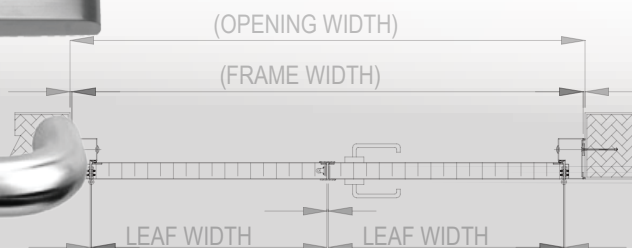
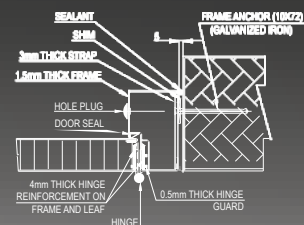
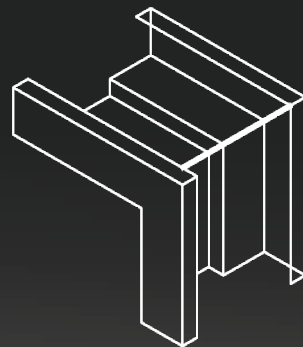
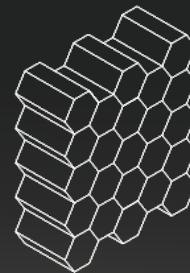
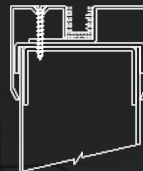


TMMI[®]

Metal Doors & Frames



"We, at Technical Metal Industrial Co. L.L.C. take pride in declaring the company's commitment to satisfy our customers by providing high quality products and promptly delivering them as per the agreed contractual requirements".



Contents

Technical Metal Industrial Co. L.L.C.

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4	Products	15	Doors - Wood Finish
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Introduction

Metal Doors & Frames

TMI is a privately owned company, established in 1997 in the Emirate of Abu Dhabi, United Arab Emirates and located on approximately 850,000 square feet in the Industrial City of Abu Dhabi (ICAD).

Specializes in metal processing and manufacturing of Expanded Metal & Plastering Accessories, Roll Formed Profiles, Suspended Ceiling Systems, Cable Management Systems, Metal Doors & Frames, Industrial Shelving, Metal Cabinets, Gratings, Metal Ladders and specialized building material products. We are an ISO 9001, 14001 & 18001 Certified company. Our emphasis is on quality products catering to today's competitive and demanding business environment. By introducing the latest, advanced technologies in our production lines, we ensure that our high production targets are achieved.

Furthermore, with deep knowledge within our manufacturing system capabilities, our products have achieved a very high quality standard in this industry. Having earned a reputation as a manufacturer and supplier of quality products, we fully recognize that constant improvement is a vital requirement for our continued success.

Developing products applicable to the changing industry, TMI has a new state of art metal doors manufacturing facility. Fire rated and non-fire rated steel doors are available in different configurations for commercial, residential, Industrial and Institutional buildings based on the functional needs and economical considerations. Our quality products range from standard steel doors and frame profiles, to special custom designs for various architectural and engineering applications.

Several types of doors are available for different needs, and play a very important role in a building's fire resistance; allow people to evacuate safely from a building or fire areas, while limiting the spread of fire. Fire doors serve as a regular door, while protecting life and property by reducing fire hazards.

TMI doorset tested in accordance with British Standard BS 476 Part 22 at Warrington Certification Limited UK and certified by certify.





Products



Fire Rated Steel Doors
Non Fire Rated Steel Doors
Steel Frames for Wooden Doors
Smoke Proof Doors
Sliding Doors
Folding Doors
Access Panels
Steel Windows
Steel Screens
Security Doors
Special Purpose Doors
Stainless Steel Doors
Cell Doors & Grill Doors
Substation Doors



MD001



MD002



MD003



MD004



MD005



MD006



MD007



MD008



MD009



MD010



MD011



MD012



MD013



MD014



MD015



MD016



MD017



MD018



Door Designs

Door Leaf & Frames - Finishes

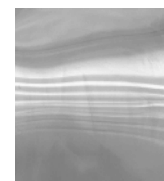
Powder Coating / Industrial Painting

TMI Metal Doors factory finished and etched primed to take any paint job. We offer a wide range of semi gloss finishes.



Stainless Steel

We can offer any door in stainless steel with corrosion protection. (see page 14)



Wooden Finish

We offer the perfect combination and alternative for architects who prefer to use "Steel" over "Timber". These doors offer the 'elegance of wood' with the 'strength of steel'.



Vision / Louver / Full Flush



VS

Vision Square



VR

Vision Round



VNS

Vision Narrow Short



VNL

Vision Narrow Long



VHG

Vision Half Glaze



VFG

Vision Full Glaze



BL

Bottom Louver



TL

Top Louver



FL

Full Louver



VNS/BL

Vision Narrow Short with Bottom Louver



VHG/BL

Vision Half Glaze with Bottom Louver



VS/BL

Vision Square with Bottom Louver



VR/BL

Vision Round with Bottom Louver



TBL

Top & Bottom Louver



FF

Full Flush



FF/TP

Full Flush with Top Panel



FF/TL

Full Flush with Top Louver



FF/TG

Full Flush with Top Glaze



VS, BL/TG

Vision Square, Bottom Louver with Top Glaze



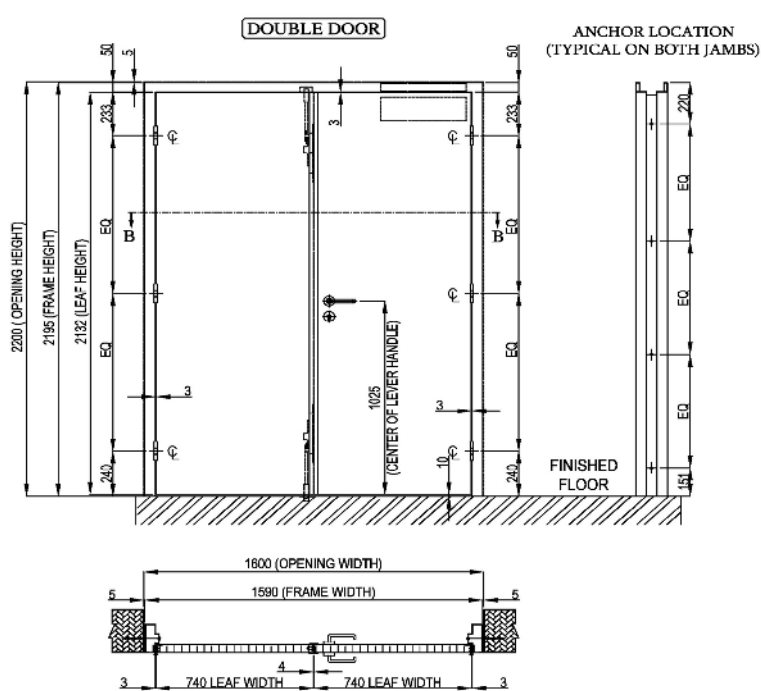
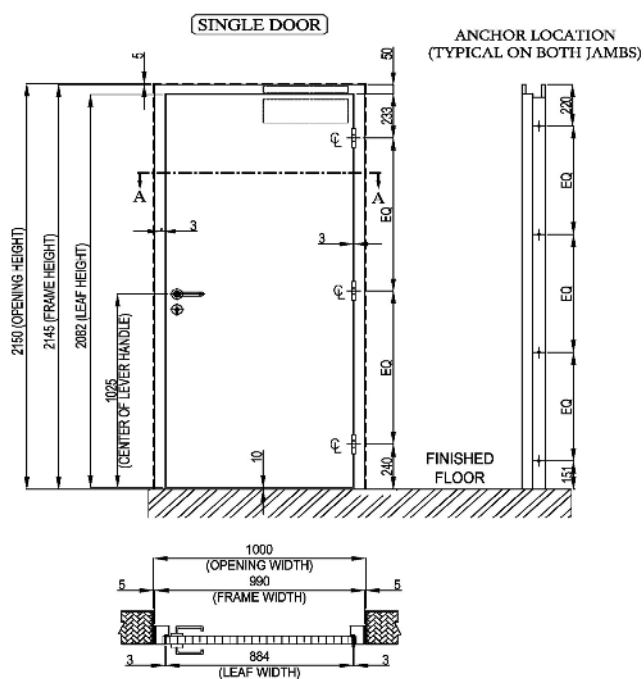
TBG

Top & Bottom Glaze

Double Door



Typical Door Type

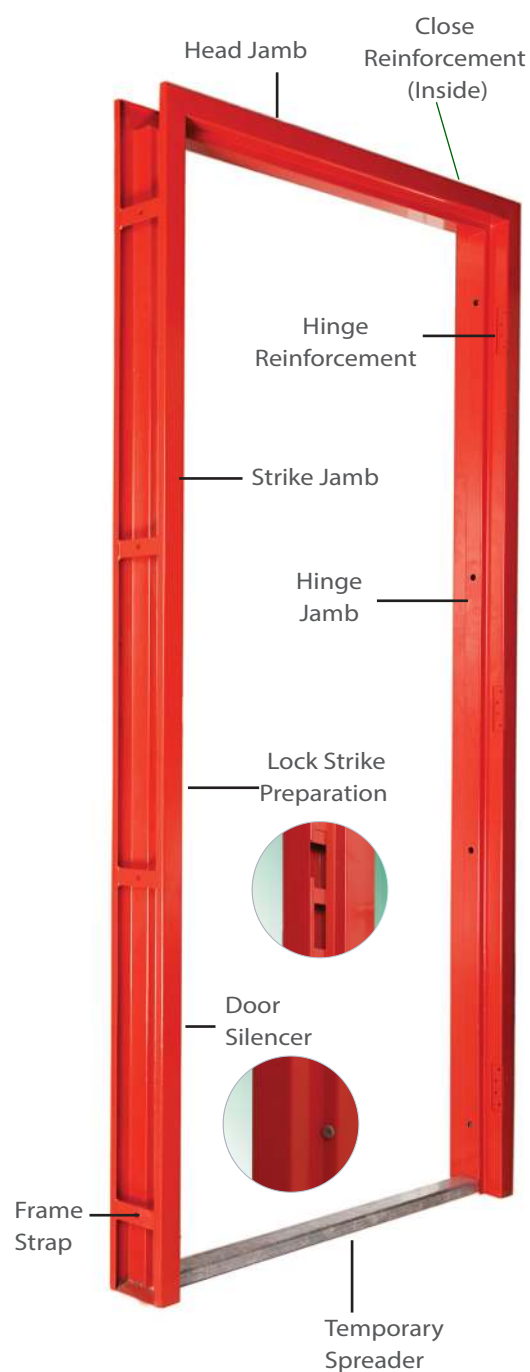


Frame Construction

Corner Construction
Fixing Methods
Frame Profiles



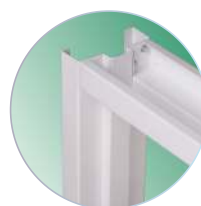
Steel sheet formed to single or double rebate profile, corners mitered and welded or knock down type construction. Hinge reinforcing plates, lock strike preparation, fixing straps, hardware mounting plates, mortar guards and temporary frame spreader are welded to the frame.



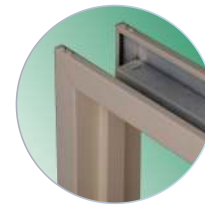
Corner Construction



Welded Corner

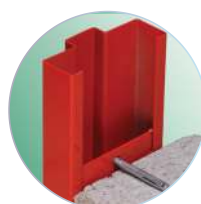


Knock down Straight



Knock down Mitre

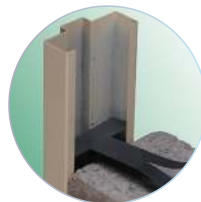
Fixing Methods



Expansion Anchor



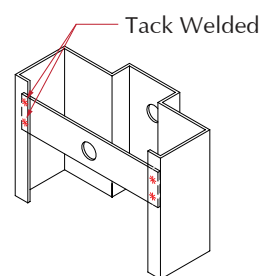
Wire Anchor



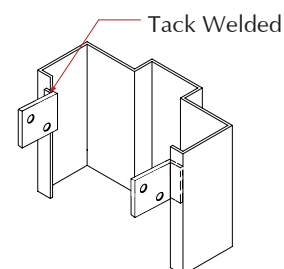
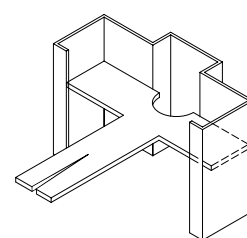
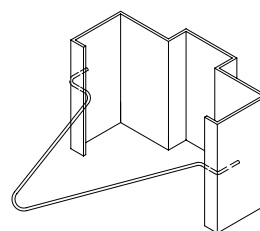
T Anchor



Strap Anchor



Tack Welded



Tack Welded

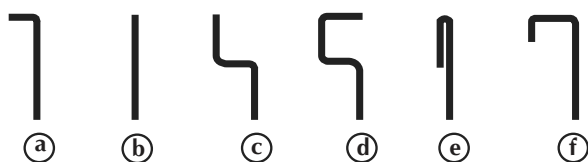
Frame Profiles

TMI produces frames in standard profiles and dimensions. Custom designs with various types and dimensions are available, subject to tooling limits.

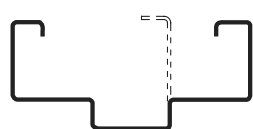
Standard Frame Dimensions

Backbend mm	Face mm	Stop mm	Rebate mm	Soffit
18	50 or 25	18	50	Varies

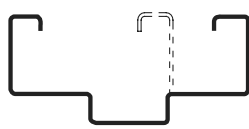
Available options



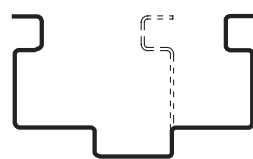
Example of custom frame profiles



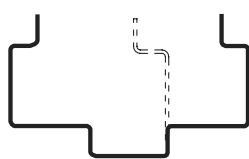
Standard



Return bend - inside



Architrave integral



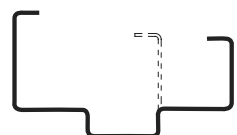
Return bend - outside



Gasket groove
integral



Cased opening

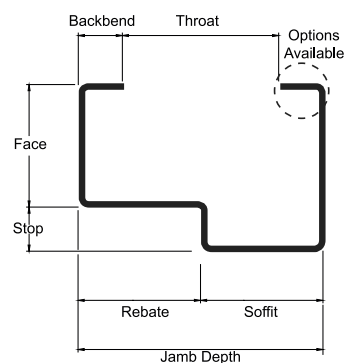


One side architrave

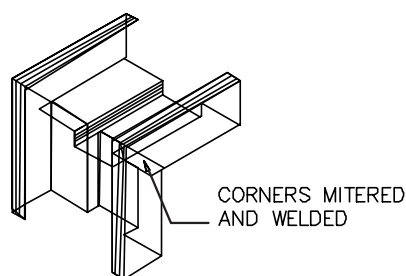
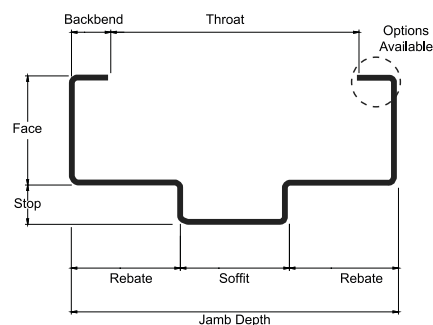


Double egress

Single Rebate Frame

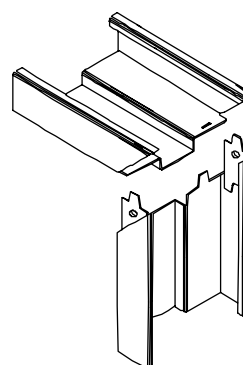


Double Rebate Frame



CORNERS MITERED
AND WELDED

CORNER WELDED FRAME



KNOCK DOWN FRAME

Door Leaf Infill

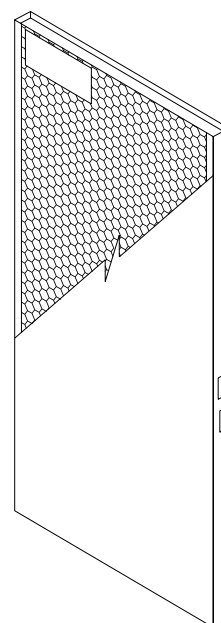
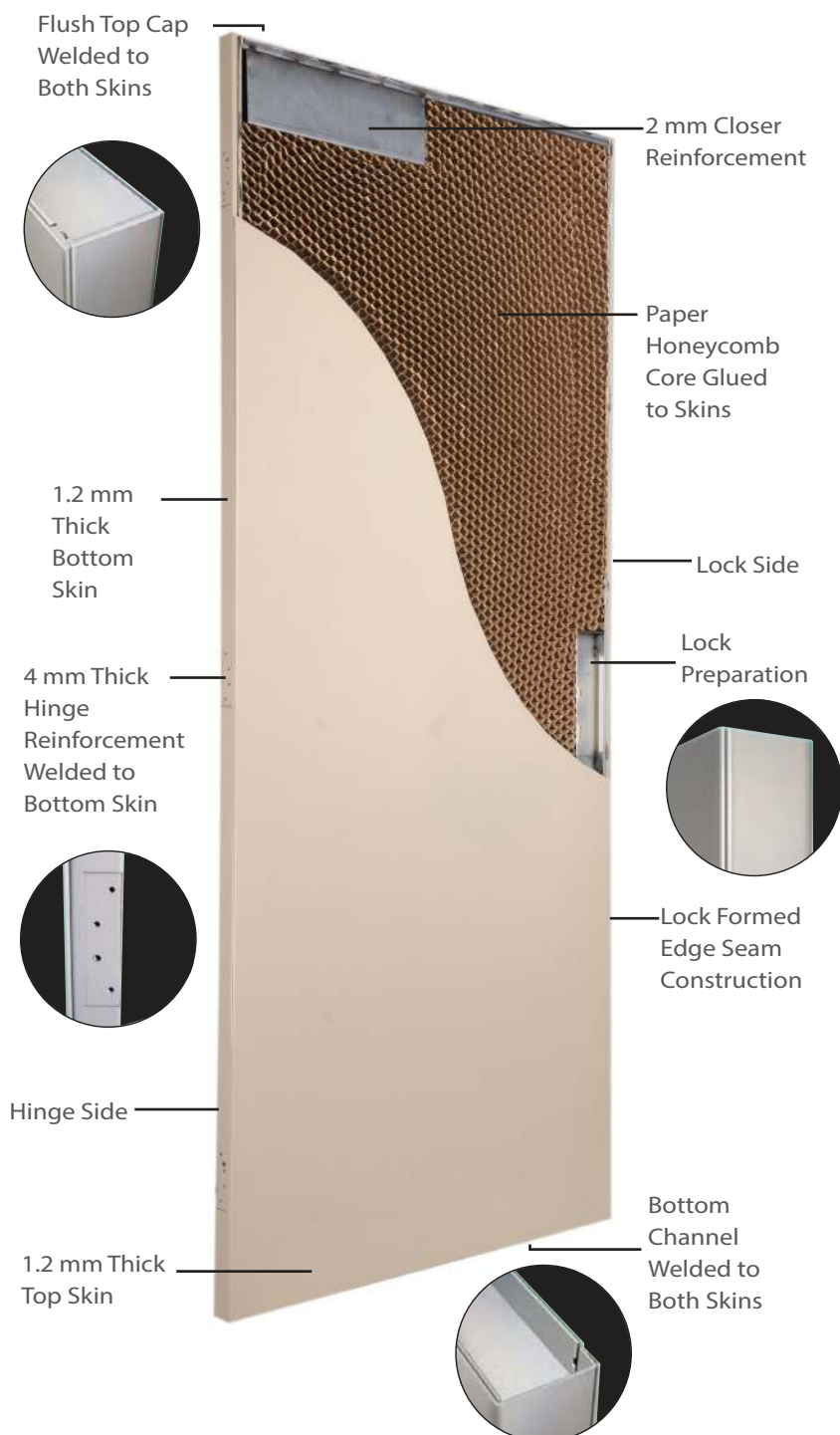
Honeycomb core
Rockwool core



Honeycomb core

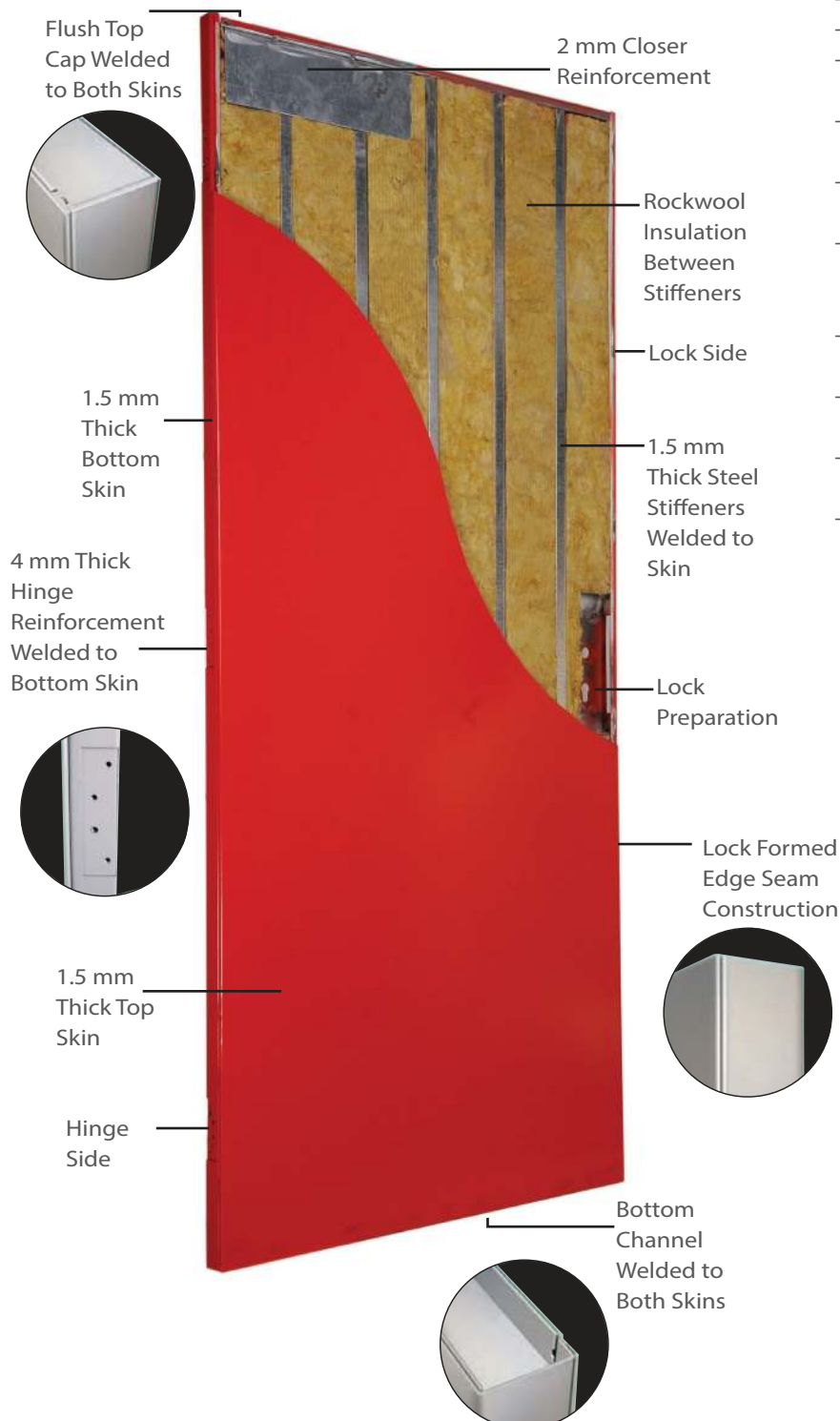
Honeycomb core doors are constructed of two steel sheets with interlocking edge seams. The hardware cut-outs are made and reinforcement plates welded within the leaf. Paper honeycomb is glued to face sheets providing strength and rigidity to panels. The top and bottom edges closed with U channels welded to face sheets.

- Fire rating up to 4 hours.
- Standard door thickness 45mm.
- Suitable for general purpose and fire rated applications.
- Available in wide range of designs with single and double leaf.
- Face sheets supported by honeycomb core provides exceptionally flat surfaces.
- Continuous mechanical interlock on vertical edge seams provides strength and rigidity.
- Honeycomb core provides high strength to weight ratio.
- Vision panel with various glass configurations are available.
- Available with metal louver and fire rated fusible link louver.
- Finish polyester powder coated with RAL or custom colors.

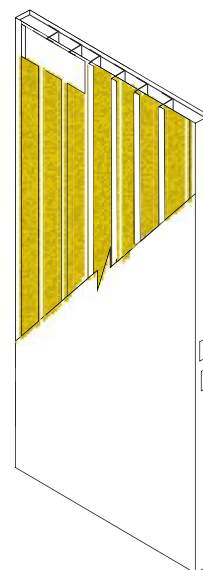


Rockwool core

Rockwool core (Mineral Fibre core) doors are constructed of two steel sheets with interlocking edge seams. The hardware cut-outs are made and reinforcement plates welded within the leaf. Stiffeners are welded to door skin and the void areas between stiffeners filled with rockwool. The top and bottom edges closed with U channels welded to face sheets.



- Fire rating up to 4 hours.
- Standard door thickness 45mm.
- Suitable for general purpose and fire rated applications.
- Available in wide range of designs with single and double leaf.
- Designed for high frequency and severe traffic openings.
- Continuous mechanical interlock on vertical edge seams provides strength and rigidity.
- Rock wool insulation limits thermal and sound transmission.
- Vision panel with various glass configurations are available.
- Available with metal louver and fire rated fusible link louver.
- Finish polyester powder coated with RAL or custom colors.



Stainless Steel Door & Frame



Stainless Steel Door & Frame

TMI offers a variety of Stainless Steel doors, with outstanding finish and corrosion protection for aesthetic or practical requirements.

- 45mm thick stainless steel full flush.
- Construction for heavy-duty and standard duty.
- Ideal for high-style architectural environments, pharmaceutical, foodstuff industry, chemical plants, coastal areas, etc...
- Polystyrene or honeycomb core.
- Core provides insulation characteristics and resistance to impact.
- Core is chemically bonded to face sheets providing total surface support.
- Seamless construction by continuous welding.
- Available with Stainless Steel glass trim.

Note:

Available in SS 316 and 304 Grades



Doors - Wood Finish



Doors - Wood Finish

TMI offers a complete range of doors in wood finish that meet the most demanding requirements up to 120 minutes fire resistance. We ensure that all our products are well manufactured.



When compared to other finishes such as painted finish, wood finish is most suitable.

Wood finish steel door does not require any maintenance. Standard period cleaning only. At the same time achieving the beauty of wood, strength and the durability of a steel door. Suitable for industrial applications.

Wood finish application is followed by the powder coating.



Substation / Louver Doors



Substation / Louver Doors

The substation door is specially designed for remote sites where ventilation is usually required and vandalism is anticipated. TMI substation doors are built for security and lasting construction. The range includes a wide number of options to meet individual customer requirements.



- Cost effective.
- Hot Dip Galvanized rectangular hollow section frame and leaf for rigidity and strength.
- To suit different security and ventilation requirements choice for door and frame thickness and louver configurations.
- Wide choice of hardware options and extras.
- Heavy duty lift off type hinges provide for easy installation.
- Secured to the wall cavity with pre-drilled fixing holes.
- Option for removable transom panel for greater access for heavy equipment and machineries.
- Available for bi-folding and tri-folding options.
- Wide range of colours.



Glazed Doors



Glazed Doors

Glazed doors are set to suit any application where vision is important.

Glazed doors can let natural light flow through and open up space into your rooms.

Custom made to fit existing structural opening for personnel, offices, kitchen rooms, etc... All doors are manufactured with CNC punching and pressing facilities.

We can fabricate any shape and size to suit your individual requirements.





Fire Rated Access Door

In modern buildings the provision for access to a void in the wall or shaft wall for the purpose of inspection and maintenance is more important. TMI has wide range of access panels combined with aesthetics of design or particular materials. Our access panels coming with standard budget locking. Other locking methods are available.

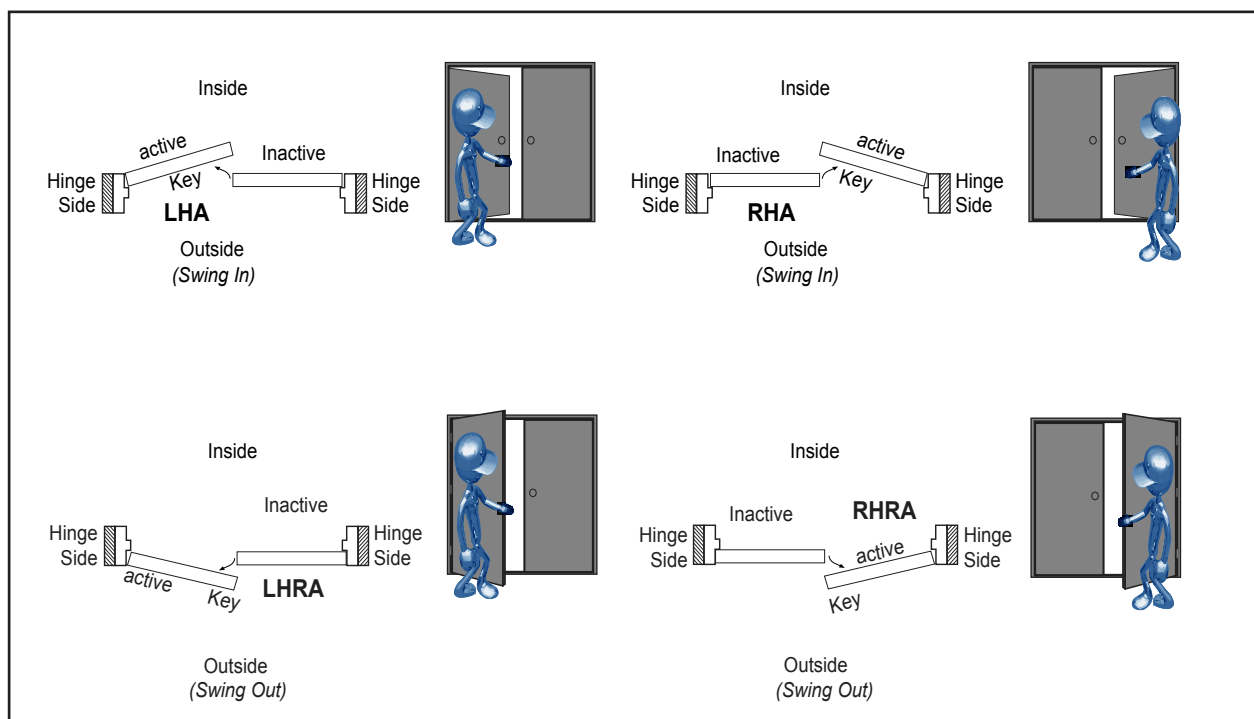
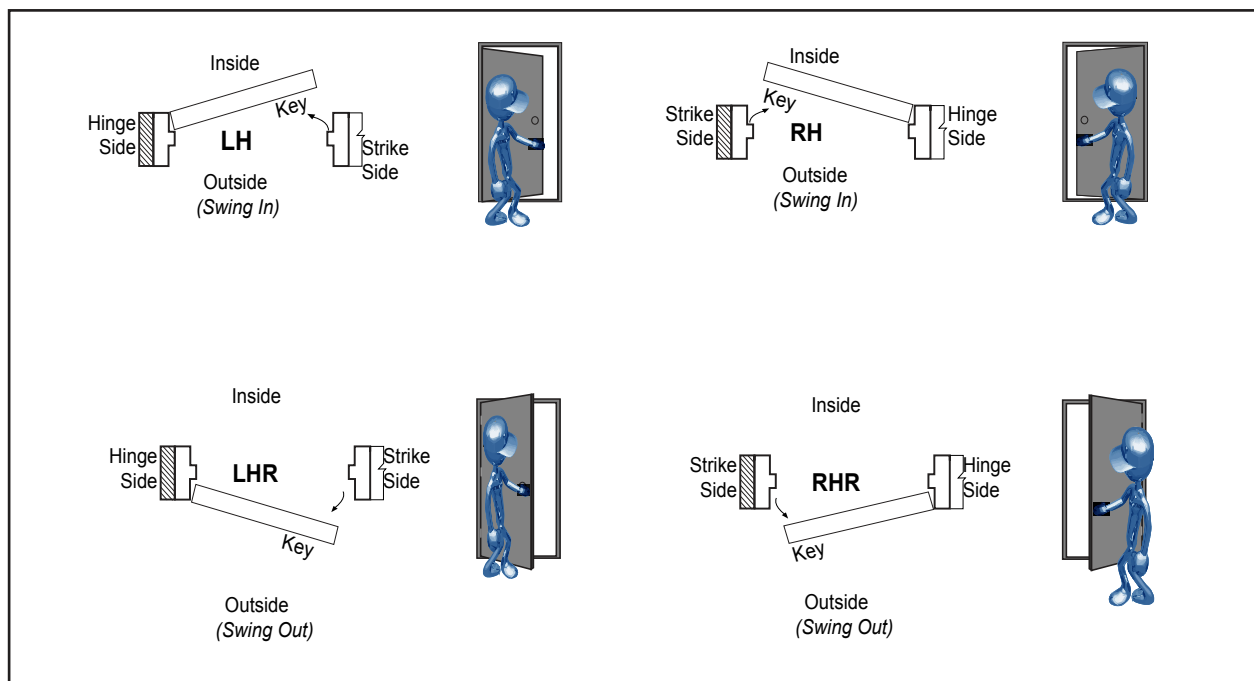


Door Handing Chart



The term handing or hand of a door is applied to doors, frames and hardware so as to indicate the direction of the swing of the door. Basically the door will be either right hand or left hand. However, because doors open into or out of a building or room and some pieces of hardware may be installed or mounted on only one side of the door, it is necessary to be more specific.

To determine the handing of a door and frame always stand outside - facing door, also recognized as the key side or the secured side



Doorset Fire Test



Tested & Certified by:
Warrington Certification Limited,
Part of Exova (UK) Ltd.

Frame 1.5mm, Leaf 1.2mm ,
Core Paper Honeycomb
Glued to skins.

Glazing 300mm x 300mm Test Date
18th September 2009
Reference No: 186693

Evaluation of the doorset against the requirements of BS 476: Part 22: Clause 8, showed that the doorset satisfied the requirements.

Integrity 264 minutes



Tested & Certified by:
Warrington Certification Limited,
Part of Exova (UK) Ltd.

Frame 2.0mm, Leaf 1.5mm ,
Core Steel Stiffener with Rockwool

Glazing 150mm x 600mm Test Date
17th September 2009
Reference No: 186691

Evaluation of the doorset against the requirements of BS 476: Part 22: Clause 8, showed that the doorset satisfied the requirements for the following periods.

Integrity 264 minutes and
Insulation 19 minutes

Exova



CERTIFICATE OF APPROVAL
No CF 705

This is to certify that, in accordance with
TS00 General Requirements for Certification of Fire Protection Products
The undermentioned products of

TECHNICAL METAL INDUSTRIAL CO. L.L.C

P.O. Box: 41558, Abu Dhabi, United Arab Emirates
Tel: +971 2 5502025 Fax: +971 2 5502024
Website: www.tmi-co.com

P. O. Box: 86029, Dubai, United Arab Emirates
Tel: +971 4 8858036 Fax: +971 4 8858658
Website: www.tmi-co.com

Have been assessed against the requirements of the Technical Schedule(s)
denoted below and are approved for use subject to the conditions
appended hereto:

CERTIFIED PRODUCT Mineral Fibre Cored Steel Doors	TECHNICAL SCHEDULE TS12 Hinged or Pivoted Fire Resisting Pedestrian Type Doorsets with Metallic Leaves and Frames
---	---

Signed and sealed for and on behalf of CERTIFIRE


 Sir Ken Knight
 Chairman - Management Council
 Page 1 of 3

Issued: 28th October 2009
 Reissued: 21st October 2014
 Valid to: 20th October 2019





This certificate is the property of Warrington Certification Limited, Holmesfield Road, Warrington, Cheshire WA1 2DS, UK. Registered company No. 02250182.

Exova



CERTIFICATE OF APPROVAL
No CF 706

This is to certify that, in accordance with
TS00 General Requirements for Certification of Fire Protection Products
The undermentioned products of

TECHNICAL METAL INDUSTRIAL CO. L.L.C

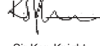
P.O. Box: 41558, Abu Dhabi, United Arab Emirates
Tel: +971 2 5502025 Fax: +971 2 5502024
Website: www.tmi-co.com

P. O. Box: 86029, Dubai, United Arab Emirates
Tel: +971 4 8858036 Fax: +971 4 8858658
Website: www.tmi-co.com

Have been assessed against the requirements of the Technical Schedule(s)
denoted below and are approved for use subject to the conditions
appended hereto:

CERTIFIED PRODUCT Paper Honeycomb Cored Steel Doors	TECHNICAL SCHEDULE TS12 Hinged or Pivoted Fire Resisting Pedestrian Type Doorsets with Metallic Leaves and Frames
---	---

Signed and sealed for and on behalf of CERTIFIRE


 Sir Ken Knight
 Chairman - Management Council
 Page 1 of 3

Issued: 29th October 2009
 Reissued: 21st October 2014
 Valid to: 20th October 2019





This certificate is the property of Warrington Certification Limited, Holmesfield Road, Warrington, Cheshire WA1 2DS, UK. Registered company No. 02250182.

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 F: +44 (0) 1925 655 419
 E: warrington@exova.com
 W: www.exova.com



Testing. Advising. Assuring

Title:

The fire resistance performance of a single specimen of a partially insulated, single-acting, double-leaf doorset in accordance with BS 476: Part 22: 1987, Clause 7.

WF Report No:

186691, Issue 3



Prepared for:

**Technical Metal
Industrial CO. L.L.C**
P.O. Box: 41558,
Abu Dhabi,
United Arab Emirates.

In conjunction with

**Technical Metal
Industrial CO. L.L.C**
P.O. Box: 86029,
Dubai,
United Arab Emirates.

Date:

23rd October 2009

Notified Body No:

0833



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 WA1 2DS
 United Kingdom
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 F: +44 (0) 1925 655 419
 E: warrington@exova.com
 W: www.exova.com



Testing. Advising. Assuring

Title:

The fire resistance performance of a single specimen of an uninsulated, single-acting, double-leaf doorset in accordance with BS 476: Part 22: 1987, Clause 8.

WF Report No:

186693, Issue 3



Prepared for:

**Technical Metal
Industrial CO. L.L.C**
P.O. Box: 41558,
Abu Dhabi,
United Arab Emirates.

In conjunction with

**Technical Metal
Industrial CO. L.L.C**
P.O. Box: 86029,
Dubai,
United Arab Emirates.

Date:

23rd October 2009

Notified Body No:

0833



CERTIFICATE OF COMPLIANCE

Certificate Number 20140123-R26650
Report Reference R26650-20140123
Issue Date 2014-JANUARY-23

Issued to: TECHNICAL METAL INDUSTRIAL CO L L C
PO BOX 41588
ABU DHABI UNITED ARAB EMIRATES

This is to certify that
representative samples of

FIRE DOOR AND FIRE WINDOW FRAMES
The single-unit type, pressed-steel frames for masonry
walls at least 2 inches (50.8 mm) thick

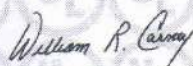
Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL Subject 63, Outline of Investigation for Fire Door Frames
Additional Information: See the UL Online Certifications Directory at
www.ul.com/database for additional information

Only those products bearing the UL Listing Mark should be considered as being covered by UL's
Listing and Follow-Up Service.

The UL Listing Mark generally includes the following elements: the symbol UL in a circle:  with the
word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category
name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product.



William R. Carney, Director, North American Certification Programs
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please
contact a local UL Customer Service Representative at www.ul.com/contactus



Accessories

TMI is proud to offer a complete range of doors and hardware packages to suit your requirements. International brand hardware supplied by TMI offer quality, value, great customer benefits and an independent choice for architects, building owners and contractors.



Technical Specifications

TMI steel doorset manufactured from prime quality pre-galvanised steel sheet to BS EN 10346:2009, ASTM A653, and JIS G3302 standards with Zinc coating ranging from 120gm-275gm/sq.m.

Door frames to BS 1245 manufactured from 1.5 or 2.0mm thick steel sheet formed to single or double rebate profile, corners mitred or butt joint with welded or knock down type construction. Hinge reinforcement 4.0mm thick, lock strike plate reinforcement, other hardware mounting plates, mortar guards are welded to the frame. In welded type frame temporary spreader is fixed at the bottom to maintain the integrity of the frame during transportation and installation. Frame anchors, In existing wall bolt fixing with steel expansion type anchor, 3.0mm thick steel strap welded to the frame and holes in the frame plugged by cap. In prefix type snap-in type T strap (1.2mm) or wire anchor (3.5mm) is used.

The door leaf, 45mm thick manufactured from steel sheet of 1.2mm thick for paper honeycomb core, glued to face sheets. The rockwool core doors are made from 1.5mm thick sheet. Steel stiffeners are vertically welded to the door skin, the void between stiffeners and door skin is filled with rockwool. Hinge reinforcement (4.0mm), lock reinforcement and other hardware mounting plates are welded within leaf. The vertical edge is lock formed and both skins are closed by mechanical interlocking and the corners spot welded. The top and bottom edges are capped off with channels, welded to door faces.

Glazing to the door leaf can be fixed by using metal trim and metal louvers as well.
All steel doors and frames are powder coated with approved color.

Storage Conditions

- All products are stored in the designated areas. Store in clean, dry and well ventilated area.
- All products shall be well packed and covered to be protected from any damage.
- All doors and frames shall be stored vertically under cover.
- The units shall be placed on - wooden blocks to prevent rust and possible damage.
- Provide space between the doors to promote air circulation.
- If the wrapper on the door becomes wet, it must be removed immediately.



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Engineering Department

