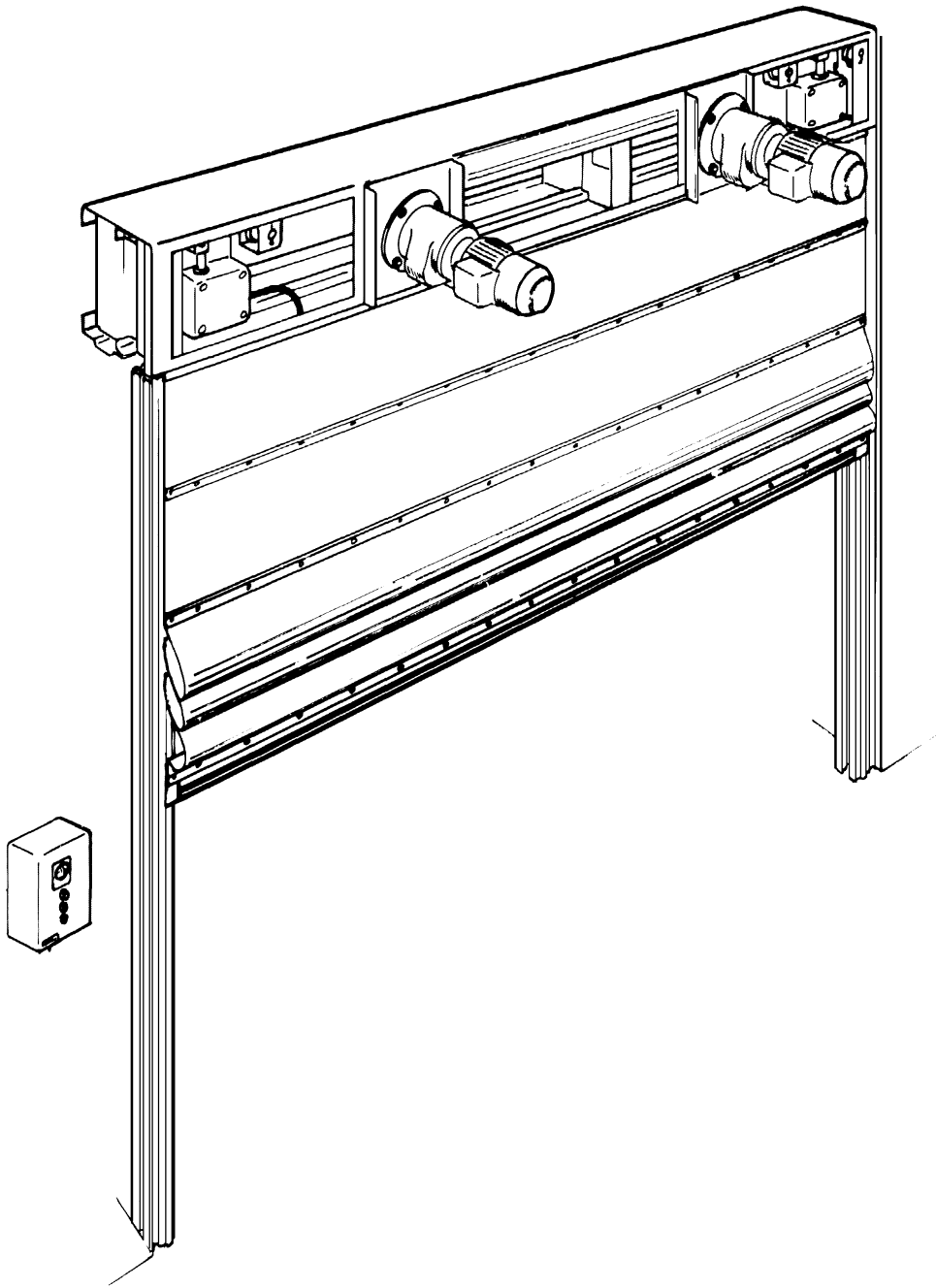

SYSTEM 1000 TECHNICAL INFORMATION



MEGADOOR[®]

SYSTEM 1000 TECHNICAL INFORMATION

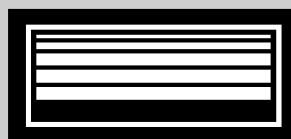


System 1000 is a system of industrial doors that has been specifically developed to cope with the specifications for durability, rigidity, reliability, and minimum maintenance requirements of heavy industry.

System 1000 is also available in an extra corrosion-proof model for extremely corrosive environments.

System 1000 may be mounted on the inside or outside of a building, or in the actual door opening, see page 6.

System 1000 is available for delivery with optional side jambs if the existing mounting surface is not suitable for the guide rails, see page 10. The machine box and motor can be enclosed in various ways, see page 11.



TECHNICAL DATA

Performance

Opening speed: 7 to 11 inches / second.
Size range: Max. Clearance Width (CW) of 48 feet.
Max. Clearance Height (CH) of 52 feet.
Note - Megadoor System 800 is normally recommended for openings smaller than 26 feet X 26 feet, i.e. CW x CH.
Estimated Wind Load: Standard 20psf, can however be designed for higher wind loads on request.

Electrical System

Power Supply: 3-phase 208, 230, 460, 575 Volt; 60 hertz.
Control Voltage: 110 VAC.
Motor Ratings: 2 to 5 Hp. per motor. Doors are supplied in either single or dual motor versions. The dual motor system is supplied for doors with CH > 30 feet.

Fabric Data

Unchanged Pliability: -35°F to +158°F.
Tensile Strength: 274 pounds / inch width.
Resistance to Light: 6 - 8 (8 denotes the highest value in the scale).
Resistance to UV-rays: UV-stabilized.
Fire Rating: Self-extinguishing, 0 - 75 Flame Spread.

Surface Treatment

Steel Parts: Alkaline cleaned or sandblasted.
Powder epoxy finish paint
Sheet Profiles: Hot-galvanized steel sheet with primer and finish paint.
Bottom Profile: Sandblasted and primed.
Side Jambs(frame): Sandblasted and primed.
Other Parts: Aluminum, High Density Plastic, Stainless Steel, Zinc / Cadmium plated.

THE CURTAIN

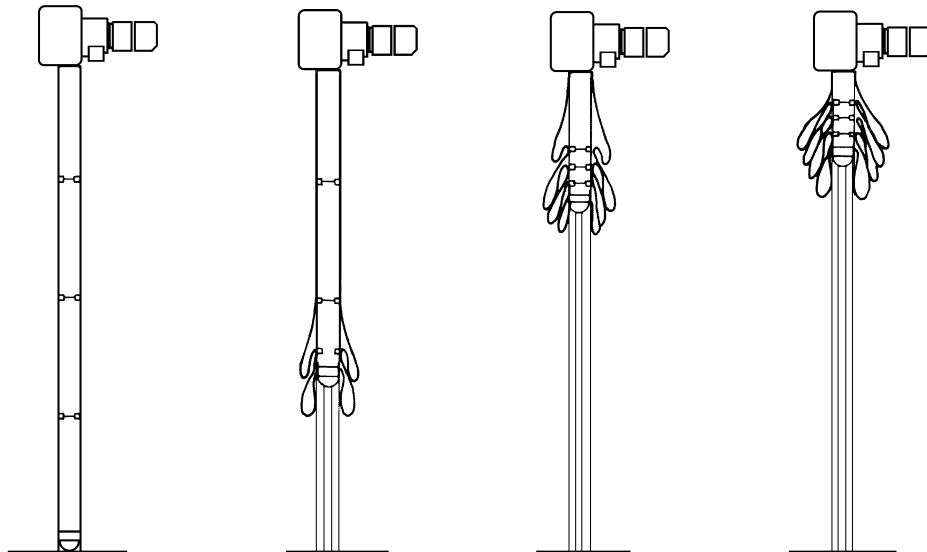
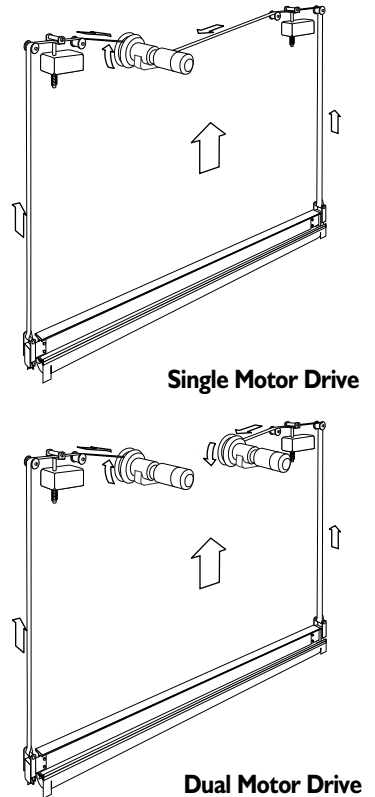
The door leaf is resistant to both mechanical abrasion, such as sand blasting, and to sparks in the immediate vicinity of the door, e.g. caused by welding or gas-arc cutting.



Wind load is transferred to the vertical guide rails by the horizontal aluminum beams of the door leaf. These beams hang between two continuous sheets of vinyl-coated polyester fabric, thus pulling the fabric tight and stabilizing the beams. Self-lubricated guide blocks travel in the guide rails at each end of the door leaf beams.

The hoist belt is wound on a belt drum to raise the bottom beam of the door. Doors are provided with either a single or a dual motor drive, dependent upon the door width and height. (See illustration.) The belt drum is keyed directly to the output shaft of the brake reduction gear motor. A hand crank can be attached to the motor for manual operation of the door in the event of a power failure.

The polyester belt is impervious to corrosion, dirt, and dust. Stainless steel safety devices prevent the door from falling in the event of an accident. The safety devices also serve as a locking mechanism when the door is in the closed position.



The bottom beam is lifted by the belt. The fabric folds into pleats as the door is opened and the aluminum beams are stacked on top of each other from the bottom up.

VARIOUS WAYS OF INSTALLING SYSTEM

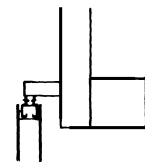
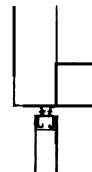
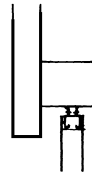
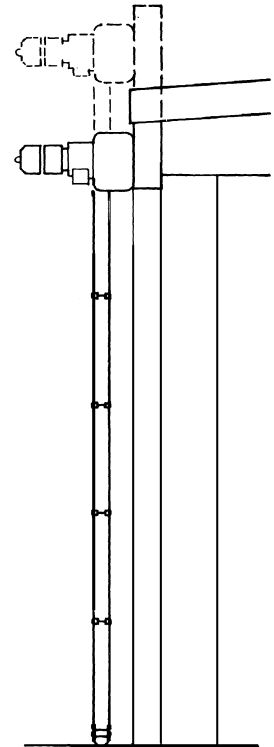
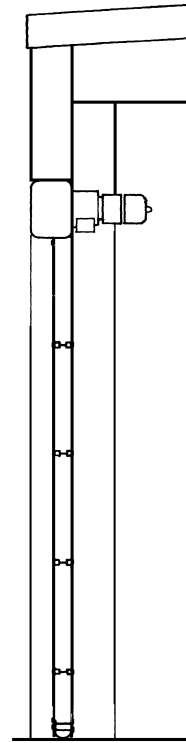
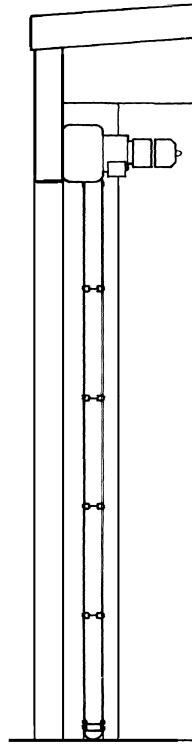
System 1000 is easy to adapt to most types of openings. It requires little space and does not take up room inside or outside of the building. If there are no solid surfaces on which to mount door guide rails, Megadoor can supply side fittings.

The door is installed on-site by Megadoor's installation specialists. To facilitate fitting the site must be prepared in good time prior to installation. A drawing is enclosed with our quotation or order confirmation for approval by the customer.

Mounting

There are three basic ways of fitting a Megadoor:

1. Internal wall mounting.
2. Fitting in a door opening.
3. External wall mounting.



Internal wall mounting

Internal mounting is recommended where the size of the door opening permits. The drive machinery and guide rails will then be fully protected.

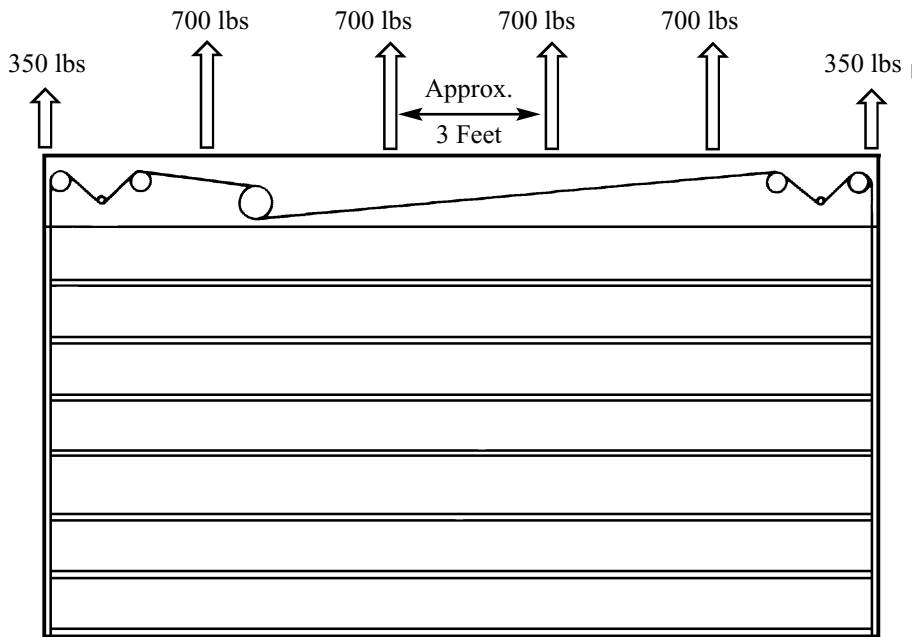
Fitting in door opening

Mounting in the opening is an alternative where a door is to be fitted in an existing opening and where the risk of collision with the guide rails is negligible. It is possible to protect guide rails with a collision shield.

External wall mounting

External mounting should be selected when the environment within the building is severe or where there is insufficient space indoors above the opening.

LOAD ON THE BUILDING

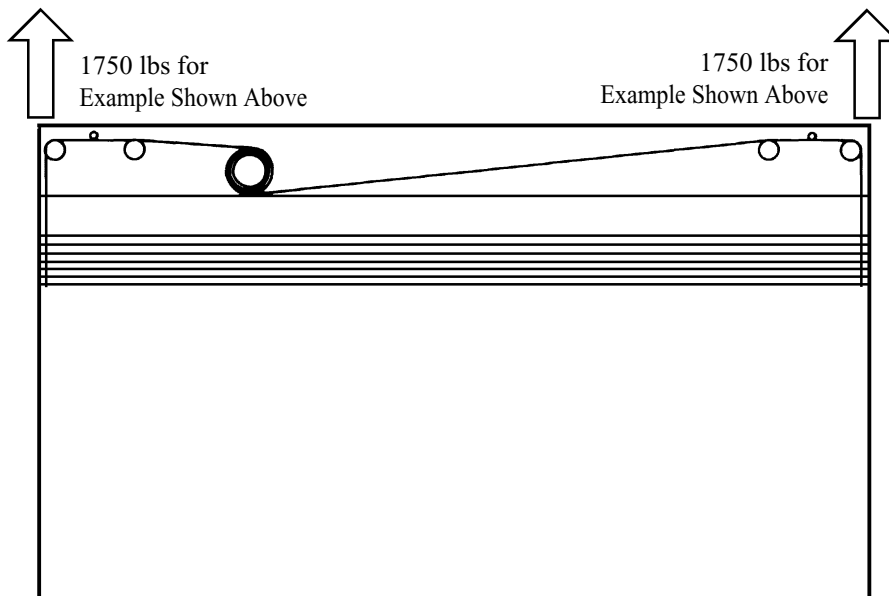


Door in Closed Position

When the door is closed, the total weight is distributed across the head of the door at the support points. The distance between the support points is approximately three feet. Standard door leaf weight is between 35 and 150 pounds per foot width, but due to additional loading which may be the result of a collision with the door, the design load used for the building should be 233 pounds per foot width.

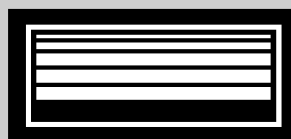
$\frac{1}{2}$ Door Leaf Weight

$\frac{1}{2}$ Door Leaf Weight



Door in Open Position

The load of the door leaf is successively transferred to the ends of the machine box as the door is opened. In this situation the weight of the machine box only is supported by the remaining fixing points.



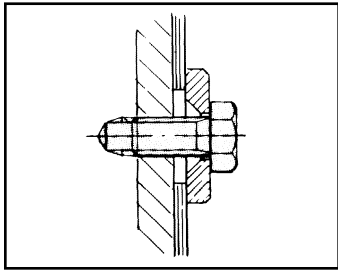
MOUNTING OF THE MACHINE BOX

Mounting on wall

There must be two flat horizontal surfaces available on the wall, see shaded part of sketch, on which to bolt the machine box. Appropriate surfaces are concrete or steel.

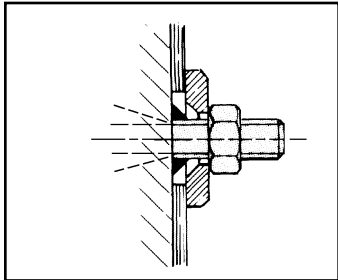
Mounting on the ceiling

Two horizontal flat surfaces, see shaded part of sketch, are needed on the ceiling on which to fix the machine box. Appropriate surfaces are concrete, or steel.



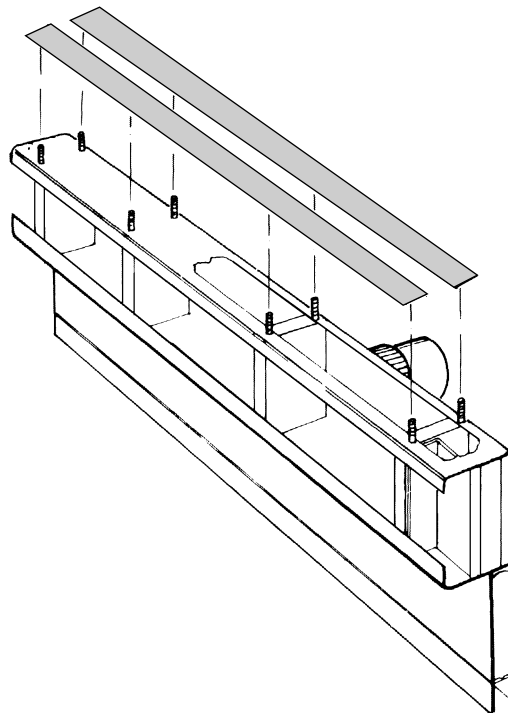
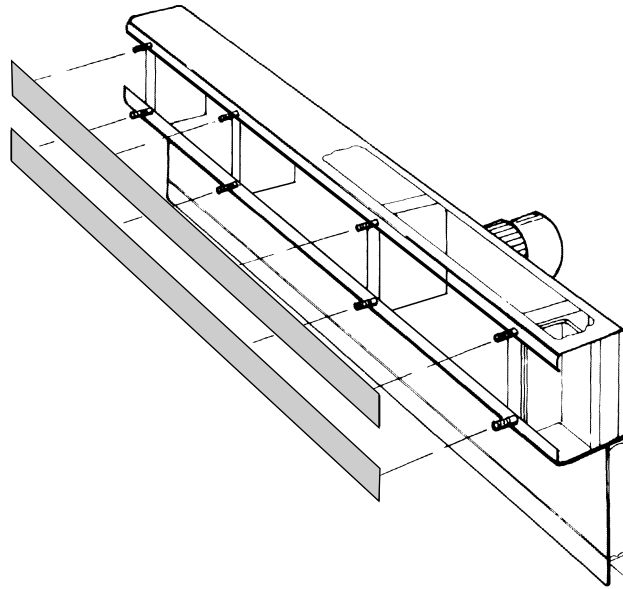
A. Steel surface

Drill holes in the wall to match the machine box, attach with the self-tapping screws and washers provided.

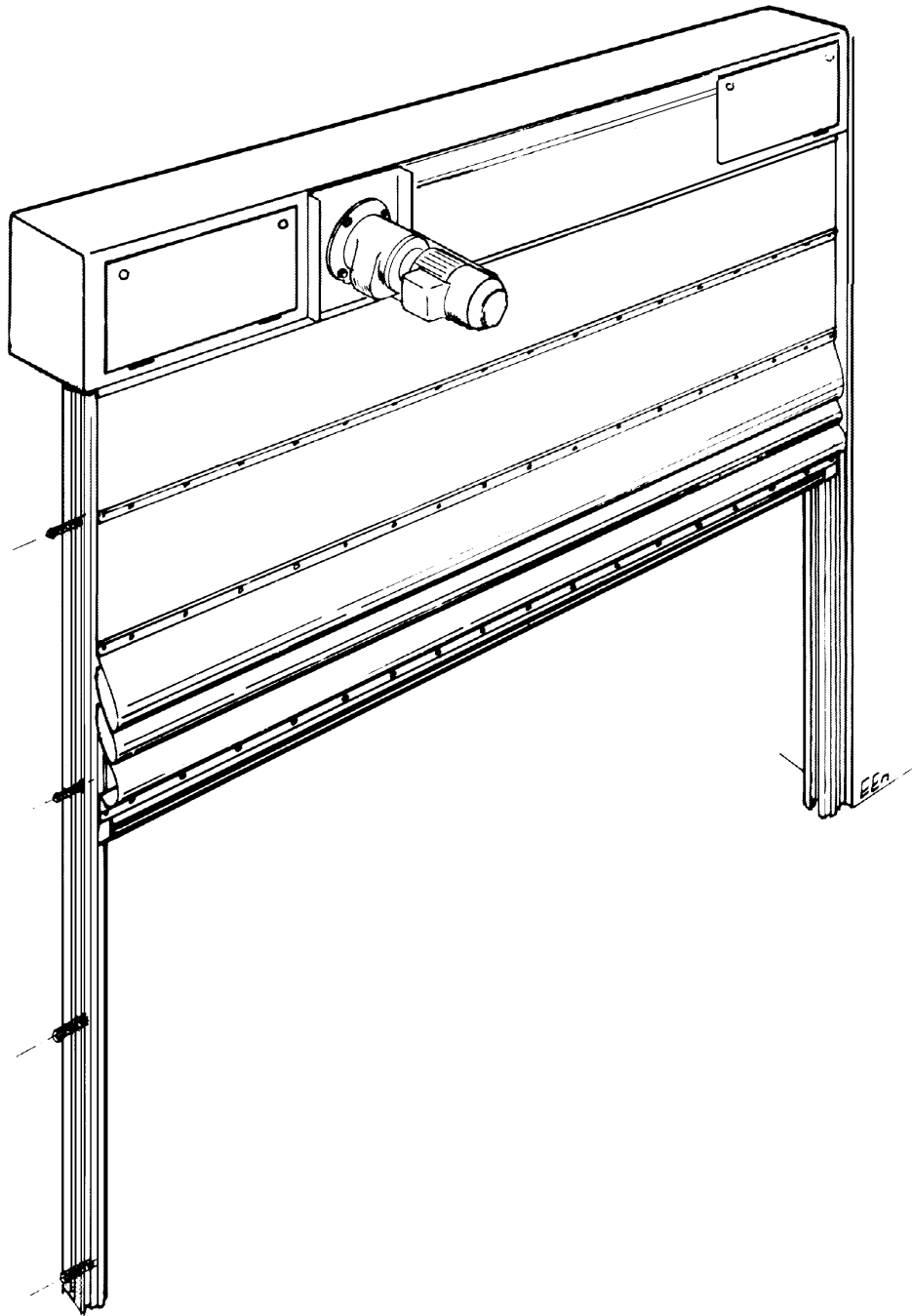


B. Concrete

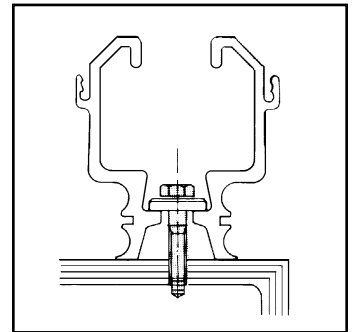
Drill holes in the concrete for expansion anchors to match the machine box. Attach with anchor bolts provided.



MOUNTING SURFACES FOR GUIDE RAILS

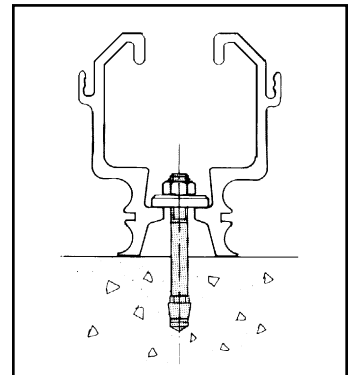


Suitable surfaces are required on which to mount guide rails. (See sketch). The fixing surfaces should be made of concrete or steel, and must be smooth and strong. Distance between fixing bolts is approximately 2.5 feet.



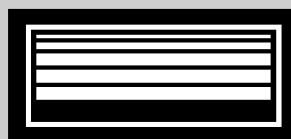
A. Steel surface

Drill holes in the wall to match the guide rails, and attach with the self-tapping screws and washers provided.



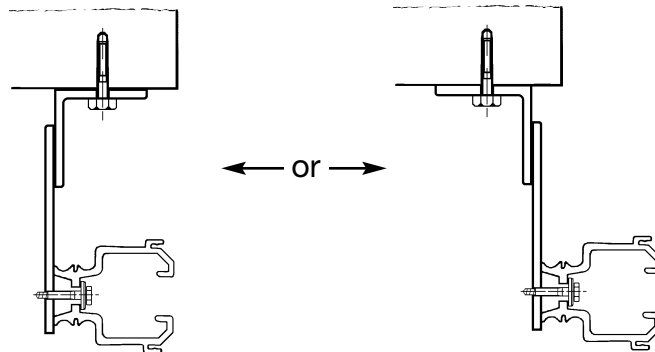
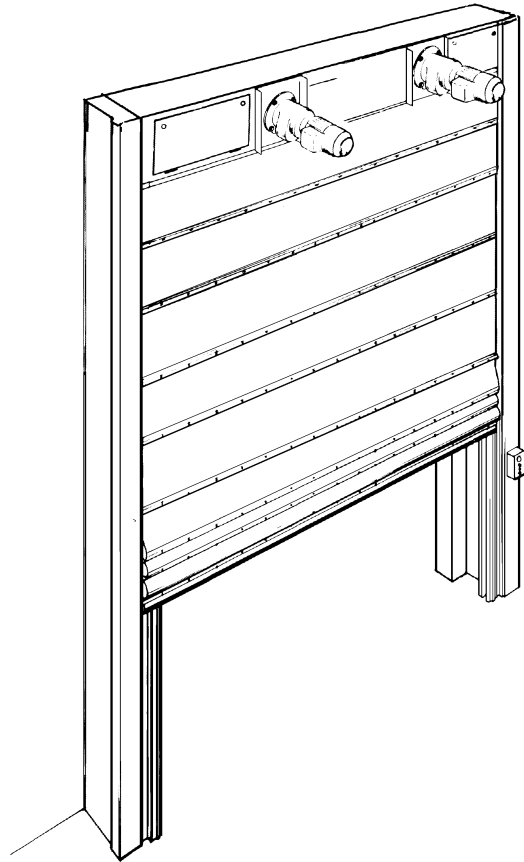
B. Concrete

Drill holes in the concrete for expansion anchors to match the guide rails. Attach with the anchor bolts provided.



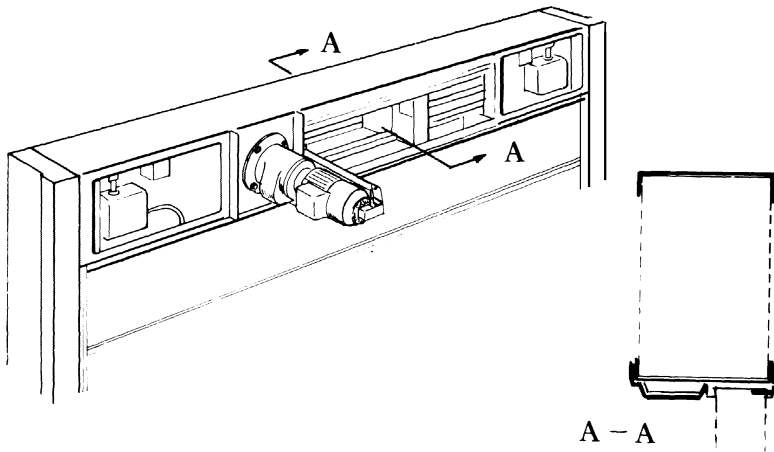
Side Jamb

For openings where columns for fixing the guide rails are not available, Megadoor can provide stable side jamba. The ways of mounting the side jamba are the same as those used for the guide rails. Distance between fixing bolts is approximately 2.5 feet. Insulation of the side jamba to prevent thermal losses is possible, but is not included in our delivery.



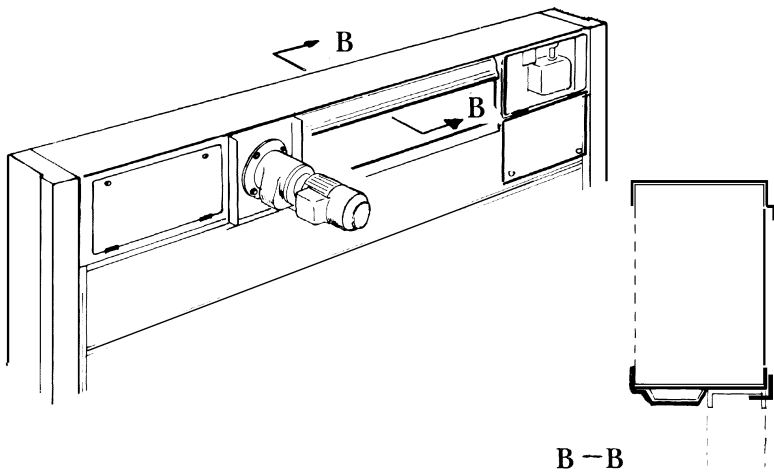
Side jamba consist of a stable steel construction enclosed in galvanized, black plastic coated sheet.

ENCLOSING THE MACHINE BOX



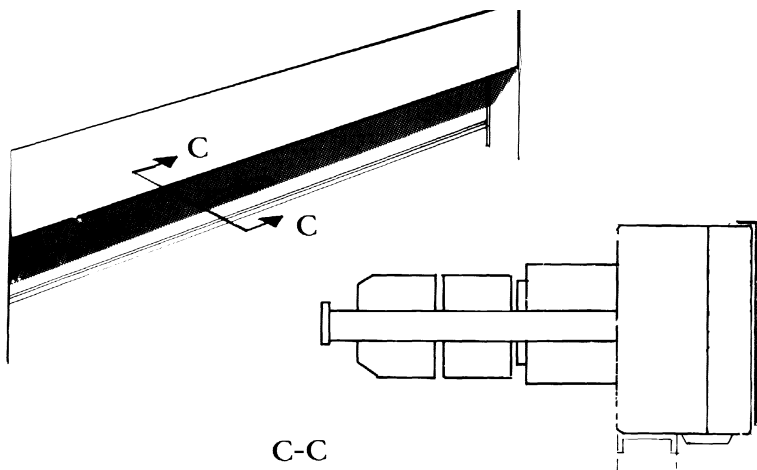
Open machine box

Our standard version of the machine box is supplied for use in normal industrial environments. The limit switches, belt, and rollers are exposed to the surrounding environment. Optional enclosures which are available are shown below.



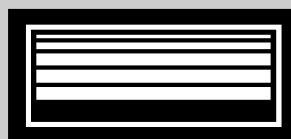
Motor side covered

The motor side of the machine box should be covered when it is located on the exterior of the building or if it faces a harsh environment. Components which need to be accessed for inspection are located at the ends behind rubber sealed hatches. The area in between the hatches is covered with permanent sheet steel covers painted to match the machine box.



Rear side covered

The rear side of the machine box should be covered when it is located on the exterior of the building or if it faces a harsh environment. The covers are permanent sheet steel painted to match the machine box. Thermal insulation of the box is available, but is not included as standard.

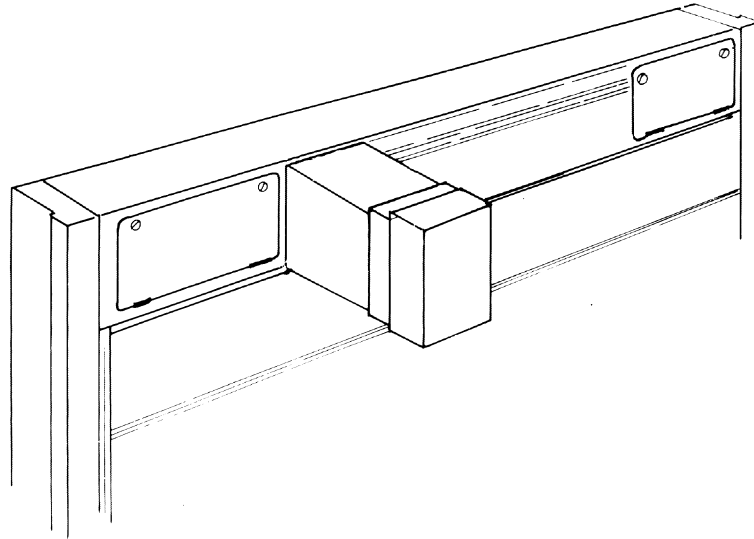


MEGADOOR[®]

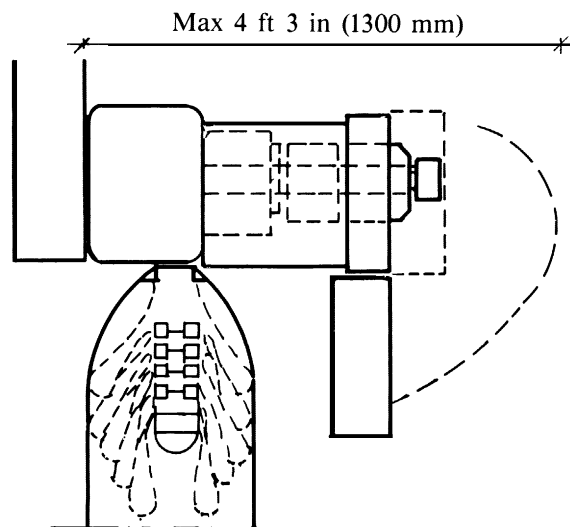
PROTECTION OF MOTOR

Protective casing over motor

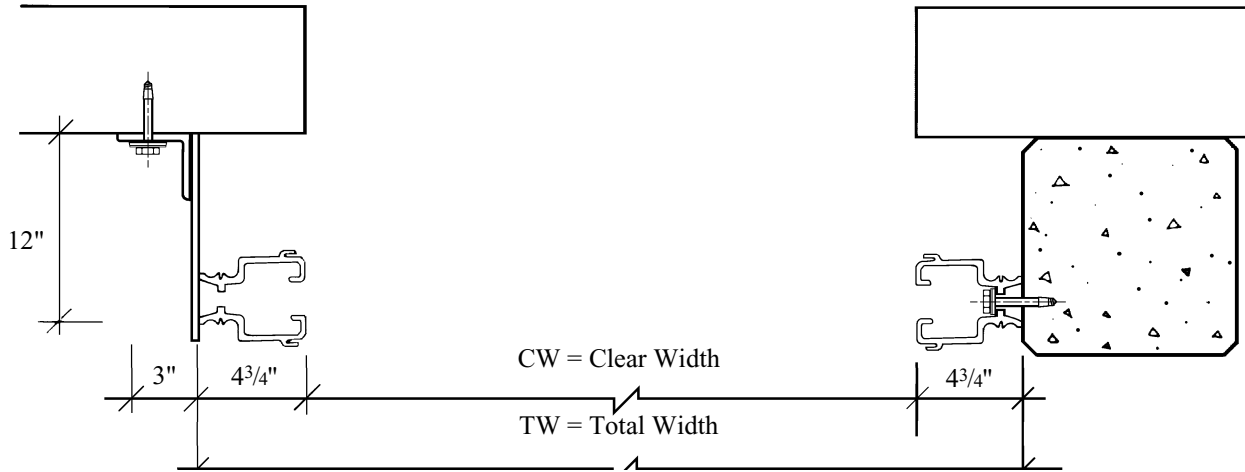
In strongly corrosive or dirty environments the motor should be fully protected. The protective casing is made of sheet steel painted to match the headerbox.



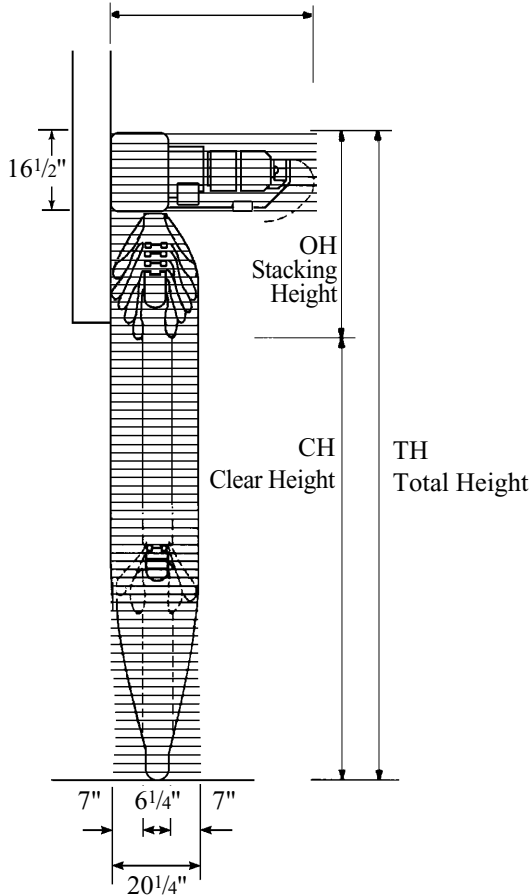
The casing is provided with a cover which can be opened for quick access to the motor for manual operation in an emergency. The entire casing is detachable.



SPACE REQUIREMENTS FOR SYSTEM 1000



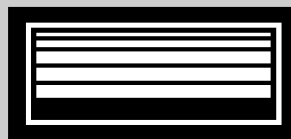
Motor Depth = MD 46 to 51 in.



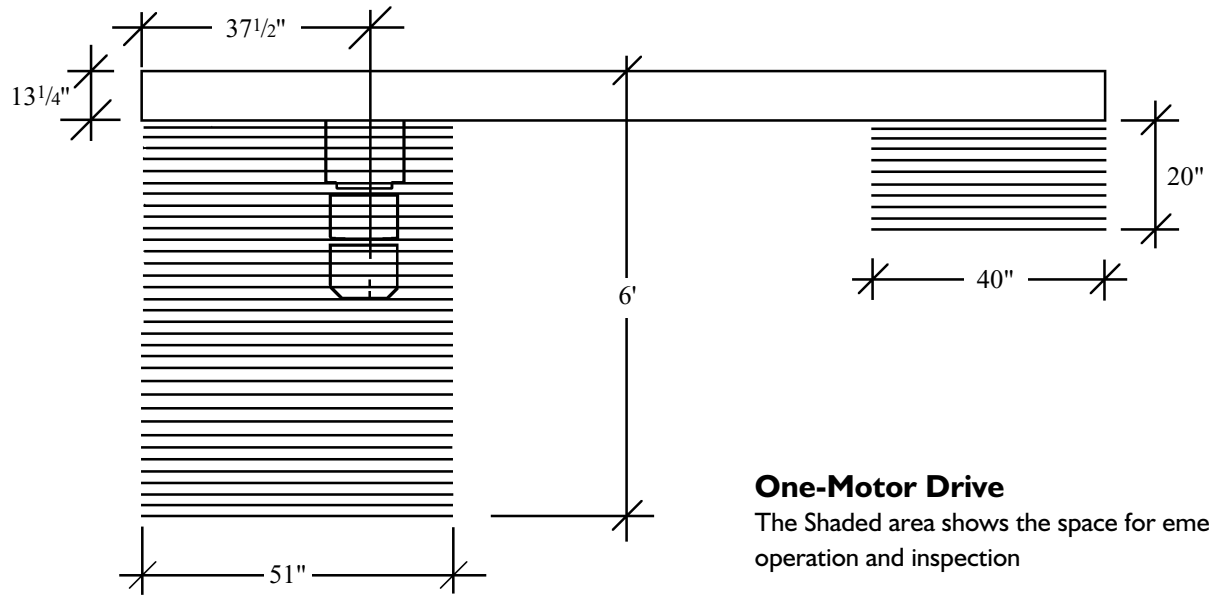
The total height is determined by computer. Contact your nearest Megadoor office for minimum space requirements.

Space requirements for fabric, and for inspection

The shaded area shows the space required for the fabric when the door is in motion. Adjacent surfaces must be smooth. The space between the wall and the fabric must be free from bolts, electrical cables, etc.

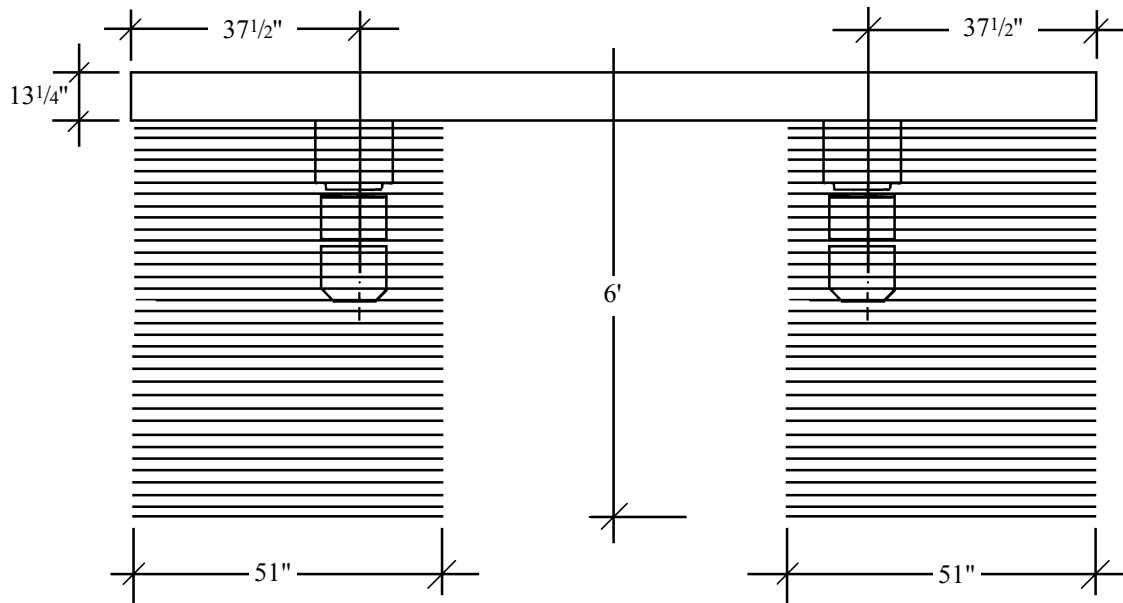


SPACE REQUIREMENTS FOR INSPECTION



One-Motor Drive

The Shaded area shows the space for emergency operation and inspection



Two-Motor Drive

The Shaded area shows the space for emergency operation and inspection

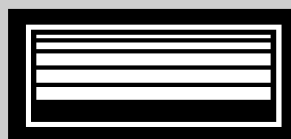
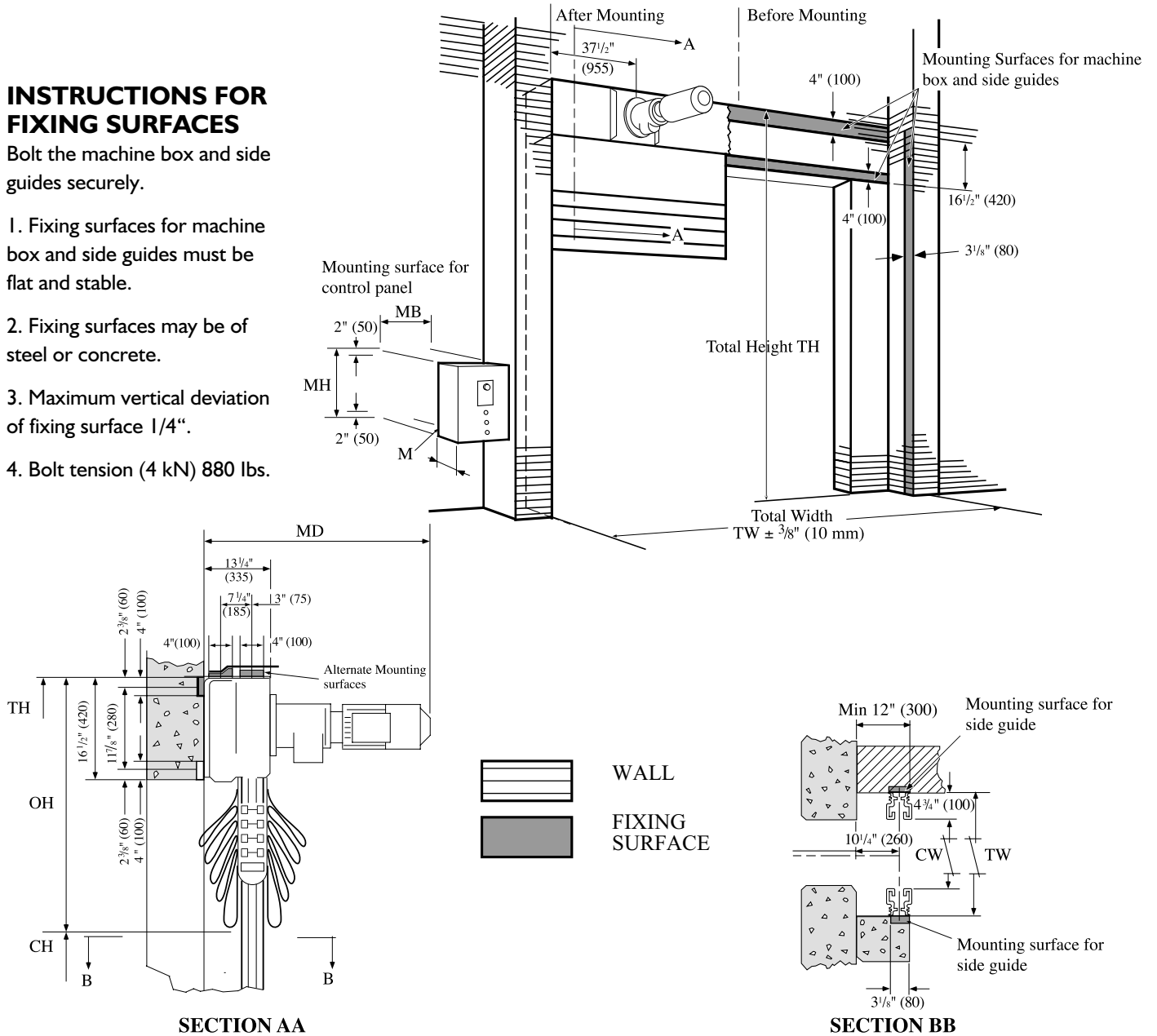
INTERNAL OR EXTERNAL WALL MOUNTED DOOR

Dimensional Drawing Megadoor System 1000

INSTRUCTIONS FOR FIXING SURFACES

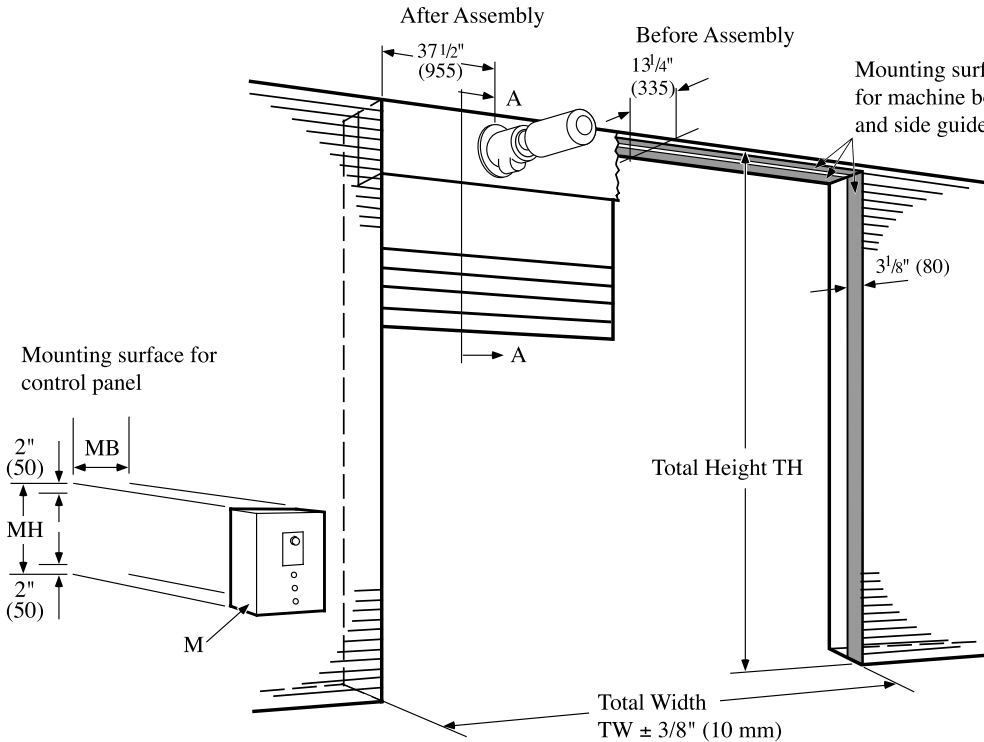
Bolt the machine box and side guides securely.

1. Fixing surfaces for machine box and side guides must be flat and stable.
2. Fixing surfaces may be of steel or concrete.
3. Maximum vertical deviation of fixing surface 1/4".
4. Bolt tension (4 kN) 880 lbs.



DOOR MOUNTED IN OPENING

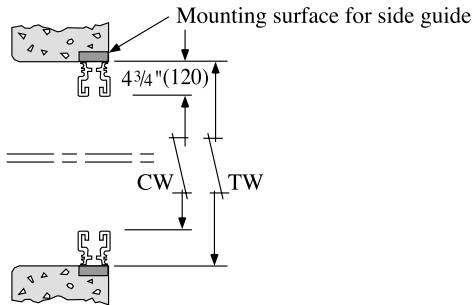
Dimensional Drawing Megadoor System 1000



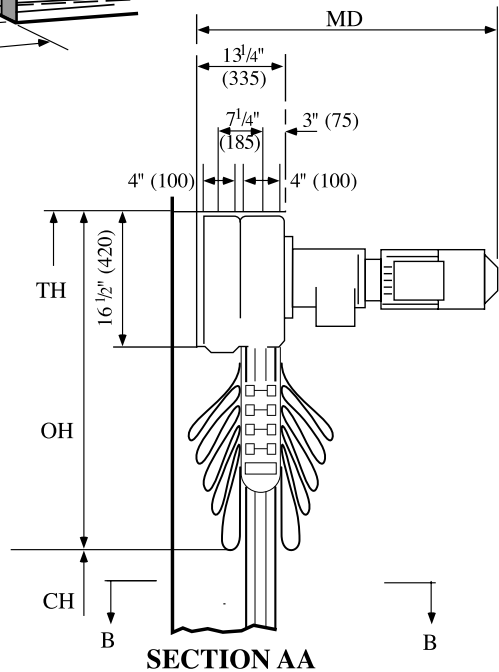
INSTRUCTIONS FOR FIXING SURFACES

The machine box and side jambs are bolted securely.

1. Fixing surfaces for machine box and side guides must be flat and stable.
2. Fixing surfaces may be of steel or concrete.
3. Maximum vertical deviation of fixing surface - 1/4".
4. Bolt tension 880 lbs.



SECTION BB



SECTION AA

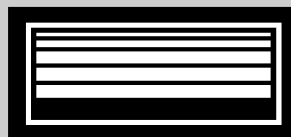
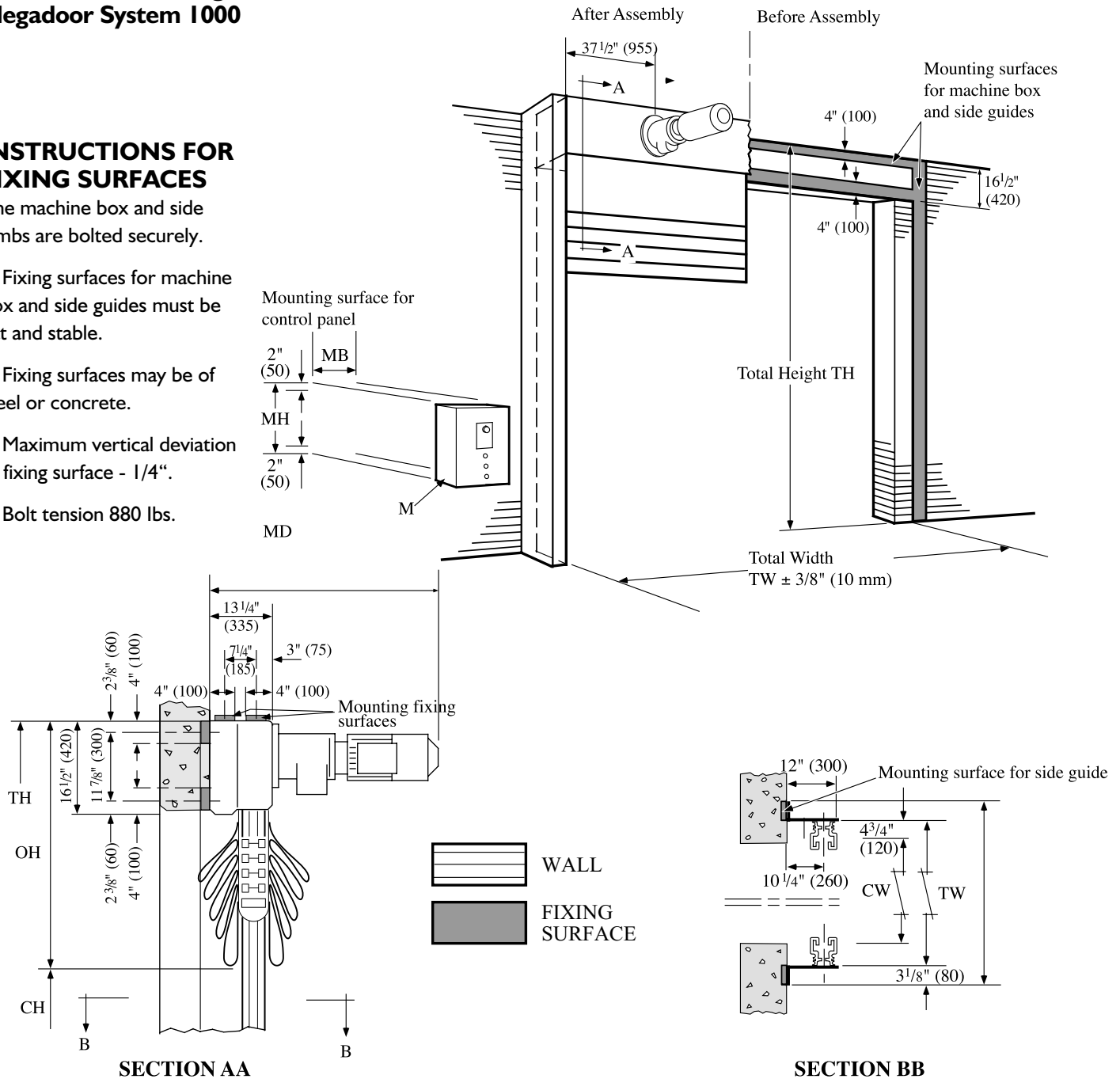
SIDE JAMBS INTERNAL OR EXTERNAL MOUNTING

Dimensional Drawing Megadoor System 1000

INSTRUCTIONS FOR FIXING SURFACES

The machine box and side jambs are bolted securely.

1. Fixing surfaces for machine box and side guides must be flat and stable.
2. Fixing surfaces may be of steel or concrete.
3. Maximum vertical deviation of fixing surface - 1/4".
4. Bolt tension 880 lbs.





ME019.1001.5C



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