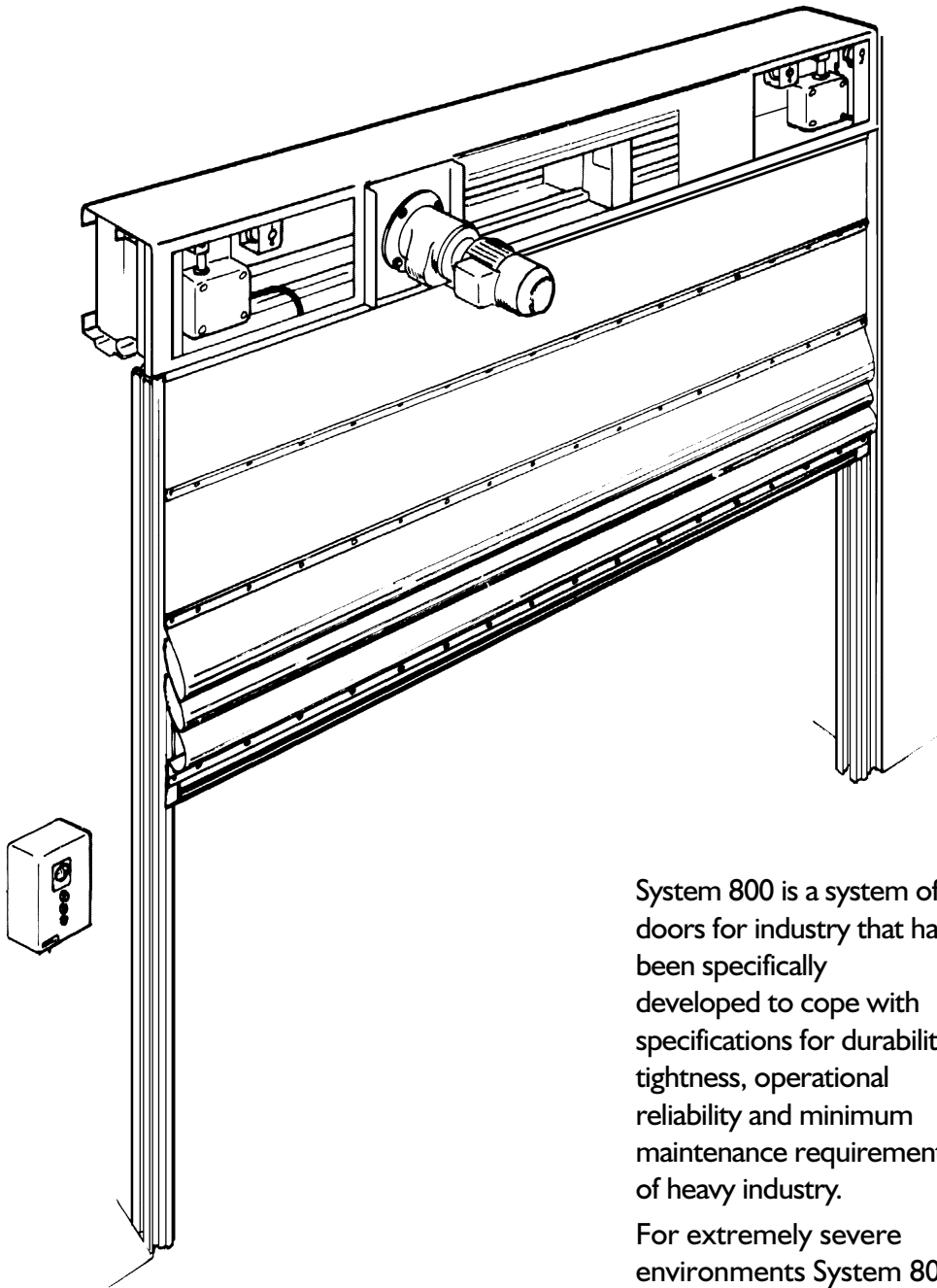

SYSTEM 800 TECHNICAL INFORMATION



MEGADOOR[®]

SYSTEM 800 TECHNICAL INFORMATION

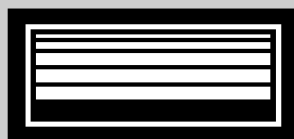


System 800 is a system of doors for industry that has been specifically developed to cope with specifications for durability, tightness, operational reliability and minimum maintenance requirements of heavy industry.

For extremely severe environments System 800 is available in an extra corrosion-proof version.

To cope with openings exposed to intense traffic, System 800 is available in a high speed version, System 800 HS and also with the control mode which minimizes traffic costs.

System 800 can easily be mounted internally or externally on the building. To simplify adjustment to the building there is a self-supporting design. System 800 is available for delivery with optional side jambs if the existing mounting surface is not suitable for the side guides. The header box may be protected with various cladding options.



TECHNICAL DATA

Performance

Normal Opening Speed:.....	8 to 12 inches / second.
Double Opening Speed	16-24 inches / second
Size Range:	Max. Clearance Width (CW) of 26 feet. Max. Clearance Height (CH) of 26 feet. Note - Megadoor System 1000 is normally recommended for openings greater than 26 feet X 26 feet, i.e. CW x CH.
Wind Load:	Standard 20psf, can however be designed for higher wind loads on request.

Electrical System

Protection Class Control Cabinet: ..	NEMA 4/12
Power Voltage:.....	3-phase 230 V 60 Hz, Also 208, 460, 575
Control Voltage:	24 V AC
Fusing:	6-20 A
Motor Rating:	0.75 - 4.0 HP

Fabric Data

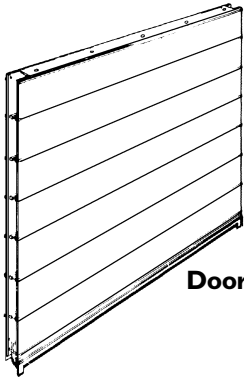
Unchanged Pliability:	-35°F to + 158°F
Tensile Strength:	274 Pounds / Inch Width
Resistance to Light:.....	6-8 (8 denotes highest value on a scale of 0-8)
UV Stabilized:	Yes
Fire Rating:	Self-Extinguishing, 0-75 Flame Spread

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 DOOR LEAF

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.

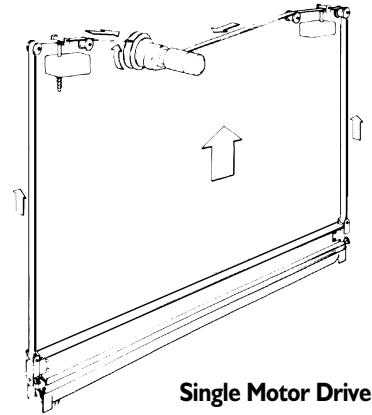


Door Leaf

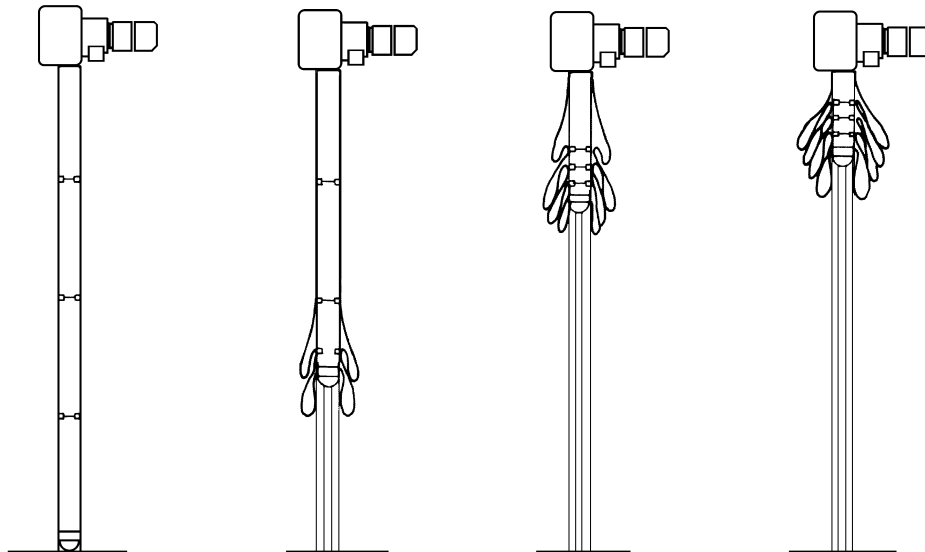
Wind load is transferred to the vertical guide rails by the horizontal aluminum beams of the door leaf. These beams hang between two continuous sheets of vinyl-coated polyester fabric, thus pulling the fabric tight and stabilizing the beams. Self-lubricated guide blocks travel in the guide rails at each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

The hoist belt is wound onto a belt drum to raise the bottom beam of the door. 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.

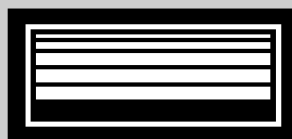
The polyester belt is impervious to corrosion, dirt, and dust. Stainless steel safety devices prevent the door from falling in the event of an accident. The safety devices also serve as a locking mechanism when the door is in the closed position.



Single Motor Drive



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

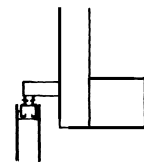
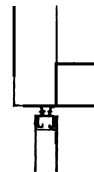
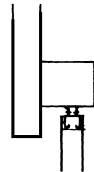
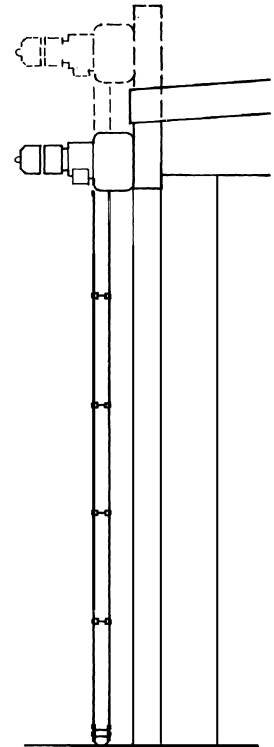
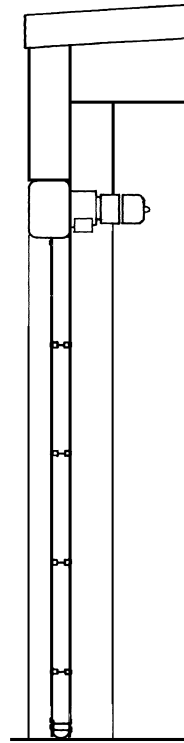
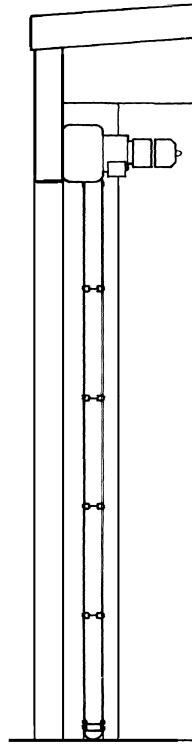
System 800 is easy to adapt to most types of openings. It requires little space and does not take up room inside or outside of the building. If there are no solid surfaces on which to mount door guide rails, Megadoor can supply side jambs

The door is installed on-site by Megadoor's installation specialists. To facilitate installation 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 mounting a Megadoor:

1. Internal wall mounting.
2. Between jambs.
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.

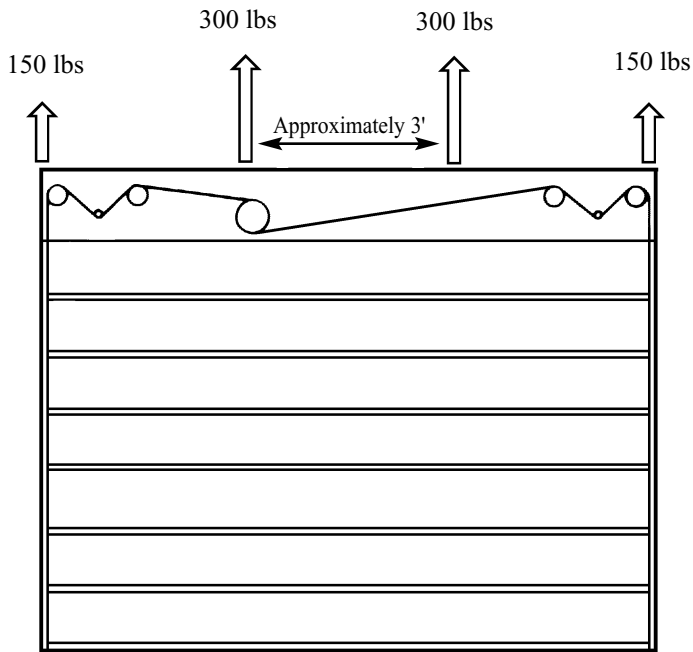
Between jambs

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

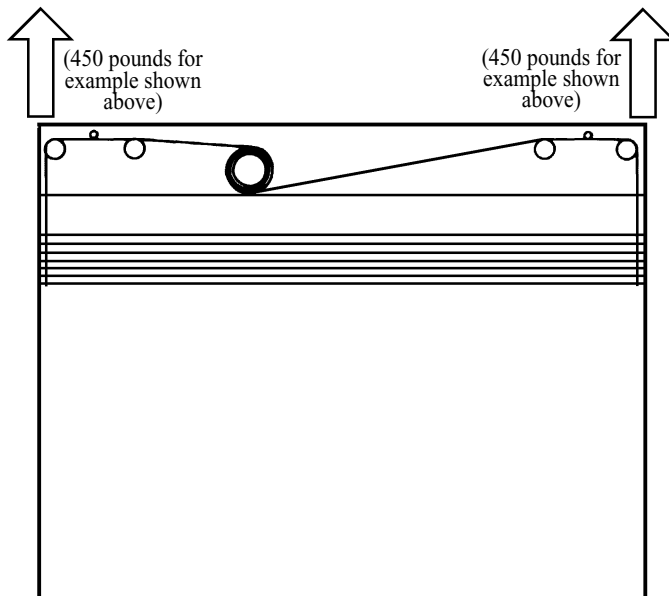


Door in Closed Position

When the door is closed, the total weight is distributed across the head of the door at the support points. A support point is located at approximately three feet on center across the width of the door. Standard door leaf weight is between 25-55 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 100 pounds per foot width.

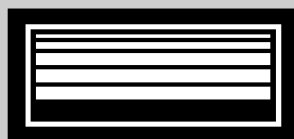
1/2 Door Leaf Weight

1/2 Door Leaf Weight

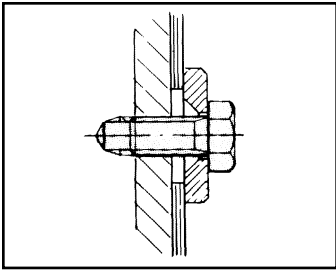


Door in Open Position

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

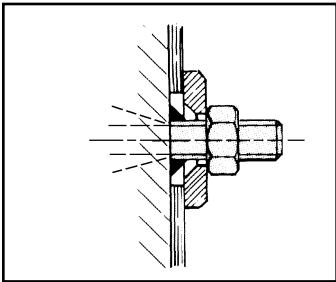


MOUNTING OF THE HEADER BOX



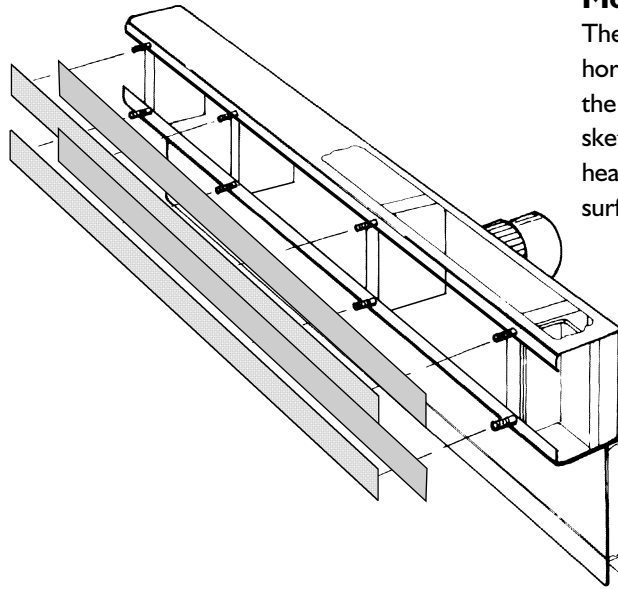
A. Steel surface

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



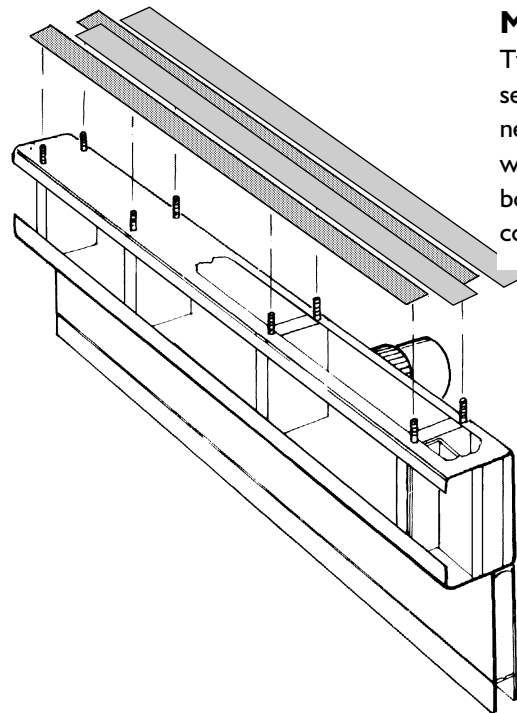
B. Concrete

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



Mounting on wall

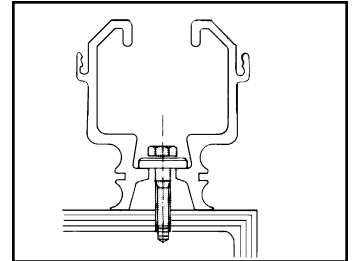
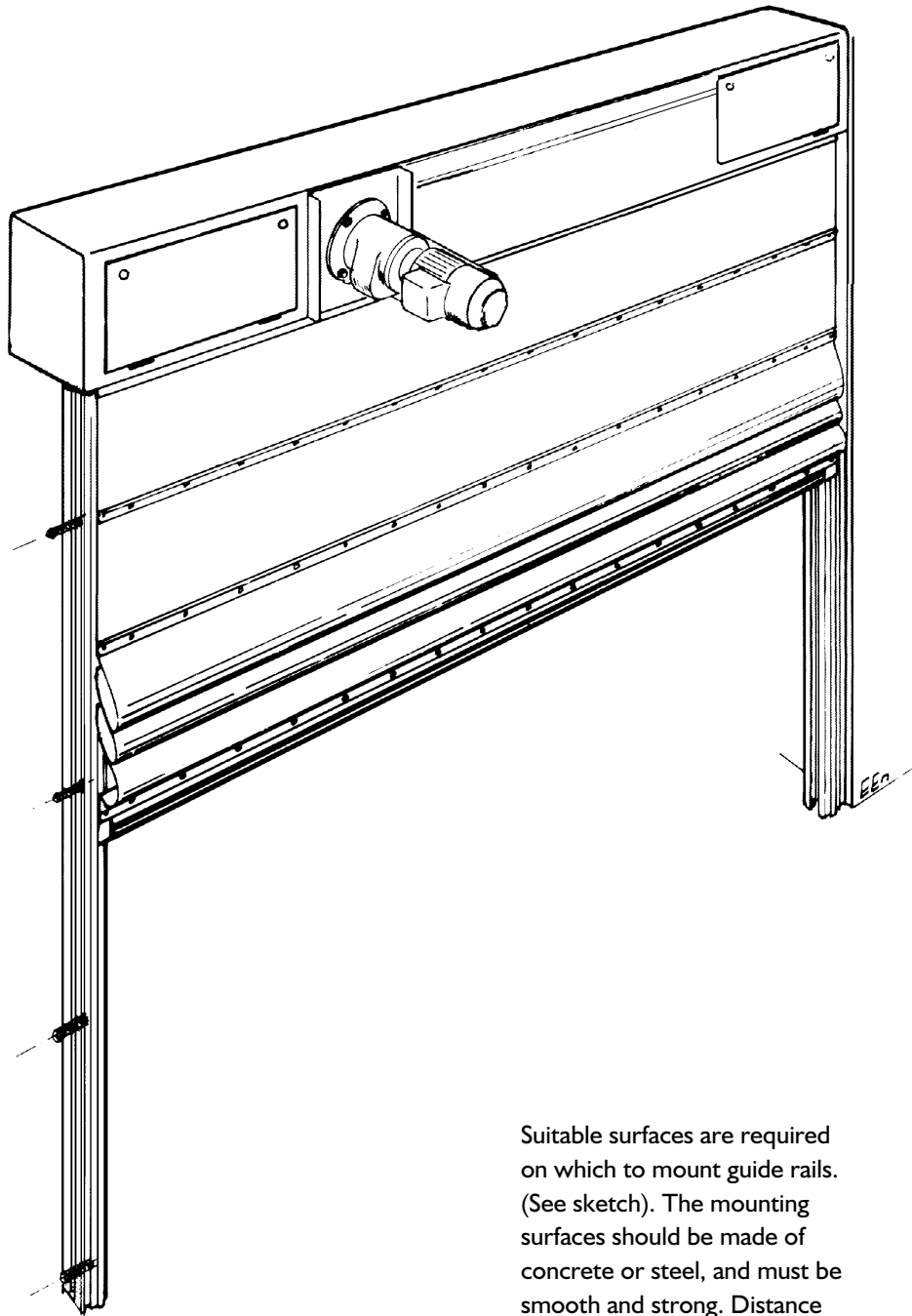
There must be two flat horizontal surfaces available on the wall, see shaded part of sketch, on which to attach the header box. Appropriate surfaces are concrete or steel.



Mounting on the ceiling

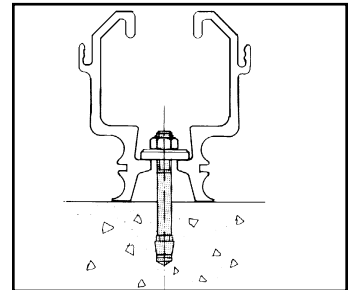
Two horizontal flat surfaces, see shaded part of sketch, are needed on the ceiling on which to attach the header box. Appropriate surfaces are concrete, or steel.

MOUNTING SURFACES FOR GUIDE RAILS



A. Steel surface

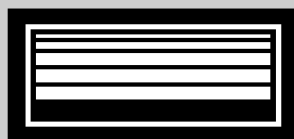
Drill holes in the wall to match the guide rails, and attach with the self-tapping screws and washers provided.



B. Concrete

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

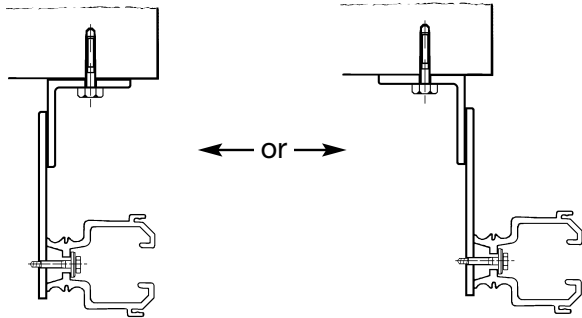
Suitable surfaces are required on which to mount guide rails. (See sketch). The mounting surfaces should be made of concrete or steel, and must be smooth and strong. Distance between bolts is approximately 2.5 feet.



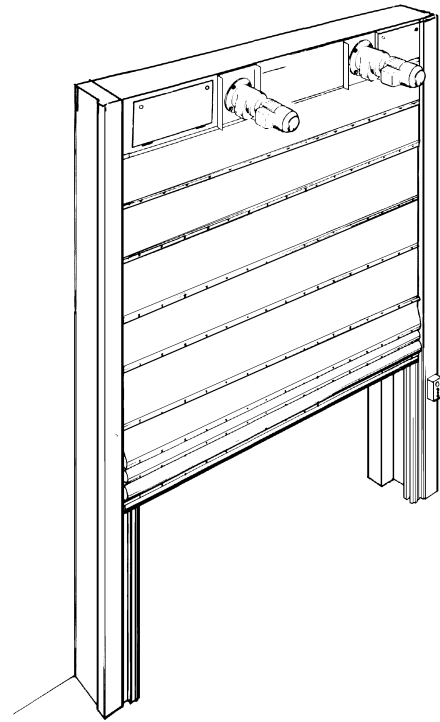
Side Jamb

For openings where columns for mounting the guide rails are not available, Megadoor can provide stable side jamps. The ways of mounting the side jamps are the same as those used for the guide rails.

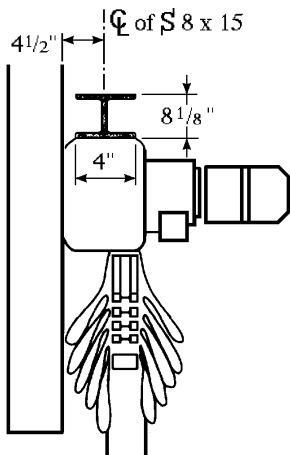
Distance between mounting bolts is approximately 3 feet. Insulation of the side jamps to prevent thermal losses is possible, but is not included in our delivery.



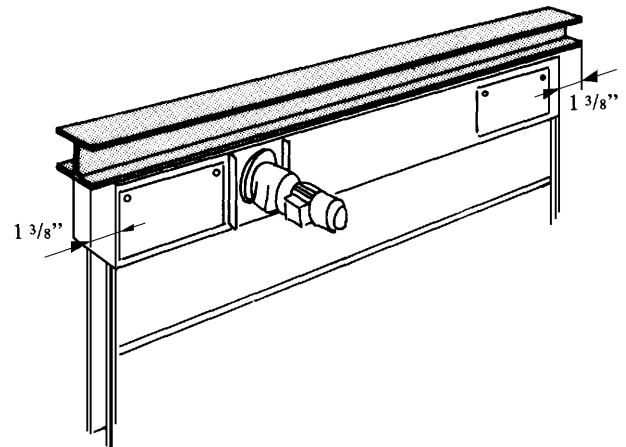
Side jamps consist of steel with prime paint.



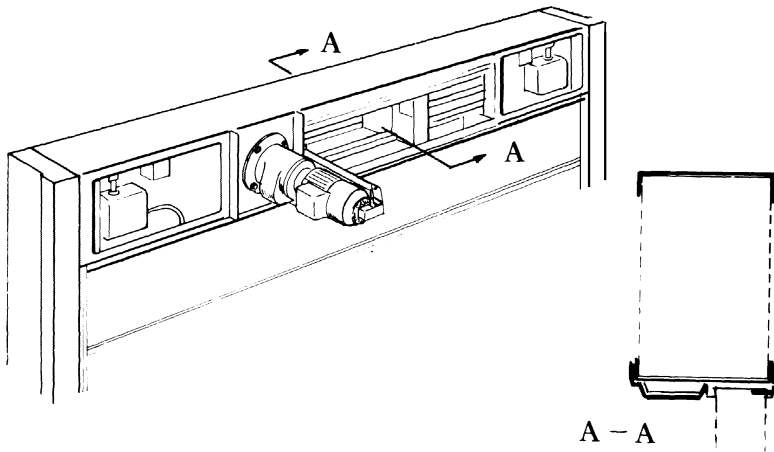
Self Supporting Version



MEGADOOR can supply a self-supporting door if the wall construction over the door opening is not strong enough. The beam fixed on the top of the header box transfers the load to the vertical supports at the sides of the door. If our side fittings are used, they will be strong enough to support the load of the header box. The beams protrude 1 3/8" on each side, which is sufficient to attach them on top of the side jamps.

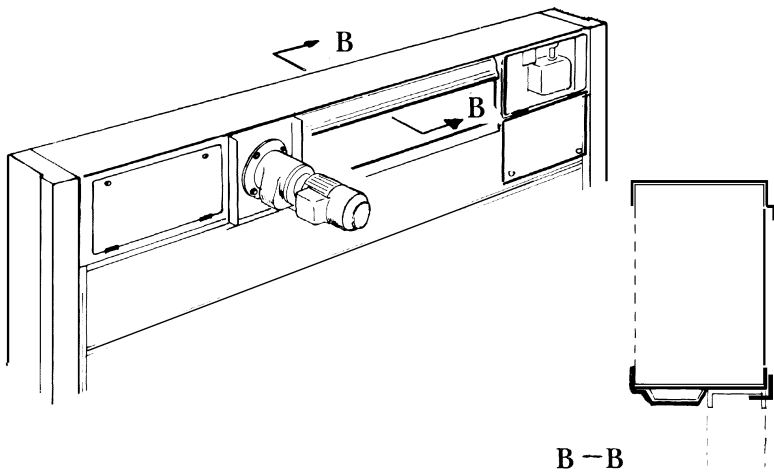


ENCLOSING THE HEADER BOX



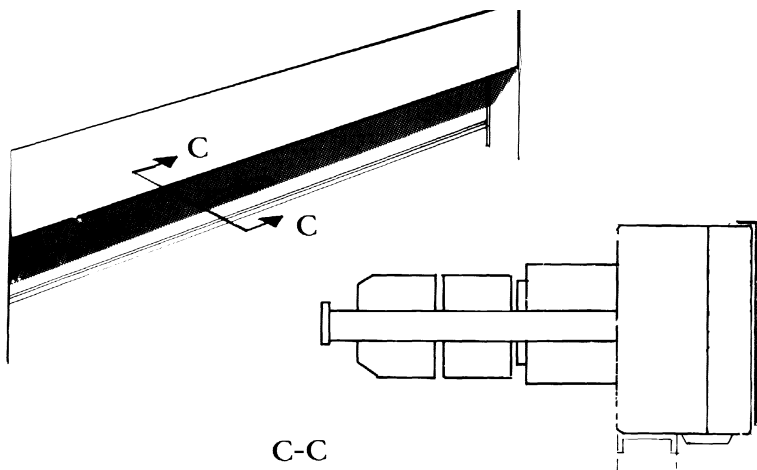
Open header box

Our standard version of the header 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.



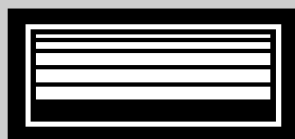
Motor side covered

The motor side of the header 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 header box.



Rear side covered

The rear side of the header 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 header box. Thermal insulation of the box is available, but is not included as standard.

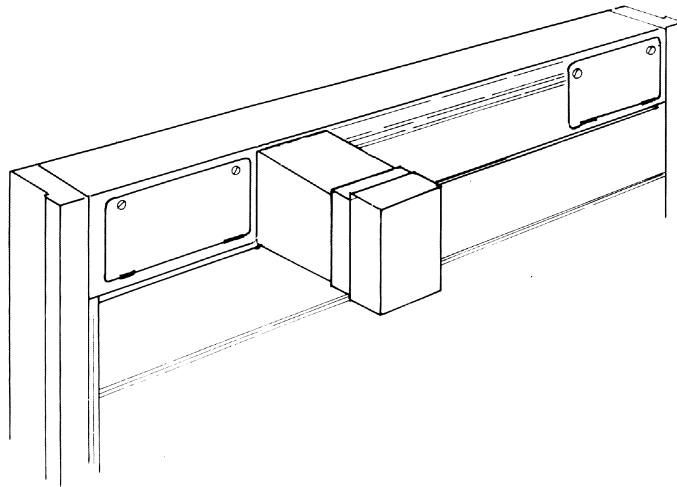


MEGADOOR®

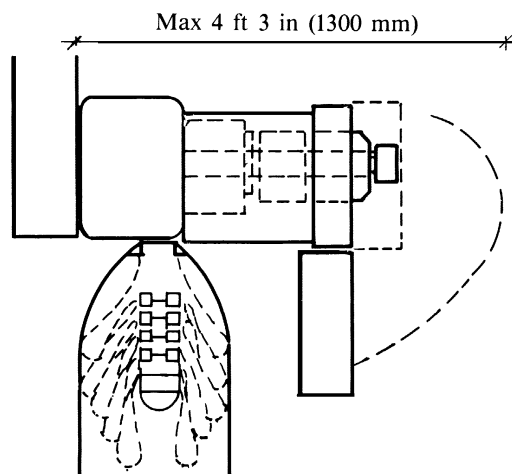
PROTECTION OF MOTOR

Protective casing over motor

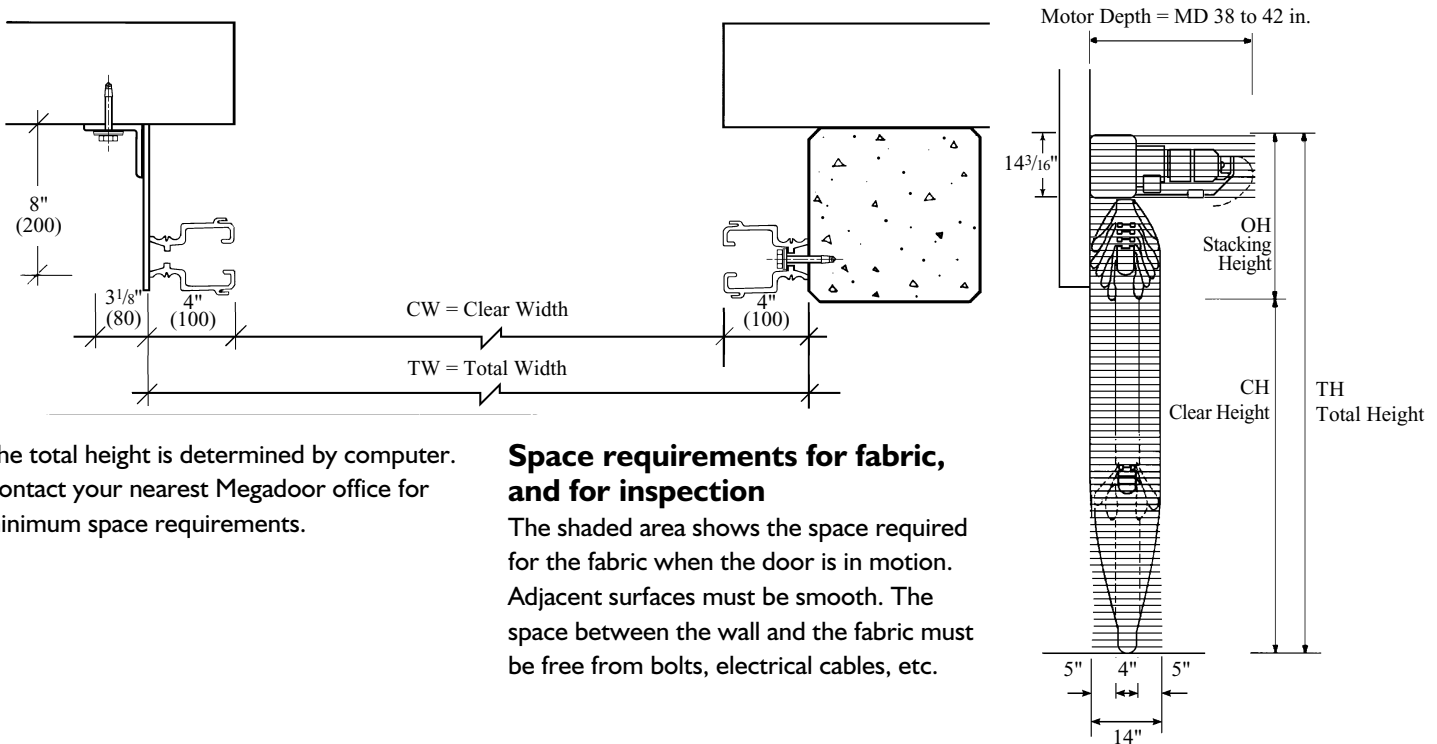
In strongly corrosive or dirty environments the motor should be fully protected. The protective casing is made of sheet steel painted to match the headerbox.



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 800

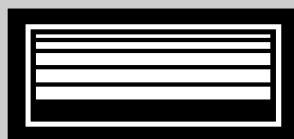
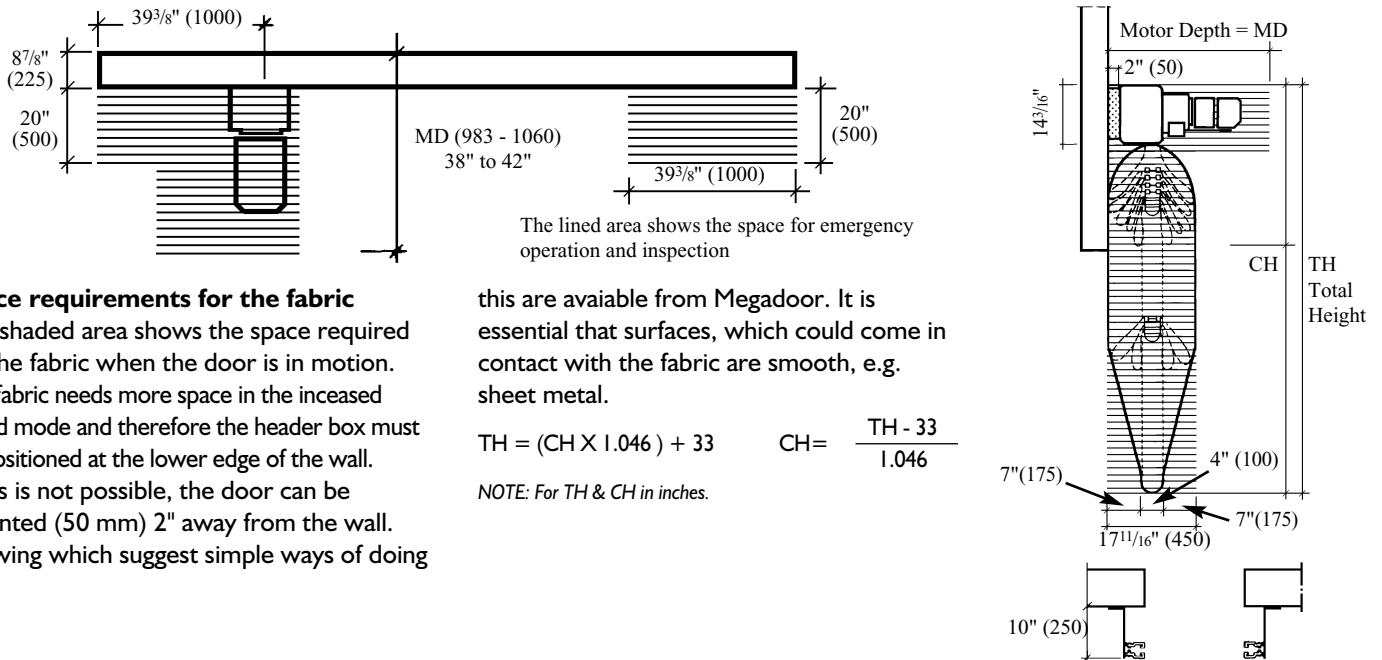


The total height is determined by computer. Contact your nearest Megadoor office for minimum space requirements.

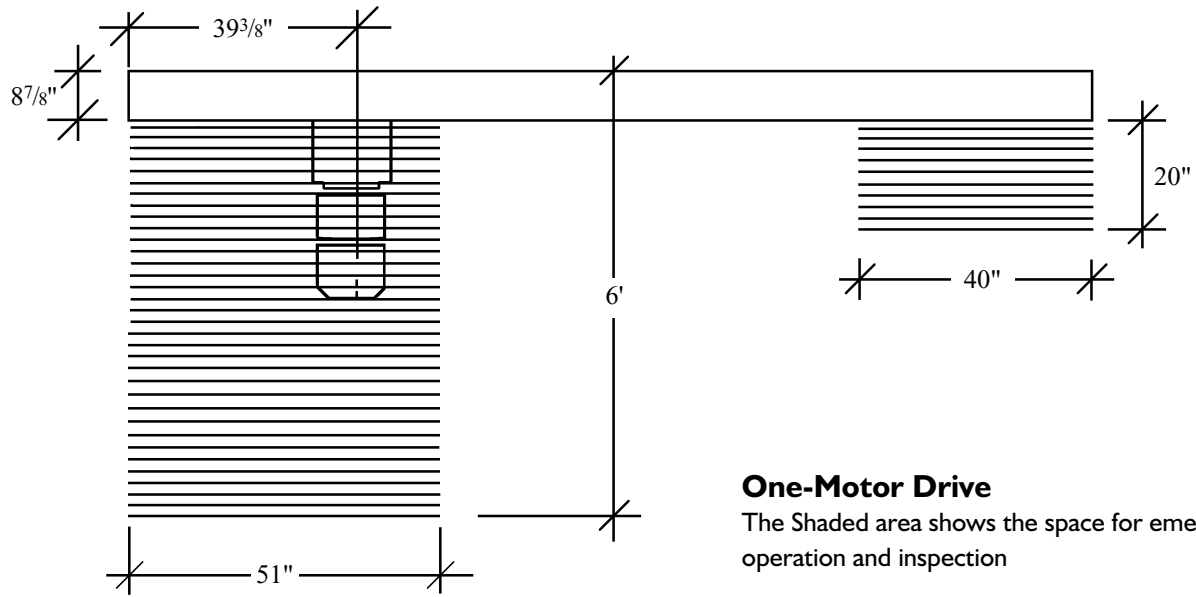
Space requirements for fabric, and for inspection

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.

REQUIREMENTS FOR INCREASED OPENING SPEED



SPACE REQUIREMENTS FOR INSPECTION



One-Motor Drive

The Shaded area shows the space for emergency operation and inspection

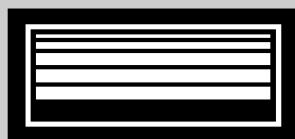
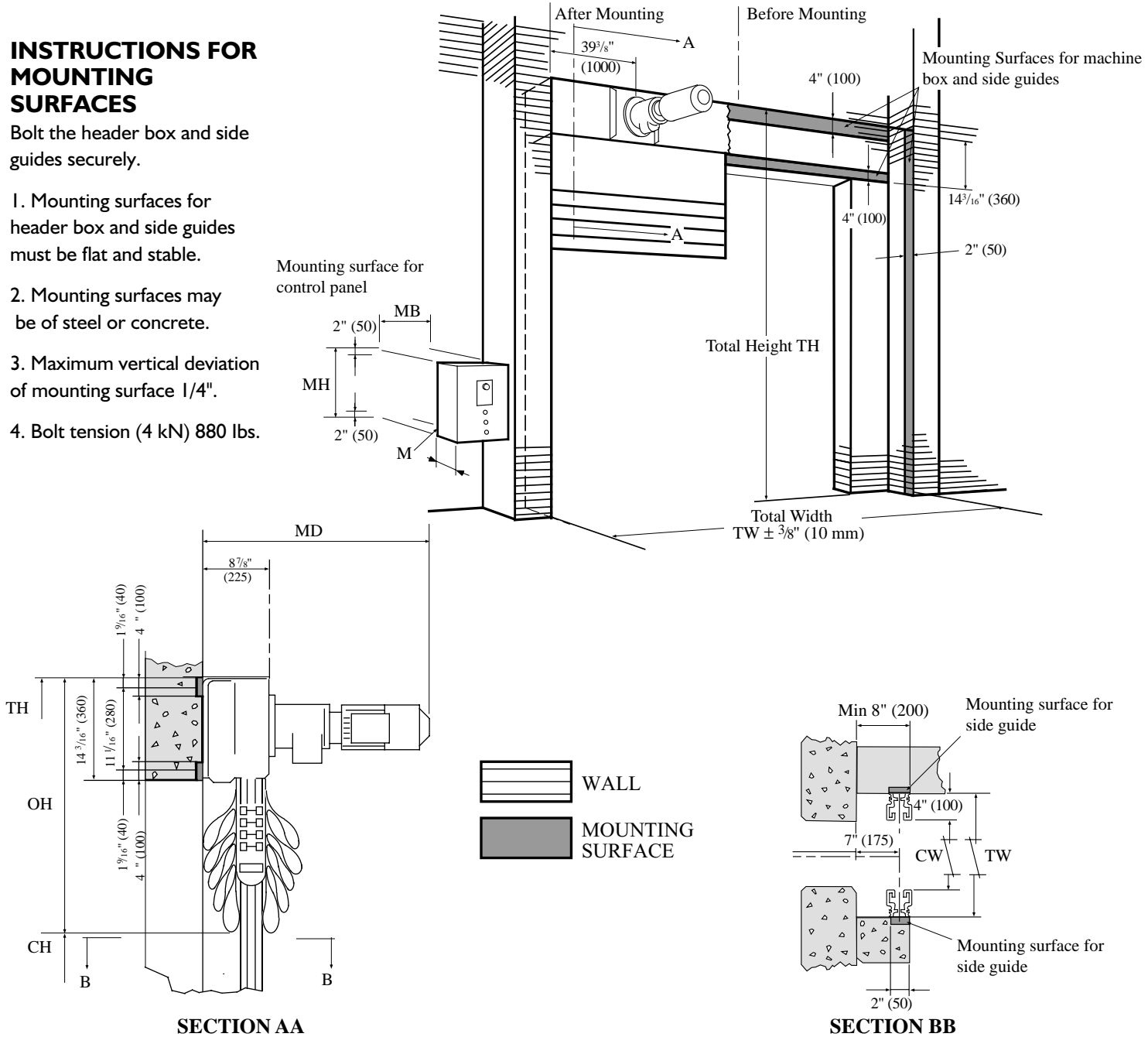
INTERNAL OR EXTERNAL WALL MOUNTED DOOR

Dimensional Drawing Megadoor System 800

INSTRUCTIONS FOR MOUNTING SURFACES

Bolt the header box and side guides securely.

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



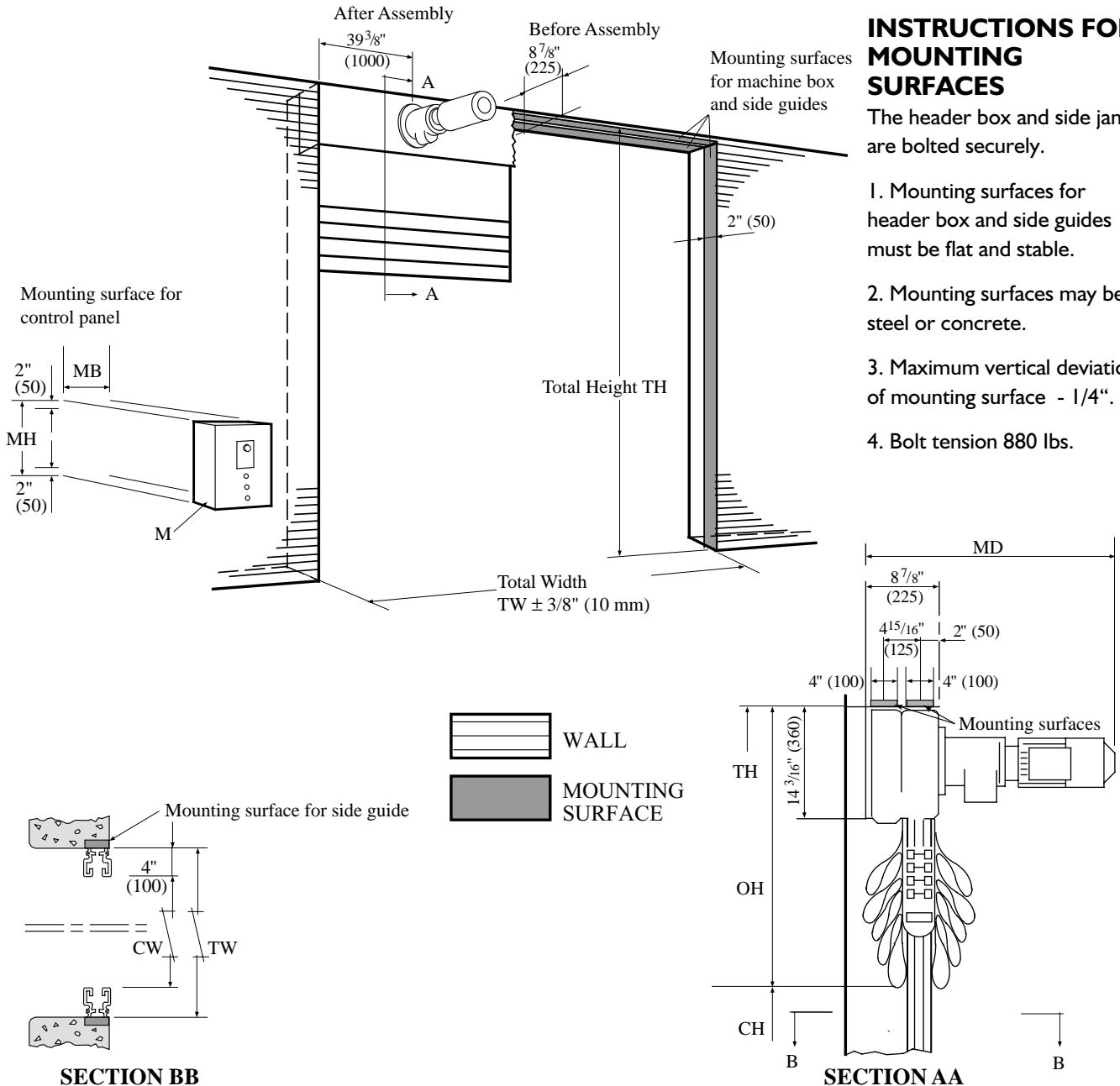
DOOR MOUNTED IN OPENING

Dimensional Drawing Megadoor System 800

INSTRUCTIONS FOR MOUNTING SURFACES

The header box and side jambs are bolted securely.

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



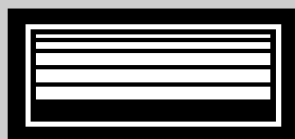
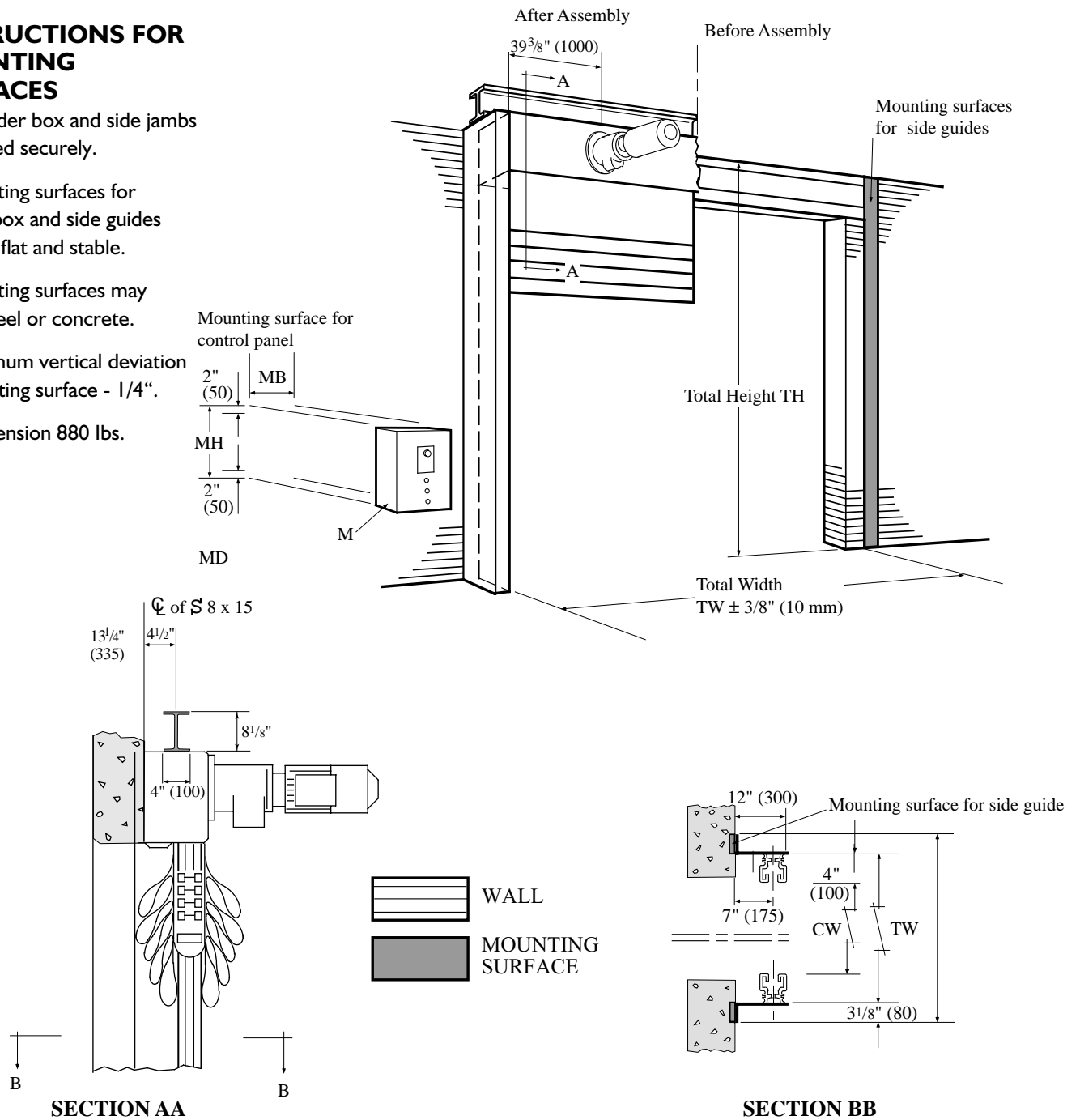
SIDE JAMBS & SELF SUPPORTING HEAD

Dimensional Drawing Megadoor System 800

INSTRUCTIONS FOR MOUNTING SURFACES

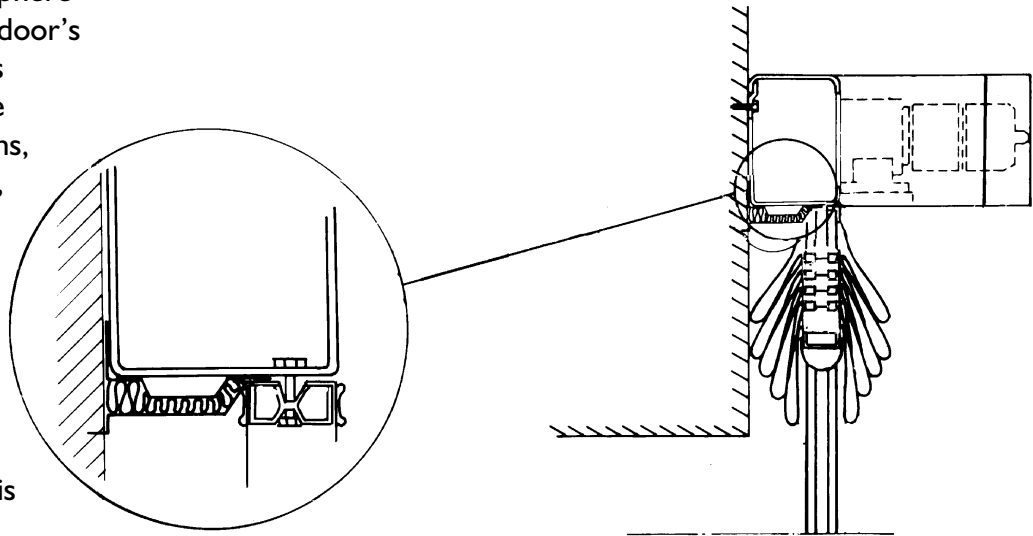
The header box and side jambs are bolted securely.

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



EXTRA CORROSION RESISTANT VERSION

Megadoor has its origins in the extremely corrosive atmosphere of wood drying kilns. Megadoor's resistance to corrosion was developed as a result of the severe conditions in the kilns, i.e. 100% relative humidity, acidic precipitation, powerful circulation of air and an ambient temperature of (125°F). In addition to the standard System 800 door, which features high resistance to corrosion, the System 800 is also available in an extra corrosion resistant version.



APPLICATIONS IN EXTREMELY CORROSIVE ENVIRONMENTS

The header box should be isolated from the corrosive atmosphere. This is best accomplished by locating the header box outside the building.

The header box should be thoroughly sealed against the wall to prevent corrosive air from entering the header box. The sheet casing, shown in the illustration, is not included in our delivery. However, suggestions and instructions for suitable solutions are available from Megadoor.

The motor should be protected at the bottom, since vapor will rise and cause condensation of moisture around the header box when the door is opened in cold weather. A protective casing over the motor is available as optional equipment. (See page 12).

LOCATION OF THE CONTROL CABINET

As the cabinet will have to be opened occasionally, e.g. to replace a fuse, and may thus allow moisture to enter, it is advisable to locate the cabinet away from any corrosive atmosphere. The cabinet

should not be placed immediately adjacent to the door if there is a risk of severe condensation when the door is opened. In such cases it is more suitable to place the control device close to the door and

the control cabinet in a well protected location.



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665 Highway 74 South • P. O. Box 2957
Peachtree City, Georgia 30269
(800) 927-6342 • (770) 631-2600 • FAX: (770) 631-9086
e-mail - sales@megadoor.com • www.megadoor.com