

Safe & Secure Metal Doors



SAFE AND SECURE METAL DOOR



Ozone is a globally trusted brand for reliable and advanced Architectural Hardware Solutions. Operating on an international scale with prestigious business associates worldwide, we offer superior product solutions which meet global standards and best practices.

We at Ozone Overseas Ltd. offer complete Architectural Hardware Solutions through more than 3000 products, divided into 8 successful product categories.

#### **WHY Ozone Metal Doors**

The most reliable Metal/ Industrial doors, featuring safety& Security of both individuals & organizations with precise, tested, certified solutions. Ozone have complete line of various steel doors & frames to meet all commercial requirements; from Fire rated doors, Clean room doors, Partitions doors to Security doors.

Ozone is committed to high products & service quality. Equipped with latest production technology at our specialized factory in India (Himachal Pradesh). Computerised numerically controlled operations ensure consistent dimensions and finish. We go extra miles to understand and deliver product that are characterised by excellent quality, functional safety and a long service life. Our International presence makes us a strong, future oriented partner for industrial and public construction projects.



Stress free level leaf



Polyester powder coated

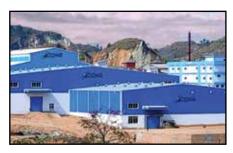


Lock formed edges



Prime quality stretched cold formed/ GP/SP sheets













Our **manufacturing** units are located in Himachal Pradesh (India). We are equipped with latest sheet metal processing machines, CNC laser cutting machines (AMADA), MIG/ TIG welding and Spot welding machines. We also have automatic powder coating plant to deliver consistent finish. We offers a wide range of **Certified** heavy duty Metal doors, ensuring total **security**.

Ozone metal door range covers from fireproof to acoustic doors, general safety doors for commercial and industrial purposes. Meeting international standards of quality and design Ozone Steel doors have been built keeping the needs of different industries in mind. Providing one-of-a-kind solutions for every need.



Our experience & expertise in having a complete range of **Certified** & **Rated Door Hardware** helps to provide a better and comprehensive solution to our customers. Our range of hardware includes Hinges, Locks, Panic bars & Door closer.

### **Innovation • Customer Service • Project Support**

































# Fireproof series

Meant for protecting life in the event of a fire related emergency, Ozone's Fireproof Doors have fire resistant levels from 30 minutes up to 2 hours. Providing enough time for a safe escape. These door sets have options of glazing, fire resistant, self-closing louvers, single and double door sets for emergency exit. Certified with CBRI (Roorkee).







- High Rise Buildings
- Metro Railway Stations
- Airports
- Ships and freight/passenger liners
- Telecom Centers
- Power Plants/Industrial Plants
- Cellar Network Stations
- Garment Processing Units
- Shopping Malls
- Multiplexes
- Hotels/Restaurants
- Pharmaceutical/Food & Packaging
- Auditoriums
- Software Parks
- Electromes



#### **FEATURES:**

#### Rated

Product that has been approved to withstand fire for a specified period of time

#### Listed or Approved

Having been fire tested and approved through proper listing agencies

#### Labeled

Product that is physically bearing a fire rating label from an approved agency

#### **MATERIALS FOR FIRE RATED DOORS:**

The door assembly's hardware must also carry the appropriate fire label.

Frame

- Sheet : GPSP Sheet 1.5mm Thick

Leaf

Sheet : GPSP Sheet 1mm ThickInfill : Rockwool (96kg/M3)

- Glass : Schott Pyran/Wire Meshed Frame

- Sheet : GPSP Sheet 1.5mm Thick

Lock System

- Emergency Exit : Panic Bar OZ-PB-2000R-SS

- Standard : Mortise Lock OML-33

Pivot/Hinge

- SS Butt Hinge : OZ-SS-BH 4X3X3

Door Closer

- Overhead Door Closer : NSK-680

#### • Other Hardware

- Kick Plate (Optional)
- Concealed Tower Bolt (Double Leaf Door)
- Drop Seal
- Door Bumpers
- Door Stopper

#### **FIRE RATINGS:**

Fire door assemblies have 5 ratings:

- 20 minute
- 45 minute
- 1 hour
- 1-1/2 hour
- 2 hour

The rating of a fire door assembly is based on the lowest rated component.

#### **REQUIRMENTS:**

- Fire ratings are granted by third-party testing agencies and are labeled on the products.
- The doors must meet the requirements of the International Building and International Fire Codes, as well as NFPA 80.
- Building codes dictate the fire rating requirements for the wall. This is based on the location of the wall, building use, and more. The fire rating of the wall dictates the required fire rating of the door.
- Fire doors are required to be self closing and positive latching.



# Cleanroom series

These doors are designed to meet the most stringent requirements for clean room and hygienic applications. Designed for interior applications in humid or corrosive environments, these doors do not swell, rot, warp, rust or attract bacteria thus making the door extremely hygienic and perfect for the pharmaceutical, leisure, food, and healthcare sectors. Most facilities incorporate multiple pressure steps within the building's structure.

- Pharmaceutical and Food
- Processing Industry
- Hospitals
- Laboratories
- Semiconductor and
- Electronic Industries
- Computer Server Rooms
- R & D Labs







# Special series

Ozone's special series doors are suitable for high security applications areas. These doors cab be Hermatically sealed or X-Ray shielding Doors.

DOOR PARAMETERS	
DOOR PARAMETERS	DOOR PARAMETERS
Maximum Door Weight	160 Kg / Leaf
Door Width	1070 mm to 1570 mm
Total Opening Width Required	2350 mm to 3350 mm
Installation Possibility	Surface Mounted
Opening Speed	25 - 55 cm/sec (Adjustable)
Closing Speed	25 - 55 cm/sec (Adjustable)

- Hospitals
- Hi-Security Labs
- R&D Centres





# Industrial series

Built for heavy duty general purposes, Ozone's metal door sets have glazing in many configurations with air vents, louvers with a wide range of hardware. The doors are finished with epoxy polyester\pure polyester coat. General Doors are ideal for commercial enterprises to ensure compliance to safety and security parameters. No third party certification required.



Smooth surface



Heavy duty

- Commercial Buildings
- Shopping Malls
- Industrial Plants
- Multiplexes
- Auditoriums
- Metro Stations
- Hotels
- Airports
- Software Parks
- Recording Studios





# Secure series

With special construction details and additional security hinges, Ozone's robust doors offer double protection against burglars and miscreants. They have multi point locks reinforced laminated cores and high security glazing producing a range of secure door sets that are suitable for high security applications. They also enhance ventilation while a main key activates multiple points of locking, thereby turning the door into a foolproof security system. No third party certification required.





Enhanced ventilation



High security glazing

- Commercial Buildings
- Shopping Malls
- Industrial Plants
- Multiplexes
- Auditoriums
- Metro Stations
- Hotels
- Airports
- Software Parks
- Recording Studios





# Acoustics Series

Our acoustic doors are manufactured with special construction, seals and structurally bonded cores offering a high level of sound reduction. Making way for a peaceful working environment. Acoustic doors reduce noise pollution in industrial, commercial and municipal buildings. Third party certification required BRE, Watford (UK)



High level of sound reduction



Special construction

- Architectural
- Airport Services
- Broadcasting
- Building Services
- Education
- Entertainment and Leisure
- Healthcare
- Industry
- Law Enforcement
- Manufacturing
- Power Generation



### Steel

- Construction Leaf
- Construction Fram

### Insulation

- Honycomb/Mineral wool

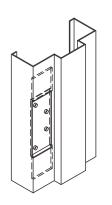
## Glazing

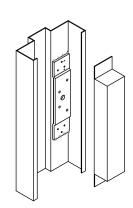
- Wired
- Float
- Toughened
- Fire rated

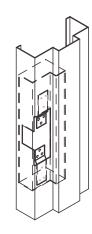
## • Paint/Finish

- Epoxy Polyester
- Pure Polyester

## Standard Specification | Door Frame Construction

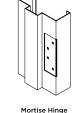


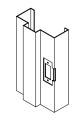


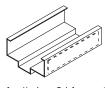


### **Hardware Preparations**



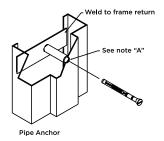


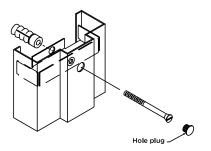




Surface Hardware Reinforcement. Weld-in Reinforcement Shown. Loose Reinforcing Sleeve Available

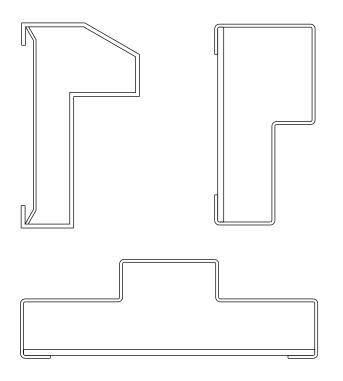
### Wall Fixing Anchor Detail

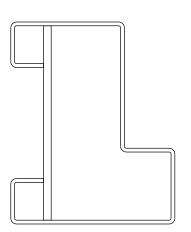




## Frame Profiles

## **Standard Frame detail**





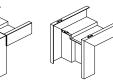
## **Corners**



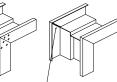
May be Horizontal or Vertical

Knocked Down (Butted) Set Up Arc Welded

and Ground Smooth



Knocked Down (Mitered) Set Up Spot Welded

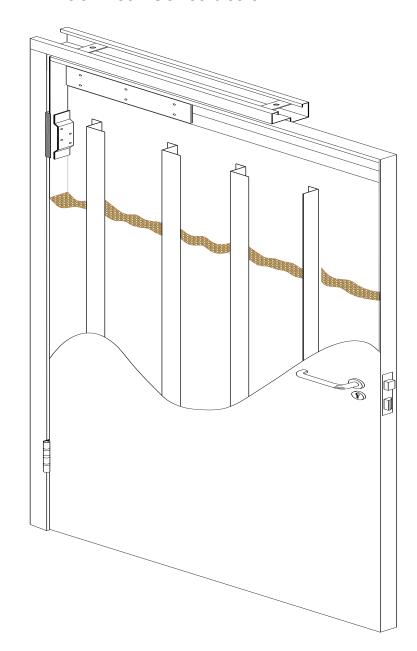


Mitered and Welded Inside or Outside

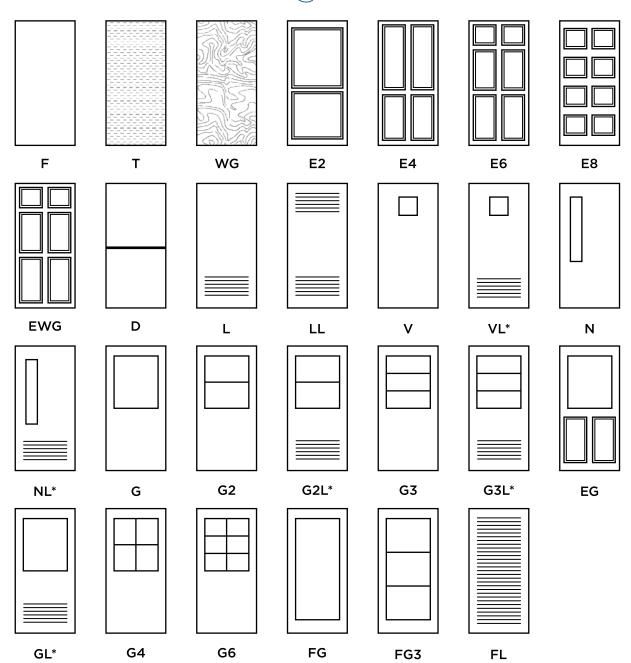


Slip-on Drywall (frame is installed after the wall has been erected). Corner may be screwed together, snap locked, or a slip fit design.

## **Door Leaf Construction**



## Door Leaf Design



## **Nomenclature Letter Symbols**

**F** - Flush

**T** - Textured

WG - Wood Grain

**E2** - 2 Panel Embossed

**E4** - 4 Panel Embossed

**E6** - 6 Panel Embossed

E8 - 8 Panel Embossed

EWG - 6 Panel Embossed and Wood Grain

**D** - Dutch Door

L - Louvered (top or bottom)

**LL** - Louvered (top and bottom)

**V** - Vision Light

VL - Vision Light and Louvered

N - Narrow Light

NL - Narrow Light and Louvered

**G** - Half Glass

(options G2, G3, G4 and G6)

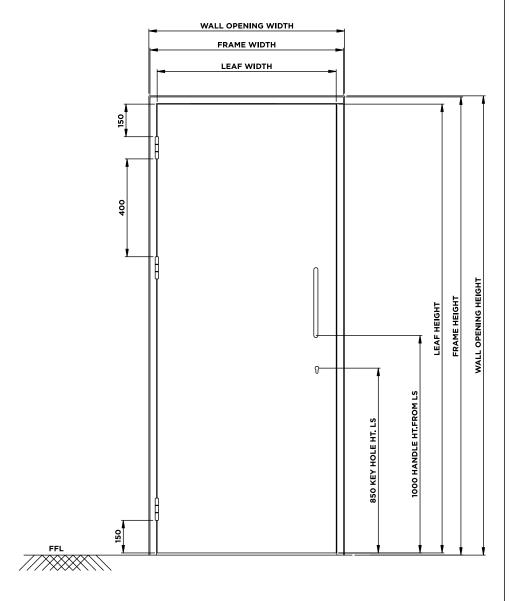
**EG** - Embossed and Half Glass

**GL** - Half Glass and Louvered

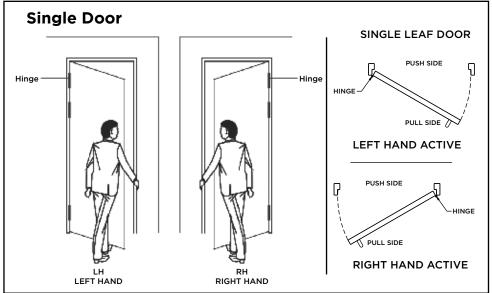
**FG** - Full Glass (option FG3)

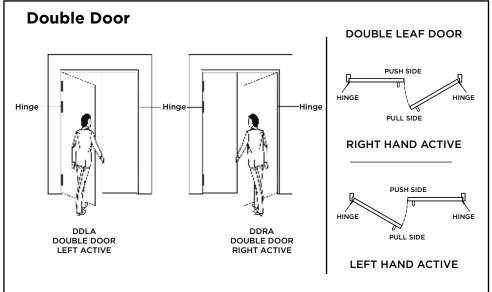
FL

## Hardware Location



# Handings





## Door Hardware

- Door Closer
- Overhead Door Closer
- Concealed Door Closer
- Electromagnetic Door Closer
- Handles
- Door Handle
- Lockbody
- Hinges
- SS Butt Hinge
- Concealed Hinge
- Panic Hardware
- Flush Bolt
- Drop Seal





## Door Closer

## • Overhead Door Closer







#### EN 1154 Tested



- Tested 5,00,000 Cycles
- Door Weight Upto 80 Kgs.
- EN 2/3/4
- Tested EN 1154
- Color Silver / Golden / Brown / Antique Brass





#### NSK-680-A

- Tested 5,00,000 Cycles
- Door Weight Upto 80 Kgs.
- EN 2/3/4
- Color Silver







#### NSK-980

- Tested 5,00,000 Cycles
- Door Weight Upto 80 Kgs.
- Tested EN 1154
- With Track Arm (SS Finish)
- Slide in SS Cover



#### EN 1154 Tested



- Tested 5,00,000 Cycles
- Door Weight Upto 100 Kgs.
- EN 2/3/4/5
- Color Silver





#### EN 1154 Tested

- Tested 5,00,000 Cycles
- Door Weight Upto 100 Kgs.
- Power adjustable
- Color Silver

NSK-780





EN 1154 Tested

#### NSK-880

- Tested 5,00,000 Cycles
- Door Weight Upto 120 Kgs.
- TESTED EN 4 8 3/5 1 13
- Power adjustable
- Color Silver





#### NSK-CA-6800

- Tested 5,00,000 Cycles
- Cam Action Door Closer
- Max. Door Weight Upto 80 Kgs.

EN 1154 Tested

(Cam Action Technology)

## Door Closer

## Concealed Door Closers







• Electromagnetic Door Closers (\*Available on specific demand)



- \* NSK-980-EMHO-TA
- Finish SS
- Door Closer with Electromagtic Hold Open
- Track Arm without Smoke Detector



- \* NSK-980-EMHO-SA
- Finish SS
- Door Closer with Electromagnetic Hold Open Scissor
- Arm without Smoke Detector



- \* NSK-980-EMHO-TA-S
- Finish SS
- Door Closer with Electromagnetic Hold Open
- Track Arm with Smoke Detector



- \* NSK-980-EMHO-SA-S
- Finish SS
- Door Closer with Electromagnetic Hold Open
- Scissor Arm with Smoke Detector

## • Accessories (for overhead door closer)











ODC-ARM TR-HO-980 Track Arm with Hold Open Function



NSK-ACC-780-PLATE
Plate for Mounting Door Closer
on glass

## Handle

## • Lever Handle



Mortise Handle in SSS Finish

Mortise Handle in SSS Finish

D-Type Mortise Handle in SSS Finish with Plate

## Handle

## • Lever Handle







## • Orbital



OCKL-11
Knob Lock with Key Operation & Push Button



OCKL-22

Knob Lock with Push Button & Coin Release



OCKL-33 Knob Lock with both side Active Knobs



OCKL-T-E 60MM

Knob Lock with Key Operation & Push Button



OCKL-T-B 60MM

Knob Lock with Push Button & Coin Release



OCKL-T-P 60MM

Knob Lock with both side Active Knobs

## Handle

• Back to Back Installation Handle ss 304



• Pull Side Handle Push Side Push Plate





# Lock Body



OML-11-BT Closed Body Mortise Strike Plate Only Soft closing latch bolt.





OML-33 Mortise lock bod-Fire Rated with dead lock & latch bolt



OML-11 A
Closed Body Mortise lock with
Strike Plate, Double throw dead
bolt & Soft closing latch bolt



OML-22A-4P
Closed Body Mortise lock with
Strike Plate. Double throw
cylindrical dead bolt & Soft
closing latch bolt



OZML-DL1-SS-55 Closed Body Mortise lock with Strike Plate, Double throw dead bolt



OZML-L1-SS-55 Closed Body Mortise lock with Strike Plate, Only Soft closing latch bolt

## Hinges

• Fire Rated Butt Hinge ss-304

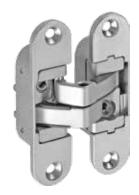




OZ-SS-BH 4x3x3 Finish-SSS



## • Adjustable Concealed Hinge



**OZ-WD-ACH 60 LEFT/RIGHT**Triple Adjustable Wooden Door Hinge (for Door Wt.-60 Kg. with 2 Hinges)



## Panic Bar Hardware







## Concealed Flush Bolt



**OZ-CFB-DP**Concealed Flush Bolt
Finish: SSS

## Drop Down Seal





OWDS-11 Drop Down Seal Finish: SSS



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