Defenshield

DEFENSHIELD LTD

Company Profile

Defenshield Limited Specializes In Fire Rated And Other Specialized Doors

MESSAGE
FROM DIRECTOR

Hello All,

It gives me an immense pleasure to introduce you to 'Defenshield Ltd." formerly known as Unicorp Solutions Ltd. Defenshield Ltd. Nairobi Kenya is led by our head office Vanguard Doors and Ironmongeries in India.

Vanguard is managed by a highly motivated, qualified engineers and experienced professionals in the field having over 20 years of engineering experience in door manufacturing in India. Our technical and experienced professionals are committed to providing the best products meeting your requirements. We at Vanguard believe in Quality & Value of time.

We supply a wide range of engineering products certified and listed by world class third party certification authorities.

We are manufacturers and suppliers of wide range of specialized doors which includes Fire Rated and Non Fire Rated Steel as well as Wooden Doors, Acoustic Doors, Bullet and Blast Resistant Doors, Stainless Steel Doors etc. among others according to UL and BS standards at our factory in India.

We have the best products to International standards and Installation is performed by our trained
personnel.

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About Us

Defenshield Ltd. is managed by a highly motivated, qualified engineers and experienced professionals in the field.

A deep study of production process and optimum flow of material throughout the plant has resulted in a state of the art manufacturing facility to produce steel doors and frames of high quality standards and in a very less lead time.

The quality management system is constantly monitored, periodically audited and revised to keep abreast of the latest in the business and industrial environment.
Our team is dedicated to provide the best possible services to the client from concept to commissioning.

Software aided manufacturing process implemented to optimize engineering work.

Structure Diagram

LIST OF OUR PRODUCTS

- Security steel door and frame
- Fire rated steel door and frame
- Non fire rated steel door and frame
- Fire rated stainless door and frame
- Acoustic fire rated steel door and frame
- Water tight steel door and frame
- Air tight steel door and frame
- X-ray proof (leadline) steel door and frame
- Bullet proof steel door and frame
- Fire rated access steel doors and frame
- Sliding doors
- Over head sectional doors
- Fire rated glazed partitions
- Access control systems
- Various brands on ironmongeries
- Acoustic seals (uk, us & australia)
- Fire rated glass (ul & warrington)
- G.I cable trays, g.I channels for wall partitions

High Quality

Vanguard doors are manufactured with care and as per the requirement of end user. Detailed shop drawings are submitted by our design engineers to main contractor prior to manufacturing to make sure that all doors are inline with the approved building design.

Modern Design

Vanguard doors are used in all modern facilities like villas, residential flats, hospitals, offices etc. Various Ral colors and finishes (Matt, Smooth, Texture, Wooden finish) can be provided as per the design requirements.

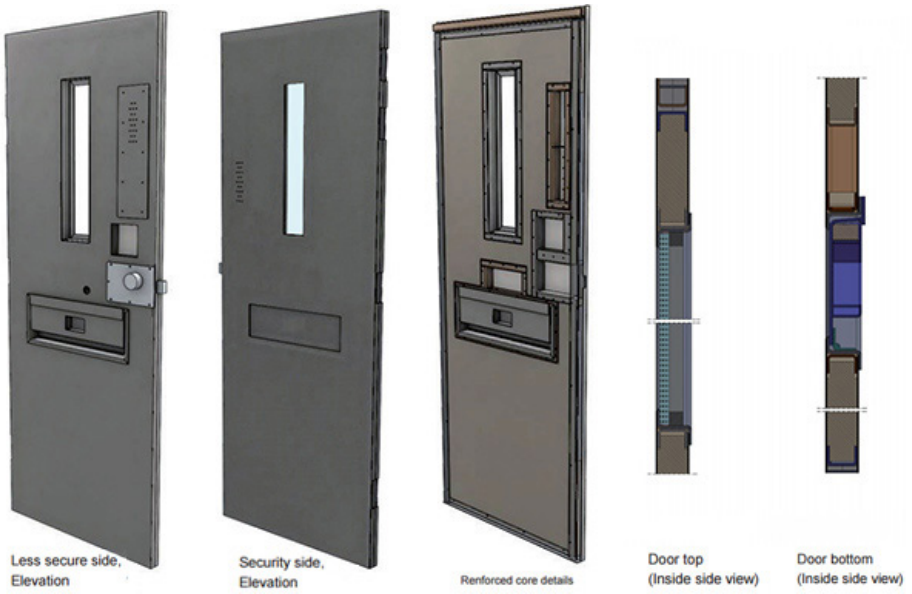
Security Steel Door And Frame

Security steel doors and frames are designed for maximum security in accordance with HMMA 862-87. Doors are supplied seamless on shutter faces.

Face sheets are totally supported by 1.2mm thk vertical stiffeners placed no more than 150mm apart and welded no more than 150mm along their length.

Fiberglass or Rockwool insulates the area between stiffeners. The top and bottom door edges are closed by 3mm inverted steel channel welded in place.

Fire Rated Steel Door And Frame



Fire rated steel doors and frames are designed to delay the transfer of heat from one side of the door to another. Full flush doors an interlocked hairline seams on vertical edges and have no visible seams on faces. Doors specified seamless have no visible seams on faces or vertical edges.

Face sheets are totally supported by special core used to cover the entire door to delay the heat transfer from one side to another and to avoid burning of people during escape from fire. Top and bottom door edges are closed by 1.5mm inverted steel channel welded in place.

Fire Rated Stainless Steel Door And Frame

Fire rated stainless steel doors and frames are manufactured from stainless steel and designed to withstand severe weather conditions coupled with beautiful appearance. Full flush doors an interlocked hairline seams on vertical edges and have no visible seams on faces. Doors specified seamless have no visible seams on faces or vertical edges.

Face sheets are totally supported by special core used to cover the entire door to delay the heat transfer from one side to another and to avoid burning of people during escape from fire. Top and bottom door edges are closed by 1.5mm inverted steel channel welded in place.

Acoustic Fire Rated Steel Door And Frame

Fire rated stainless steel doors and frames are manufactured from stainless steel and designed to withstand severe weather conditions coupled with beautiful appearance. Full flush doors an interlocked hairline seams on vertical edges and have no visible seams on faces. Doors specified seamless have no visible seams on faces or vertical edges.

Face sheets are totally supported by special core used to cover the entire door to delay the heat transfer from one side to another and to avoid burning of people during escape from fire. Top and bottom door edges are closed by 1.5mm inverted steel channel welded in place.

Water &Air Tight Steel Door And Frame*

Water & Air tight steel doors and frames are designed to control water & air infiltration as complete unit (doors, frame & water and air tight gasketing). Full flush doors an interlocked hairline seams on vertical edges and have no visible seams on faces. Doors specified seamless have no visible seams on faces or vertical edges.

Face sheets are totally supported by special core. Water & Air tight doors and frames are supplied with the special seals to control water & air infiltration. Gasketing is part of the assembly as shown in the drawing. Top and bottom door edges are closed by 1.5mm inverted steel channel welded in place.

X-Ray Proof Steel Door And Frame

X-Ray proof steel doors and frames are designed to protect from harmful rays. Full flush doors an interlocked hairline seams on vertical edges and have no visible seams on faces. Doors specified seamless have no visible seams on faces or vertical edges. Face sheets are totally supported by lead sheet covering the full width and height of the door and frame.

The lead thickness is to be equal to the lead in the adjacent wall. The Locks, glass and louvers must be lead shielded by the manufacturer. Top and bottom door edges are closed by 1.5mm inverted steel channel welded in place.

Bullet Proof Steel Door And Frame

Bullet proof steel doors and frames are designed to protect from even from bullets. Full flush doors an interlocked hairline seams on vertical edges and have no visible seams on faces. Doors specified seamless have no visible seams on faces or vertical edges.

Face sheets are totally supported by vertical stiffeners supported with special armor plate to protect from bullets in accordance with UL752 Level 4 up to 32-06 caliber. These doors are supplied complete with frame and hardware. Top and bottom door edges are closed by 2mm steel channel welded in place. Top and bottom edge channels are flush.

Retractable (Sliding Folding) Doors

Our movable folding partitions are widely used in:

- Hotel
- Meeting room
- Office
- Soundproof room
- Commercial room
- Movie theater room
- Restau-rant
- Museum
- Exhibition
- Library
- College etc.

Stainless Steel Doors (Grade 304, 316)

Vanguard Stainless steel doors are used in clean environments where extra hygiene is required. Hospitals, Kitchen areas on restaurants and Hotels are the major areas where Stainless steel doors are used.

Both (304 and 316) grades are available on Vanguard Stainless steel doors.

Finishes available are Brush finish (hair line) & Mirror finish. Stainless Steel doors are easy to clean and look nice to your clean areas. Stainless Steel's anti rust property will avoid the doors from rusting even in wet areas.

Proper periodic maintenance shall be done on Stainless steel doors in order to avoid rusting.

Laminated/ Veneered/ Postformed/ Solid Wooden Doors (Non Fire Rated)

The laminated door is a door leaf finished with laminated plastic. The main advantages of lami- nated doors are moisture impermeability, and resistance to various mechanical influences. A veneered product is made out of thin, decora- tive slices of high quality wood, affixed to a lower density core that will resist warping and moisture and therefore offer a good value alternative to solid oak.

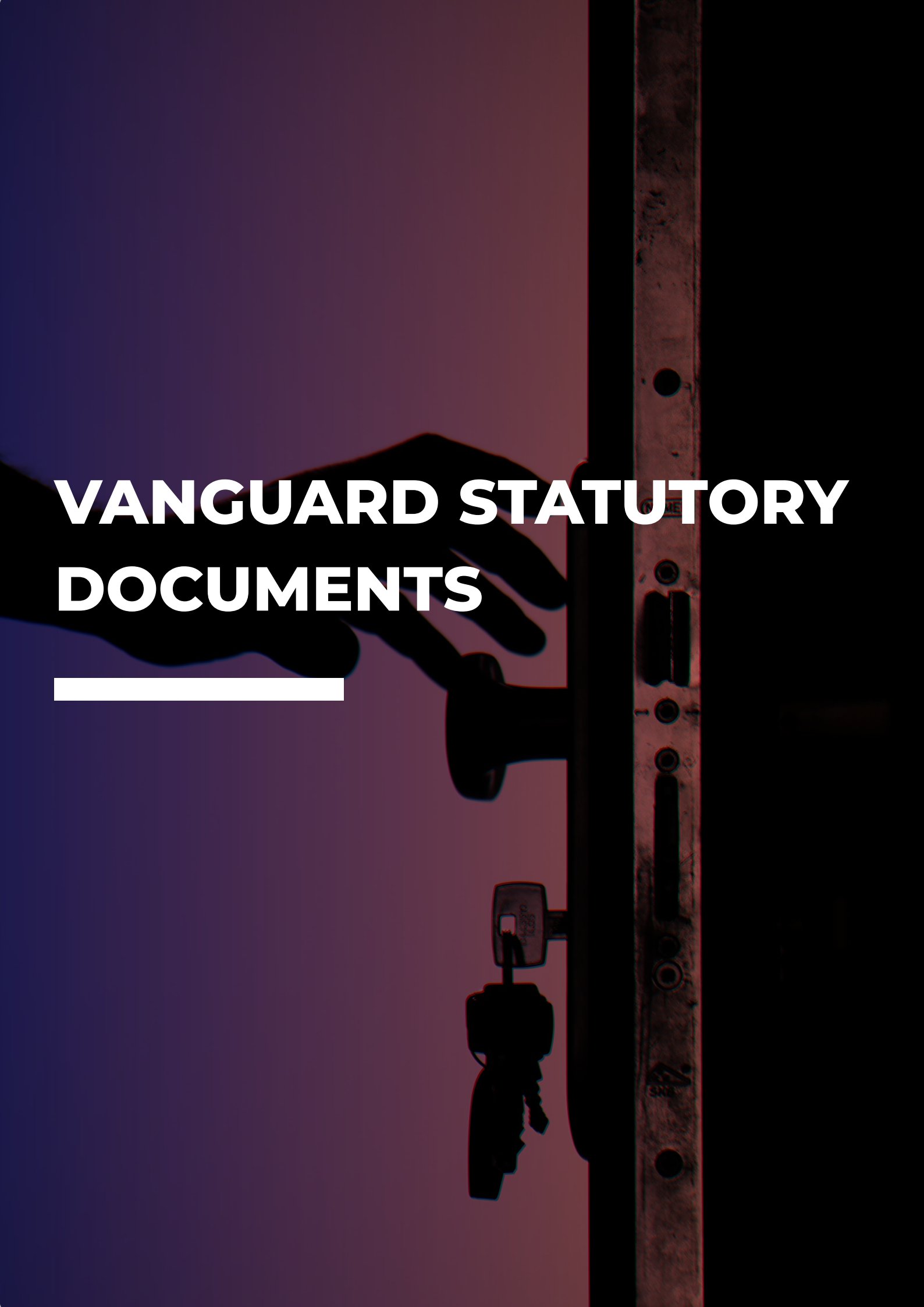
They can also be stained to produce a warm, rich finish. Post-formed laminate is created using a different process to conventional laminate. The aim of the post-forming process is to allow the laminate to bend, offering a greater level of flexibility.

Fire Rated Wooden Door And Frame

Doors can play a pivotal role when it comes to, safely during fire accidents. Our fire-rated wooden doors are manufactured by a unique process, using top quality fire-rated core material from Halspan and Kingsa. They are aesthetically designed to offer an architectural appeal, and can be produced from a number of different species and panel configurations. Building regulations specify the requirements for doorsets to protect occu- pants for a minimum time, in different locations in the building, expressed in minutes, 30, 60, 90 or 120.

As a manufacturer of fire rated doors, our design is evaluated by a UKAS accredited laboratory against a British Stan- dard test. Warrington / BM TRADA's Q-Mark Fire Door Scheme further ensures that the manufacturers' systems meet the requirements and all the doorsets, covered by the certificate are fit for purpose. We manufacture the doors of different fire ratings to fit the particular construc- tion project and code requirements. Halspan 45 US is an internal component or fabricated core based system for a range of standard door set items compliant with North American codes like NFPA 252, ANSI UL10c, UBC 7-2 and CAN4 S104. In addition to its excellent performance in fire doors, Halspan 45 is also used to make fire rated frames. Applied facings give a suitable surface for finish- ing with veneer, high pressure laminate or paint.

VANGUARD STATUTORY DOCUMENTS



TEST SCHEDULE 1/1
(Reference No. – FR /0358)

1. Name of the Laboratory	: Fire Research Laboratory CSIR-Central Building Research Institute, Roorkee-247 667
2. Name of the Sponsorer	: M/s Adiba Fire Doors # 47/48, Byraveshwara Indl. Estate, Andrahalli Main Road, Behind Sushruthi Bank, Peenya 2nd Stage, Bangalore
3. Name of the Test	: Fire Resistance Test
4. Date of Test	: February 25, 2019
5. Ambient Temperature	: 19°C
6. Fire Exposure	: As per BS:476 (Part 20 & 22)-1987, IS:3614(Part-2)-1992
7. Applicability of Test Criteria	: Stability : Yes : Integrity : Yes : Insulation : No
8. Specimen Details	: Single Leaf Single Swing G.I. Composite Fire Door

Size	Door Frame	Door Panel
Height	: 2420 mm	: 2358 mm
Width	: 1200 mm	: 1120 mm
Thickness	: 100 mm	: 46 mm

9. Specimen Construction	: As shown in Figure 1 and Figure 2 [(Drg. No. 1/1 - 0358(1) and 1/1- 0358(2)]
10. Door Type	: Uninsulated
11. Door Installation	: Opens outwards the furnace chamber
12. Intended Test Duration	: 120 Minutes

One Twenty Minutes

Test Results

The data of the evaluation reveals that the single leaf single swing G.I. composite fire door (Uninsulated) specimen has been found to be able to withstand standard fire exposure for 120 min. (One Twenty Minutes Only) with respect to **stability and integrity only.**

(Sushil Kumar) **(Narendra Kumar)** **(Dr. Suvir Singh)**

(Technical data provided in this schedule pertains to the specific sample submitted to the Institute and tested. CBRI's name or logo cannot be used for commercial purposes. All procedural, legal, and / or operational matters will be the responsibility of the party using these results. Accepting / Rejecting the results, partly or fully rests with the users agencies.)

अग्नि अनुसंधान प्रयोगशाला
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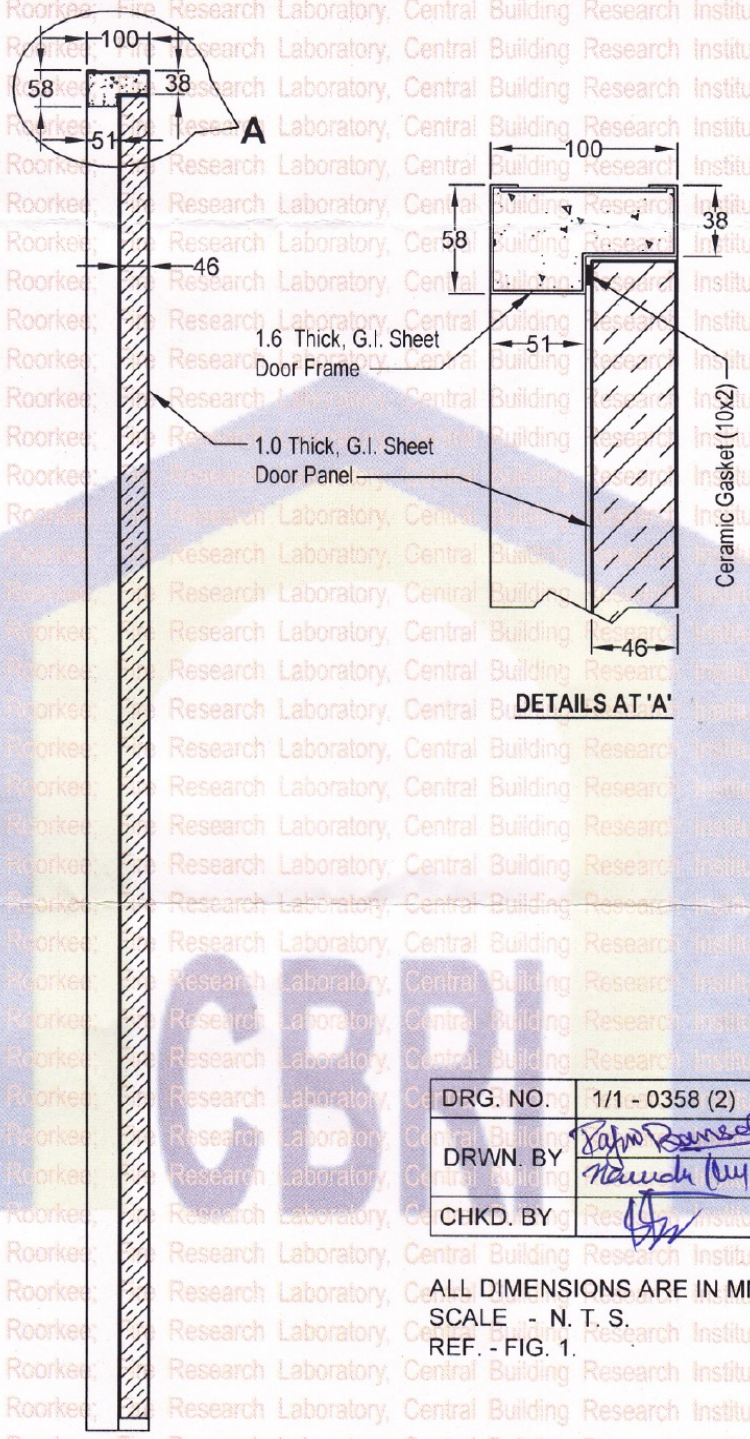
CSIR - Central Building Research Institute
रूड़की - 247 667 (उत्तराखण्ड) भारत/Roorkee - 247 667 (U.K.) INDIA

Note : This original only is valid. Third parties using copies are doing so at their own risk.



DRG. NO.	1/1 - 0358 (2)
DRWN. BY	
CHKD. BY	

ALL DIMENSIONS ARE IN MM.
SCALE - N. T. S.
REF. - FIG. 1.

Fig. 2: Sectional details of Single Leaf Single Swing G. I. Composite Fire Door (Uninsulated) specimen evaluated for Fire Resistance on February 25, 2019.

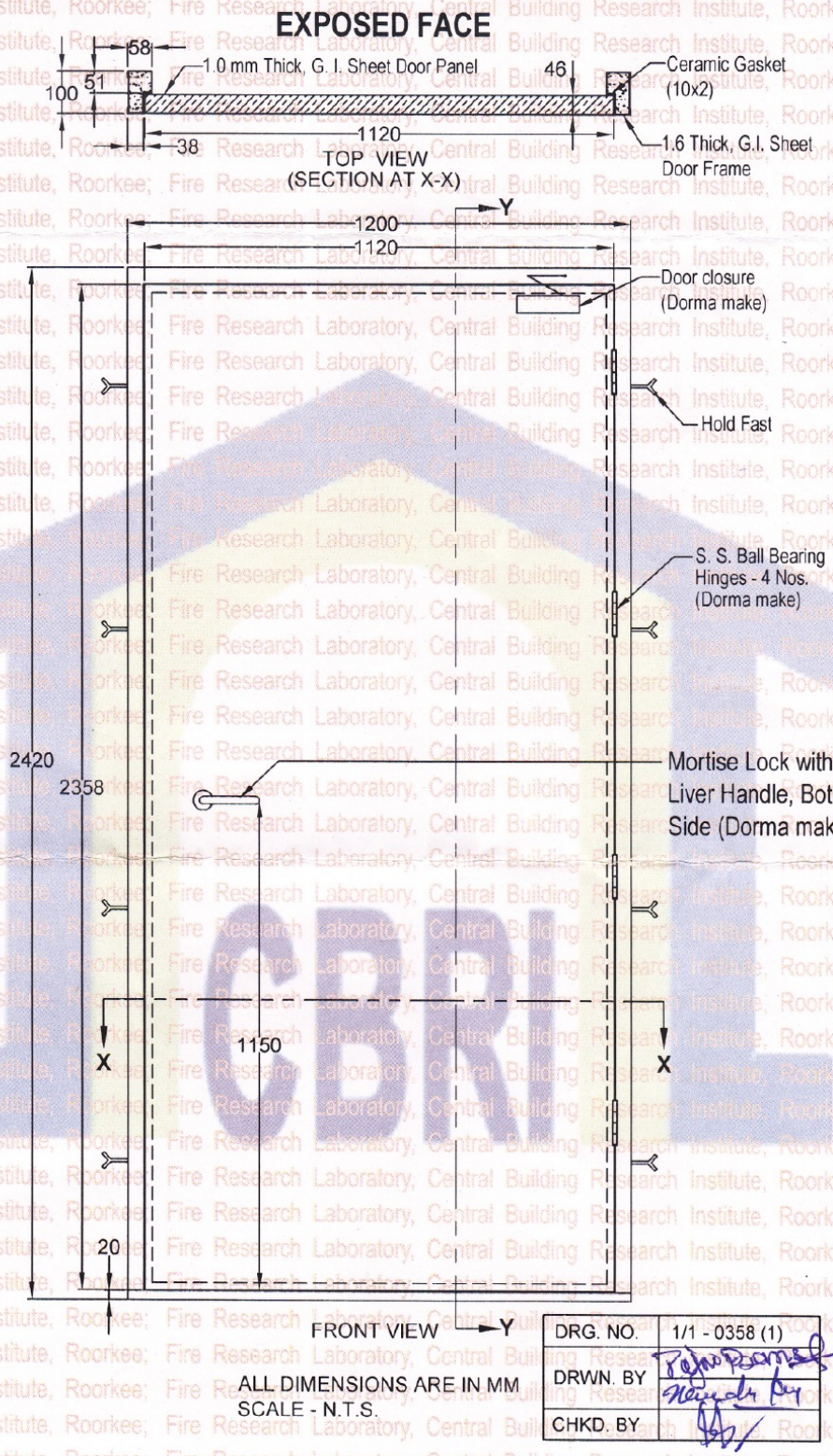


Fig. 1: Construction details of Single Leaf Single Swing G. I. Composite Fire Door (Uninsulated) specimen evaluated for Fire Resistance on February 25, 2019 .

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CERTIFICATION

Certifire

Certifire is an independent third-party certification scheme that assures performance, quality, reliability and traceability of products and systems. Recognised by regulatory authorities worldwide as an international mark of fire safety and one of the most authoritative in the industry.

Consort use the Certifire scheme as its internationally recognised for quality assurance within our industry. We are annually inspected for products that carry the Certifire logo and our products on the market are randomly selected for independent tested to make sure that they continue to meet the requirements and maintain the levels of certification achieved originally.

Certification documentation for Consort's products is readily available on our website or on request.

CE Marking

From July 2013 it became mandatory for many construction products which are covered by a harmonised EN standard to be CE marked before they could be put on the market. It is the manufacturers declaration that their product meets the minimum requirements of a harmonized technical specification.

CE marking shows compliance with the latest UK Construction Products Regulations for hardware used on fire, smoke & escape doors. This indicates that the product has been through third party performance and fire tested, where applicable, and that the product is produced in an environment which has passed production control systems.

UKCA Marking

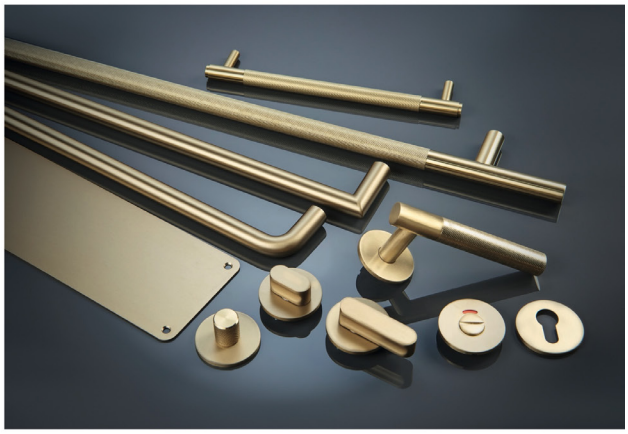
The new UKCA (UK Conformity Assessed) marking declares that the product conforms to all applicable U.K. legislative requirements and that appropriate conformity assessment procedures have been successfully completed. The marking is now used because the UK has left the EU and therefore represents the UK equivalent of the CE marking.

Starting from January 1st 2021 the UKCA marking will replace the CE marking as a requirement for goods entering Great Britain, including England, Scotland and Wales. The UKCA marking will be required on products subject to the U.K. equivalent legislation to all of the EU Directives/Regulations that required CE marking, including the Radio Equipment, EMC and Low Voltage Directives.

Fire Symbol

Product is fire rated, please get in touch to find out specific certifications achieved.

CERTIFICATION & STANDARDS



Stainless Steel

Stainless steel is a generic term for a family of corrosion resistant alloy steels containing 10.5% or more chromium and all stainless steels have a high resistance to corrosion. This resistance to attack is due to the naturally occurring chromium-rich oxide film formed on the surface of the steel. Although extremely thin, this invisible, inert film is tightly adherent to the metal and extremely protective in a wide range of corrosive media. The film is rapidly self-repairing in the presence of oxygen, damage by abrasion, cutting or machining.

Stainless Steel Gradings

- **Grade 316** - this is a marine grade stainless steel and used in areas of high corrosion.
- **Grade 304** - this is the most common grade used worldwide and is a medium to high corrosion resistance grade.
- **Grade 201** – this is a low to medium corrosion resistance grade because it has very little nickel and a higher manganese content which makes it less resistant although cheaper due to the low nickel content.

CERTIFICATION & STANDARDS

CONSORT

CERTIFICATION & STANDARDS

OVERVIEW

British & European

BS EN 1906 is the standard requirements and testing methods covering lever handles and knob furniture according to British/European standards.

BS EN 1634-1 is the standard requirements and testing methods determining the fire resistance of door and shutter assemblies and openable windows according to British/European standards.

BS 8424 is the standard requirements and testing methods covering pull handles according to British standards.

BS 5499/ ISO 7010 is the standard requirements and testing methods covering all safety warning signage according to British standards & global standards.

BS EN 12209 is the standard requirements and testing methods covering locks, latches and locking plates according to British/European standards.

BS EN 12051 is the standard requirements and testing methods covering single point bolts and associated keeps, used to secure, or increase the security of doors and windows according to British/European standards.

BS EN 1935 is the standard requirements and testing methods covering single axis hinges according to British/European standards.

BS EN 1527 is the standard requirements and testing methods covering manual system sliding doors, sliding corner doors, and folding doors of the bi-fold type and multi panel folding doors but excluding doors and panels according to British/European standards.

BS EN 1154 is the standard requirements and testing methods covering controlled door closing devices according to British/European standards.

BS EN 1158 is the standard requirements and testing methods covering both separately mounted devices and mechanisms incorporated in door closers according to British/European standards.

BS 476 is the standard requirements and testing methods covering fire tests for elements of structure and materials according to British standards.

BS EN 1303 is the standard requirements and testing methods covering cylinders for locks according to British/European standards.

BS EN 1125 is the standard requirements and testing methods covering panic exit devices operated by a horizontal bar according to British/European standards.

BS EN 179 is the standard requirements and testing methods covering panic exit devices operated by a lever handle or push pad according to British/European standards.

BS8300 is the standardised design of an accessible and inclusive built environment, to meet the needs of disabled people as well as create an accessible and inclusive environment for them. This is in place to ensure everybody has access to enter, use, and exit a built environment open to the public equally.

American

ANSI/BHMA 156.3 this standard establishes requirements for exit devices and trim, automatic and self-latching flush bolts, removable mullions, coordinators, and carry-open bars. Performance criteria include cycle, operational, strength, material evaluation, and finish tests. According to American National Standards Institute (ANSI) & Builders Hardware Manufactures Association (BHMA).

ANSI/BHMA 156.1 this standard establishes requirements for butts & hinges. Cycle tests, lateral and vertical wear tests, friction tests, strength tests, finish tests, and material and dimensional requirements are included. According to American National Standards Institute (ANSI) & Builders Hardware Manufacturers Association (BHMA).

UL10C is the standard for positive pressure fire tests of door assemblies, these methods of fire tests are applicable to swinging door assemblies, including door frames with lights and panels, of various materials and types of construction for use in wall openings to retard the passage of fire.

BS EN 1906 Lever handles & knob furniture

BS EN 1906 classifies door furniture by using an 8 digit coding system. A similar classification applies to all building hardware product standards so that complementary items of hardware can be specified to, for instance, a common level of corrosion resistance, category of use, etc. Each digit refers to a particular feature of the product measured against the standards performance requirements.

Digit 1 – Category of use – four grades identified.

- Grade 1: medium frequency of use with a high incentive to exercise care and a small chance of misuse, e.g. internal residential doors;
- Grade 2: medium frequency of use by people with some incentive to exercise care but where there is some chance of misuse, e.g. internal office doors;
- Grade 3: high frequency of use by public or others with little incentive to exercise care and with a high chance of misuse, e.g. public office doors;
- Grade 4: high frequency of use on doors which are subject to frequent violent use, e.g. football stadiums, oil rigs, barracks, public toilets, etc.

Digit 2 - Durability – two grades identified.

- Grade 6: medium use - 100 000 cycles
- Grade 7: high use - 200 000 cycles

Digit 3 – Test door mass No classification.

Digit 4 – Fire resistance - four grades are identified.

- Grade 0: no performance determined.
- Grade A: for use on smoke door assemblies.
- Grade B: for use on smoke control and fire resistance door assemblies.
- Grade C: for use on smoke control and fire resistance door assemblies with requirement for special core in the handle/knob.

Digit 5 – Safety - two grades identified.

- Grade 0: normal use
- Grade 1: safety application - example handles must have high strength handle-to-plate and plate-to-door fixing such that they would withstand a person grabbing to prevent falling.

Digit 6 – Corrosion resistance - five grades are identified according to EN 1670.

- Grade 0: no defined corrosion resistance.
- Grade 1: mild resistance - minimum requirement for internal use.
- Grade 2: moderate resistance.
- Grade 3: high resistance - minimum requirement for external use.
- Grade 4: very high resistance - recommended for use in exposed marine atmospheres or very polluted industrial environments.
- Grade 5: exceptionally high corrosion resistance recommended for use in exceptionally severe conditions where long-term protection of the product is required.

Digit 7 – Security - five grades are identified.

- Grade 0: not approved for use on burglary resistant doors.
- Grade 1: mild burglary resistance.
- Grade 2: moderate burglary resistance.
- Grade 3: high burglary resistance.
- Grade 4: extra high burglary resistance

Note: The main requirements include resistance to drilling, close fitting plates or escutcheons to help protect the lock and support the cylinder.

Digit 8 – Type of operation - three operation types are identified.

- Type A: spring assisted furniture
- Type B: spring loaded furniture
- Type U: unsprung furniture

Ongoing Projects

- Menengai Geothermal Power Plant - Nakuru
- Pangani Urban Affordable Housing Projects

Below are our completed projects in Kenya

- City Lodge Hotel - two rivers
- LSG sky chefs JKIA
- Union Logistics JKIA cargo
- Bidco Land O'lakes Nakuru
- Avenue Hospital Kisumu
- Carrefour Mega Mall Mombasa road
- Sarit Centre Westlands(Phase 2)
- Builders Warehouse at Karen Waterfront
- United States International University (School of Social Science and Humanities)
- Olkaria Naivasha
- Visa Office at Riverside(Bullet Poof Doors)
- Capital West in Westlands
- Victoria Inn Hotel in Kisumu
- Landmark place, Karen
- Cooperative University, Langata
- Makande Secondary School, Mombasa
- Kenyatta hospital-East African Kidney Institute,
- Panaroma Hotel (sliding folding doors)
- United States International University (school of human resource, (sliding folding door)

Our Patners & Clients

SYMBION

PLANNING architecture + land use

BEGLIN WOODS ARCHITECTS LIMITED

Tower Cost CONSULTANTS LIMITED

DESIGN PARTNERSHIP

YMR

LAXMANBHAI CONSTRUCTION LTD. BUILDING & GENERAL CONTRACTOP

Parklane Construction Limited

PARBAT SIYANI INTERIORS We Consult, Design & Build

Dinesh Construction LTD

LSG Sky Chefs

LSG sky chefs
~ JKIA

Avenue Healthcare

Avenue Hospital
~ Kisumu

USIU AFRICA United States International University-Africa

USI University
~ School of Social Science and Humanities

CITY LODGE HOTEL

Bidco Land O'lakes
~ Nakuru

Bidco Land O'lakes
~ Nakuru

UNION LOGISTICS

Union Logistics
~ JKIA Cargo

Sarit Your City

Sarit Centre
~ Westlands(Phase 2)

VICTORIA INN

Victoria Inn Hotel
~ Kisumu

VISA

Visa Office (Bullet Poof Doors)
~Riverside

Carrefour

Carrefour Mega
~ Mombasa road Mall

builders WAREHOUSE

Builders Warehouse
~ Karen Waterfront

Olkaria BIO LIMITED

Olkaria
~ Naivasha

KNH QUALITY HEALTH CARE

Kenyatta National Hospital
~ East African Kidney Research Institute

THE CO-OPERATIVE UNIVERSITY OF KENYA

Cooperative University
~ Langata

DEFENSHIELD LTD

ABOUT OUR COMPANY

Defenshield Ltd- Nairobi Kenya is led by our head office Vanguard Doors and Ironmongeries in India.

THANK YOU

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