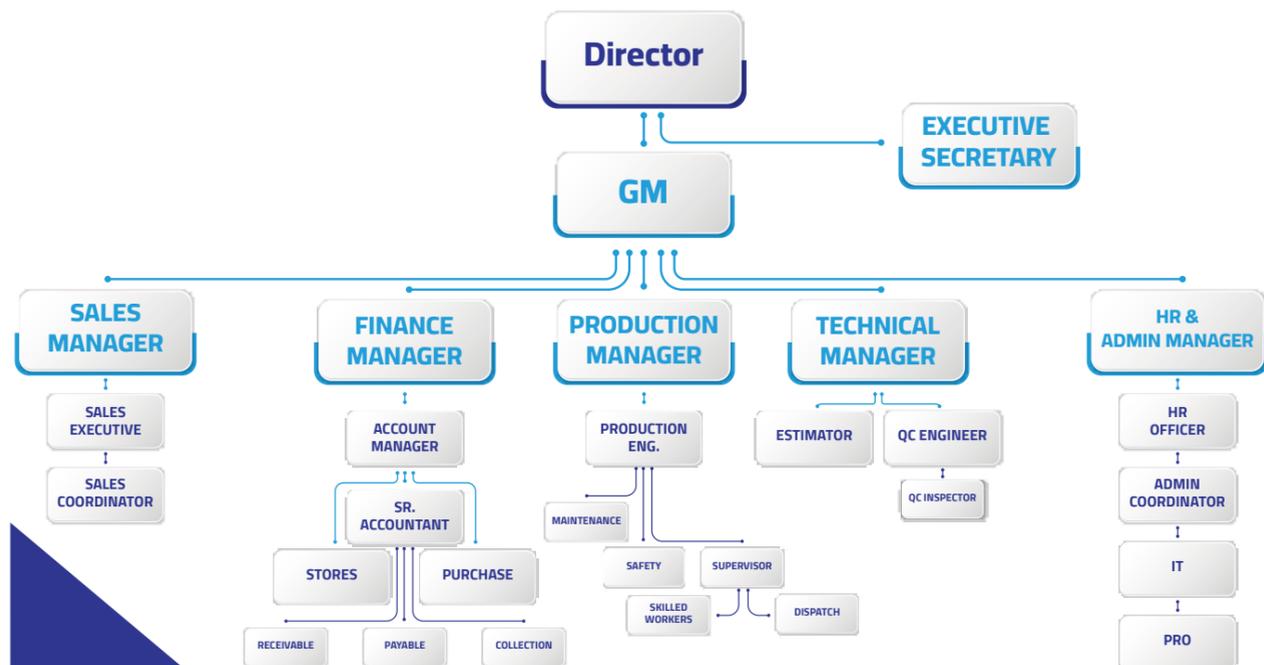
# HEALTH & SAFETY

Al Mabani Is committed to a strong safety program that protects its personnel, guest, our clients and its property and the public from accidents. With rigorous training and safety awareness campaign the management encourage all the employees in Al Mabani to work towards eliminating any accidents in the factory. An injury and accident-free workplace is our goal.

# ENVIRONMENTAL POLICY

Its our commitment to strictly abide by the local and international codes to minimize the pollution and carbon emission that will harm the environment. Our aim is to cut down the consumption of electricity and minimize any sort of biohazard waste.

# ORGANIZATION CHART



# PRODUCTS INTRODUCTION

when it comes to the air quality and ventilation of commercial and residential buildings, air ducts are a crucial component. Maximizing the efficiency of your ductwork can improve the performance of your "Heating, Ventilation and Air Conditioning" Systems (HVAC). As a result, you lower your environmental impact which in turn improves the bottom line for project stakeholders.

Al Mabani provide a full range of specialist HVAC products and services for the residential and commercial sectors including design, manufacturing/fabrication and on-site installation.

## "Professional Ductwork Involves More Than Just Ducts"

Al Mabani understand the importance of energy-efficient HVAC systems. The design intent of all HVAC components is carried out with a core focus on optimized flow and reduced energy consumption, resulting in increased building efficiency and operational performance.

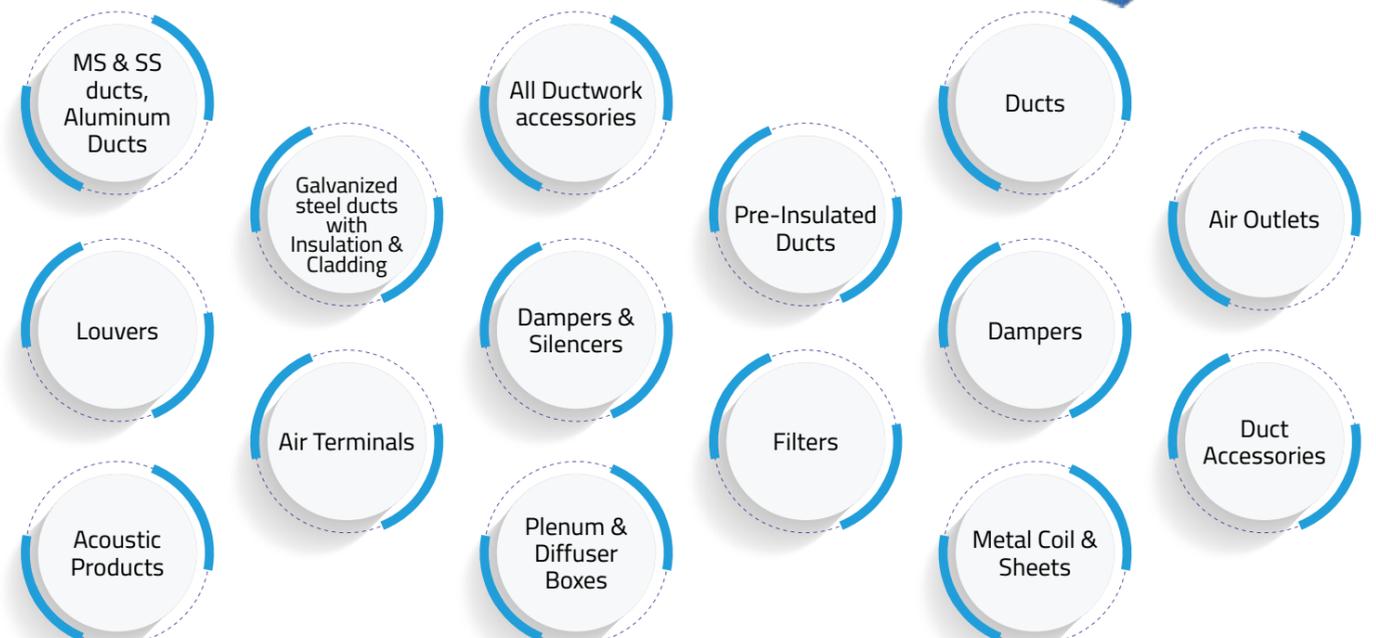
Our development is driven by a collaborative effort and strong leadership. Our diverse and experienced team of qualified design engineers and manufacturing/installation technicians ensure all project needs are met.

Al Mabani operates on ISO 9001, 1400, & OHSAS 18001 certified & integrated QHSE Management system.

# AL MABANI AL UMUMIYAH SOLUTIONS



Al Mabani offers full range of "Design, Manufacture & Install" services for the following products:



# 1 DUCT

## GI DUCT WORK

Ducts are conduits or passages used in heating, ventilation, and air conditioning (HVAC) to deliver and remove air.

Rectangular Ductwork fabricated from lock forming quality GI sheet conforms to ASTM A 653 , Z275 coating . The ducts are fabricated in accordance with SMACNA, DW 142, DW 144 standards



### AVAILABILITY:

#### Thickness:

26 Gauge to 16 Gauge

#### Transverse Connection:

S&C, Self-Flange, Slip On Flange, TDC Flange, Coupler & Angle Flange

#### Reinforcement:

TDC, Slide On Flange, Angle Flange

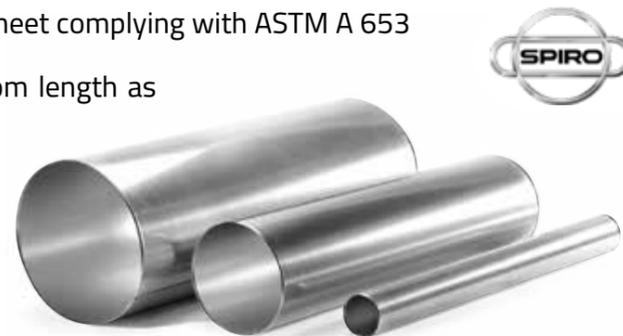
#### Tie Rod

M10, M12 & M16 (Threaded / Plain)

Product Code	Detail
GI-R-LF	GI Rectangular Duct with Lock Forming Joint
GI-R-W	GI Rectangular with Welded Joint
GI-C-LF	GI Round Duct with Lock Forming Joint
GI-R-LF	GI Round Duct with Welded Joint
GI-DW-T	GI Double Wall Thermal Duct
GI-DW-A	GI Double Wall Accoustic Duct

## ROUND DUCT

- The round s duct made lock forming quality GI sheet complying with ASTM A 653 & Z275 coating.
- Standard length of round duct is 1200 m custom length as per request.
- Diameter range: 100-1500 mm
- Thickness range: 0.5 to 3 mm
- Material: GI, AI, SS



## DOUBLE WALL DUCT

GI Double Wall Duct available with Fibreglass & Rubber Insulation



## PIR & PHENOLIC PRE-INSULATED DUCTS

High quality, light weight & fiber free pre insulated ducts made in state of the art CNC machines enables easy installation, eco friendly and economic alternative.

Material: PIR, PAL Eco, Phenolic, UL 181 phenolic

Duct Thickness: 20 / 30 mm

Pre insulated ducts are available in the following material



### AVAILABILITY:

#### Thickness:

20MM & 30MM

#### Transverse Connection:

PVC Profile & Aluminium Profile

#### Reinforcement:

PVC / Aluminium

Product Code	Detail
PIR-PVC	Pre Insulated Duct (PIR) Normal with PVC Flange
PIR-AL	Pre Insulated Duct (PIR) Normal with Aluminium Flange
PH-PVC	Pre Insulated Duct (Phenolic UL181) with PVC Flange Aluminium Tape &
PH-AL	Pre Insulated Duct (Phenolic UL181) with Aluminium Flange & Aluminium Tape

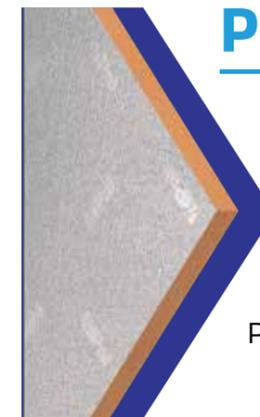
## PIR DUCTS

Panels comprise al high performance, rigid thermosetting polyisocyanurate (PIR) insulation core. The insulation core is faced on both sides with an embossed Aluminium foil.

### PIR Panels have a fibre-free and closed cell insulation core.

- Fibre-free core
- Low thermal conductivity
- Low air-leakage
- Low-weight

## PHENOLIC PANELS



Phenolic Panels have a high performance, rigid thermoset phenolic insulation core. The panels are faced with an embossed aluminum foil on one side. System is available in 20/30 mm thicknesses which are UL 181 Listed - standard for Factory - Made Air Ducts.

Phenolic Panels have a fibre-free and closed cell insulation core, which has been manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP).

- UL Listed
- Fibre-free core
- Low weight
- CFCs/HCFCs-free
- Low GW
- UL Listed Class 1 air duct

## ECO PANELS

Eco Panels have a high performance, rigid thermoset Polyisocyanurate (PIR) or Polyurethane (PUR) insulation core. The insulation core is faced on one side with an embossed aluminum foil and a smooth aluminum foil on the other.

Eco panels are protected with Biomaster antimicrobial technology that resists against the spread of surface bacteria. Fiber-free core Biomaster antimicrobial technology

- Antimicrobial Coating
- Resists spread of bacteria
- Low Air-leakage
- Especially suitable for clinics, hospitals, laboratories and the food & beverage industries.



# CIRCULAR / SPIRAL DUCT SYSTEM

## SPIRAL DUCT



- The round spiral duct made lock forming quality SS/GI sheet complying with ASTM A 653 & Z275 coating.
- Standard length of spiral duct is 4000m custom length as per request.
- Spiral ducts can be made in various diameter from 100 mm to 1500 mm and in double wall with insulation.
- Al Mabani Spiral duct construction complies with the SMACNA & DW 144 standards.



### AVAILABILITY:

#### Thickness:

26 Gauge to 16 Gauge

#### Transverse Connection:

Coupler, Round Flange, Spiral Flange

#### Insulation:

Rubber, XLPE, Fibreglass, Rockwool

Product Code	Detail
SP-SW	GI Single Wall Spiral Duct
SP-DW-FB	GI Double Wall Wall Spiral Duct



## CIRCULAR DUCT FITTINGS

Circular duct fittings are made of metal one gauge heavier than the straight round or spiral duct.

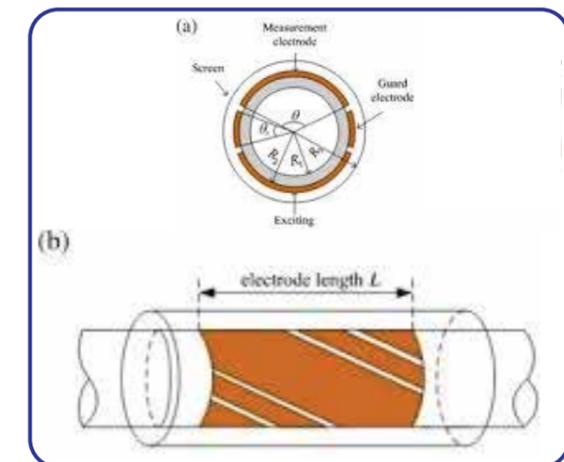
## CIRCULAR DUCT JOINING

Circular duct & fittings are connected with internal/external coupler or circular flange joint system.



## DOUBLE WALL DUCT

Factory made Double wall spiral duct available with external fiberglass or rubber insulation and metal jacketing. The jacketing or cladding can be made in aluminum, galvanized sheet or stainless-steel sheet

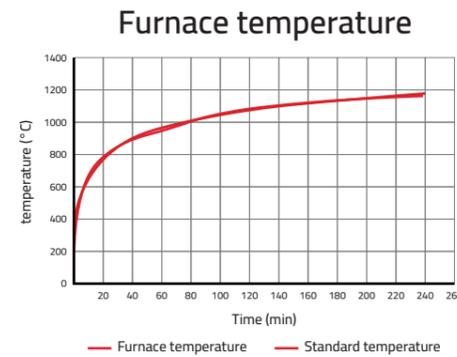


## FIRESAFE®

### NON-COATED FIRE RATED DUCT

Al Mabani non coated fire rated duct system "Firesafe" is an enormous cost saver for the contractors as opposed to the traditional coated fire ducts while providing a 2 hours or 4 hours of fire rating.

Al Mabani fire rated duct system is tested and certified against BS 476: part 24 & EN 1366 for type A & Type B ducts in an approved Laboratory of Saudi Defense "Applus"



Al Mabani fire rated ducts available in GI rectangular, GI circular, MS & SS material and fire rated duct accessories such as fire rated Volume damper, Fire rated silencer & access door can be supplied as a complete package for the system.

## ADVANTAGES

- Most economical fire rated duct system.
- Considerably cheaper than the counter parts.
- No intumescent painted surfaces to get damaged.
- In house manufacturing ensures manufacturing quality and consistency.
- All ductwork manufactured to SMACNA & DW 144 for high pressure
- Smooth internal surfaces for cleaning.
- Approved by Applus.
- Environmentally Friendly.
- Comply with ESTIDAMA.
- Cost effective alternative to the use of fire dampers/smoke dampers and no on-going annual maintenance maintenance or inspection costs.
- Heavy constructed access doors, VCD, sound attenuators for the fire rated duct work
- "FIRESAFE" fire rated duct work system is fully certified for any size of ductwork in the horizontal and vertical plane

### AVAILABILITY:

#### Thickness:

20 Gauge to 16 Gauge

#### Transverse Connection:

Slip On Flange. Angle Flange

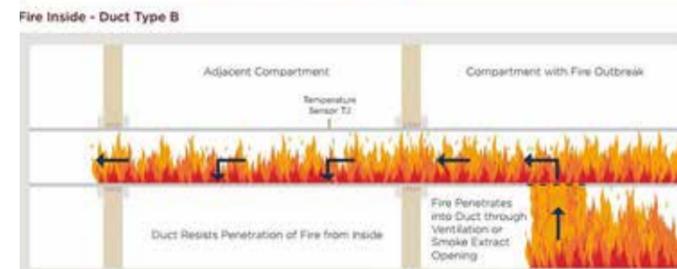
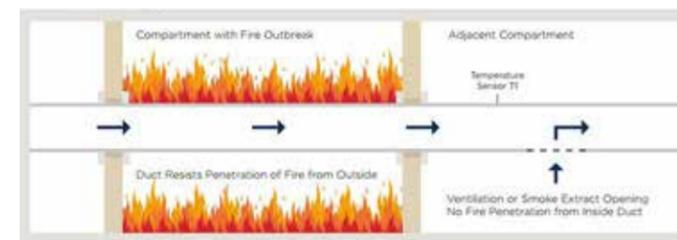
#### Reinforcement:

Slip On Flange. Angle Flange

#### Tie Rod

M10, M12 & M16 (Threaded / Plain)

Product Code	Detail
FR-120	Fire Rated Duct 120 Minutes Fire Rating
FR-240	Fire Rated Duct 240 Minutes Fire Rating



## FIRESAFE GASKET

Zero VOC Fire rated Ceramic or Butyl Gasket



## FIRESAFE SEALANT:

Designed to prevent the spread of fire and smoke through joints and openings in Fire Rated Duct, fire rated walls and floors



## STAINLESS STEEL / BLACK STEEL DUCT

Rectangular and round Welded grease ducts made in both mild steel and stainless steel conforms to NFPA 96 and other industry standards.

Welded MS ducts are mostly used in kitchen to vent grease vapor from cooking equipment's to outside building safely. Welded SS ducts can be used in highly corrosive environment such as battery rooms & marine environment.

At Al Mabani we give utmost importance in fabricating the welded ducts considering the safety requirement and industry requirement.

**TIG welding:** SS duct    **ARC/MIG welding:** MS duct

**Finish:** Mill finish, red oxide or heat resistant coating.

**Material** SS: 304,316, 316 L, MS :CR4    **Thickness:** 0.6 to 6 mm

### AVAILABILITY:

**Thickness:**

26 Guage to 16 Guage

**Transverse Connection:**

S&C, Angle Flange

**Reinforcement:**

Angle Flange

**Tie Rod**

M10, M12 & M16 (Threaded / Plain)

Product Code	Detail
SS-R-LF	SS Rectangular Duct with Lock Forming Joint
SS-R-W	SS Rectangular with Welded Joint
SS-C-LF	SS Round Duct with Lock Forming Joint
SS-R-LF	SS Round Duct with Welded Joint

## JACKETING

We are also specialized in fire rated jacketing on the welded MS or SS duct with high temperature resistant rock wool insulation.

## AL DUCT

Aluminum prefabricated ducts are made of superior quality aluminum sheet. Both aluminum plain and stucco embossed variant is available. Aluminum ducts are fabricated from cold rolled Aluminum sheets with the longitudinal seams are lock formed and transverse joints with self-flange and aluminum angle.

### AVAILABILITY:

**Thickness:**

26 Guage to 16 Guage

**Transverse Connection:**

S&C, Self Flange, Angle Flange

**Reinforcement:**

Angle Flange

Product Code	Detail
AL-R-LF	AL Rectangular Duct with Lock Forming Joint
AL-R-W	AL Rectangular with Welded Joint
AL-C-LF	AL Round Duct with Lock Forming Joint
AL-C-W	AL Round Duct with Welded Joint

## FINISH

Welded MS ducts are available in varioUS finishes as per the project specs.

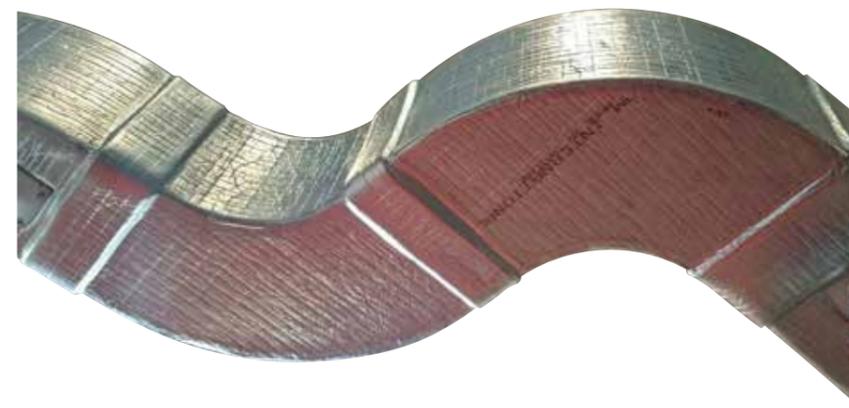
## RED OXIDE

Heat resistant paint 400 °C  
Heat resistant paint 600 °C  
Mill Finish



## GI DUCT WORK WITH INSULATION & JACKETING

Thermal insulation is a great way to minimize energy loss in ducts. Insulating ducts helps the air within stay at the desired temperature. It also prevents the ducts from leaking air. Ducts which leak air can result in greater energy consumption and expensive utility bills. AL MABANI offers all kind of insulation & jacketing.

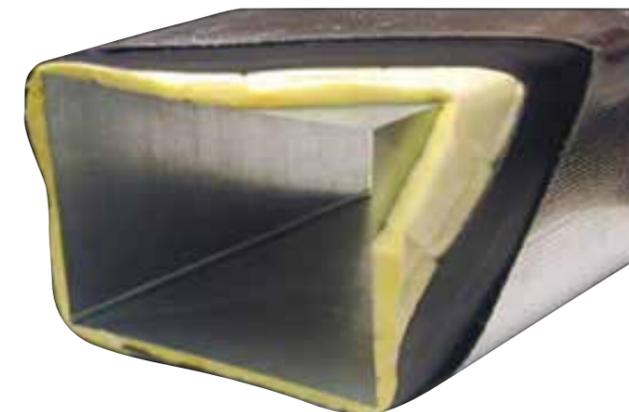


## EXTERNAL INSULATION

**Duct Work:** External fiberglass with Foster fire-rated rock wool jacketing, nitrile rubber, and polyolefin insulation in various thicknesses as per the project specifications.

**Material:**

Fiber glass insulation      Rock wool insulation  
Nitrile Rubber insulation      Polyolefin insulation



## LINER INSULATION

Internal acoustic liners are provided in the duct to reduce the noise from the fan units. In AL MABANI we can make all kind of liner insulation

**Material:**

Acoustic Fiber glass insulation  
Acoustic Nitrile Rubber insulation  
Acoustic Poly Olefine insulation

## 2 DAMPERS

### VOLUME CONTROL DAMPERS

#### RECTANGULAR VCD

Volume control dampers are used to regulate the air flow in a distribution duct. This unit comes with complete manual quadrant or motorized actuators.



Volume Control Dampers can be manufactured with galvanized steel, stainless steel and aluminum as per the project specification.

Concealed linkages inside the frame to reduce pressure drop and smooth operation.

- **Handle:** Hot dip galvanized steel
- **Bushing:** Nylon or Brass
- **Frame:** Roll formed Hat shaped or Flange type frame as standard option. Frame with Drive cleats and slip on flanges are also available.
- **Blades:** aero foil type and 3 V Aerofoil blades. Aero foil type blades are available in extruded aluminum or GI sheet.

Maximum single section size is 1200x1200 and any size above that can be fabricated in multi section Volume control damper with integral sleeve, louvers and filter assembly is available on request.

All manual dampers available with motorized option with Belimo & Honeywell actuator

#### AVAILABILITY:

**Thickness:**

22 Gauge to 16 Gauge

**Transverse Connection:**

S&C, Self Flange, Angle Flange

Product Code	Detail
VCD-AAB	Rectangular VCD with Aluminium Aerofoil blade
VCD-GAB	Rectangular VCD with GI Aerofoil blade
VCD-3VB	Rectangular VCD with GI 3 V blades

#### ROUND VCD

Circular Volume Control Damper are commonly used in plenum mouths where flexible ducts are connected or in the round ducts.

- **Handle:** Galvanized Steel
- **Bushing:** Nylon or Brass
- **Frame and blades** made of galvanized steel Round VCD with plane end and flanged end is available depend on the size Heavy duty round VCD with circular flange is available for industrial application
- **Material:** Round VCD in stainless steel, Black steel & aluminum
- **Diameter Range:** 100 mm to 1500 mm
- **Thickness Range:** 0.8 mm to 1.6 mm
- **Other option:**



## FIRE DAMPERS

UL listed and civil defense approved Fire dampers with a fire rating of 1 & half hours and 3 hours Fire dampers are passive fire protection products used in heating, ventilation, and air conditioning (HVAC) ducts to prevent the spread of fire inside the ductwork through fire-resistance rated walls and floor.



**CONSTRUCTION:** Casings 1.2 mm thick galvanized steel

**BLADES:** 0.85 mm GI sheet Roll formed interlocking type

**BLADE RAMP:** Galvanized steel

**FUSIBLE LINK:** 165 °F (other options available)

**SLEEVES:** 300 mm as standard.

**MOUNTING:** Horizontal or vertical

**SPRING:** Stainless Steel closure spring

**OPTIONS:** Blades outside air stream and in the air stream

#### AVAILABILITY:

**Thickness:**

22 Gauge to 16 Gauge

**Transverse Connection:**

S&C, Self Flange, Angle Flange

Product Code	Detail
SAS-FD-G-90-A-R/O/S	Fire Damper 1.5 Hours
SAS-FD-G-180-A-R/O/S	Fire Damper 3 Hours
SAS-FD-G-90-B-R/O/S	Fire Damper 1.5 Hours
SAS-FD-G-180-B-R/O/S	Fire Damper 3 Hours

## MOTORIZED SMOKE & FIRE DAMPER (MSFD)

16 gauge (1.6 mm) galvanized steel interlocking hat section channel frame construction.

**BLADES:** 16 gauge (1.6 mm) galvanized 3 "V" formed .

**BEARINGS:** Sintered bronze, oil impregnated.

**CLOSURE DEVICE:** Electronic fusible link with closure temperature of 165 °F(74°C) (others available)

**LINKAGE:** Plated steel in opposed blade configuration, concealed inside the jamb, Operator shaft ½ " steel rod.

**FINISH:** Mill Galvanized

Product Code	Detail
MFSD-1.5 S	MSFD with 1.5 Hour Fire Rating (Single Section)
MFSD -3S	MSFD with 3 Hour Fire Rating (Single Section)
MFSD-1.5 M	MSFD with 1.5 Hour Fire Rating (Multiple Section)
MFSD -3 M	MSFD with 3 Hour Fire Rating (Multiple Section)

#### AVAILABILITY:

**Thickness:**

22 Gauge to 16 Gauge

**Transverse Connection:**

S&C, Self Flange, Angle Flange



## BACK DRAFT DAMPER (BDD)

Backdraft dampers (also called gravity dampers) allow airflow in one direction and prevent reverse airflow for use in exhaust or intake HVAC systems. Backdraft dampers can either be operated by gravity (where pressure or velocity opens and closes the damper) or motorized to open and close when required.



## NON RETURN DAMPER (NRD)

Non-return dampers prevent unwanted airflows against the intended airflow direction when the system is not in operation

- Non return/pressure relief dampers are designed for use in intake and discharge opening in commercial and residential air conditioning systems.
- When the ventilation system is on, the blades of the non-return damper are held in the open position by the airflow.
- If the system is switched off, the damper blades close automatically, thus preventing reverse airflow and giving protection against the ingress of untampered air, rain and birds into the air conditioning system.
- Non return damper designed to be duct mounted & wall mounted.



## PRESSURE RELIEF DAMPERS (PRD)

Pressure relief dampers are backdraft air dampers with an adjustable start-open pressure. This provides the capability of maintaining a relative constant pressure at various airflows. The damper closes when there is a decrease in differential pressure. This damper is generally used as a safety or controlling device. These dampers are of air / pressure, counter weight operated for opening or closing for intake or discharge or pressure relief vents.

For example, mounting this damper on a duct section would relieve unexpected overpressure or relieve negative pressure downstream of a rapidly closing fire damper.



## 3 AIR OUTLETS

### SQUARE & RECTANGULAR DIFFUSERS

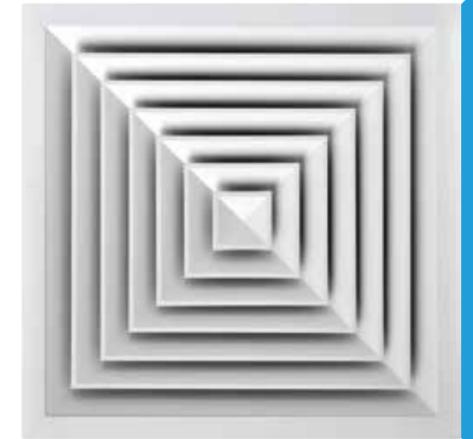
Square and rectangular flush mounted ceiling diffusers available made of high quality extruded aluminum profiles. Standard frame width the 30 mm.

Louvered type core is fixed to the frame with aluminum pins loaded with steel springs. Core can be easily removable and interchangeable to allow for maximum flexibility in installation, maintenance and damper adjustment.

Damper is fixed rigidly to the frame by aluminum rivets. Fixing by spring clips as option.

Opposed blade damper is screw operated from the face opening of the diffuser after removing the internal core. Lever operated damper as option.

Core is available in one way, two way, three way and four way discharge.



### ROUND DIFFUSER



Round diffusers are made of spindling high quality aluminum sheet. The concentric inner cores are rigidly fixed to the frame of the round diffuser, giving a horizontal air pattern. The inner core is removable.

Standard finish is powder coated RAL 9010/RAL 9016.

Available in various size

## GRILLES & REGISTERS

Single deflection and double deflection supply or return grilles and registers made of high quality extruded aluminum profile with the advantage of high corrosion resistant. Deflection blades can be adjusted manually and individually, to provide air deflection in both horizontal and vertical planes. Grilles are rigidly fixed with opposed blade damper by grippers. Damper blade is screw operated from the face opening.

- Standard frame width 30 mm
- Blade spacing 20 mm
- Standard color RAL 9010
- Other Colors are also available on request

Options: Front blade horizontal and front blade vertical

- Finish:
- Natural anodized aluminum finish.
  - Powder coated color finish as per RAL color codes.
  - Flexibility of finishing is available as option.





## LINEAR BAR GRILLE & REGISTER

Flush mounted linear bar grille made of high quality extruded aluminum profile available in standard powder coated finish. Horizontal face bars with 0°, 15°-1 way throw and 15°-2 way throw are fixed rigidly to the frame with 8 mm pipes. The blades are fixed to the frame with nylon bushing can be adjustable from the front side.

### Types :

- Single deflection
- Curved linear bar grille
- Double Deflection
- Mitered



## LINEAR SLOT DIFFUSER

Flush mounted linear slot diffusers made of high quality extruded aluminum available in 1 to 6 slots and hit and miss damper. The air flow pattern can be fully adjusted up to 180°. Standard finish is powder coated RAL 9010/9016. Other finishes available on request.

## DECORATIVE GRILLES

Decorative grilles are made of high quality extruded aluminum frame and the decorative patters are made in aluminum sheet to the desired shape.

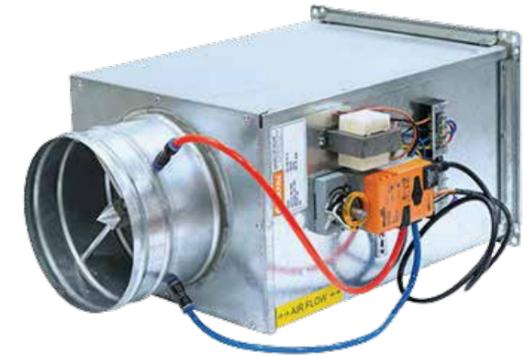
Available in various pattern and finishes such as anodized & powder coated.



## 4 AIR TERMINALS

### VAV

VAV Air terminal units are zone-level air distribution devices that regulate airflow for maximum occupant comfort. The ATU controls the zone space temperature to maintain a desired occupied space temperature. In variable air volume (VAV) systems, the flow of air is supplied by a single air handling unit. Al Mabani makes both bypass type and pressure independent type VAV boxes.



### VAV BOX WITH BYPASS

AL MABANI Bypass Variable Air Volume (VAV) Control units are ideal for low and medium pressure applications. These units are suitable for pressure dependent and pressure independent variable air volume to individual zones while bypassing the unwanted air to ceiling plenum for recirculation. The temperature can be preset on the electronic analogue/digital thermostat, which senses the room temperature and controls the VAV Unit.

### PRESSURE INDEPENDENT VAV BOXES

AL MABANI Pressure Independent Variable Air Volume (VAV) Control units are ideal for low and medium pressure applications. These units are suitable for pressure independent variable air volume to individual zones regardless of the inlet air supply. The temperature can be preset on the electronic analogue/digital thermostat, which senses the room temperature and controls the VAV Unit.

## 5 ACOUSTIC PRODUCTS

### RECTANGULAR & ROUND SILENCER

Silencers are used in the HVAC system to reduce the noise from the fans or any other noise source. Al Mabani is able to provide complete noise study, design and supply of sound attenuators for commercial and industrial application. Complete noise study using the latest software give a huge competitive advantage.

Al Mabani silencers are tested at SRL Laboratories UK



### MODELS

Al Mabani has the complete sound attenuators range as below

- Rectangular Silencer
- Elbow Silencer
- Cross talk silencer
- Circular Silencer
- FIRESAFE Fire rated silencer

Fire rated silencer made of heavier gauge metal and high temperature resistant rockwool insulation.

### AREA OF APPLICATION

- Package units
- Fresh air handling units
- Air handling units
- Axial ventilation fans
- Generator rooms
- Chiller Plant
- Industrial noise control



## 6 LOUVERS

### FRESH /EXHAUST AIR LOUVER

Fresh Air Louvers are used for fresh air intake or exhaust to prevent rain water while permitting the ventilation air flow. Fresh air or exhaust air louver made of extruded aluminum and it is available in various finishes.

- Fresh air intakes
- Air exhausts
- Places where natural ventilation is needed and air volume control and direction are not.

Mabani has various types of fresh air louver starting standard to heavy duty construction and fresh/exhaust air louver with aerofoil blades



### SAND TRAP LOUVER

Sand trap louvers are used for preventing the ingress of sand while permitting the air inside. Al Mabani louvers available in both Aluminum & GI with various finish to choose from.

- Manufacturing plant air inlet system
- Generator and plant room as inlet air devices
- Power Station's intake
- Air inlet for HVAC ducted systems.

Our louvers are tested at BSRIA UK for its performance

#### Models

- Insect screen: GI, AL & SS
- Bird mesh: GI, AL & SS
- Filter: Aluminum washable filter



### ACOUSTIC LOUVER

Acoustic Louvers are used to reduce mechanical equipment noise transmitted through building openings or from openings in acoustic enclosures or barrier walls. Fixed Blade Acoustic Louvers are economical, effective, and attractive solution for maximum sound reduction when space is limited.

Acoustic louvers are available in GI, Aluminum & stainless steel with powder finish or Mill finish

## 7 PLENUM & DIFFUSER BOXES

### Description

Plenum box is designed to ensure equal distribution of air across the slot diffusers. The supply plenum box has acoustic lining to reduce noise generated inside the duct due to airflow turbulence before reaching the diffuser. The built-in damper can be operated from the spigot connection or from face of diffuser.

### Standard Construction Plenum Box

Built of galvanized steel sheet gauge 24, conform to ASTM A653, Lock Forming Quality, G90 zinc coating.

### Insulation

25 mm thick acoustic lining with black glass tissue facing, 24 kg/m<sup>3</sup> density. Acoustic lining is fixed inside the plenum box with non-flammable adhesive and mechanical fastener (cupped head pins). Available in Elastomeric Rubber Insulation other densities are available on request.

### Spigot

Spigot inlet with damper as standard.



## 8 FILTERS

### General

Economy Grade Aluminum Air Filters are the light test and most economically priced washable filters available. The bonded aluminum media may be used either dry or coated with filter adhesive. The filter is suitable for all residential and commercial applications.

### Construction

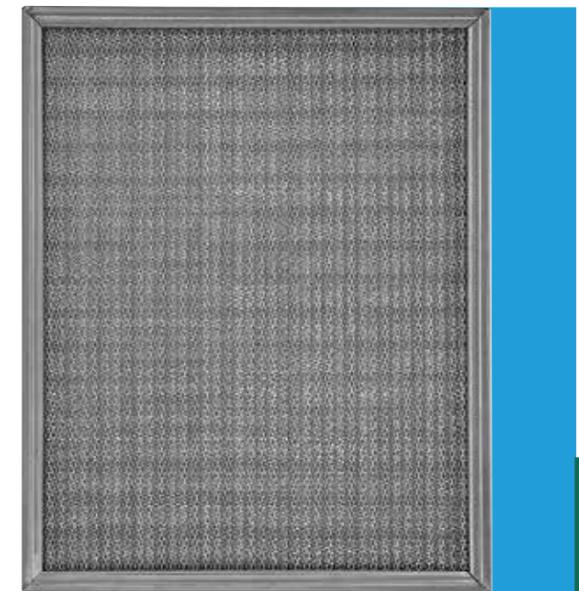
The filter has an 0.7", 1 mm thick aluminum frame that enclose the bonded aluminum media. The corners are mitre and the frame is secured with rivet. The bonded aluminum media is slit and expanded to several different size openings. The layers are then arranged with the larger openings at the air entrance side and the smaller openings at the air exit side. This design allows contaminants to be trapped throughout the entire filter depth and not just at the surface. Six standard nominal size filters are available and are undercut 3/8" on the height and width dimensions. Nominal 1" filters are 7/8" thick and nominal 2" filters are 1-7/8" thick.

### Important Features

All-Aluminum construction Bonded aluminum progressive density media Economically priced Light in weight Washable and reusable Standard and special sizes are available

### OTHER FILTER RANGES

1- Bag Filter 2- Hepa Filter 3- Carbon Filter 4- Air Intake Filters 5- Paint booth Filters



## 9 METAL COIL & SHEETS

### HOT / COLD ROLLED STEEL COILS

#### GALVANIZED STEEL

Galvanized steel coil and GI steel coil refer to the same product, which is cold rolled steel sheet coated with zinc. It is also known as galvanized iron or GI. Galvanized steel coil is produced by passing cold rolled steel sheet through a molten zinc bath.

#### AVAILABILITY:

**Thickness:** 26 Gauge to 16 Gauge  
**Grade:** Stucco / Plain  
**Brand:** SABIC / AGIS / UIS / Jindal / Nippon

#### CARBON STEEL / BLACK STEEL

Steel coils are classified according to their professional uses, including oil drum plates, bulletproof plates, shipbuilding plates, automobile plates, construction plates, machining plates, etc. Specializing in the production and sales of carbon steel coils, factory direct sales, product grades and specifications are complete, and can certainly meet your various needs, welcome to consult!

#### AVAILABILITY:

**Thickness:** 26 Gauge to 16 Gauge

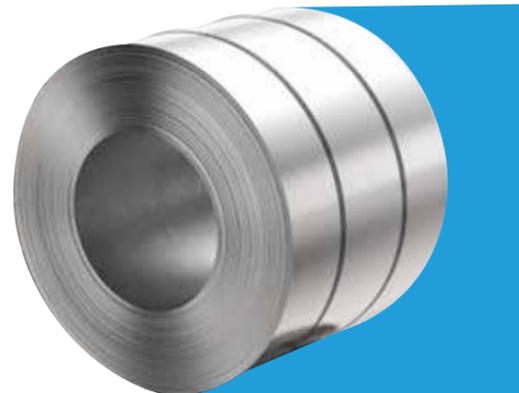


#### ALUMINIUM STEEL COILS

Aluminium coil / sheet metals come in a range of thicknesses and can be anodised, polished, or finished in several different ways. Check out our range of aluminium coil / sheet options today to find exactly what you need for your project.

#### AVAILABILITY:

**Thickness:** 24 Gauge to 16 Gauge  
**Finish:** Stucco / Plain



#### STAINLESS STEEL COILS

Stainless steel sheets are thin, flat pieces of stainless steel with many applications. They are manufactured through hot or cold rolling, compressing stainless steel into thin sheets with a consistent thickness. They are composed primarily of iron, along with a minimum of 10.5% chromium, which forms a protective oxide layer on the surface, known as the passive layer. This passive layer makes stainless steel sheets resistant to rust, staining, and corrosion caused by exposure to moisture, chemicals, and environmental factors. Purchase it online or at any Metal Supermarkets location, cut to your exact specifications.

**Thickness:** 26 Gauge to 16 Gauge  
**Grade:** 304 / 316 / 316 L

**Finish:** Mill Finish / 2B Finish / Mirror Finish

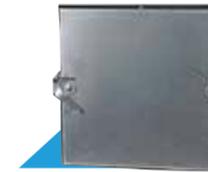


## 10 DUCT ACCESSORIES

#### ACCESS DOOR

The access door has been designed to create an airtight seal utilizing a moisture, oil and grease resistant neoprene gasket between the door to the frame and the frame to the duct.

The access doors are quick, easy and economical option where access is required in the duct for inspection & maintenance purpose. Access doors available in GI, Aluminum, MS & SS with thermal insulation. Cam lock type, Hinge type & wing nut type access doors available on request.



#### FLANGE

Our standard GI slip on flanges available in three different size 20 mm, 30 mm and 40 mm with joint rating of F, H & J as per the SMACNA transverse joint rating system and J3, J4 & J5 as per the DW 144 rating system.



#### CORNERS

Our standard GI slip on flanges available in three different size 20 mm, 30 mm and 40 mm with joint rating of F, H & J as per the SMACNA transverse joint rating system and J3, J4 & J5 as per the DW 144 rating system.



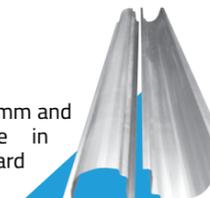
#### DRIVE CLEATS

Drive cleats such as S cleat, C cleat and S standing cleats are used in transverse joint connection in lower pressure gauge ducts. Available at a length of 1220 mm as standard.



#### GI CLEATS

GI cleats are used for connecting 20 mm and 30 mm flange joints. Available in 20 m & 30 mm size with a standard length of 1220 mm.



#### GI CLAMP

GI clamps are used for connecting transverse joints in high pressure ducts especially 40 mm slip on flanges. For fire rated ducts, GI clamps are the accepted joint system to connect the duct.



#### SEALANT

Silicone has a 'closed cell structure', which helps to keep out moisture ingress, along with water and dust. We supply fire rated & acrylic silicone.  
**Type:** Duct sealant, Mastic Sealant, 4 hours fire rated sealant, 4 hours fire stop sealant.



#### GASKETS

High quality self adhesive foam gaskets allows air tight seal in the transverse joint s system. Available in 3 mm as the standard thickness.



#### ALUMINUM FOIL

High Tensile Strength Aluminum Foil, coated in epoxy resin strong cold weather solvent acrylic adhesive easy release silicone paper liner.

**Available size:**

50 mm & 75 mm

**Options:**

- Alu glass, UL 181
- Aluminum foil type



# 11 MODULES

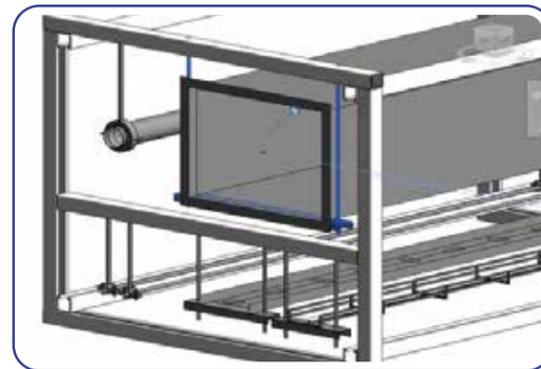
## PRE-FABRICATED MODULES

Modular installations are an innovative way of assembling installations in a building. MEP modules facilitate coordination and introduce manufacturing efficiencies to the traditionally complex HVAC and mechanical industry. A typical module consists of steel frames to which pipes, ventilation ducts and cable trays, chiller pipes are attached. Its length is usually from 6 to 12 meters, width and height is limited mainly by the possibilities of transport on the construction site.



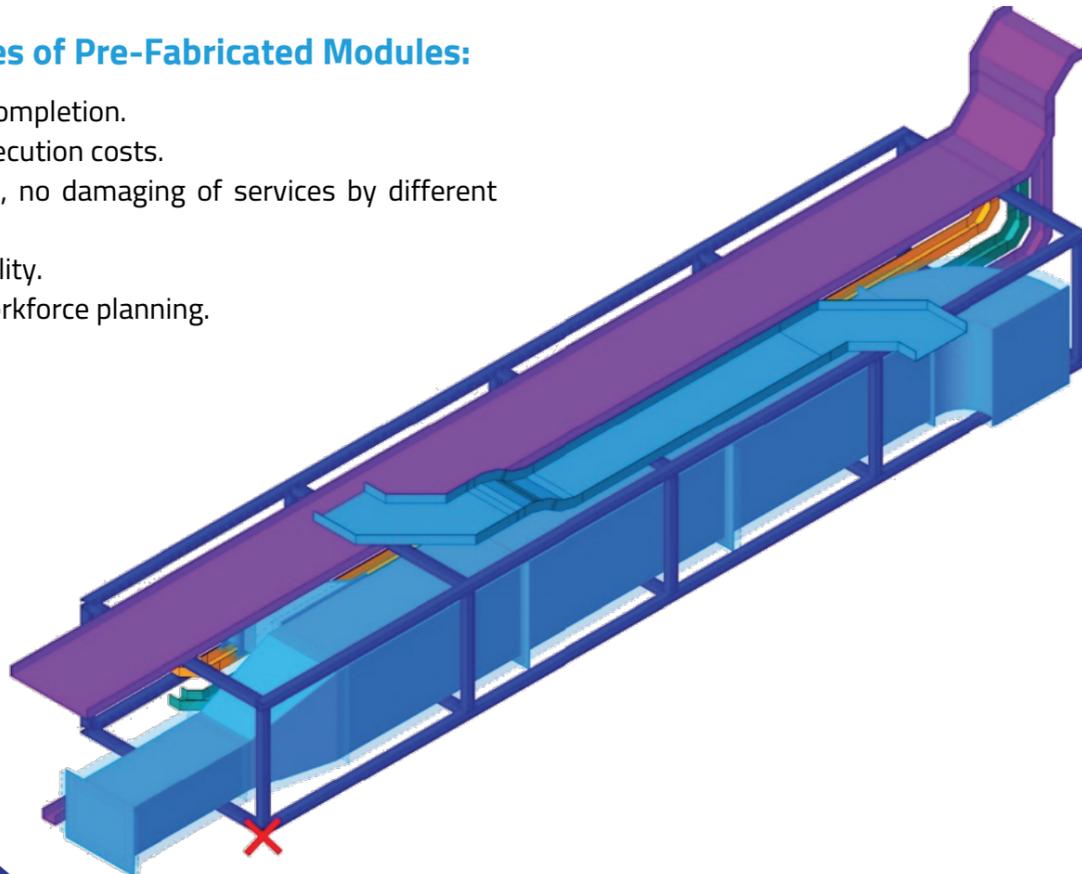
We are specialized in fabricating all kind of modular MEP construction as below.

- Corridor Horizontal modules
- Vertical Riser modules
- AHU & FCU modules
- Tunnel modules
- Apartment/Residential modules
- Chiller plant room modules comprising pump modules & associated M & E services.



### Advantages of Pre-Fabricated Modules:

- Quicker completion.
- Lower execution costs.
- No snags, no damaging of services by different trades.
- Good quality.
- Easier workforce planning.



## PRODUCTS & SERVICES

### DESIGN SERVICES

With a qualified team of MEP Engineers and draftsman, Al Mabani offers a range of inhouse design services. All design is in compliance to international standards, project specifications and local authority requirements.

#### “HVAC Design Plays a Crucial Role in Any Commercial or Residential Project”

With a core focus on simplicity, durability and high performance, Al Mabani design services include a detailed layout for all project ductwork. Our extensive experience and technical know-how in fabrication and installation is taken into careful consideration in coordination with design layouts to ensure a practical and cost-effective HVAC design is carried out.

### MANUFACTURING & FABRICATION

Al Mabani Ductwork fabrication is carried out using the latest “Computerized Numerical Control” (CNC) technology. The pre-programmed design and code control provides a fully automated process using detailed Plasma cutting technology to ensure the end product is manufactured to the exact design intent.

Our custom duct work fabrication covers many applications for HVAC systems to meet all project needs. We understand certain metals are ideal for specific applications, the most common are as follows.

**Pre-Insulated** Duct is a lightweight material free of (CFC) carbon, hydrogen and chlorine chemical properties. It achieves the highest firing rating while providing increased durability making it the most cost efficient and environmentally friendly option.

**Galvanized** Steel is the most popular material used to fabricate ducts due to the high durability and corrosion resistance provided by zinc coating.

**Black Steel Stainless Steel** Welded ducts are used in kitchen and the SS welded ducts are suitable in highly corrosive environment

**Aluminium** ducts are lightweight materials which offer significant benefits during installation.

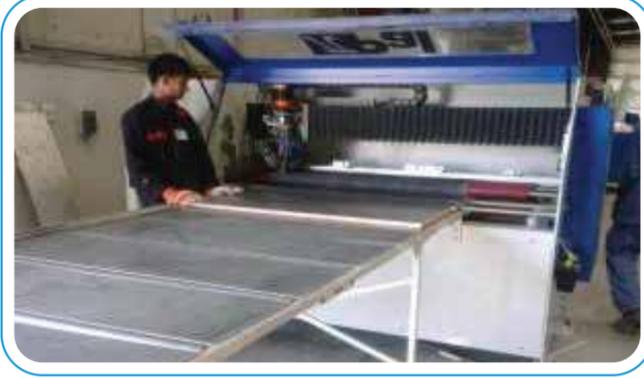
**Fiberglass** duct panels are designed with built-in thermal insulation. providing soundabsorbing properties that produce a whisper-quiet HVAC system

### INSTALLATION SERVICES

Installing a HVAC system is never a one-size-fits-all process. Selecting a qualified and experienced specialist to install the ductwork can increase the air conditioning unit's life expectancy.

CS have the technical expertise to provide complete customization for the installation of air conditioning ducts. Our qualified team of field technicians maintain a high level of workman- ship while installing all ductworks in accordance with the approved design and project specifications.

# OUR FACILITY



# SAUDI ARABIA PROJECTS



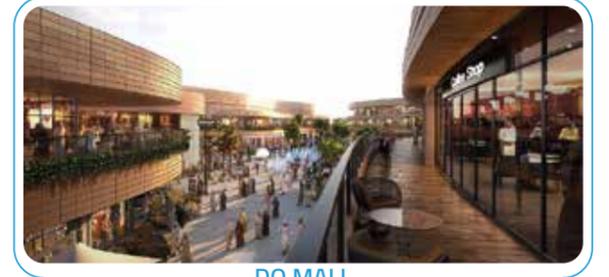
SULIMAN ELHABEEB HOSPITAL @ RYADH



Haram



BODY MASTERS - FAYHAA



DQ MALL



KAFD - SIDF PARCEL 3.04



AL MURJAN MEDICAL CENTRE @ JEDDAH



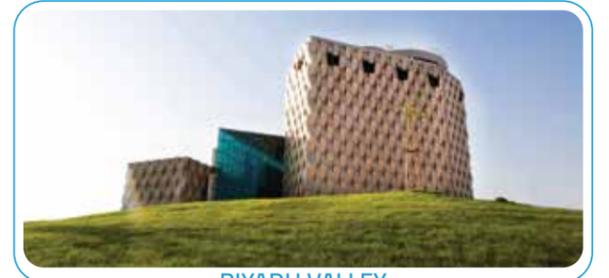
KING SALMAN AIRBASE PROJECT, CENTRAL SECTOR - DIRAB (PART 2)



CP04 - ROYAL ARTS COMPLEX



ROSHN - RIYADH TOWNSHIP



RIYADH VALLEY

# SAUDI ARABIA PROJECTS



SECURITY FORCES - MEDICAL CENTRE



KAFD - CLUSTER J01



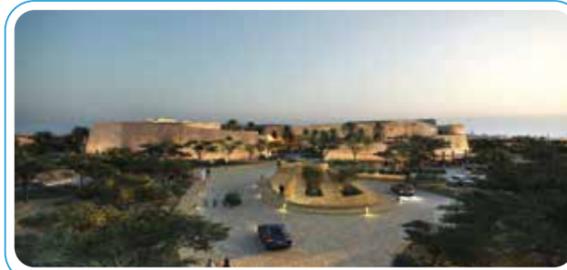
TBC SCHOOL @ MADINA



SOFITEL HOTEL @ RIYADH



AL HAYAT HOSPITAL



TUWAIQ PALACE @ RIYADH



KING FAHAD HOSPITAL @ DAMMAM



KING FAHAG HOSPITAL @ JEDDAH



PRESIDENTIAL PALACE ABU DHABI



PROJECT EXPO 2020

# INTERNATIONAL PROJECTS



ABUDHABI FUTURE SCHOOL



AL AIN UNIVERSITY



FAIRMONT HOTEL



AL AIN STADIUM



EXPO 2020 DUBAI



AMERICAN HOSPITAL DUBAI



MEDICLINIC HOSPITAL-ABUDHABI



NEW AL AIN HOSPITAL



ETIHAD ARENA



Presential Palace

# MAJOR PROJECT (SAUDI ARABIA)

SN	PROJECT NAME	PRODUCT	CONSULTANT
1	Al Sahafa, Dr Sulaiman Al Habib Hospital @ Riyadh	Duct	Omran Consulting
2	KSP Royal Arts Complex, Riyadh	Duct	WSP
3	"Private Residential Project (Dr. Sulaiman Al-Habib Palace in Riyadh)"	Duct	Omran Eengineering Consultant
4	Qiddiya Water Theme Park, KSA	Duct	Dewan Architects
5	AL-JUBAIL SWRO DESALINATION PLANT PHASE 2	Duct	Fichtner Co.
6	Business Lane - Tharwat 2	Duct	Aleamad Alarabi Engineering Consultancy
7	KAFD - SIDF PARCEL 3.04	Duct	Prisma Consulting Engineers SA
8	Maternity and Pedia Hospital Takhassusi - Riyadh - Dr Sulaiman Al Habib Project	Duct	Shaker Consultancy Group
9	Red Sea Al Shura Island (CLUBHOUSE & VILLAS)	Duct	Dewan Architects
10	Al Nafi Hiazah Building @ Riyadh	Duct	Hiazah
11	Dommat Al Jandal Hospital	Duct	Minstry of Health
12	TBC School @ Madinah	Duct	AECOM
13	AL JOUF UNIVERSITY- SAKAKA	Duct	-
14	Dirab Air Base Project	Duct	Dar
15	Saudi Tourism Authority	Duct	EAST CONSULTING ENGINEERING
16	Bank Misr- Islamic Riyadh Branch	Duct	Khatib & Alami
17	A Hayat hospital - AL QASSIM	Duct	-
18	SIDF - KAFD 3 - Daycare Academy	Duct	Prisma Consulting Engineers SA
19	SWRO Jubail 3B IWP Project	Duct	IDOM
20	Middle East Co Project	Duct	Private
21	SAHAYEB TIER III DATA CENTERS RIYADH (PHASE I)	Duct	Edaarat Grou[
22	Samhan Historical Hotel @ Riyadh	Duct	WME
23	NRCC	Duct	Saudi Architects
24	Construction of Building G - Al Hariq	Duct	Zuhair Fayaez Partnership
25	Construction of Building G Rania	Duct	Zuhair Fayaez Partnership
26	Mockup Experience Centre	Duct	Dar Al Omran
27	ROSHN - Riyadh Township	Duct	Hanmi Global
28	DQ project @ Riyadh	Duct	-
29	Drama Project	Duct	-
30	Private Villa for Turki Al Rajhi @ Riyadh	Duct	-
31	Nursery Place in KAFD 3 Project	Duct	Prisma Consulting Engineers SA
32	Starbucks Alyasmin Branch	Duct	Richmonds
33	Starbucks East Boulevard	Duct	Private
34	Starbucks KING SAUD Project	Duct	Private
35	Dammam Hospital	Duct	Private
36	WAVE 2 Schools Project @ Madina	Duct	AECOM

# MAJOR PROJECT (SAUDI ARABIA)

SN	PROJECT NAME	PRODUCT	CONSULTANT
37	Al Marai Project	Duct	-
38	The Stage Center, Riyadh, KSA	Duct	AJ Saudi
39	Samhan Historical Hotel @ Riyadh	Duct	WME
40	Body Masters - Fayhaa	Duct	-
41	Red Sea Al Shura Island (CLUBHOUSE & VILLAS)	Duct	Dewan Architects
42	Riyadh Boulevard	Duct	Khatib & Alami
43	HC02 Red Sea Shura Island, Red Sea	Duct	KEO
44	HC03 Red Sea Shura Island, Red Sea	Duct	KEO
45	HE03 Red Sea Shura Island, Red Sea	Duct	KEO
46	Red Sea Al Shura Island (CLUBHOUSE & VILLAS)	Duct	Dewan Architects
47	NRCC	Duct	Saudi Architects
48	Construction of Building G - Al Hariq	Duct	Zuhair Fayaez Partnership
49	Construction of Building G Rania	Duct	Zuhair Fayaez Partnership
50	Maternity and Pedia Hospital Takhassusi - Riyadh - Dr Sulaiman Al Habib Project	PI	Shaker Consultancy Group
51	Al-Mohammadiya Hospital - Jeddah, KSA	PI	Shaker Consultancy Group
52	Qiddiya Water Theme Park, KSA	PI	Dewan Architects
53	Sulaiman Al Habib - GARB JEDDAH HOSPITAL CO- JEDDAH	PI	DR. SULAIMAN AL-HABIB MEDICAL GROUP (HMG)
54	Al Sahafa, Dr Sulaiman Al Habib Hospital @ Riyadh	PI	Omran Consulting
55	MBC STUDIOS	PI	Green Concept Engineering
56	Sehat Al Kharj Hospital @ Riyadh.	PI	Shaker Consultancy Group
57	KSP Royal Arts Complex, Riyadh	FRD	WSP
58	Qiddiya Water Theme Park, KSA	FRD	Dewan Architects
59	GDH Dammam Data Center	FRD	Sudlows Consulting
60	SAHAYEB TIER III DATA CENTERS RIYADH (PHASE I)	FRD	Edaarat Grou[
61	Sofitel orouba road	FRD	Khatib & Alami
62	AL-JUBAIL SWRO DESALINATION PLANT PHASE 2	Dampers	Fichtner Co.
63	Al Moussa hospital Al ihsaa	Dampers	-
64	SAHAYEB TIER III DATA CENTERS RIYADH (PHASE I)	Dampers	Edaarat Grou[
65	"Private Residential Project (Dr. Sulaiman Al-Habib Palace in Riyadh)"	Dampers	Omran Eengineering Consultant
66	TBC School @ Madinah	Dampers	AECOM
67	School Complex @ Riyadh	Dampers	AECOM
68	AL-JUBAIL SWRO DESALINATION PLANT PHASE 2	Louvers	Fichtner Co.
69	MEP HUP -Red sea Project	Louvers	WS Atkins & Partners Overseas
70	General Project	Accessories	Private
71	KSP Royal Arts Complex, Riyadh	Accessories	WSP
72	Red Sea Al Shura Island (CLUBHOUSE & VILLAS)	Duct	Dewan Architects

AND THOUSANDS MORE PROJECTS IN GCC



# AL MABANI

## AL UMUMIYYAH



As a part of our growing business, Al Mabani Factory & Office:

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