вс 15



Fire Rated Doors & Frames























BETEC CAD. manufactures life safety Fire Doors, based on NFPA 80 & UL 10B / UL 10C / BS 476 technological data, in the interest of improving the safety for public benefit.

Today, as per **BOCA** national building code 10th edition & **IBC 2000** standards, building safety is a demandable choice by the public in case of fire accidents. **BETEC CAD**'s Fire Rated Doors are manufactured in accordance with **UL 10C / BS 476** standards to prevent the spread of fire breakouts.

FIRE DOORS FOR BUILDING & COMMERCIAL APPLICATIONS

















Fire Rated Steel Door Infill: Steel Stiffened with Rockwool **Construction : Galvanized Steel**

BETEC CAD manufactures fire rated steel doors, which barricades / reduces the spread of fire and enables safe egress. In addition these doors offer the highest degree of compartmentalization. The steel doors are designed to be rugged, long lasting and offer great endurance through time. They can resist environmental stresses like heat and humidity that may adversely impact other door and frame products. Our fire rated doors are fitted in strong steel door frames and are highly preferred for various applications thus offering safe and secure living for the occupants.

Door Test Ratings

: Upto 2 hours Fire Rating Test Standards : UL-10B / UL-10C / BS 476 part 20/22

Size Range

Double door upto 8' width x 10' height

Standard Construction

Door

45 mm $(1-\frac{3}{4})$ thick full flush construction. Galvanized steel to Zinc coating Z-22 to Z-27. Nominal door thickness 18 ga. Deep end channels at top and bottom of door for lasting integrity.

Hinge

4.5 mm thick steel hinge reinforcements welded to the doors in compliance with SDI100. Standard hinge preparation is to be 4" x 4".

Lock Face Plate

4.0 mm thick steel lock face plate reinforcement with tapped holes welded to the Doors.

Standard lock preparation is to be provided in compliance with ANSI A115.1 or A115.2.

Infill

Rockwool.

42mm thickness and 100kg/m³ density.

Hardware

UL listed fire rated hardware.

Finish

RAL (Powder Coat)

Optional Construction

- Louvers
- Vision Panel
- Finish Wooden finish (Powder Coat) Metallic finish (Powder Coat)
- Infill

Polystryene core door Stiffened Door with fiberglass insulation Polyurethane core door









Selected Products of the company have been Classified / Listed / Tested by various international testing authorities.







UL-10B/10C



Fire Rated Steel Door Infill: Steel Stiffened with Rockwool Construction : Galvanized Steel

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Door Test Ratings

Fire Rating : Upto 2 hours Test Standards : BS 476 part 20/22

Size Range

Single door upto 4' width x 10' height

Standard Construction

Door

45 mm (1-³/₄") thick full flush construction. Galvanized steel to Zinc coating Z-22 to Z-27. Nominal door thickness 18 ga. Deep end channels at top and bottom of door for lasting integrity.

Hinge

4.5 mm thick steel hinge reinforcements welded to the doors in compliance with SDI100. Standard hinge preparation is to be 4" x 4".

Lock Face Plate

4.0 mm thick steel lock face plate reinforcement with tapped holes welded to the Doors.

Standard lock preparation is to be provided in compliance with ANSI A115.1 or A115.2.

Infill

Rockwool.

42mm thickness and 100kg/m³ density.

Hardware

UL listed fire rated hardware or British Standard hardware.

Finish

RAL (Powder Coat)



BS 476 part 20/22

Optional Construction

- Louvers
- Vision Panel
- Finish

Wooden finish (Powder Coat) Metallic finish (Powder Coat)

• Infill

Polystryene core door Stiffened Door with fiberglass insulation Polyurethane core door



2

















Fire Rated Steel Door Infill: Honeycomb Construction : Galvanized Steel

BETEC CAD manufactures fire rated steel doors, which barricades / reduces the spread of fire and enables safe egress. In addition these doors offer the highest degree of compartmentalization. The steel doors are designed to be rugged, long lasting and offer great endurance through time. They can resist environmental stresses like heat and humidity that may adversely impact other door and frame products. Our fire rated doors are fitted in strong steel door frames and are highly preferred for various applications thus offering safe and secure living for the occupants.

Door Test Ratings

Fire Rating : Upto 3 hours Test Standards : BS 476 part 20/22

Size Range

Single door upto 4' width x 10' height

Standard Construction

Door 45 mm (1-³/₄") thick full flush construction. Galvanized steel to Zinc coating Z-22 to Z-27. Nominal door thickness 18 ga. Deep end channels at top and bottom of door for lasting integrity.

Hinge

4.5 mm thick steel hinge reinforcements welded to the doors in compliance with SDI100. Standard hinge preparation is to be 4" x 4".

Lock Face Plate

4.0 mm thick steel lock face plate reinforcement with tapped holes welded to the Doors.

Standard lock preparation is to be provided in compliance with ANSI A115.1 or A115.2.

Infill

Honeycomb core.

Hardware

UL listed fire rated hardware or British Standard hardware.

Finish

RAL (Powder Coat)



Optional Construction

- Louvers
- Vision Panel
- Finish

Wooden finish (Powder Coat) Metallic finish (Powder Coat)

• Infill

Polystryene core door Stiffened Door with fiberglass insulation Polyurethane core door













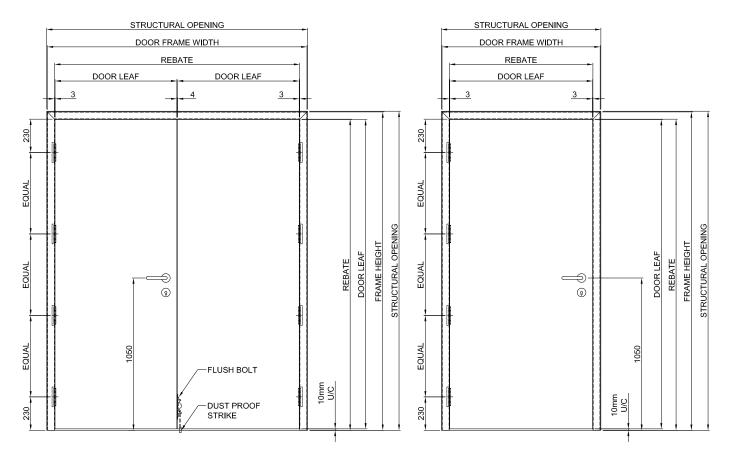




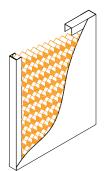
Fire Rated Steel Door Elevation



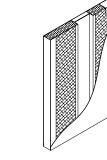
Single Door Elevation



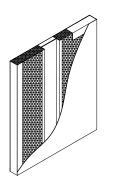
Fire Rated Steel Door Type of Insulation



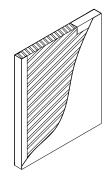
HONEY COMB CORE

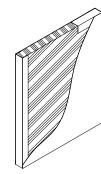


STEEL STIFFENED WITH ROCKWOOL



STEEL STIFFENED WITH FIBER GLASS





POLYURATHANE CORE

POLYSTYRENE

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4









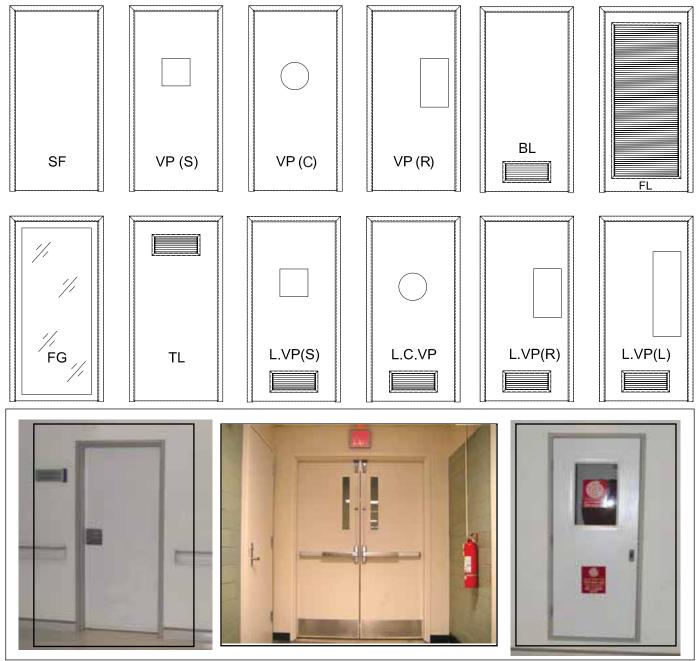








Typical Elevations



1) Pre-foamed Honey Comb bonded to both Door skins using a heated power press thus ensuring maximum adhesion and a flat warp and distortion free panel.

2) Pre-polystyrene slab of 18kg/m³ (1.12pcf) density filled inside the door and secured to face skins with adhesive.

3) Constructed using 1.5 mm (16 gauge) thick vertical steel stiffeners welded to each face of the door at 100mm centers and spaced 190mm centers. Voids are filled with fiberglass insulation.

4) Constructed using 1.5mm (16 gauge) thick vertical steel stiffeners welded to each face of the door at 100mm centers and spaced 190mm centers. Voids are filled with rock wool insulation.

5) Foamed-in-place polyurethane core exceeding 35 kg/m³ (2.18 pcf) compressed density is entirely filled inside the door.

















Fire Rated Steel Frame

Construction : Galvanized Steel

Frame Test Ratings

Fire Rating : 1 hr / 2hrs / 3hrs Test Standards : UL-10B / UL-10C , BS 476

Standard Construction

Frame Frames are constructed of galvanized steel. Zinc coating Z-22 to Z-27. Nominal frame thickness 16 ga.

Welded Frames

Welded frames will be factory assembled, face welded and ground smooth.

All welded frames will include the appropriate anchors to match the wall construction they are intended to be installed.

Strike Preparation

4.0 mm thick steel lock strike reinforcement with tapped holes welded to the frames.

Standard strike preparation is to be for $2-\frac{3}{4}$ " or $4-\frac{7}{8}$ " strike in compliance with ANSI A115.1 or A115.2.

Hinge

4.5 mm thick steel hinge reinforcements welded to the Doors in compliance with SDI100.

Standard hinge preparation is to be 4" x 4".

Closer and Other Reinforcement

Minimum 1.5 mm (16 gauge) reinforcement is necessary to support the scheduled hardware in compliance with ANSI/SDI-100.

Drilling and tapping for surface applied hardware to be performed at the building site by others.

Plaster Guard

1.2 mm thick steel plaster guard or mortar boxes at the back of hardware cut-outs in the frames are provided.

Finish

RAL (Powder Coat)

Labels

Fire rated doors shall bear the appropriate fire rated label.

Installation

Set frames plumb, square, level at correct elevation. Fire labelled frames shall be installed in accordance with ANSI/NFPA-80.



Optional Construction

Knocked Down Frames

All KD frames will be provided with steel corner tabs and corner reinforcing for field assembly. All KD frames will include the appropriate anchors to match the wall construction, they are to be installed in the appropriate reinforcing.

Finish

Wooden finish (Powder Coat) Metallic finish (Powder Coat)

6











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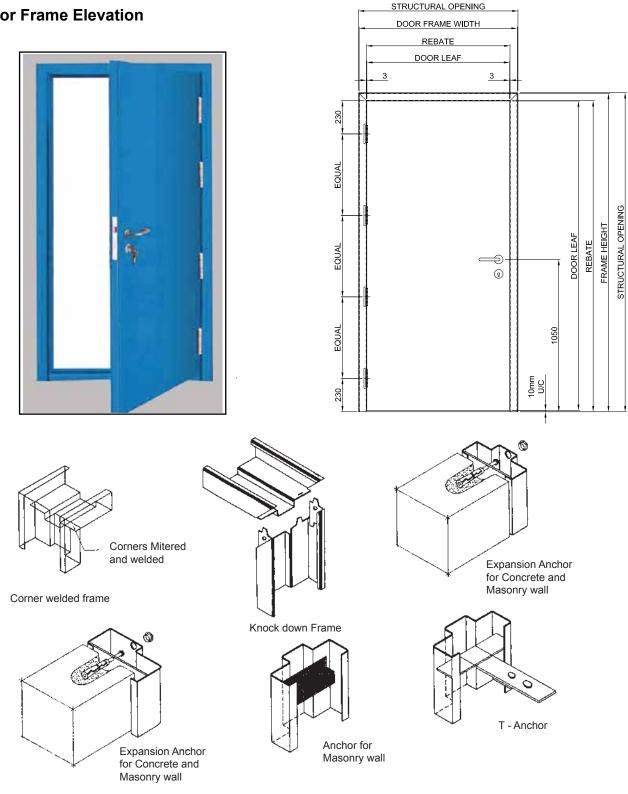




Fire Rated Doors & Frames



Steel Door Frame Elevation



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Intertek

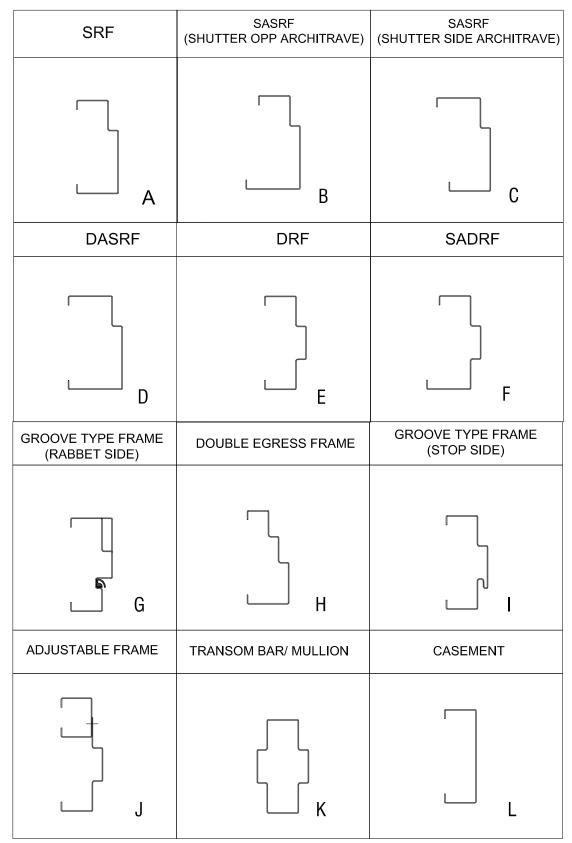








Frame Profiles



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8













BETEC CAD's Fire rated steel single door during Fire Test



BETEC CAD's Fire rated steel single door during Fire Test



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9





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BETEC CAD's Fire rated steel double door during Fire Test



















Special Notes:















Special Notes:

















Special Notes:















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"Due to continuous progress and product improvement, **BETEC CAD.** reserves the right to make changes without notice"

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