





### **Shield Door System**

#### Produces steel, glazed and timber door systems

Our steel doorsets are designed and manufactured to meet the needs of an increasingly demanding market, offering total design, manufacture and installation services throughout the Middle East, Norwood uses modern manufacturing techniques with the latest production equipment and can handle projects of all types and sizes.

Norwood door sets are manufactured using high quality steel and are suitable for a wide range of applications including fire doors, security doors, personnel and acoustic door set options.

Norwood door sets are commonly used for new build or refurbishment projects and are ideally suited for use on projects within the Healthcare, Education, Corporate and Pharmaceutical markets

Our steel doors are made using state of the art CNC machinery and are manufactured to order; every door is made to measure. Doors are manufactured from flat sheet materials therefore we can easily incorporate almost any hardware configuration, allowing a custom designed door to be made to order







We turn shell constructions into key-ready buildings (Photo left: Rail Project, Qatar; middle: University Library Project, Qatar; right: Cell Therapy Laboratory, Qatar)

### shield doors

#### Construction

DOOR ELEMENTS

Strength:

Heavy duty.

Leaf thickness:

44mm

Door frame:

One piece fully welded flush frame (1.2mm Galvanized Steel)

Door leaf:

1.2 galvanized steel leaf with honey comb bonded core

Configuration:

Available in single & double door configuration

Steel door finish:

All steel frames and leaves are factory finished in a high quality epoxy polyester powder coating in RAL exterior grade polyester, applied at 18 – 20 micron dry film thickness over 4 – 6 microns of anti corrosive primer as supplied by BASF. The gloss level will be 35% +/- 5% depending on substrate interaction.

Frame options: Steel / Timber / Glazed

Vision panels:

Fully flushed double glazed units 6mm clear float toughened glass (both side)

Steel door:

Manufactured from 1.2mm zinc coated mild steel with interlocking seams to vertical stiles, incorporating horizontal and vertical stiffeners, inverted top and bottom channels to provide a flush faced, double skin construction of 44mm overall thickness. honicel bonded or insulated core to suit the application. Doors are mortised and reinforced for hardware

Glazed doors:

Manufactured 1.2mm zinc coated mild steel with 100mm to 300mm steel surrounds, the vision panel size up to 1750mm x 750mm, the glass thickness may vary according to the project requirements

#### **Geometrical features**

**DIMENSIONS** 

Module Height:

2200mm with flush over panels to over all partition height

Module width:

1000mm single leaf & 2000mm double leaves with flush over panels to over all partition height

#### **Options**

Door set:

All sets are supplied for manual operation or they can be automated & activated by various means push button, infrared etc. interlocking systems can be accommodated with a factory fitted electrical solenoid bolt, a slim flush unit concealed with in the door lintel & housing a stainless steel dead bolt with a 16mm throw into the door leaf.

Leaf options:

Sliding door:

Options of single leaf or bi-parting to provide clear openings of either 900mm or up to 1800mm

Overview:

Norwood manufactures both steel and glass doors for different working applications and understands the importance of both the aesthetic and the functionality of doors into demountable partitioning systems.

We take into consideration many different factors whilst working through the design process. Such as the end use of the working environment, usage, demographic of people, site access and age of building to name a few.

#### Acoustics

WEIGHTED AIRBORNE SOUND REDUCTION INDEX

Steel door:

Rw (C; Ctr) = 28 (-1;-1) dB with drop-seal & std. door tested with MED-80 partition wall standard door

Steel door:

Rw (C; Ctr) = 25 (-0;-0) dB with drop-seal deactivated tested with MED-80 partition wall

Steel door:

Rw (C; Ctr) = 28 (-1;-1) dB with enhanced door tested with MED-80 partition wall

Sound reducing doorsets are specifically designed to obtain noise reduction by use of acoustic glass & upgraded door infill's seals. An effective solution where acoustic performance is a key feature, whilst maintaining architectural standards of appearance and the requirement for personnel access.

Further enhancements can be made

to increase the sound reduction index, guidance can be given on request.

#### Fire

FIRE RESISTANCE

Dependent on design characteristics up to:

High performance door sets providing 30 minute to 90 minutes fire resistance when tested in accordance with BS 476, part 8 & 22

Steel Doors: 90 minutes

In accordance with BS Test standards.

## CERTIFICATIONS







#### **Fire Resistance**

**Steel Door Set** 

Non fire rated

30 minutes

90 minutes.

#### **Acoustics**

**Steel Door Sets** 

28 dB up to 41 dB

**Glazed Door Sets** 

41 dB:

6mm + 6mm Glass

48 dB:

10.8mm + 10.8mm Glass

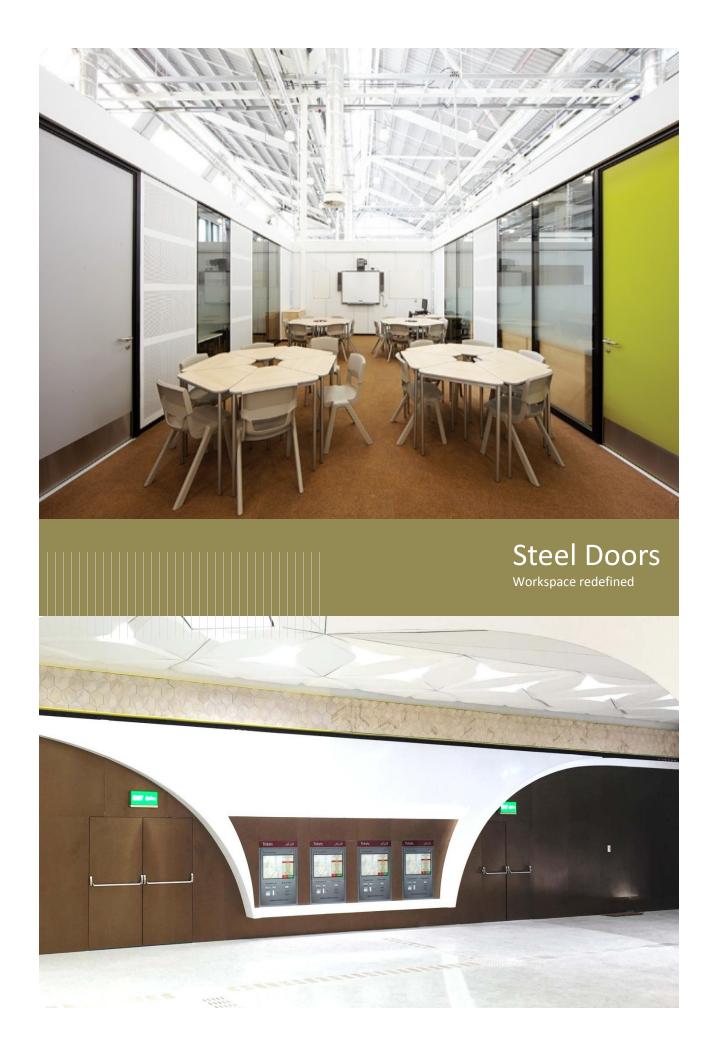
#### **Structural**

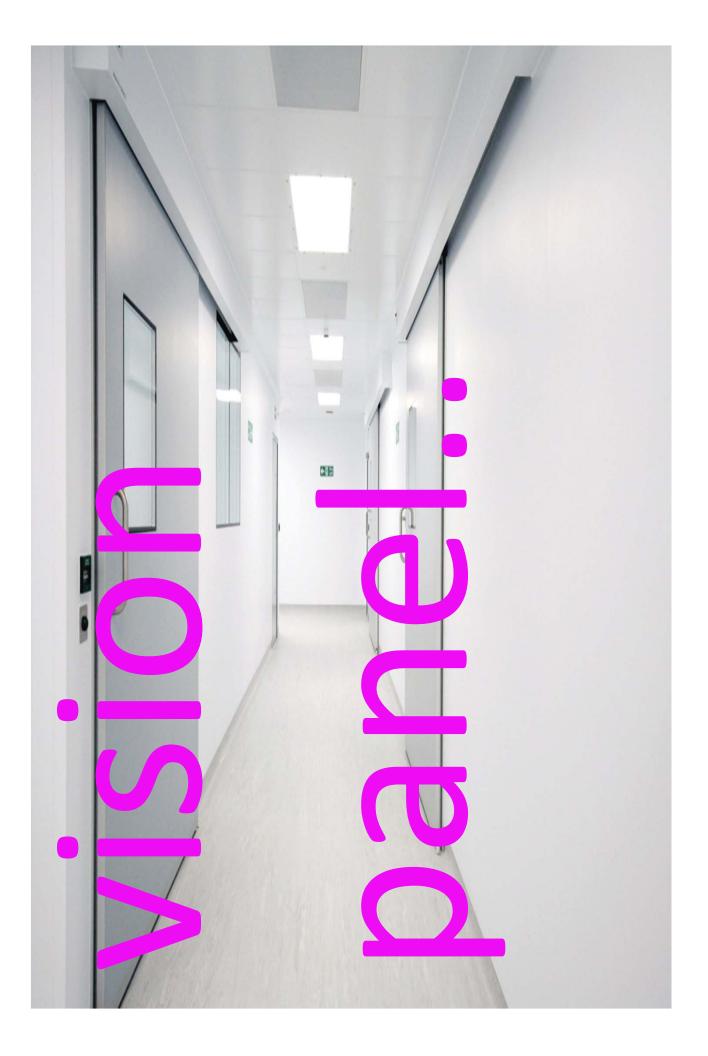
**Steel Door Set** 

Medium Duty

In accordance with BS-5234 Part 2: 1992





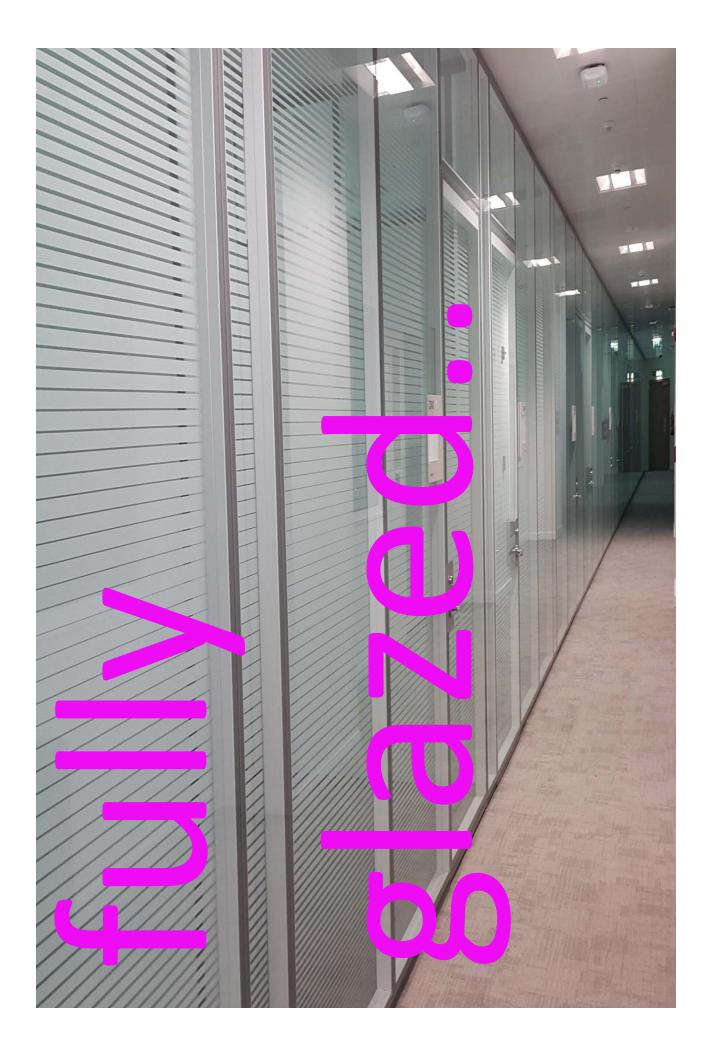


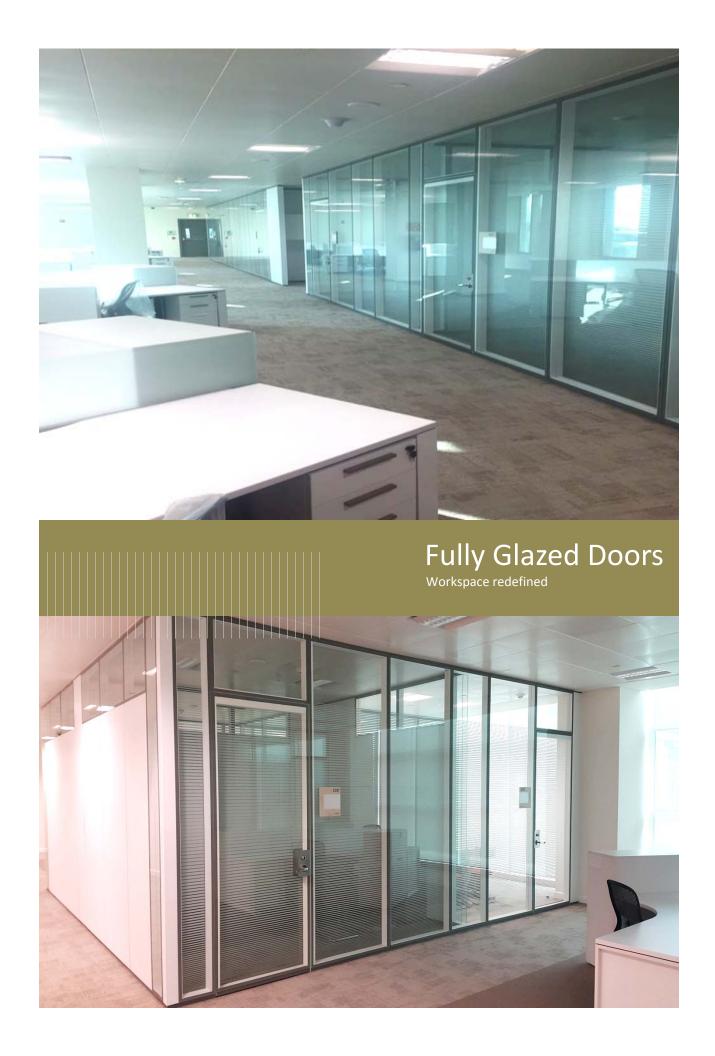


## Vision Panel Steel Doors

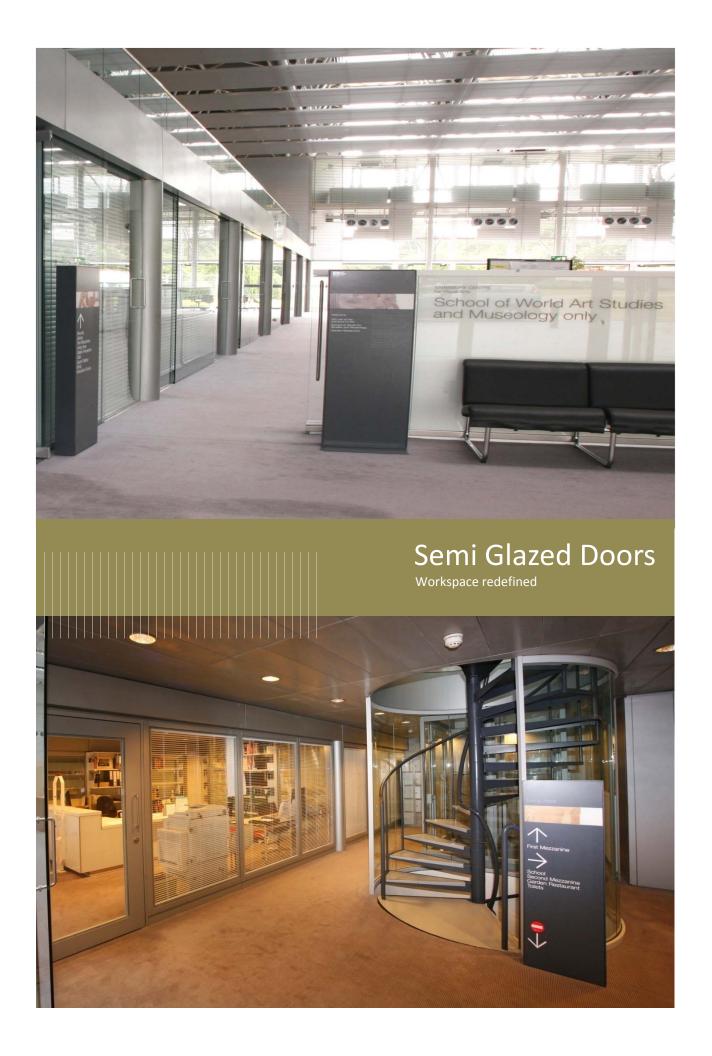
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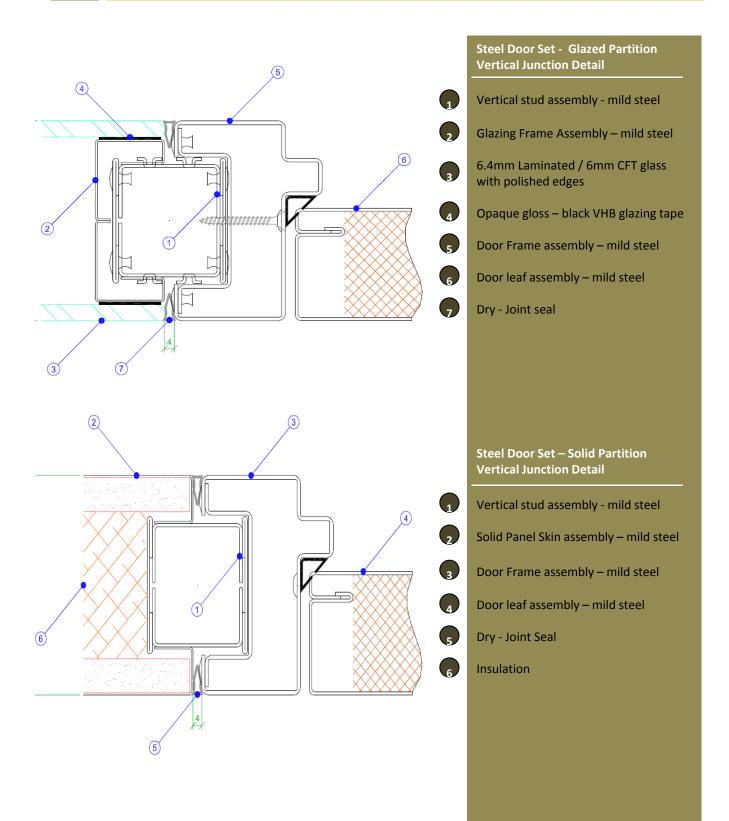




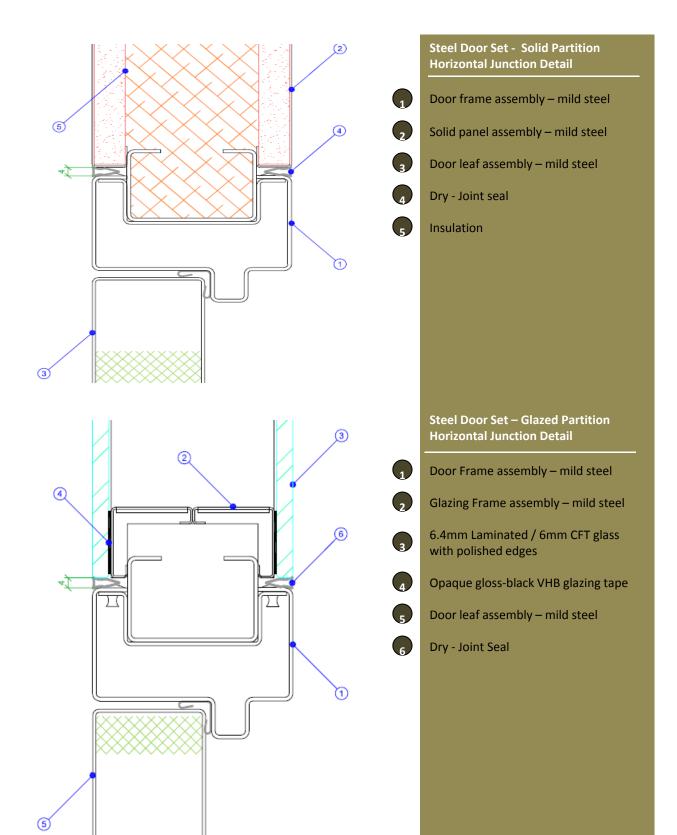




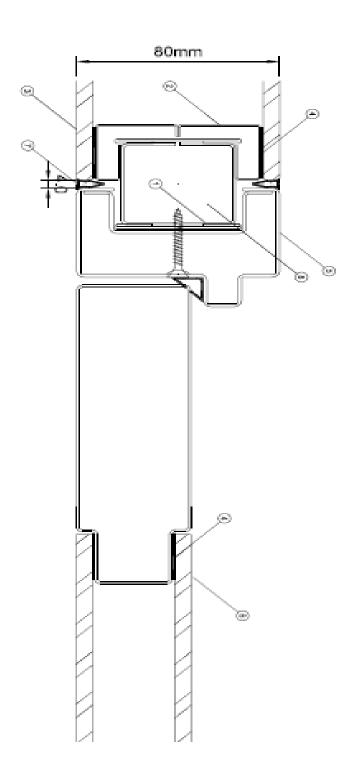
# DOOR DETAILS STEEL



## DOOR DETAILS STEEL



## DOOR DETAILS SEMIGLAZED



Glazed Door Set - Glazed Partition Vertical Junction Detail

Vertical Stud assembly – mild steel

Glazing frame assembly – mild steel

6.4mm Laminated glass with polished edges

4 Opaque gloss-black VHB glazing tape

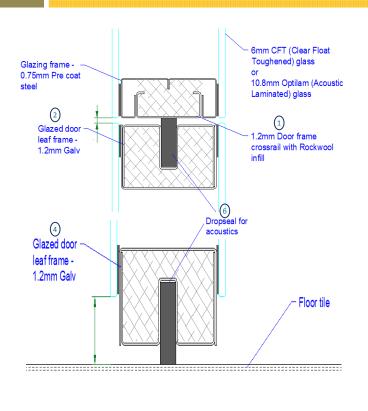
Door frame assembly – mild steel

Door leaf assembly – mild steel surround with glass leaf

Dry - Joint seal

Mullion to conceal electrics & blind control cables

## DOOR DETAILS FULLY GLAZED



Glazed Door Set - Glazed Partition Vertical Junction Detail

1.2mm Door frame cross rail with rock wool infill

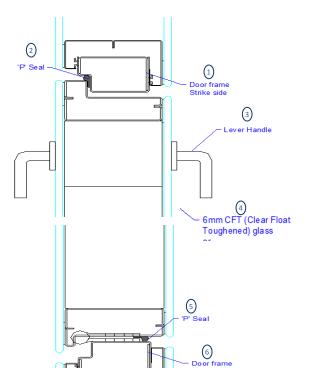
Glazed Door leaf frame - 1.2mm galvanized steel (Top)

Glazing frame - 0.75mm pre coated steel

Glazed Door leaf frame - 1.2mm galvanized steel (Bottom)

6mm + 6mm CFT. glass

Dropseal for acoustics



Glazed Door Set - Glazed Partition
Over Head Detail

Door frame strike side

P Seal

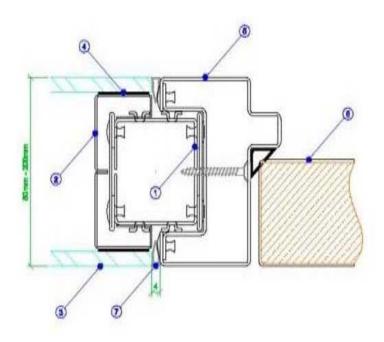
Lever Handle

6mm + 6mm CFT. glass

P Seal

Door frame hinge side

# DOOR DETAILS TIMBER



Door Set Timber - Glazed Partition Vertical Junction Detail

Vertical stud assembly - mild steel

Glazing Frame Assembly – mild steel

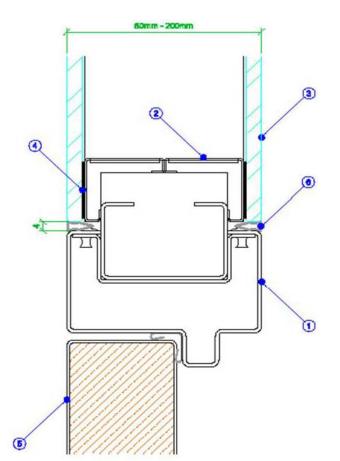
6.4mm Laminated / 6mm CFT glass with polished edges

Opaque gloss – black VHB glazing tape

Door Frame assembly – mild steel

Door leaf assembly – timber

Dry - Joint seal



Door Set Timber – Glazed Partition Horizontal Junction Detail

Door Frame Assembly - mild steel

Glazed Frame Assembly – mild steel

6.4mm Laminated / 6mm CFT glass with polished edges

Opaque gloss – black VHB glazing tape

Door leaf assembly – Timber

Dry - Joint Seal

