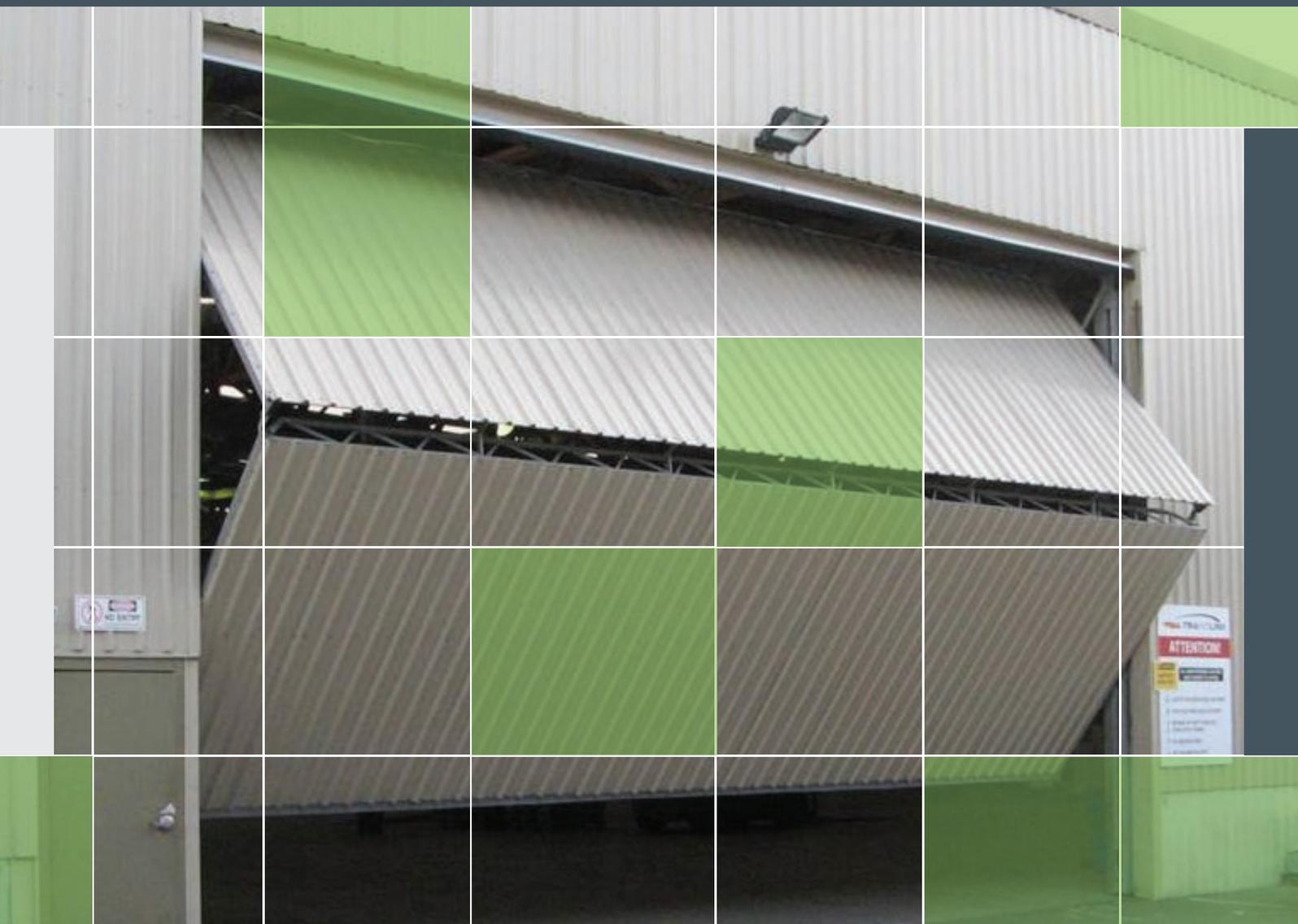




# Uliti Bi-Folding Doors

IDEAL FOR OVERSIZE SITUATIONS



SPECIALIST DOOR SOLUTIONS

0800 807 753

[ultigroup.co.nz](http://ultigroup.co.nz)

## Ulti Bi-Folding Doors

Ulti Bi-Folding Doors offer you a dynamic solution for your heavy duty door requirements. When you need a heavy duty door with easy operation, durability, strength and a door system to last many years, an Ulti Bi-Folding is your only solution.

Ulti Bi-Folding Doors are available up to **10m high and 30m wide** in one door, totally eliminating the need for centre mullions and multiple doors for your wide door solutions. Standard colour steel cladding gives a quality pre-finish exterior with the main frame constructed from zinc coated steel. Ulti Bi-Folding Doors have been used in airport hangars, schools, workshops, factories, government departments, supermarkets and industrial buildings.

### RUGGED DESIGN

Wide spans (no centre mullions or weight on lintel)

### DURABLE

Cladding options

### COST EFFECTIVE

Strong construction (no rattly roller doors)

### COST MAINTENANCE

No floor track (no bumps or rubbish traps)



CLOSED



HALF OPEN



OPEN



## Standard Features

**FRAME CONSTRUCTION** on all Ulti Bi-Folding Doors are from galvanised steel. All construction is from experienced engineers taking pride in their work. With both quality steel and workmanship, Ulti Bi-Folding Doors will outlast any door on the market.



**DON'T WATCH YOUR STEP** there are no floor tracks as on sliding doors. This gives excellent transition as there is nothing to trip over or drive over. Excellent in industrial or hanger applications.



**NO HORIZONTAL**, internal tracks, as seen in the photo, making the internal finish very tidy when your door is shut.



**EASE OF OPERATION** is achieved by the doors being counter weighed. If the door weighs 1000kg, 1000kg of weights are used making this the easiest door on the market to operate.

## OPTIONS



**HAND CHAIN** unit can be added to any door. This can be mounted on either side of the door.



**MOTOR OPERATION** gives you control of your door. With a built-in emergency override, you will never be left „in the dark“. Motor can be mounted on either side of door. Motor units come standard with remote activation.

# Ulti Bi-Folding Doors

Cladding options for Ulti Bi-Folding Doors are endless. 90% of doors are clad with a roofing profile due to cost and ease of installation. Shown are some of the many completed projects. Weight and thickness can be an issue, but submit your ideas and we will work with you. Horizontal cladding can add extra costs.

## Cladding Options

ZINCALUME CLADDING



POWDER  
COATED  
FLAT SHEET



COLOURSTEEL  
CLADDING



COLOURSTEEL  
SHEETING



FULLY GLAZED



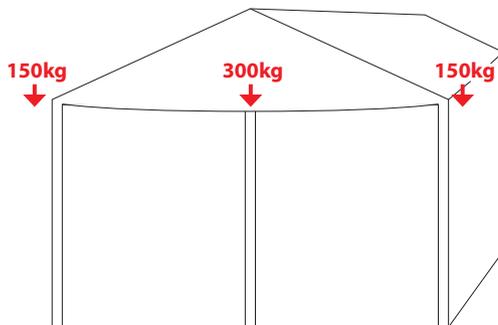
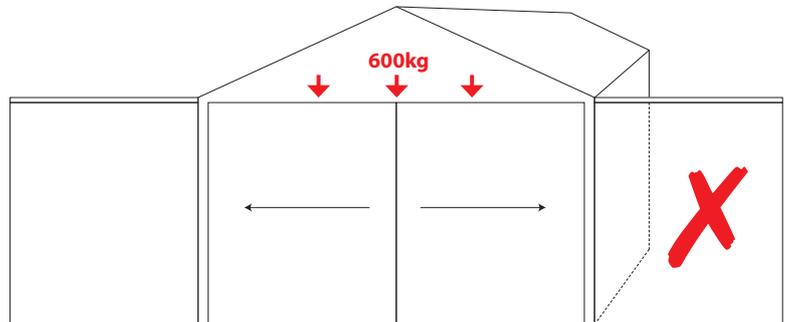
HALF GLAZED, HALF COLOURSTEEL



Ulti Bi-Folding Doors add no weight to the lintel, no tracks to the floor and no wing walls to the outside edge of your building. The overall door is easy to install and very easy to operate. A large single span door can be opened manually or with a motor option. The example below is based on a door estimated at 600kg.

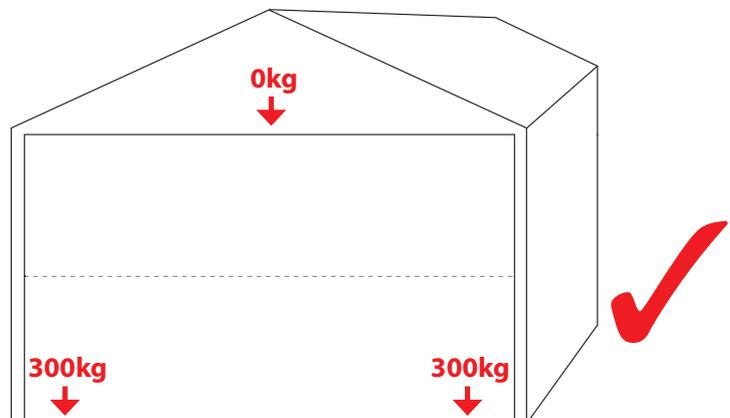
## Single Spans

Sliding doors need wing walls, therefore the hangers take up extra space. Therefore hangars can't be close together.



Centre mullions sag lintels and add unnecessary weight to structures.

Ulti Bi-Folding Doors transfer the door weight down into the floor.



# Ulti Bi-Folding Doors

Ulti Bi-Folding Doors construction surpasses every other type of door on the market. All the doors are made to withstand a minimum of 0.85kpa and can also be constructed to meet any wind load. Shown in the photos below are the two most common types of truss configuration, lattice and purlin. The type of truss used on each door is determined on door width and cladding.

## Construction

PURLIN TYPE TRUSS



LATTICE TYPE TRUSS

Shown is a project with a row of hangars at a small airfield. There is also another lot of hangars on the back of these three. On a building 15.0m wide, the 13.0m wide door allows you to have a man door next to Ulti Bi-Folding Doors as seen in the photos below. The doors are manually operated.

## Light Aircraft

3.6 HIGH X 13.0M WIDE



## Helicopter Maintenance

Shown is a huge door for a helicopter maintenance company. Glass on the top 3/4 gives excellent natural light into the workshop offering an excellent working environment. With a trackless floor, the conveyance of helicopters for test flights becomes effortless. With the simple push of a button, the huge 132m<sup>2</sup> door quietly lifts up out of the way.



6.0M HIGH X 22.0M WIDE

## Ulti Bi-Folding Doors

Shown is a large door in the coal mining industry. The site is at 1000m above sea level and faces huge winds. The door was retro fitted to an existing building and has been a huge success. Other types of doors have been blown in, but the Ulti Bi-Folding Door has come out on top. With a motor fitted, it makes the door 100% operator friendly.

### Truck Maintenance

10.0M HIGH X 9.5M WIDE



Shown is a Ulti Bi-Folding Door on a new tyre retailer. There were two doors with the front door having glazing to the bottom panel only. This gives the benefit of excellent lighting with protection from wind and rain. (Note - horizontal cladding may add additional costs).

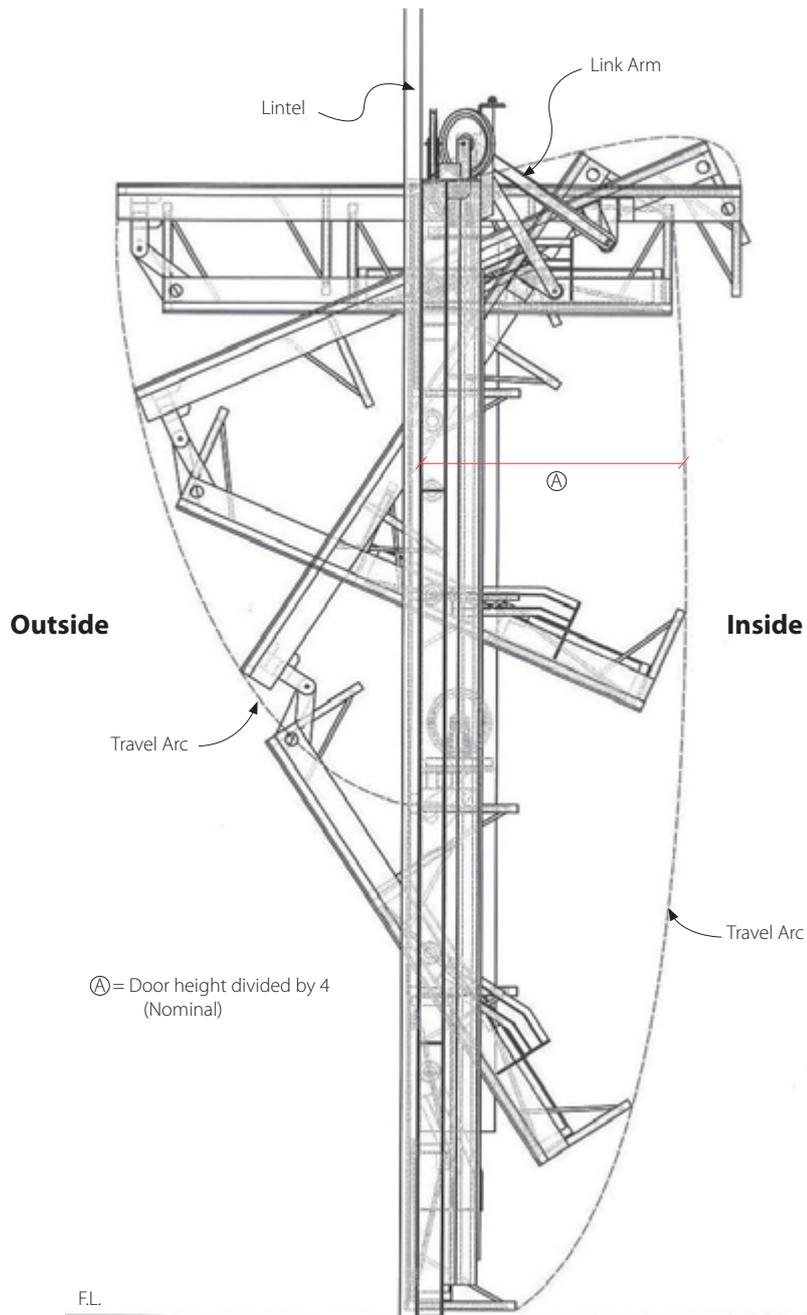
## Workshop Door



■ 4.0M HIGH X 10.0M WIDE



**Travel Arc:** Travel arc shown below is indicative for all Ulti Bi-Folding Doors. Welded trusses are shown but on some doors, other types of trusses are used.

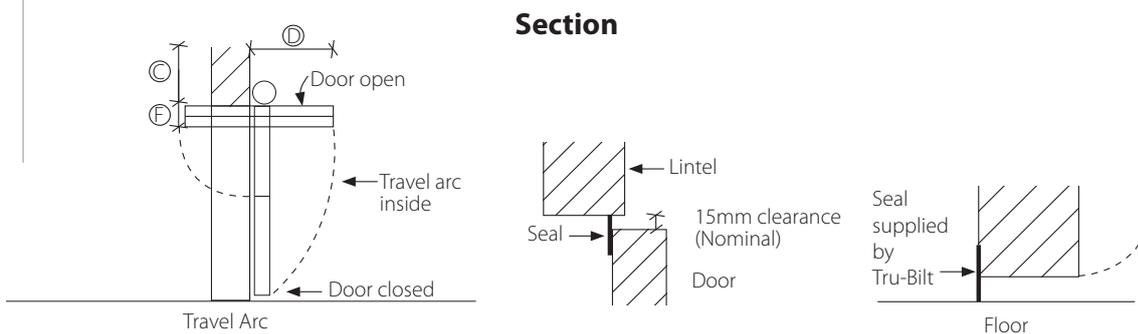
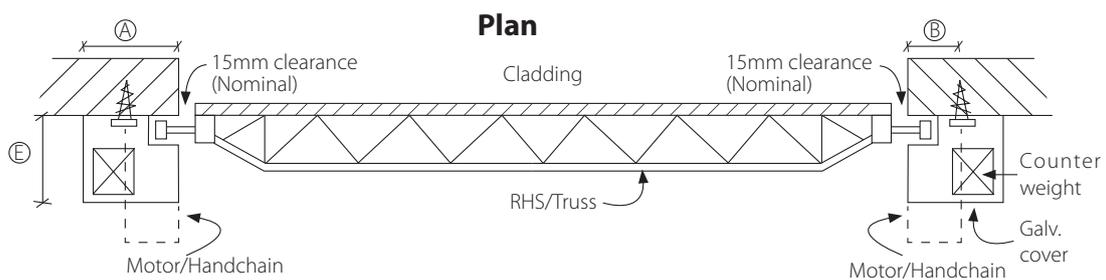
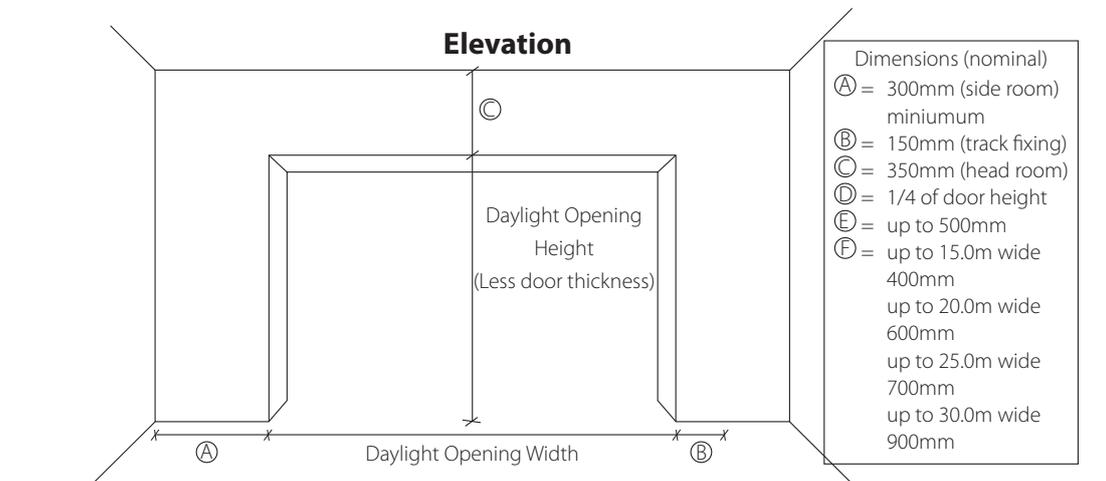


Note: Welded truss shown in drawing above

**Door Openings:** Formed and finished by others. Must be true and plumb. No obstructions such as electrical conduits, steel plates or services to be inside fixing areas. Contact Ulti Group to ensure that you have the right interpretation of the above information.

## Technical Data

### Clearances



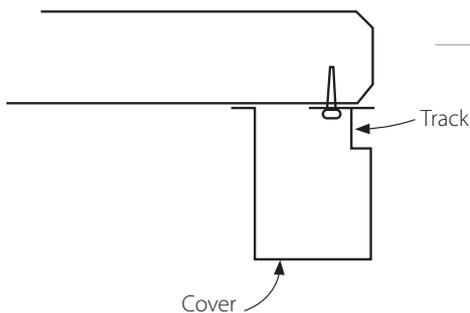
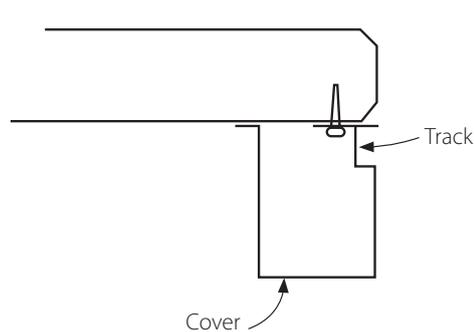
# Ulti Bi-Folding Doors

**TRACK FIXING OPTIONS:** Flat fixing space round door must be provided. The details below out-line some of the possible ways and some of the different types of fixing.

## Technical Data

### THE SLAB CONCRETE

Use galvanised fixing into concrete.  
Ensure concrete edge doesn't crack.

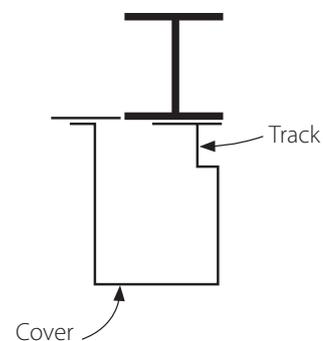
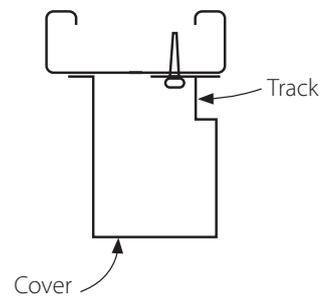


### TIMBER

Use coach screws only. Timber  
tex screws are not suitable.

### ROLLED PURLIN

Bolt through the purlin. Do not tex screw on. Timber  
can be set in the back and coach screwed into.



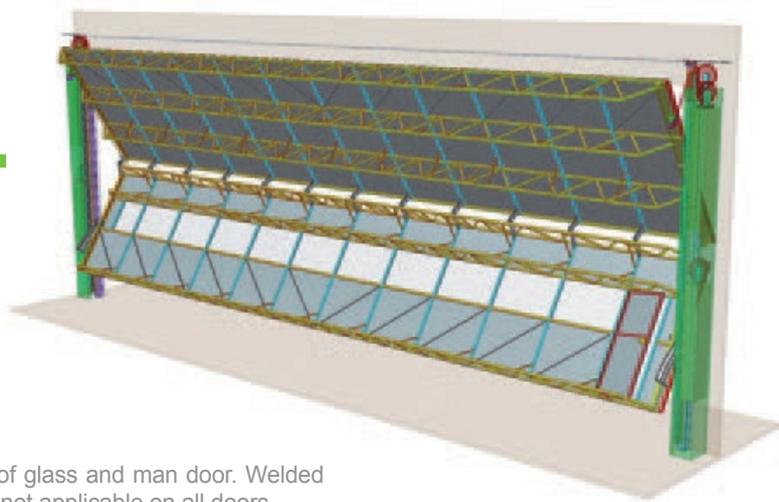
### STEEL BEAM

Weld or bolt on. Fixing must be provided for cover.

**Note:** Track fixing is important. Wind load is transformed back to the tracks and then into the structure. Structural strength of building to be by a engineer. Ulti Group takes no responsibility for what the door is fixed to.

**Dimensional View:** The 3 dimensional view indicates door structure configured inside the door opening.

DOOR HALF OPEN 



**Note:** Door shown with one row of glass and man door. Welded trusses for high wind area. Detail not applicable on all doors.

PRESSURE (KPA)	SPEED (M/SEC)	SPEED (KM/H)
0.45	27	98
0.60	32	113
0.85	38	135
1.00	41	146
1.15	44	157
1.30	47	167
1.45	49	176
1.60	52	185
1.75	54	194
1.90	56	202

**Calculations of  
Wind Speed Table**

## Product Specifications

### ULTI BI-FOLDING DOORS BY ULTI GROUP

**OPERATION:**

Two leaves with a horizontal folding line. Both leaves are counter weighted and under constant suspension. Both leaves guided by wheels in the track.

**FRAME:**

Side styles to be of heavy RHS to suit wind loads applicable. Galvanised steel to be used where possible. No less than grade C350LO in accordance with AS/NZ 4600. Where purlins are used, in accordance with AS/NZ 1397:1993. Galvanising to be a minimum of 275g/m<sup>2</sup>. un-coated steel to be coated to a grade 4 finish to suit application.

**WIRE ROPES:**

Galvanised wire to be used in all situations. Safety factor of 6-1 to be applied in all cases.

**TRACKS:**

Constructed using galvanised steel where possible. Coatings and steel grade to be equivalent of specifications for frame. To suit applicable wind and cladding loads. Fixing of tracks to wall/structure by welding or bolting. Fixing is site dependent. Concrete to be thicker under tracks to take door weight. 100mm per 2.0m of door height is minimum. Track must sit on floor.

**COUNTER WEIGHTS:**

To be of cast iron blocks @7.4kgs each. Weights to be equal weight to door, suspended on heavy duty frame with heavy duty pulley mounted on top.

**COUNTER WEIGHT COVERS:**

Formed from galvanised sheet to applicable length. Finished size will vary due to counter weight details. Must be removable for ease of maintenance. Protect with one bollard per side.

**SEALS:**

Clear PVC type seal for complete perimeter of door. Fix between frame and cladding. Seal to touch frame and the concrete floor provides bird proof surrounding.

## Product Specifications

### CLADDING:

Client specified. Must be fixed in accordance with all local/governing bodies codes. Glass to be in accordance with overhead glazing codes. Horizontal cladding may add extra costs to door structure. Use vertical cladding where possible.

### MAN DOORS:

Can be incorporated into certain designs. Sizes to be determined by cladding and frame configuration.

### ACTIVATION:

Doors can all be manually operated. Hand chain or motors can be installed. Hand chain to have a 4.5-1 ratio mounted in galvanised enclosure. Motor to be 1ph or 3ph depending on door size and weight. Motor to have emergency override feature and be capable of incorporating remotes and other activations. Power to be supplied to door by owner/contractor. Provide isolating switch at 1500mm from the floor.

### LOCKING:

Manual doors to have standard door bolts on each side of door. Slide bolts to slide into 16mmØ hole in concrete floor. Hand chain and motorised doors to have no locks. Locking by activation.

### WINDLOADING:

All doors to be designed to withstand 0.85 kpa/37.64 metres per second/135 kmh winds. Structure for door tracks to be fixed to is to be engineered by others. Wind loads are transferred onto the axles in the centre of each leaf. Windloading in some cases to be site specific.



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