Delaware Elevator New York City Elevator Planning Guide

About Delaware Elevator Manufacturing

DEM (Delaware Elevator Manufacturing) is a family owned elevator manufacturer and equipment supplier offering complete elevator packages and elevator components tailored to the needs of our customers. With over 70 years experience in the elevator industry we are committed to providing high quality, accurate, and complete product to our customers in a timely manner. Our factory is conveniently located in the Mid-Atlantic region, allowing us to provide optimal service to the Northeastern United States. DEM is exceptionally experienced with both government and municipal projects. Our continued commitment to providing the best quality of products and service has made us one of the largest independent elevator companies in the nation.

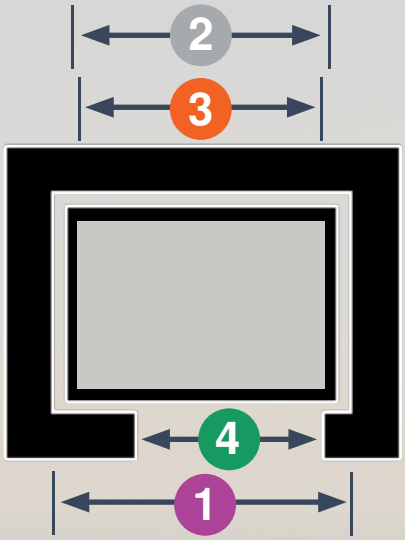
The Delaware Elevator New York City Elevator Planning Guide

We understand that planning an elevator to meet New York City requirements can be challenging and complex. With over 60,000 passenger elevators making over 35 million trips per day in New York City, elevators are one of the most crucial elements of a new building project. DEM offers a variety of applications suited for the needs of any project. Our New York City Elevator Planning Guide was created to assist architects in the planning stages and help you select the optimal application for your project. With DEM, you can be confident that your project specifications will meet New York City's many requirements.

Table Of Contents

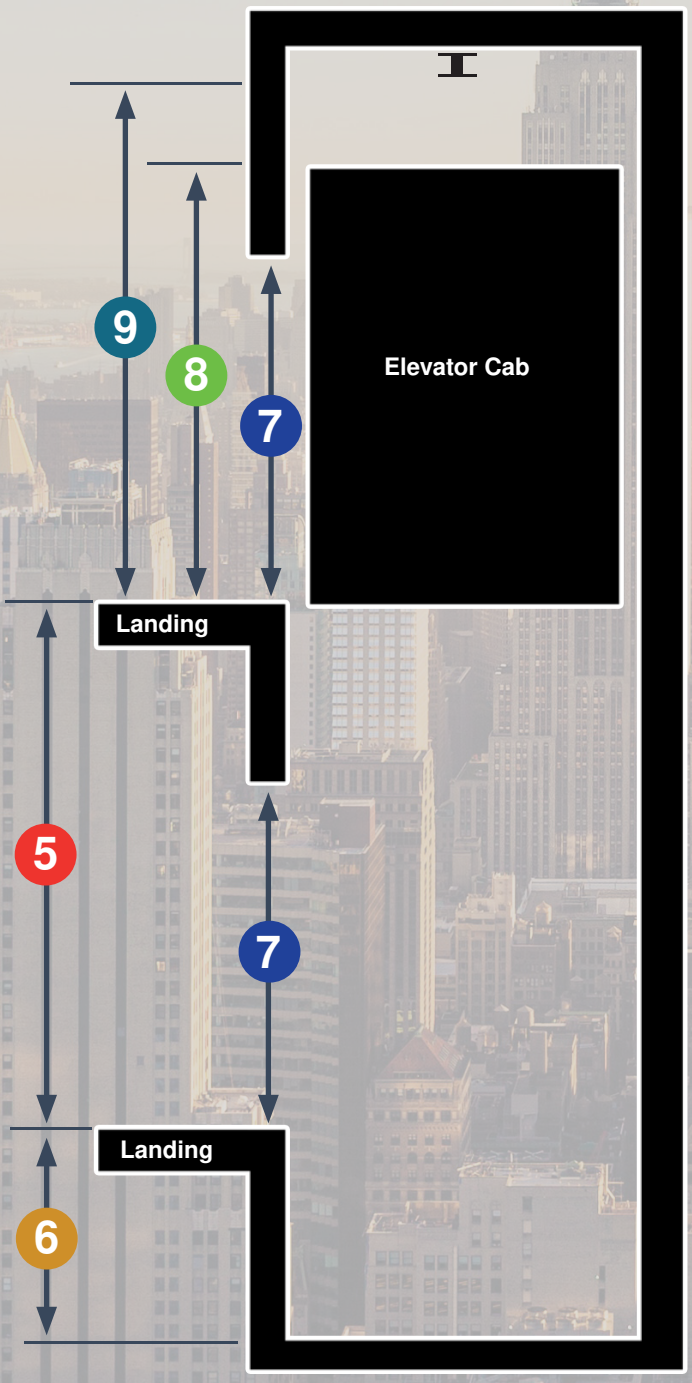
04	Basic Elevator Dimensions
05	Basic Elevator References
06	Basic Elevator Requirements
07	NYC Stretcher Compliance
08-09	Choosing The Optimal Elevator
10	MRL Low Overhead Custom
11	MRL Cornerpost
12-13	MRL Rail Supported
14-15	MRL Frame Building Supported
16-17	MRL Building Supported
18-19	Overhead Traction
20-21	Hydraulic Twin Jack Holeless
22-23	Hydraulic In-Ground
24-25	Hydraulic Freight
26-27	Parts & Components
28-29	Cabs & Entrances
30-31	Our Portfolio
32-33	Why Choose DEM

Basic Elevator Dimensions



1. Hoistway Width
2. Platform Width
3. Clear Inside Cab Width
4. Entrance Width

5. Travel
6. Pit Depth
7. Entrance Height
8. Cab Height
9. Overhead

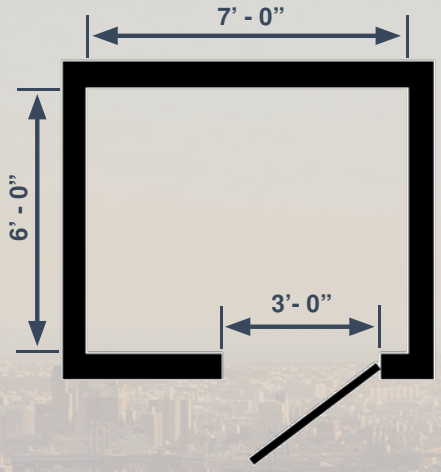


Basic Elevator References

1. Hoistway - The shaft constructed where the elevator travels.
2. Platform - The platform that the elevator cab sits on.
3. Clear Inside - The inside dimension of the cab interior.
4. Entrance Width - The width of the entrance into the elevator.
5. Travel - The distance the elevator travels from lowest landing to highest landing.
6. Pit - The space below the elevator car from the lowest landing to the bottom of the hoistway.
7. Entrance Height - The height of the entrance into the elevator.
8. Cab - The enclosure that travels from floor to floor.
9. Overhead - The distance from the top landing to the top of the hoistway.

- Capacity - The weight that the elevator is rated to hold. This is based on the elevator's Clear Inside dimension.
- Speed - The rate at which the elevator is traveling measured in feet per minute (FPM).

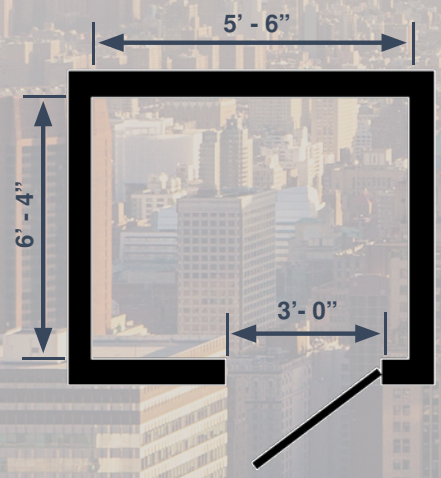
Basic Elevator Requirements



Hydraulic Machine Room

This is a small room containing the pump unit and controller. These are a requirement with hydraulic elevators and must be adequate size to provide clearances around and between equipment as required by code. Only elevator related equipment is permitted in the machine room. This room can be located adjacent or remote to the hoistway.

*Dimensions shown as a minimum. Other sizes and shapes can be utilized.



MRL Control Room

This is a small room containing the MRL (Machine Room-Less) controller. Elevator control rooms must be adequate size to provide clearances around and between equipment as required by code. Only elevator related equipment is permitted in the control room. This room can be located adjacent or remote to the hoistway within 160’-0” from machine to controller.

*Dimensions shown as a minimum. Other sizes and shapes can be utilized.

Overhead Machine Room

This is a room above the hoistway containing the overhead traction elevator’s machine and controller. Elevator machine rooms must be adequate size to provide clearances around and between equipment as required by code. Only elevator related equipment is permitted in the machine room.

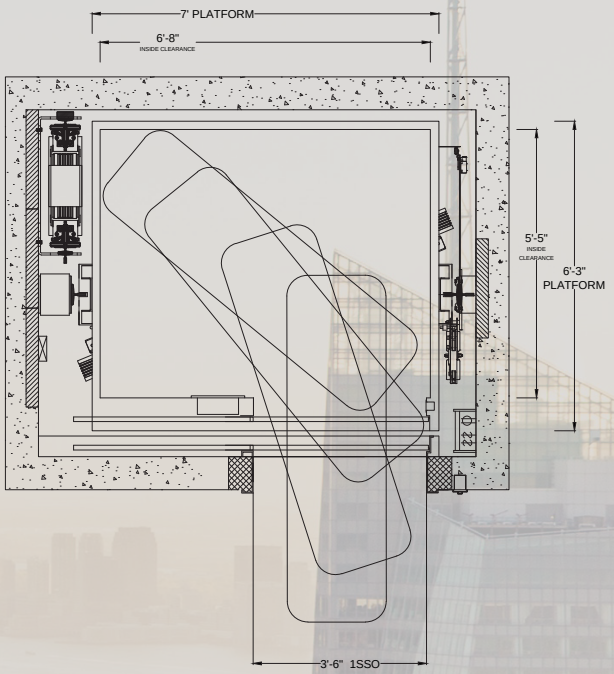
*Dimensions may vary based on application.

New York City Special Requirements

NYC Elevator Requirement

New York City requires that buildings 5 stories or more in height to have at least one elevator that provides access to all floors.

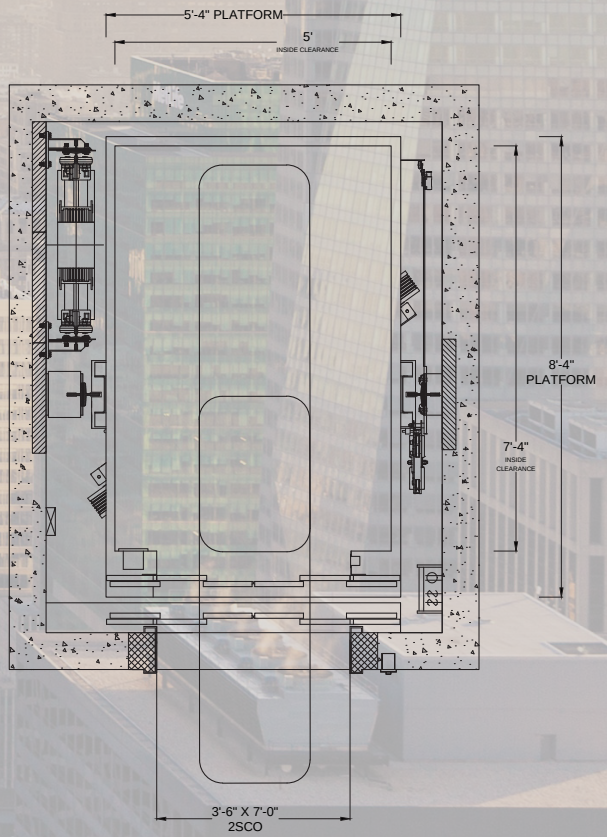
*N.Y.C. Buildings Department. Bulletin 2017-008. Section BC 3002.4



NYC Stretcher Compliance

New York City requires buildings that are 5 stories or more in height to have at least one elevator cab that is sized to accommodate a (24”x 84”) ambulance stretcher.

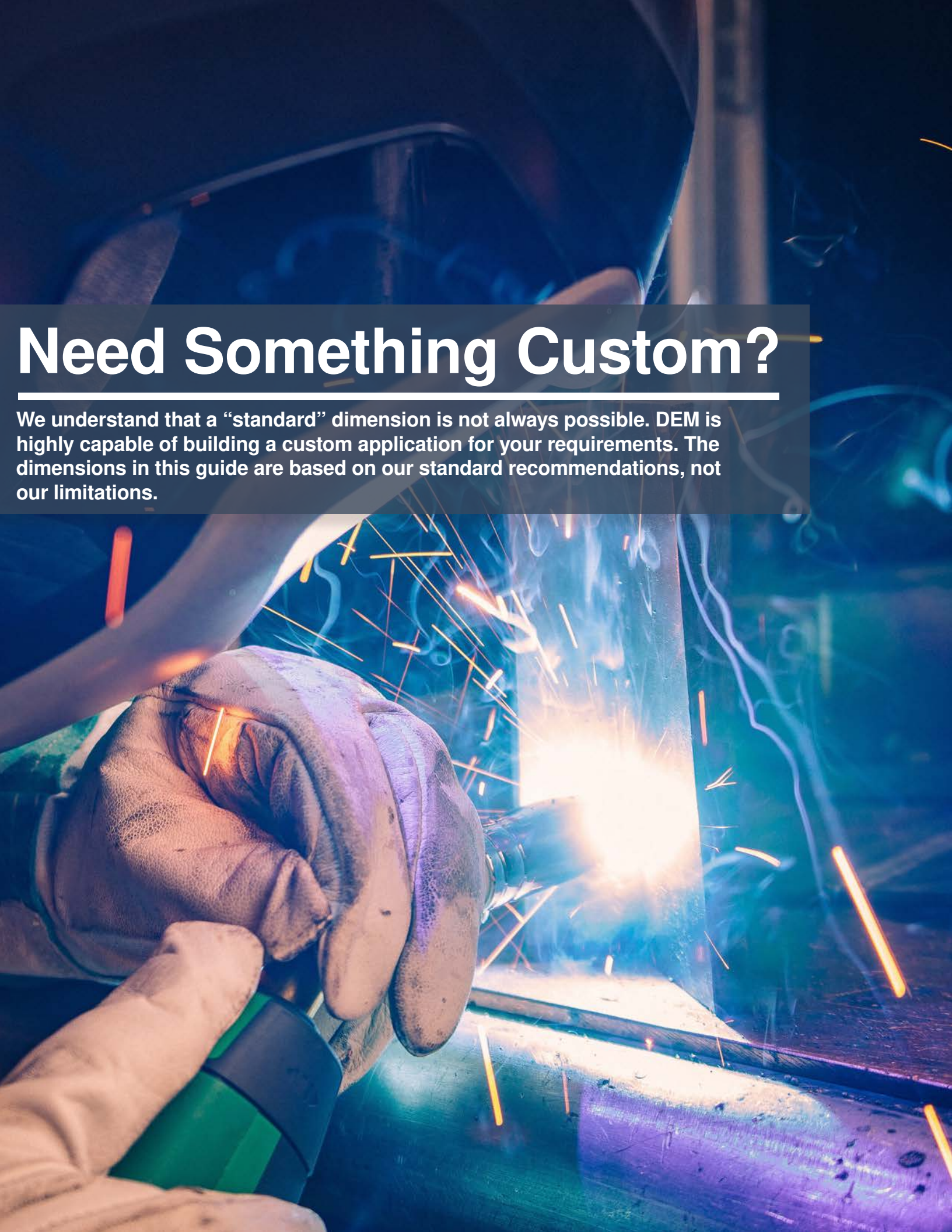
*N.Y.C. Buildings Department. Bulletin 2017-008. Section BC 3002.4



Seismic Zone 2

New York City is located in seismic zone 2. Although this entails additional requirements, the dimensions in this guide are already compliant to seismic zone 2.

*The dimensions in this guide are based on seismic zone 2.



Need Something Custom?

We understand that a “standard” dimension is not always possible. DEM is highly capable of building a custom application for your requirements. The dimensions in this guide are based on our standard recommendations, not our limitations.

Choosing The Optimal Elevator

Analyze Capabilities

Although there are many factors in choosing an elevator, we suggest determining the appropriate elevator by analyzing the Capabilities of each elevator. This includes Travel, Capacity, Overhead and Speed.

1

Travel

The first consideration should be the required travel distance of the elevator. Each elevator has a max travel capability.

2

Capacity

The second consideration should be the capacity of the elevator. Factors to consider are: building population, building usage, and code. If a stretcher compliant elevator is needed, the car must be a capacity of 3500lb or higher.

3

Overhead

The third consideration should be the overhead. New York City has special overhead requirements which entail additional overhead space. This can be an additional challenge in New York City as it often requires more space and building higher.

4

Speed

The forth consideration should be the speed of the elevator. Factors to consider are: travel, building population, and building traffic. Higher speeds will typically entail higher material costs.

5

Requirements

Determine the selected elevator's additional Requirements. This may include dimensions like: minimum Overhead or minimum Pit Depth. This may also include additional factors like a Machine Room or a Control Room.

Contact Us

Need help selecting the optimal elevator? Contact a DEM sales representative for more details.

Dimensions provided are not for final construction purposes. All dimensions should be verified with D.E.M. prior to construction.

MRL
Low Overhead

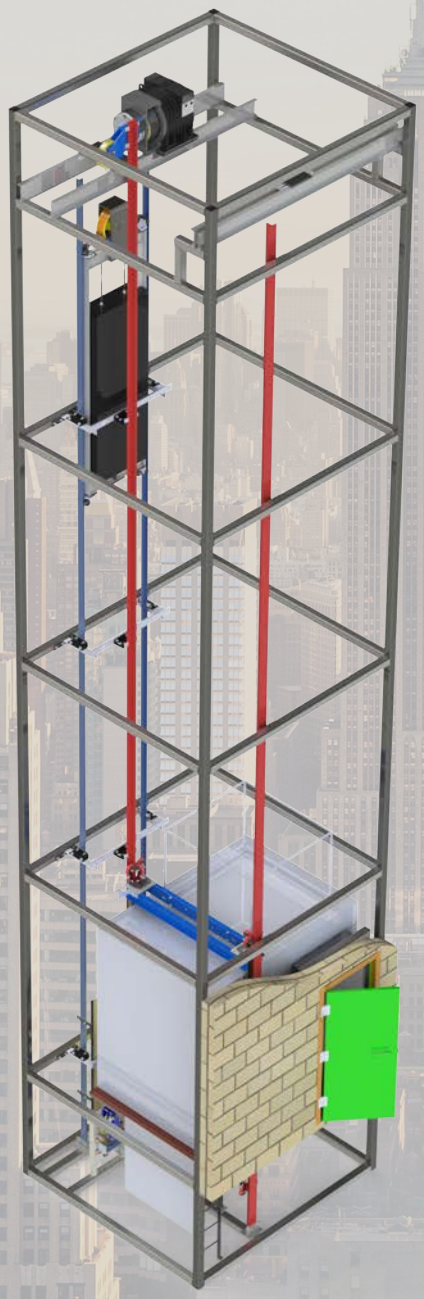
Capabilities
- Max Travel: Up to 300 ft.
- Capacity(lb): 2100 - 5000
- Max Speed: Up to 500 FPM

Summary
The “Machine Room Less” is an application that utilizes an efficient gearless machine located in the hoistway. This eliminates the need for a traditional machine room. The Low Overhead application utilizes a side mounted machine to reduce the required overhead.

Advantages
- Saves on valuable floor space.
- Energy efficient.
- Superior ride quality.
- Lower Overhead required than standard MRL’s.

Disadvantages
- Higher material cost than standard MRL’s.

Considerations
- Requires a separate control room.
- Overhead varies depending on Speed.



MRL

Custom Dimensions
Need a hoistway with low overhead? We can help! This MRL is a custom application offered in a variety of hoistway dimensions. Contact a DEM sales representative for more information.

MRL Cornerpost

Capabilities

- Max Travel: Up to 300 ft.
- Capacity(lb): 2100 - 5000
- Max Speed: Up to 500 FPM

Summary

The “Machine Room Less” is an application that utilizes an efficient gearless machine located in the hoistway. This eliminates the need for a traditional machine room. The Cornerpost MRL allows a side opening cab.

Advantages

- Saves on valuable floor space.
- Energy efficient.
- Superior ride quality.
- Enables a side opening.

Disadvantages

- Higher material cost than standard MRL’s.

Considerations

- Requires a separate control room.
- Overhead varies depending on Speed.

Custom Dimensions

The Cornerpost MRL is a custom application offered in a variety of hoistway dimensions. Contact a DEM sales representative for more information.

MRL
Rail Supported

Capabilities
- Max Travel: Up to 50 ft.
- Capacity(lb): 2100 - 3500
- Max Speed: Up to 350 FPM

Summary
The “Machine Room Less” is an application that utilizes an efficient gearless machine located in the hoistway. This eliminates the need for a traditional machine room.

Advantages
- Saves on valuable floor space.
- Energy efficient.
- Superior ride quality.

Disadvantages
- Higher material and maintanace costs.
- Limited Capacity options.

Considerations
- Requires a separate control room.
- Overhead varies depending on Speed.

MRL

Capacity	Openings F = Front R = Rear	Hoistway	Platform	Clear Inside	Stretcher Compliant
Front Opening					
2100	F	7’-10” x 5’-10”	6’-0” x 5’-1”	5’-8” x 4’-3”	N
2500	F	8’-10” x 5’-10”	7’-0” x 5’-1”	6’-8” x 4’-3”	N
3000	F	8’-10” x 6’-3”	7-0” x 5’-6”	6’-8” x 4’-8”	N
3500	F	8’-10” x 7’-0”	7’-0” x 6’-3”	6’-8” x 5’-5”	Y
Front & Rear Openings					
2100	F&R	7’-10” x 6’-8 ½”	6’-0” x 5’-8”	5’-8” x 4’-4”	N
2500	F&R	8’-10” x 6’-8 ½”	7’-0” x 5’-8”	6’-8” x 4’-4”	N
3000	F&R	8’-10” x 6’-11 ½”	7’-0” x 5’-11”	6’-8” x 4’-7”	N
3500	F&R	8’-10” x 7’-9 ½”	7’-0” x 6’-9”	6’-8” x 5’-5”	Y

Requirements

- Based on an 8’-0” Cab Height
- A Control Room is required

Overhead Requirements

- 100 - 200 FPM = 16’ -11”
- 250 - 300 FPM = 17’ -3”
- 350 FPM = 17’ -6”

*For every 1’-0” added to the cab height; add 1’-0” to the overhead.

Pit Depth Requirements

- 100 - 200 FPM = 5’ -0”
- 250 - 350 FPM = 5’-6”

New York City MRL’s

New York City has special Overhead requirements that apply to MRL’s.

MRL
Frame Building Supported

Capabilities
- Max Travel: Up to 200 ft.
- Capacity(lb): 2100 - 3500
- Max Speed: Up to 350 FPM

Summary
The “Machine Room Less” is an application that utilizes an efficient gearless machine located in the hoistway. This eliminates the need for a traditional machine room. Frame Building Supported MRL’s require small machine beam pockets at the top of the hoistway.

Advantages
- Saves on valuable floor space.
- Energy efficient.
- Superior ride quality.

Disadvantages
- Higher material cost than hydraulic elevators.
- Limited Capacity options.

Considerations
- Requires a separate control room.
- Overhead varies depending on Speed.

MRL

Capacity	Openings F = Front R = Rear	Hoistway	Platform	Clear Inside	Stretcher Compliant
Front Opening					
2100	F	7’-10” x 5’-10”	6’-0” x 5’-1”	5’-8” x 4’-3”	N
2500	F	8’-10” x 5’-10”	7’-0” x 5’-1”	6’-8” x 4’-3”	N
3000	F	8’-10” x 6’-3”	7-0” x 5’-6”	6’-8” x 4’-8”	N
3500	F	8’-10” x 7’-0”	7’-0” x 6’-3”	6’-8” x 5’-5”	Y
Front & Rear Openings					
2100	F&R	7’-10” x 6’-8 ½”	6’-0” x 5’-8”	5’-8” x 4’-4”	N
2500	F&R	8’-10” x 6’-8 ½”	7’-0” x 5’-8”	6’-8” x 4’-4”	N
3000	F&R	8’-10” x 6’-11 ½”	7’-0” x 5’-11”	6’-8” x 4’-7”	N
3500	F&R	8’-10” x 7’-9 ½”	7’-0” x 6’-9”	6’-8” x 5’-5”	Y

Requirements

- Based on an 8’-0” Cab Height
- A Control Room is required

Overhead Requirements

- 100 - 200 FPM = 17’ -2”
- 250 - 300 FPM = 17’ -6”
- 350 FPM = 17’ -9”

*For every 1’-0” added to the cab height; add 1’-0” to the overhead.

Pit Depth Requirements

- 100 - 200 FPM = 5’ -0”
- 250 - 350 FPM = 5’-6”

New York City MRL’s

New York City has special Overhead requirements that apply to MRL’s.

MRL
Building Supported

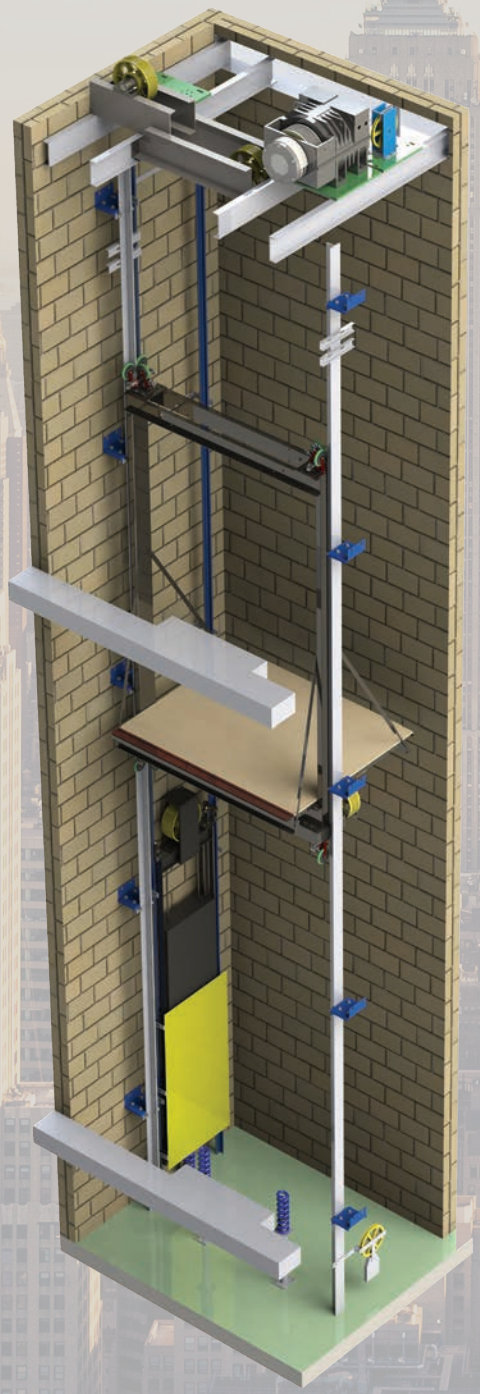
Capabilities
- Max Travel: Up to 300 ft.
- Capacity(lb): 2100 - 5000
- Max Speed: Up to 500 FPM

Summary
The “Machine Room Less” is an application that utilizes an efficient gearless machine located in the hoistway. This eliminates the need for a traditional machine room. Building Supported MRL’s require small machine beam pockets at the top of the hoistway.

Advantages
- Saves on valuable floor space.
- Energy efficient.
- Superior ride quality.
- High Capacity and high Travel capability.

Disadvantages
- Higher material cost than lighter duty MRL’s.

Considerations
- Requires a separate control room.
- Overhead varies depending on Speed.



MRL

Capacity	Openings F = Front R = Rear	Hoistway	Platform	Clear Inside	Stretcher Compliant
Front Opening					
2100	F	7’-8” x 6’-5”	6’-0” x 5’-1”	5’-8” x 4’-3”	N
2500	F	8’-8” x 6’-5 ½”	7’-0” x 5’-1”	6’-8” x 4’-3”	N
3000	F	8’-8” x 6’-8”	7’-0” x 5’-6”	6’-8” x 4’-8”	N
3500	F	8’-8” x 7’-0”	7’-0” x 6’-3”	6’-8” x 5’-5”	Y
4000	F	9’-8” x 7’-0”	8’-0” x 6’-3”	7’-8” x 5’-5”	Y
Front & Rear Openings					
2100	F&R	7’-8” x 6’-8 ½”	6’-0” x 5’-8”	5’-8” x 4’-4”	N
2500	F&R	8’-8” x 6’-8 ½”	7’-0” x 5’-8”	6’-8” x 4’-4”	N
3000	F&R	8’-8” x 7’-5 ½”	7’-0” x 6’-5”	6’-8” x 5’-1”	N
3500	F&R	8’-8” x 7’-9 ½”	7’-0” x 6’-9”	6’-8” x 5’-5”	Y
4000	F&R	9’-8” x 7’-9 ½”	8’-0” x 6’-9”	7’-8” x 5’-5”	Y
Service Front Opening					
S3500	F	7’-0” x 9’-3”	5’-4” x 8’-4”	5’-0” x 7’-4”	Y
S4000	F	7’-8” x 9’-3”	6’-0” x 8’-5”	5’-8” x 7’-5”	Y
S4500	F	7’-8” x 9’-7”	6’-0” x 8’-9”	5’-8” x 7’-9”	Y
S5000	F	7’-8” x 10’-6”	6’-0” x 9’-8”	5’-8” x 8’-8”	Y
Service Front & Rear Openings					
S3500	F&R	7’-0” x 10’-3 ½ ”	5’-4” x 9’-0”	5’-0” x 7’-4”	Y
S4000	F&R	7’-8” x 10’-4 ½”	6’-0” x 9’-1”	5’-8” x 7’-5”	Y
S4500	F&R	7’-8” x 10’-9 ½”	6’-0” x 9’-6”	5’-8” x 7’-10”	Y
S5000	F&R	7’-8” x 11’-7 ½”	6’-0” x 10’-4”	5’-8” x 8’-8”	Y

Requirements

- Based on an 8’-0” Cab Height
- A Control Room is required

Overhead Requirements

- 100 - 200 FPM = 17’ -0”
- 250 - 300 FPM = 17’ -4”
- 350 FPM = 17’ -7”
- 500 FPM = 18’ -7”

*For every 1’-0” added to the cab height; add 1’-0” to the overhead.

Pit Depth Requirements

2100-3500 Capacity

- 100 - 200 FPM = 5’ -0”
- 250 - 350 FPM = 5’-6”
- 400 FPM = 5’ -9”
- 450 - 500 FPM = 6’ -3”

4000-5000 Capacity

- 100 - 200 FPM = 5’ -0”
- 250 - 350 FPM = 5’-6”
- 400 FPM = 6’ -0”
- 450 - 500 FPM = 6’ -6”

Overhead Traction

Capabilities

- Max Travel: Over 500 ft.+
- Capacity(lb): 2100 - 5000
- Max Speed: Up to 800 FPM

Summary

This high Travel design utilizes a traction machine located in a Machine Room directly above the hoistway. Overhead Traction elevators use hoist ropes and counterweights (at the side or rear) to move the cab.

Advantages

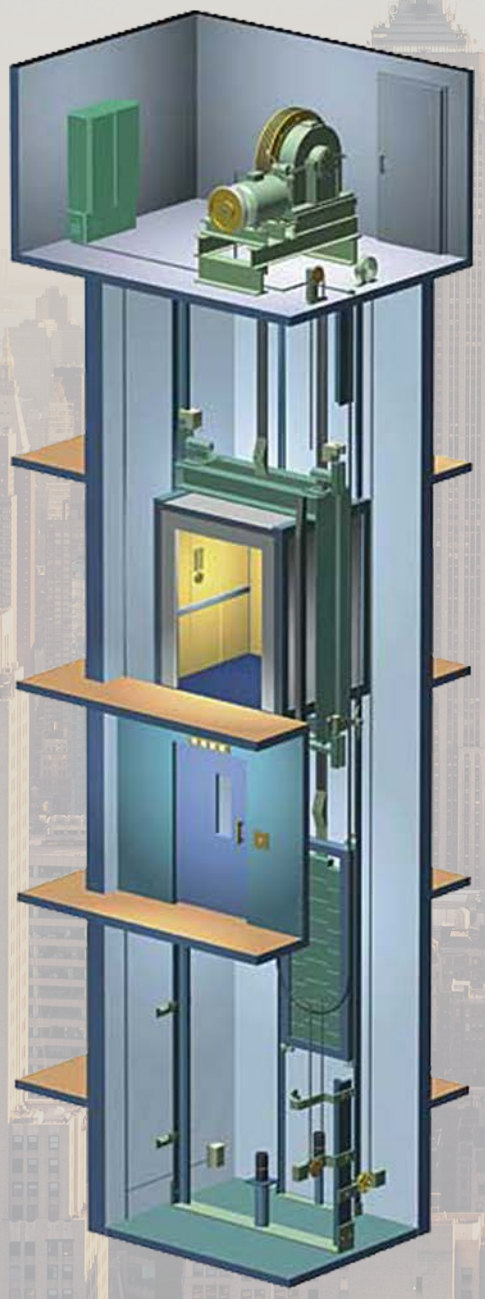
- High Travel and Speed capabilities.
- Energy Efficient
- Available in low and high capacity applications.

Disadvantages

- Larger Overhead Machine Room is required.

Considerations

- Requires an overhead Machine Room.



Overhead Traction

Capacity	Openings F = Front R = Rear	Hoistway Size	Platform Size	Clear Inside	Stretcher Compliant
Front Opening (Counterweight at REAR)					
2100	F	7’-4” x 6’-8”	6’-0” x 5’-1”	5’-8” x 4’-3”	N
2500	F	8’-4” x 6’-8”	7’-0” x 5’-1”	6’-8” x 4’-3”	N
3000	F	8’-4” x 7’-1”	7’-0” x 5’-6”	6’-8” x 4’-8”	N
3500	F	8’-4” x 7’-10”	7’-0” x 6’-3”	6’-8” x 5’-5”	Y
4000	F	9’-4” x 7’-10”	8’-0” x 6’-3”	7’-8” x 5’-5”	Y
Front Opening (Counterweight at SIDE)					
2100	F	8’-4” x 5’-10”	6’-0” x 5’-1”	5’-8” x 4’-3”	N
2500	F	9’-4” x 5’-10”	7’-0” x 5’-1”	6’-8” x 4’-3”	N
3000	F	9’-4” x 6’-3”	7’-0” x 5’-6”	6’-8” x 4’-8”	N
3500	F	9’-4” x 7’-0”	7’-0” x 6’-3”	6’-8” x 5’-5”	Y
4000	F	10’-4” x 7’-0”	8’-0” x 6’-3”	7’-8” x 5’-5”	Y
Front & Rear Openings (Counterweight at SIDE)					
3500	F&R	9’-4” x 7’-9 ½”	7’-0” x 6’-9”	6’-8” x 5’-5”	Y
4000	F&R	10’-4” x 6’-9 ½”	8’-0” x 7’-9”	7’-8” x 5’-5”	Y
Hospital Front Opening (Counterweight at SIDE)					
3500H	F	7’-2” x 9’-2”	5’-4” x 8’-4”	5’-0” x 7’-4”	Y
4000H	F	7’-10” x 9’-3”	6’-0” x 8’-5”	5’-8” x 7’-5”	Y
4500H	F	7’-10” x 9’-7”	6’-0” x 8’-9”	5’-8” x 7’-9”	Y
5000H	F	7’-10” x 10’-7”	6’-0” x 9’-8”	5’-8” x 8’-8”	Y
Hospital Front & Rear Openings (Counterweight at SIDE)					
3500H	F&R	7’-2” x 10’-3 ½”	5’-4” x 9’-0”	5’-0” x 7’-4”	Y
4000H	F&R	7’-10” x 10’-4 ½”	6’-0” x 9’-1”	5’-8” x 7’-5”	Y
4500H	F&R	7’-10” x 10’-9 ½”	6’-0” x 9’-6”	5’-8” x 7’-10”	Y
5000H	F&R	7’-10” x 11’-7 ½”	6’-0” x 10’-4”	5’-8” x 8’-8”	Y

Requirements

- Minimum required Pit Depth = 5’-0”
- Minimum required Overhead = 15’-0”
- Based on an 8’-0” Cab Height
- Based on a Speed of 200FPM
- A Overhead Machine Room is required

*The Pit and Overhead above only apply to a speed of 200FPM.

Contact Us

Overhead Traction elevators offer a multitude of options and capabilities. Consult with a D.E.M. Representative for required dimensions based on your application.

Twin Jack Holeless Hydraulic

Capabilities

- Max Travel: Up to 50 ft.
- Capacity(lb): 2100 - 5000
- Max Speed: Up to 150 FPM

Summary

This application uses two hydraulic jacks; one on each side of the platform. These are typically used for low travel applications.

Advantages

- Less material and maintenance cost.
- Easy installation.
- Available in low and high capacity applications.

Disadvantages

- Limited Speed capability.
- Limited Travel capability.

Considerations

- Requires a separate machine room.

*Machine Rooms can be remote up to 100ft.

Hydraulic

Capacity	Openings F = Front R = Rear	Hoistway Size	Platform Size	Clear Inside	Stretcher Compliant
Front Opening					
2100	F	7’-4” x 5’-10”	6’-0” x 5’-1”	5’-8” x 4’-3”	N
2500	F	8’-4” x 5’-10”	7’-0” x 5’-1”	6’-8” x 4’-3”	N
3000	F	8’-4” x 6’-3”	7’-0” x 5’-6”	6’-8” x 4’-8”	N
3500	F	8’-4” x 7’-0”	7’-0” x 6’-3”	6’-8” x 5’-5”	Y
4000	F	9’-4” x 6’-11”	8’-0” x 6’-3”	7’-8” x 5’-4”	Y
Front & Rear Openings					
2100	F&R	7’-4” x 6’-8 ½”	6’-0” x 5’-8”	5’-8” x 4’-4”	N
2500	F&R	8’-4” x 6’-8 ½”	7’-0” x 5’-8”	6’-8” x 4’-4”	N
3000	F&R	8’-4” x 6’-11 ½”	7’-0” x 5’-11”	6’-8” x 4’-7”	N
3500	F&R	8’-4” x 7’-9 ½”	7’-0” x 6’-9”	6’-8” x 5’-5”	Y
4000	F&R	9’-4” x 7’-8 ½”	8’-0” x 6’-8”	7’-8” x 5’-4”	Y
Hospital Front Opening					
3500H	F	6’-8” x 9’-3”	5’-4” x 8’-4”	5’-0” x 7’-4”	Y
4000H	F	7’-4” x 9’-3”	6’-0” x 8’-5”	5’-8” x 7’-5”	Y
4500H	F	7’-4” x 9’-7”	6’-0” x 8’-9”	5’-8” x 7’-9”	Y
5000H	F	7’-6” x 10’-7”	6’-0” x 9’-8”	5’-8” x 8’-8”	Y
Hospital Front & Rear Openings					
3500H	F&R	6’-8” x 10’-3 ½”	5’-4” x 9’-0”	5’-0” x 7’-4”	Y
4000H	F&R	7’-4” x 10’-4 ½”	6’-0” x 9’-1”	5’-8” x 7’-5”	Y
4500H	F&R	7’-4” x 10’-9 ½”	6’-0” x 9’-6”	5’-8” x 7’-10”	Y
5000H	F&R	7’-6” x 11’-7 ½”	6’-0” x 10’-4”	5’-8” x 8’-8”	Y

Requirements

- Minimum required Pit Depth = 4’-0”
- Minimum required Overhead = 12’-6”
- Based on an 8’-0” Cab Height
- A Hydraulic Machine Room is required

*For every 1’-0” added to the cab height; add 1’-0” to the overhead.

In-Ground Hydraulic

Capabilities

- Max Travel: Up to 100 ft.
- Capacity(lb): 2100 - 5000
- Max Speed: Up to 150 FPM

Summary

This is a traditional elevator application that has been used for many years. The hydraulic jack is located directly underneath the platform. The jack unit is drilled deep into the ground and protected by a PVC liner.

Advantages

- Less material and maintenance cost.
- Long life expectancy
- Available in low and high capacity applications.

Disadvantages

- Requires drilling (equal to the length of travel).
- Drilling can be costly depending on conditions.

Considerations

- Requires a separate machine room.
- Drilling can be expensive depending on travel.

*Machine Rooms can be remote up to 100ft.

Hydraulic

Capacity	Openings F= Front R= Rear	Hoistway Size	Platform Size	Clear Inside	Stretcher Compliant
Front Opening					
2100	F	7’-4” x 5’-10”	6’-0” x 5’-1”	5’-8” x 4’-3”	N
2500	F	8’-4” x 5’-10”	7’-0” x 5’-1”	6’-8” x 4’-3”	N
3000	F	8’-4” x 6’-3”	7’-0” x 5’-6”	6’-8” x 4’-8”	N
3500	F	8’-4” x 7’-0”	7’-0” x 6’-3”	6’-8” x 5’-5”	Y
4000	F	9’-4” x 7’-0”	8’-0” x 6’-3”	7’-8” x 5’-5”	Y
Front & Rear Openings					
2100	F&R	7’-4” x 6’-8 ½”	6’-0” x 5’-8”	5’-8” x 4’-4”	N
2500	F&R	8’-4” x 6’-8 ½”	7’-0” x 5’-8”	6’-8” x 4’-4”	N
3000	F&R	8’-4” x 6’-11 ½”	7’-0” x 5’-11”	6’-8” x 4’-7”	N
3500	F&R	8’-4” x 7’-9 ½”	7’-0” x 6’-9”	6’-8” x 5’-5”	Y
4000	F&R	9’-4” x 7’-9 ½”	8’-0” x 6’-9”	7’-8” x 5’-5”	Y
Hospital Front Opening					
3500H	F	6’-8” x 9’-3”	5’-4” x 8’-4”	5’-0” x 7’-4”	Y
4000H	F	7’-4” x 9’-3”	6’-0” x 8’-5”	5’-8” x 7’-5”	Y
4500H	F	7’-4” x 9’-7”	6’-0” x 8’-9”	5’-8” x 7’-9”	Y
5000H	F	7’-6” x 10’-7”	6’-0” x 9’-8”	5’-8” x 8’-8”	Y
Hospital Front & Rear Openings					
3500H	F&R	6’-8” x 10’-3 ½”	5’-4” x 9’-0”	5’-0” x 7’-4”	Y
4000H	F&R	7’-4” x 10’-4 ½”	6’-0” x 9’-1”	5’-8” x 7’-5”	Y
4500H	F&R	7’-4” x 10’-9 ½”	6’-0” x 9’-6”	5’-8” x 7’-10”	Y
5000H	F&R	7’-6” x 11’-7 ½”	6’-0” x 10’-4”	5’-8” x 8’-8”	Y

Requirements

- Minimum required Pit Depth = 4’-0”
- Minimum required Overhead = 12’-6”
- Based on an 8’-0” Cab Height
- A Hydraulic Machine Room is required

*For every 1’-0” added to the cab height; add 1’-0” to the overhead.

Hydraulic Freight

Capabilities

- Max Travel: Up to 100 ft.
- Capacity(lb): 4000 - 50000+
- Max Speed: Up to 100 FPM

Summary

Hydraulic Freight elevators are used for heavy industrial equipment and automotive vehicles. Freight elevators are rated by classes, which dictate the load per square foot.

Advantages

- Ability to lift heavy equipment.

Disadvantages

- Typically requires larger Machine Room.

Considerations

- Requires a separate machine room.

Class Ratings

Class A: General Freight Not less than 50lb per sq. ft.

Class B: Motor Vehicles Not less than 30lb per sq. ft.

Class C: Industrial Truck Loading Not less than 50lb per sq. ft.

Hydraulic

Capacity	Openings F = Front R = Rear	Hoistway Size	Platform Size	Clear Inside
Class A & C Front Opening				
4000	F	7’-8” x 8’-8”	6’-0” x 8’-0”	5’-8” x 7’-5”
5000	F	8’-10” x 10’-8”	7’-0” x 10’-0”	6’-8” x 9’-5”
6000	F	10’-2” x 10’-8”	8’-4” x 10’-0”	8’-0” x 9’-5”
8000	F	10’-2” x 12’-8”	8’-4” x 12’-0”	8’-0” x 11’-5”
10000	F	12’-2” x 14’-8”	10’-4” x 14’-0”	10’-0” x 13’-5”
12000	F	14’-4” x 16’-8”	12’-4” x 16’-0”	12’-0” x 15’-5”
15000	F	14’-4” x 18’-8”	12’-4” x 18’-0”	12’-0” x 17’-5”
Class A & C Front & Rear Openings				
4000	F&R	7’-8” x 8’-10”	6’-0” x 8’-0”	5’-8” x 7’-4”
5000	F&R	8’-10” x 10’-10”	7’-0” x 10’-0”	6’-8” x 9’-4”
6000	F&R	10’-2” x 10’-10”	8’-4” x 10’-0”	8’-0” x 9’-4”
8000	F&R	10’-2” x 12’-10”	8’-4” x 12’-0”	8’-0” x 11’-4”
10000	F&R	12’-2” x 14’-10”	10’-4” x 14’-0”	10’-0” x 13’-4”
12000	F&R	14’-4” x 16’-10”	12’-4” x 16’-0”	12’-0” x 15’-4”
15000	F&R	14’-4” x 18’-10”	12’-4” x 18’-0”	12’-0” x 17’-4”
Class B Motor Vehicle Front Opening				
8000	F	11’-2” x 22’-8”	9’-4” x 22’-0”	9’-0” x 21’-5”
10000	F	12’-2” x 24’-8”	10’-4” x 24’-0”	9’-0” x 23’-5”
Class B Motor Vehicle Front & Rear Openings				
8000	F&R	11’-2” x 22’-10”	9’-4” x 22’-0”	9’-0” x 21’-4”
10000	F&R	12’-2” x 24’-10”	10’-4” x 24’-0”	10’-0” x 23’-4”

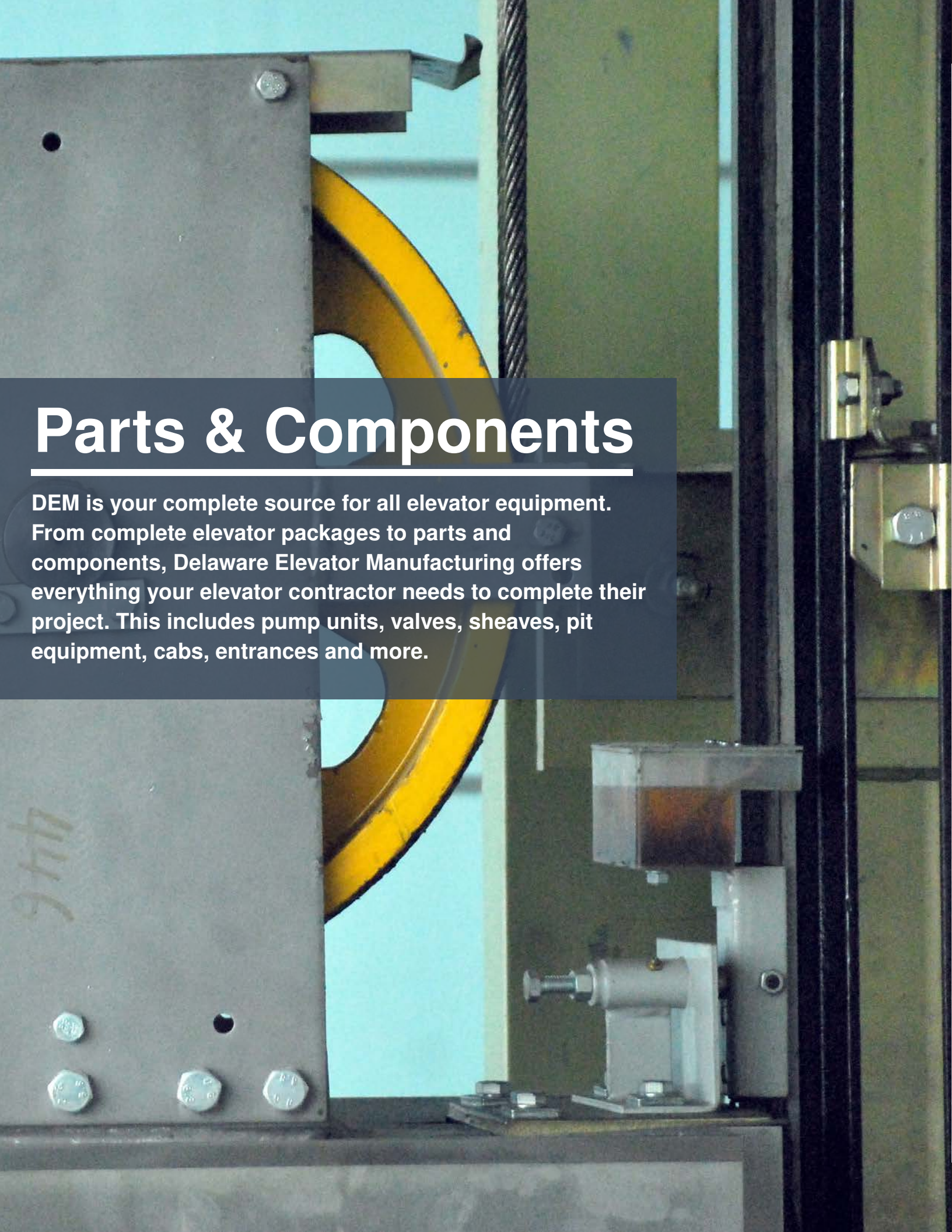
Requirements

- Minimum required Pit Depth = 4’-6”
- Minimum required Overhead = 14’-6”
- Based on an 8’-0” Cab Height and 6’ gate height
- A Hydraulic Machine Room is required

*The requirements above are limited to the indicated cab height.

Contact Us

Freight Elevators offer a multitude of sizing options and capabilities. Consult with a D.E.M. Representative for required dimensions based on your application.

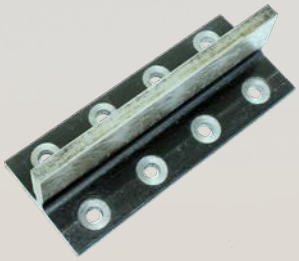
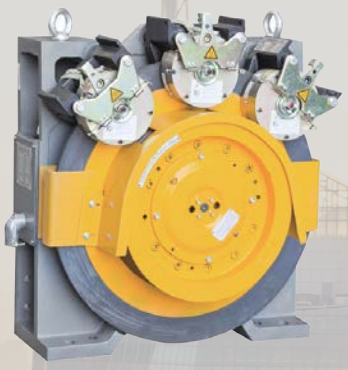
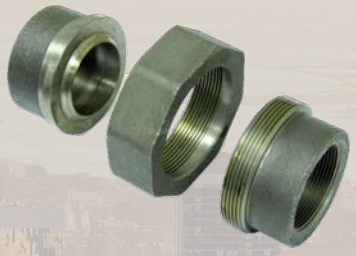


Parts & Components

DEM is your complete source for all elevator equipment. From complete elevator packages to parts and components, Delaware Elevator Manufacturing offers everything your elevator contractor needs to complete their project. This includes pump units, valves, sheaves, pit equipment, cabs, entrances and more.

Parts & Components

Complete Elevator Packages
Custom Pump Units
Pump Unit Accessories
Traction Machines
Roller Guides
Pit Equipment
Piping
Rails
Controllers
Wiring
Cabs
Entrances
And More...







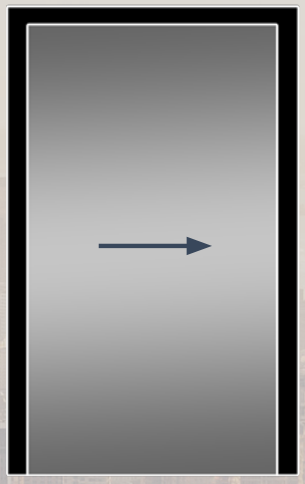
Cabs & Entrances

Along with being compliant, we want to ensure that your elevator is aesthetically pleasing. At DEM, we offer an endless variety of finishes and options to ensure that your design vision is achieved. From custom wall finishes to handrails and ceiling arrangements, choosing DEM specifications enables your creative freedom.

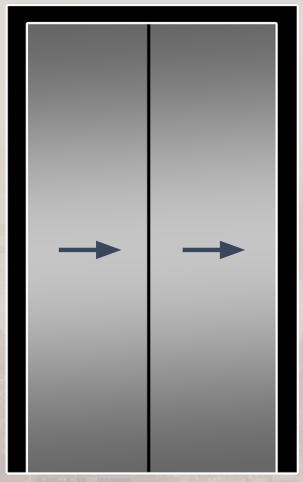
Elevator Door Types

Door Types

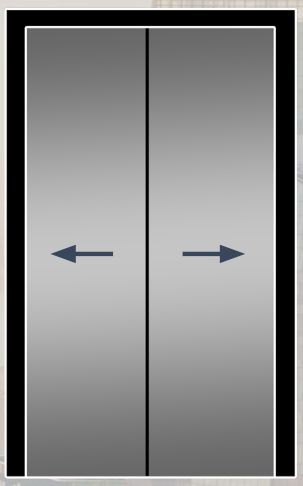
Form & Function: A variety of door configurations are available to maximize entrance space, utilize cab arrangements and the aesthetics of the elevator's entrance.



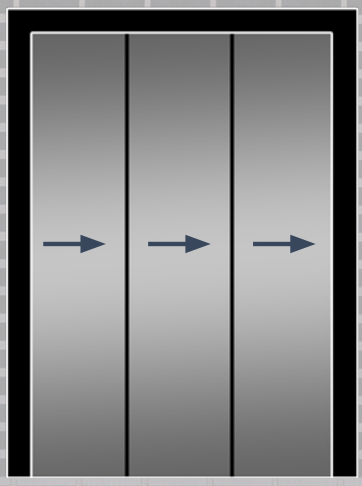
SSSO
Single Speed Single Opening



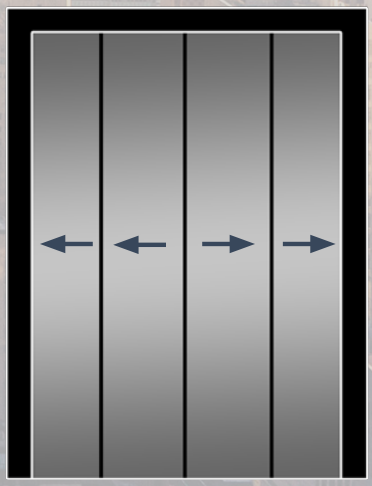
2SSO
Two Speed Single Opening



SSCO
Single Speed Center Opening



3SSO
Three Speed Single Opening



2SCO
Two Speed Center Opening

IDEC Cab & Entrances

Need help designing the perfect cab and entrance? We can help! Delaware Elevator Manufacturing is affiliated with IDEC, a manufacturer of cabs and entrances. IDEC offers a large selection of interior designs and finishes.

IDEC ELEVATOR PRODUCTS

Our Portfolio

DEM's is highly experienced with both government and municipal projects. From major universities to high traffic medical centers, our equipment has been trusted in thousands of locations all over the world.

NASA Space Launch Complex

Udvar-Hazy National Air and Space Museum

Salisbury University

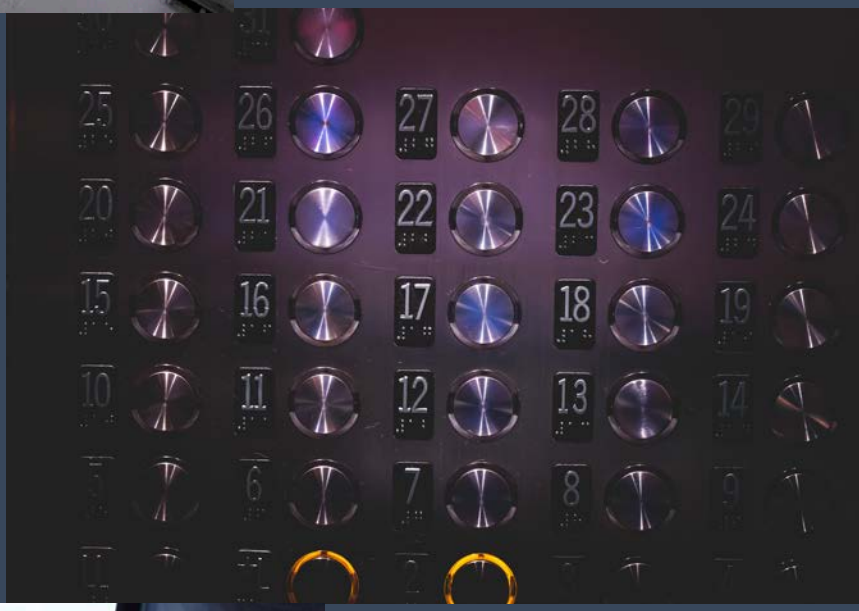
Walter Reed Military Medical Center

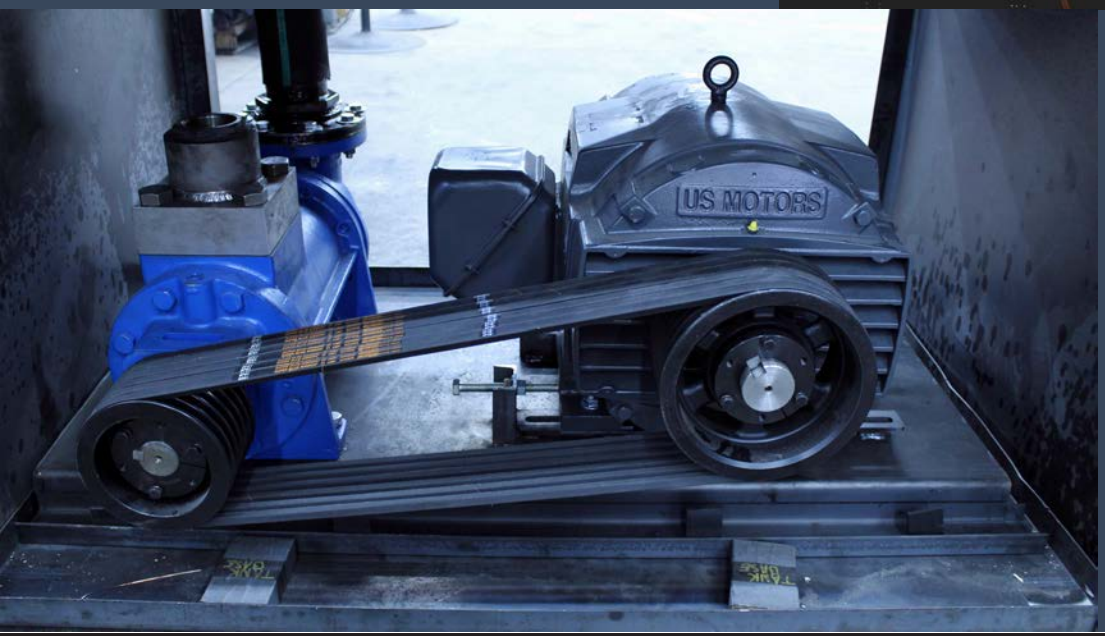
Experience

Established in 1946, Delaware Elevator has over 70 years in the construction industry. This experience has given us a thorough understanding of our customer's needs and allowed us to offer optimal service, coordination, and project management.

Responsiveness

We can confidently affirm that we are large enough to solve your problems but small enough to provide personal care. We value our customers and welcome the opportunity to work with you on any of your vertical transportation needs.





Versatility

With DEM's custom capabilities and experience, you can be confident that your vision will be accomplished. From complete elevator systems to modifications on an existing elevator, no job is too large or too small.

Custom Capabilities

Although our recommended standard dimensions are in this guide, DEM is highly capable of adapting our products to custom requirements to fit the needs of our customers. Whether you need a custom solution or additional features, DEM can help you achieve your vision.

Quality

At DEM, we only use high quality components that we have experience using and installing. We want to ensure that your elevator will continue operating safely for many years.

Non-Proprietary Components

Non-proprietary components allow flexibility to choose the exact components you need. This also gives the building owner the ability to choose the elevator contractor they wish to install and service the elevator and ultimately, lower ownership costs.

DELAWARE ELEVATOR MANUFACTURING

27685 ROCKAWALKIN RIDGE RD.
SALISBURY, MD 21801

410-749-3489

MANUFACTURINGSALES@DELAWAREELEVATOR.COM

WWW.DELAWAREELEVATOR.COM

Bruce Steffen
BruceSteffen@DelawareElevator.com
443-497-0155

Jimmy Didomenicis
JimmyD@DelawareElevator.com
443-614-8612

Logan Betterton
LBetterton@DelawareElevator.com
443-614-2910

Tim Race Jr.
TJ@DelawareElevator.com
443-397-2154

NOTES

DELAWARE ELEVATOR MANUFACTURING

27685 ROCKAWALKIN RIDGE RD.
SALISBURY, MD 21801

410-749-3489

MANUFACTURINGSALES@DELAWAREELEVATOR.COM

WWW.DELAWAREELEVATOR.COM