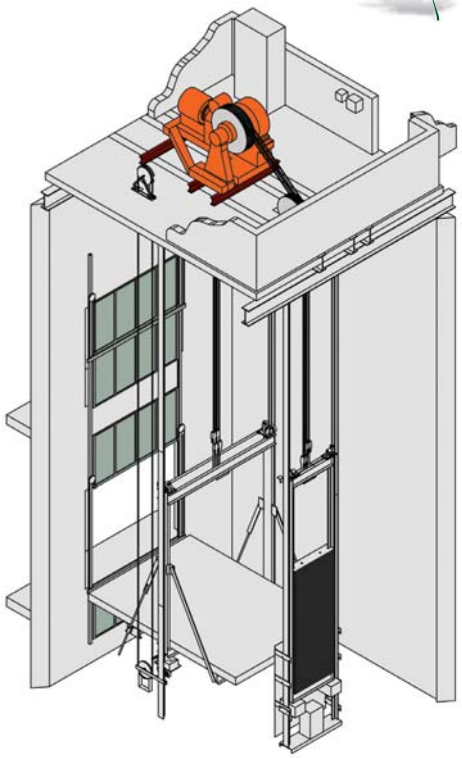
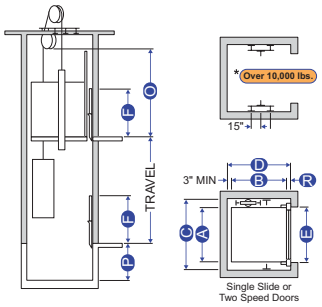
green tip

Regenerative drives available.

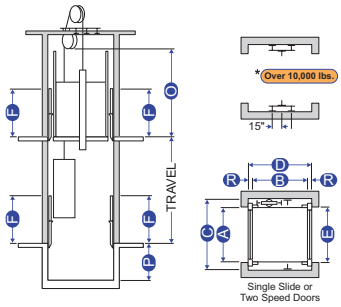
Call MEI for Sizes or Capacities Outside Listed Ranges 507.245.3060



Single Opening (F)



Double Opening (F/R)



A = Platform Width
B = Platform Depth
C = Hoistway Width
D = Hoistway Depth
E = Clear Door Width
F = Clear Door Height

O = Overhead
P = Pit Depth
R = Door Clearance
R = 5" for Regular Type Doors
R = 6 ¾" for Pass Type Doors

***Over 10,000 lbs.**

For capacities over 10,000 lbs., rail bracket fastening may require beam support as shown. A Structural Engineer needs to determine that the hoistway structure will withstand the rail forces shown on the layout drawing.

Cap.	Platform A x B	Hoistway With Power Regular Type Doors C x D	Hoistway With Power Pass Type Doors C x D	Front/ Rear	Pit Depth	Minimum Overhead With One Section Gate	Clear Inside With Single Section Gate W x D	Clear Inside With Two Section Gate W x D	Door Width E	Max. Speed FPM
4000	7'-0" x 8'-0"	9'-2" x 8'-8"	9'-2" x 8'-9 ¾"	F	5'-2"	16'-0"	6'-8" x 7'-7"	6'-8" x 7'-4 ½"	6'-8"	350
4000	7'-0" x 8'-0"	9'-7" x 8'-10"	9'-7" x 9'-1 ½"	F/R	5'-2"	16'-0"	6'-8" x 7'-6"	6'-8" x 7'-1"	6'-8"	350
5000	8'-0" x 9'-0"	10'-2" x 9'-8"	10'-2" x 9'-9 ¾"	F	5'-2"	16'-0"	7'-8" x 8'-7"	7'-8" x 8'-4 ½"	7'-8"	350
5000	8'-0" x 9'-0"	10'-7" x 9'-10"	10'-7" x 10'-1 ½"	F/R	5'-2"	16'-0"	7'-8" x 8'-6"	7'-8" x 8'-1"	7'-8"	350
6000	10'-4" x 10'-0"	12'-6" x 10'-8"	12'-6" x 10'-9 ¾"	F	5'-2"	16'-0"	10'-0" x 9'-7"	10'-0" x 9'-4 ½"	10'-0"	350
6000	10'-4" x 10'-0"	12'-11" x 10'-10"	12'-11" x 11'-1 ½"	F/R	5'-2"	16'-0"	10'-0" x 9'-6"	10'-0" x 9'-1"	10'-0"	350
8000	10'-4" x 12'-0"	12'-6" x 12'-8"	12'-6" x 12'-9 ¾"	F	5'-2"	16'-0"	10'-0" x 11'-7"	10'-0" x 11'-4 ½"	10'-0"	350
8000	10'-4" x 12'-0"	13'-1" x 12'-10"	13'-1" x 13'-1 ½"	F/R	5'-2"	16'-0"	10'-0" x 11'-6"	10'-0" x 11'-1"	10'-0"	350
10000	10'-4" x 14'-0"	12'-9" x 14'-8"	12'-9" x 14'-9 ¾"	F	6'-0"	17'-6"	10'-0" x 13'-7"	10'-0" x 13'-4 ½"	10'-0"	225
10000	10'-4" x 14'-0"	12'-9" x 14'-10"	12'-9" x 15'-1 ½"	F/R	6'-0"	17'-6"	10'-0" x 13'-6"	10'-0" x 13'-1"	10'-0"	225
12000	12'-4" x 12"-0"	14'-9" x 12'-8"	14'-9" x 12'-9 ¾"	F	6'-0"	17'-6"	12'-0" x 11'-7"	12'-0" x 11'-4 ½"	12'-0"	200
12000	12'-4" x 12"-0"	15'-6" x 12'-10"	15'-6" x 13'-1 ½"	F/R	6'-0"	17'-6"	12'-0" x 11'-6"	12'-0" x 11'-1"	12'-0"	200
15000	12'-4" x 16'-0"	14'-10" x 16'-8"	14'-10" x 16'-9 ¾"	F	6'-0"	18'-0"	12'-0" x 15'-7"	12'-0" x 15'-4 ½"	12'-0"	150
15000	12'-4" x 16'-0"	14'-10" x 16'-10"	14'-10" x 17'-1 ½"	F/R	6'-0"	18'-0"	12'-0" x 15'-6"	12'-0" x 15'-1"	12'-0"	150
Automobile Lifts										
8000	9'-4" x 21'-8"	11'-6" x 22'-4"	11'-6" x 22'-5 ¾"	F	6'-0"	17'-0"	9'-0" x 21'-3"	9'-0" x 21'-0 ½"	9'-0"	350
8000	9'-4" x 21'-8"	11'-6" x 22'-6"	11'-6" x 22'-9 ½"	F/R	6'-0"	17'-0"	9'-0" x 21'-2"	9'-0" x 20'-9"	9'-0"	350

Based on car speeed of 200 fpm • F = 8'-0" • Cab Height = 8'-0" • For seismic applications add 3" to hoistway width

Notes:

- Overhead dimensions are based on 6 foot high car gate.
- Two section car gates are not recommended for high usage installations or wide openings.
- For extra high door opening requirements, or special conditions, consult your representative.

Standard Cab Height H = 8'-0"

Speeds exceeding 200 FPM require addional overhead and pit depth. Minimum pit depth is based on the use of spring buffers. Add 5" to pit depth if oil buffers are required or car speed exceeds 200 FPM.

225 FPM = add 6" of overhead & 5" of pit depth
250 FPM = add 7" of overhead & 5" of pit depth
300 FPM = add 8" of overhead & 5" of pit depth
350 FPM = add 10" of overhead & 6" of pit depth

Application Summary

This design utilizes a geared machine, ropes, and counterweights instead of hydraulic equipment. The main guide rails are mounted on each side of the car and an additional pair of counterweight rails is located on one side or at the rear. The geared machine, along with the related drive equipment, is generally located above the hoistway in a penthouse machine room. In some limited situations, it can be located next to the hoistway at a lower landing. This latter arrangement is referred to as a basement traction.

Advantages

- No risk of oil contamination to the ground.
- Accommodates front and rear openings in any configuration.
- Available for both low and high capacity cars.
- Nearly unlimited floor travel is possible.
- Has greater power efficiency than hydraulic applications.
- Allows significantly higher car speeds than hydraulic designs.

Disadvantages

- The material cost is substantially higher than that of hydraulic applications.
- There are structural building considerations because the elevator is supported for the top of the hoistway.
- Elevator maintenance cost is generally greater than that of hydraulic elevators.
- Cycle time for securing the material package and installing it is generally longer than that of hydraulic elevators.

⚠ Do not use hoistway dimensions for construction purposes. Different code year adoptions and local code variations may affect the hoistway size. Verify all dimensions with MEI prior to construction.