AD-SERIES
Acoustic Doors

ABOUT THE PRODUCT

Acoustical doors are used in premier live performance venues and industrial applications where noise and sound control is of primary concern. Al Kuhaimi Metal Industries delivers a fully factory assembled door unit including leaf, time saving split frame, seals, latching hardware & glazing.

FEATURES

- Fully factory assembly and functional testing
- Self-aligning seals provide durability and high field STC ratings under adverse conditions
- Hardware compliance
- Various finishing option
- Custom built to the highest standards

SPECIFICATIONS

STC-30:

- 45 mm (1 3/4") thick full construction fabricated from 1.5 mm (GA 16) thick steel sheets (commercial quality cold rolled/ASTM A1008 or galvanized/ASTM A 653-DQ).
- 1.5 mm (GA 16) thick steel top and bottom channels welded to both face sheets.
- Mechanically interlocked, hemmed vertical edge seams for added strength and rigidity.
- Foam-in-place polyurethane thermal insulation core, of thickness 43 mm and nominal density 35-42 kg/m ^{3} (DIN 53420).
- Thermal Resistance: R-Factor = 12.45 hr.ft ^{2}.^{0}F/Btu. (ASTM C518-63T).
- Hollow Metal Frame made of 1.50/2.0 mm steel sheet thickness.

STC-31 to STC-46:

- 45 mm (1 3/4") thick full construction fabricated from 1.5 mm thickness for up to STC-31 to STC-40 and 2.0 mm thickness for STC42 - STC46(GA 14) thick steel sheets (commercial quality cold rolled/ASTM A 1008 or galvanized/ASTMA 653-DQ).
- Face sheets are stiffened by vertical 0.8 mm (GA 22) steel stiffeners, spaced 190 mm on center and welded to face sheets at 100 mm on center, with Rockwool insulated.
- Spaces between stiffeners are insulated with Rockwool to the full height of the door. Standard infill thickness 50 mm of nominal density 50kg/m ^{3}.
- Thermal Resistance: R-Factor = 9.04 hr.ft ^{2}. ^{0}F/Btu. (ASTM C518-63T).
- Mechanical Interlocked, hemmed vertical edge seams for added strength and rigidity.
- 1.5 mm (GA 16) thick steel top and bottom channels welded to both face sheets on 150 mm centers.
- Hollow Metal Frame made of 1.50/2.0mm steel sheet thickness.

The following chart illustrates the sound retarding performance associated with a range of STC values:

Door STC	Rating	Description	Typical Application
50-60	Excellent	Loud sounds heard faintly or not at all	Band & music rooms.
40-47	Very Good	Loud speech heard faintly, but not understood	Audiovisual, Manufacturing, Conference & Private Office rooms.
35-40	Good	Loud speech heard but hardly intelligible	Classrooms, Cafeterias, Corridors, Hotel Guest
30-35	Fair	Loud speech fairly understood	Rooms and Lobby Rooms.
25-30	Poor	Normal speech understood easily and distinctly	Commercial applications where no acoustic
20-25	Very Poor	Loud speech audible	reduction is required.

Acoustic doors are tested to ISO10140, AS/MZS ISO717.1 & ASTM 413-87 standards which compromises of tests at 105 decibels over 18 distinct frequencies.

RADIATION SHIELDED - Lead Line

Hollow Metal Door

SPECIALITY STEEL DOORS & FRAMES

ABOUT THE PRODUCT

Where metal construction is required for specialized applications, Al Kuhaimi Metal Industries offers lead lined hollow metal doors. These doors are designed as premium grade hollow metal doors while providing the radiation protection required .These doors are constructed with a single sheet of lead located in the center of the door extended to all edges using steel stiffeners as support. These doors are typically used in various X- ray, PET or CT scan rooms in hospitals and Doctors' offices.

FEATURES

- Lead is effective in scattering gamma rays and X-rays
- Doors and frames look and feel like normal hollow metal doors.
- Keep consistent look between offices and radiology rooms.

SPECIFICATIONS

- Door Construction Code: C1-LS, C1-LS-SWP
- Door: 45mm thick covered with 1.2 or 1.5mm thick Cold Rolled or Galvanized Steel Sheet on both sides with 2.0mm thick Lead Sheet.
- Frame: 1.5 or 2.0mm thick Cold Rolled or Galvanized Steel Sheet face.
- Insulation: Polyurethane
- Hardware: "By Others" Consult to Hardware Specialist.
- Hinges shall be Heavy Duty Ball Bearing.

TRR-SERIES

Temperature Rise Door

SPECIALITY STEEL DOORS & FRAMES

ABOUT THE PRODUCT

The TRR-Series (Metal Composite Temperature Rise) flush doors are designed to allow people to pass by the door safely when fire is on the other side. When an opening is required to retard the transmission of heat from one area to an adjacent area, a temperature-rise rated door is required. These doors are typically required in locations such as stairwell access doors, electrical control rooms, paint storage, etc. Temperature-rise designations indicate the maximum rise in temperature above ambient on the non-fire side of the door during the first 30/60 minutes of exposure in a standard fire test.

Listed Temperature Rise:
- Maximum 250 °F at 30 minutes for pairs.
- Maximum 450 °F at 60 minutes for single swing.

Listed Fire Rating:
- Up to and including 3 hours.

Note: A temperature rise rating is not a requirement for qualification as a labeled fire door, but, when required, doors are built to meet this criteria.

FEATURES

CORE:
- GP-Mineral Core (made of a proprietary mix of various minerals, fiberglass, and inert binders), of thickness 43 mm and nominal density of 512 Kg/m3. This material fills most of the space in the interior of the door.
- All 45, 60 & 90 minute fire doors containing GP components qualify for an "S" label opening, provided an appropriate fire-rated smoke and draft control gasket is used. (Asbestos-Free material.)
- GP-mineral core meets all the following standards: UBC 7-2 (1997), NFPA 252 (1999), UL 10-C (1998), CAN4-S104, CSFM 12-43-4, ISO 3008, BS 476 PART 22, Japanese Industrial Standard and ASTM E-2074. Tested and certified by Intertek-Warnock Hersey-USA.

TRR-SERIES
Temperature Rise Door

SPECIALITY STEEL DOORS & FRAMES

OPTIONS

- Seamless design.
- Polyurethane RAL color paint finish (factory applied).
- Non-handed reversible design.
- Listed steel vision panel light kit with maximum visible areas of 100 Inch ^{2} (with a maximum width of 254 mm and a maximum height of 838 mm) for 60 and 90 minutes locations.

LOUVERED DOORS
Metal Door

SPECIALITY STEEL DOORS & FRAMES

ABOUT THE PRODUCT

Al Kuhaimi Metal Industries offers a wide variety of louver models and finishes with each category of louver types. Al Kuhaimi's louvers serve a certain need and requirement within the air movement and control. The steel louvered panels can be fitted into any of our steel door range to transfer flat paneled steel doors into fully or partially louvered steel doors.

FEATURES

- Easy installation
- Multi-point locking system
- Frame and leaf with inbuilt steel strengthening
- Sand trap options

SPECIFICATIONS – Z & I-Y type Louver

- Material: 1.2mm (18 gauge) Cold Rolled Steel Sheet (ASTM A 1008), Galvanized steel sheet (ASTM A653-DQ) framing and blades.
- Construction: Mitered and welded corners.
- Finish: Shop primer (Sigmacap Pricoat 155 RAL # 7035). Finish Paint upon request (color RAL# to be specified).

Notes: (Fire Rated)

Description	American Standard(Intertek)	British Standard(IFC)
Louver must be installed either at or below	1000 mm	1000 mm
Glass Light (Vision Panel)	Not Allowed	0.40m ^{2}
Fire Exit Hardware	Not Allowed	Allowed
No. of Louvers	1 each/door panel	1 each/door panel
Maximum size	24" x 24"	24" x 24"
Type	Z-type Louver or Fusible Link Louver	Fusible Link Louver