



Bi-Folding Doors



High clearance bi-fold doors for aircraft hangars, shops, warehouses, loading areas and farm buildings. You won't go wrong with quality-built Bi-Folding Doors! They're the only bi-fold doors with high-clearance advantages, requiring less overhead space. Made of heavy-duty steel tubing in sizes up to 70-feet wide and 20-feet high, their rugged, all-welded construction prepares them for many years of day-in and day-out use with minimum maintenance.



Door Specifications:

Standard door sizes

12' to 70' clear opening width: heights to 20' clear.

Main door structure

Double 2" x 4" Class A500 14-gauge structural center hinge line tubing on doors to 46' wide and double 2" x 6" Class A500 on larger doors.

Door frame

14-gauge, welded, Class A513 square steel tubing: 1-1/2" x 1-1/2" on doors up to 46' wide: 2" x 2" on doors over 46' wide. Door frame unitized on doors to 46' x 18'. Doors over 18' high and over 46' wide built in right and left halves. Doors over 18' high may have the top and bottom horizontally divided to facilitate freight.

Door trusses

Heavy-gauge, steel tubing with angel iron webbing: 1 to 3 horizontal trusses, 6 1/2" to 12" deep, depending on door width, height and load requirements.

Door finish

All doors primed with black water base oxide and painted with black ester enamel epoxy.

Hinges

Strong factory welded leaf type hinges are installed on the horizontal centerline and top of the door. Top hinge can be ordered with 9-1/4" wide leaf up for wood buildings or 3" wide leaf up for steel buildings. Five top hinges on doors to 34' wide, seven hinges on doors over 34' and nine hinges on doors over 56' wide and 16' tall.

Auxiliary arms

Patented, high-clearance door support arms made of heavy-gauge square-steel tubing with self-concealing chain followers.

Wheels

roller wheels on door bottom and Auxiliary Arms are solid steel with sealed roller bearings inserts.

Drive unit

1 h.p. to 2 h.p. motor with 45 to 1 speed reducer. Electric brake installed on all doors. Jack shaft with dual chain drives supplied on all doors. Motor mounted to side on doors over 34' wide.

Electrical wiring

Furnished and completely factory installed. 1 h.p. motors standard 110 volt with circuit breaker: 1.5 hp. and 2 h.p. wired 220 with up electrical safety disconnect. Conduit required to be supplied by others. Electrical components placed on door in a location to meet the requirements of N.E.C. section 513.

Operating control

NEMA type 1 "Up-Down-Stop" three push button control wired 24 volts standard.

Up/Down limits

Easy, positive micro-switch adjustment for top and bottom automatic shut-off contained in relay box with chain drive coupling with drive shaft.

Open/Close time

- Approximately one to two minutes, varies with door size.

Operating cables

7/32" aircraft cables in quantity to provide a 5 to 1 safety factor.

Cable lift drums

Four 2" diameter lift drums with cable guide and cable guard installed on full width drive shaft. Doors over 46' wide use 3" diameter drums. Doors smaller than 36' supplied with three lift drums. Doors larger than 56' wide and 16' tall supplied with six 3" diameter drums.

Drive shaft

Full width drive shaft constructed of 2" diameter steel torque tube. Load bearings supporting the drive shaft are installed on each side of lift drum and are bronze with grease fitting.

Single location lock

Self adjusting latches secure door to jambs with the turn of a crank. Eliminates walking to each side of door to lock/unlock. Micro switch safety disconnect supplied to interrupt power if Single Location Latch is not unlocked.

Bottom follower system

Hold bottom of door against building with door closed. Rubber bottom seal - 3" space between door frame and finished floor sealed with standard 12" wide bottom seal.

Floor cane-bolt

Factory installed at center of door over 40' wide. Cane-bolt slides thru sleeve on door into a hole drilled in the floor.