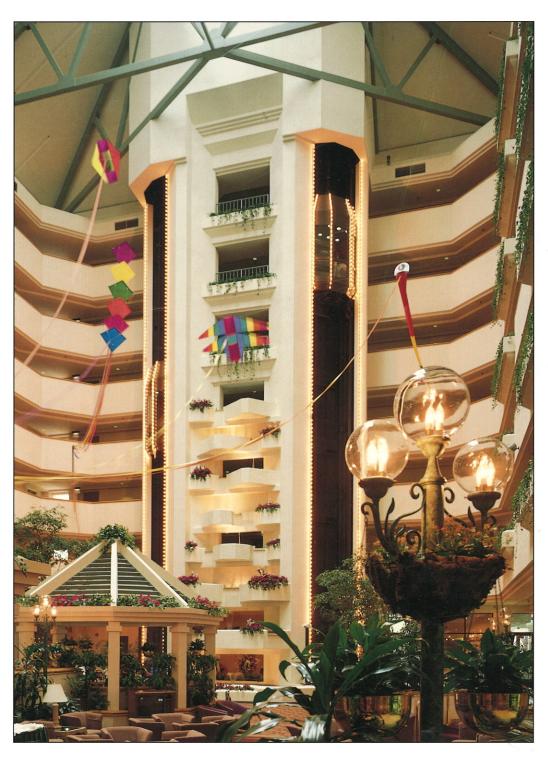
# Observation Elevators



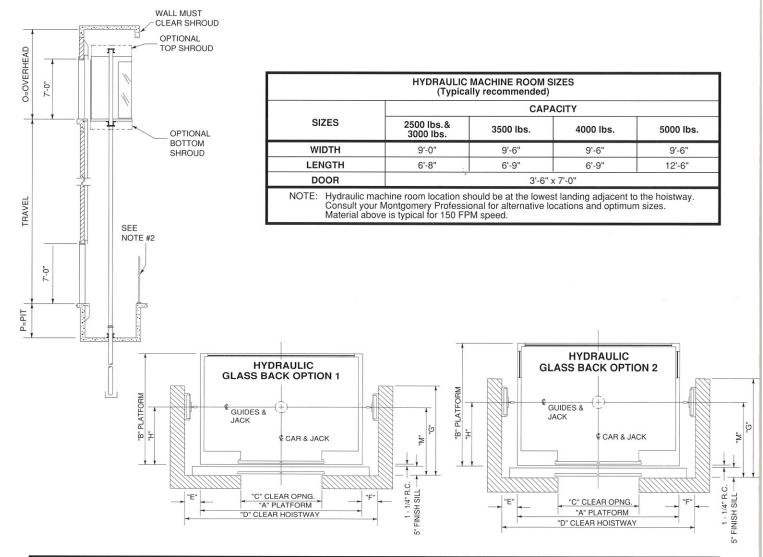






**Hydraulic Observation Elevators** 

## **Hydraulic Observation Elevators**



|                   | BASIC DIMENSIONS: HYDRAULIC OBSERVATION ELEVATORS |                   |                   |             |             |             |             |             |             |             |  |
|-------------------|---|-------------------|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|
| CAPACITY          |   |                   |                   |             |             |             |             |             |             |             |  |
| Dimension         | 2500 lbs.   | 3000 lbs.         | 3500 lbs.         |             | 4000 lbs.   |             |             | 4500 lbs.   |             |             |  |
|                   | OPTION<br>1,2,3,4                                 | OPTION<br>1,2,3,4 | OPTION<br>1,2,3,4 | OPTION<br>5 | OPTION<br>5 | OPTION<br>6 | OPTION<br>7 | OPTION<br>5 | OPTION<br>6 | OPTION<br>7 |  |
| Α                 | 7'-0"   | 7'- 0"            | 7'- 0"            | 7'- 0"      | 7'- 0"      | 7'- 0"      | 7'- 0"      | 7'- 0"      | 7'- 0"      | 7'- 0"      |  |
| В                 | 5'-3"   | 5'-11"            | 6'- 6"            | 7'- 2"      | 7'-11"      | 7'- 3"      | 7'- 11/2"   | 8'- 6"      | 7'-10"      | 7'- 71/2'   |  |
| С                 | 3'-6"   | 3'- 6"            | 3'- 6"            | 3'- 6"      | 3'- 6"      | 3'- 6"      | 3'- 6"      | 3'- 6"      | 3'- 6"      | 3'- 6"      |  |
| D                 | 8'-4"   | 8'- 4"            | 8'- 4"            | 8'- 4"      | 8'- 4"      | 8'- 4"      | 8'- 4"      | 8'- 4"      | 8'- 4"      | 8'- 4"      |  |
| E                 | 8"  | 8"                | 8"                | 8"          | 8"          | 8"          | 8"          | 8"          | 8"          | 8"          |  |
| F                 | 8"  | 8"                | 8"                | 8"          | 8"          | 8"          | 8"          | 8"          | 8"          | 8"          |  |
| . G               | 4'-3"   | 4'- 7"            | 4'-101/2"         | 4'-101/2"   | 5'- 31/4"   | 5'- 2"      | 5'- 2"      | 5'- 63/4"   | 5'- 51/2"   | 5'- 51/4"   |  |
| Н                 | 2'-83/4"  | 3'- 03/4"         | 3'- 41/4"         | 3'- 41/4"   | 3'- 9"      | 3'- 73/4"   | 3'- 71/2"   | 4'- 01/2"   | 3'-11"      | 3'-11"      |  |
| J                 | N/A   | N/A               | N/A               | N/A         | N/A         | 2"          | 2"          | N/A         | 2"          | 2"          |  |
| K                 | N/A   | N/A               | N/A               | N/A         | N/A         | 2'- 51/4"   | 2'- 33/4"   | N/A         | 2'- 81/2"   | 2'- 61/2'   |  |
| L                 | N/A   | N/A               | N/A               | N/A         | N/A         | 8'- 8"      | 8'- 8"      | N/A         | 8'- 8"      | 8'- 8"      |  |
| М                 | 3'-3"   | 3'- 7"            | 3'-101/2"         | 3'-101/2"   | 4'- 31/4"   | 4'- 2"      | 4'- 13/4"   | 4'- 63/4"   | 4'- 51/4"   | 4'- 51/4"   |  |
| *O <sup>(1)</sup> | 12'-6"  | 12'- 6"           | 12'- 6"           | 12'- 6"     | 12'- 6"     | 12'- 6"     | 12'- 6"     | 12'- 6"     | 12'- 6"     | 12'- 6"     |  |
| **O(1)            | 14'-2"  | 14'- 2"           | 14'- 2"           | 14'- 2"     | 14'- 2"     | 14'- 2"     | 14'- 2"     | 14'- 2"     | 14'- 2"     | 14'- 2"     |  |
| *P <sup>(2)</sup> | 4'-0"   | 4'- 0"            | 4'- 0"            | 4'- 0"      | 4'- 0"      | 4'- 0"      | 4'- 0"      | 4'- 0"      | 4'- 0"      | 4'- 0"      |  |
| **P               | 5'-6"   | 5'- 6"            | 5'- 6"            | 5'- 6"      | 5'- 6"      | 5'- 6"      | 5'- 6"      | 5'- 6"      | 5'- 6"      | 5'- 6"      |  |

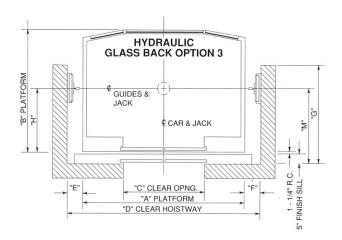
NOTE:

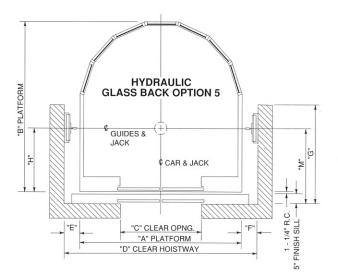
\*Dimension when no shroud is used.
\*\*Dimension when 2'-0" shroud is used.

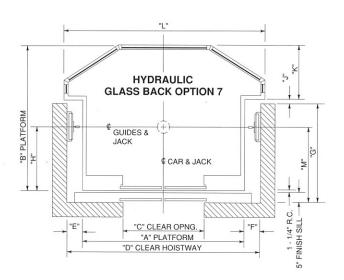
(1) Based on standard cab, 8'-0" under canopy.

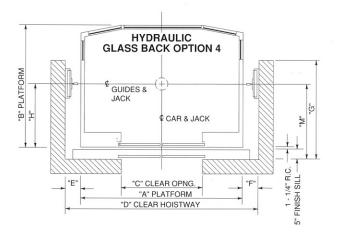
(2) Back options 2,4,5,6,7 require an additional 6" of pit depth to clear under-floor bracing.

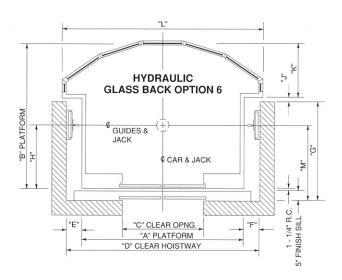








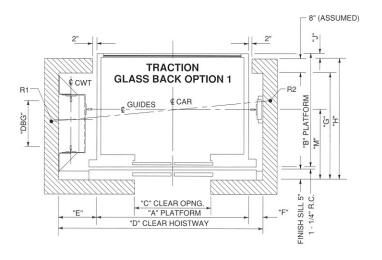


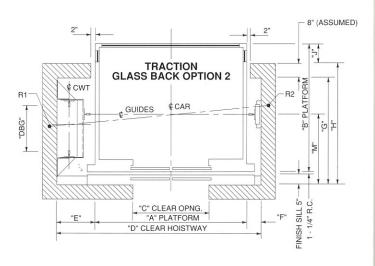


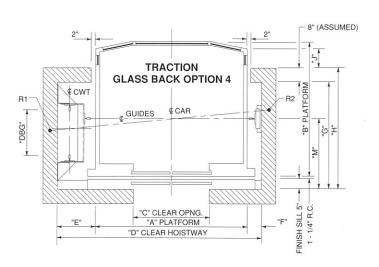
# Notes (Hydraulic and Traction)

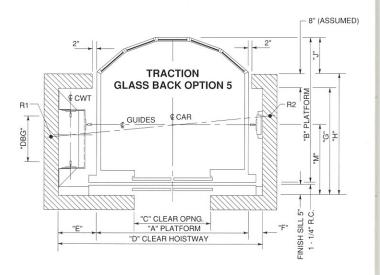
- Elevator configurations and corresponding dimensions are in accordance with Montgomery Elevator Company's interpretation of the standards set forth by ASME, NEII and also the ADA (Americans with Disabilities Act).
- Protection around hoistway at lowest landing is not by Montgomery. Consult local code(s) for specific requirements.
- State and local code requirements may vary. Data contained in this brochure is for general application.
- Additionally, accessibility standards include the placement of car controls, hall buttons, intercommunication equipment, tactile markings, handrails in elevator cabs, audible signals, etc.
- Means of mounting guide rail brackets to hoistway walls varies with type of wall construction and location of structural support.











| VERTICAL  | TRACTION ELEVATOR CAPACITY |            |            |            |            |  |  |  |
|-----------|----------------------------|------------|------------|------------|------------|--|--|--|
| REACTIONS | 2500 lbs.                  | 3000 lbs.  | 3500 lbs.  | 4000 lbs.  | 4500 lbs.  |  |  |  |
| R1        | 17500 lbs.                 | 18900 lbs. | 20900 lbs. | 21900 lbs. | 24400 lbs. |  |  |  |
| R2        | 13900 lbs.                 | 15000 lbs. | 16300 lbs. | 17000 lbs. | 19100 lbs. |  |  |  |

Reactions include allowance for impact but DO NOT include weight of concrete slab. Reactions are for preliminary use only. Exact reactions will be provided when exact conditions are known.

- Consult your local Montgomery Professional for more information regarding Notes 1, 2, 3, 4 & 5, and also for specific recommendations where space may be limited or other conditions necessitate further study.
- 7. All layout details are based upon the use of center opening type entrances.
- Elevator machine room temperature should be maintained between 8. 65°F and 100°F.
- 9. For SHROUD INFORMATION, refer to the back cover of this brochure.
- 10. Please consult your local Montgomery Professional for exact information for working drawings and for designs which may vary from those depicted within this literature.

| DIMENSION |             | 2500 lbs.  |             |            |             |            |            |     |
|-----------|-------------|------------|-------------|------------|-------------|------------|------------|-----|
|           | Option<br>1 |            | Option<br>3 |            | Option<br>1 |            |            |     |
| "DBG"     | 2           | 25"        |             | 25"        | 3           | 31"        | 3          | 37" |
| Α         | 7'-         | 0"         | 7'-         | 0"         | 7'-         | 0"         | 7'-        | 0"  |
| В         | 5'-         | 0"         | 5'- 4"      |            | 5'- 4"      |            | 5'-10"     |     |
| С         | 3'-         | 6"         | 3'-         | 6"         | 3'-         | 6"         | 3'-        | 6"  |
| D         | 9'-         | 5"         | 9'-         | 5"         | 9'-         | 5"         | 9'-        | 5"  |
| E         | 1'-         | 8"         | 1'-         | 8"         | 1'-         | 8"         | 1'-        | 8"  |
| F         |             | 9"         |             | 9"         |             | 9"         | 9'         |     |
| G         | 4'- 71/2"   |            | 4'- 71/2"   |            | 5'- 1½"     |            | 5'- 71     |     |
| Н         | 5'-         | 31/2"      | 5'- 3½"     |            | 5'- 9½"     |            | 6'- 31/    |     |
| J         | 23/4"       |            | 63/4"       |            | 3/4"        |            | 3,         |     |
| K         | N/A         |            | N/A         |            | N/A         |            | N/A        |     |
| L         | N/A         |            | N/A         |            | N/A         |            | N/A        |     |
| М         | 3'-         | 01/4"      | 3'-         | 11/4"      | 3'-         | 31/2"      | 3'-        | 61/ |
| N         | 7'-         | 6"         | 7'-         | 6"         | 7'-         | 6"         | 7'-        | 6"  |
| S         | 13'- 8"     |            | 13'- 8"     |            | 13'- 8"     |            | 13'- 8"    |     |
| SPEED     | 200<br>fpm  | 350<br>fpm | 200<br>fpm  | 350<br>fpm | 200<br>fpm  | 350<br>fpm | 200<br>fpm | f   |
| *O(1)     | 14'- 8"     | 15'- 4"    | 14'- 8"     | 15- 4"     | 14'- 8"     | 15'- 4"    | 14'- 8"    | 15  |
| **(1)     | 15'- 2"     | 15'-10"    | 15'- 2"     | 15'-10"    | 15'- 2"     | 15'-10"    | 15'- 2"    | 15  |
| *P        | 4'- 6"      | 5'- 0"     | 4'- 6"      | 5'- 0"     | 4'- 6"      | 5'- 0"     | 4'- 6"     | 5   |
| **P       | 4'-10"      | 5'- 4"     | 4'-10"      | 5'- 4"     | 4'-10"      | 5'- 4"     | 4'-10"     | 5   |

NOTE:

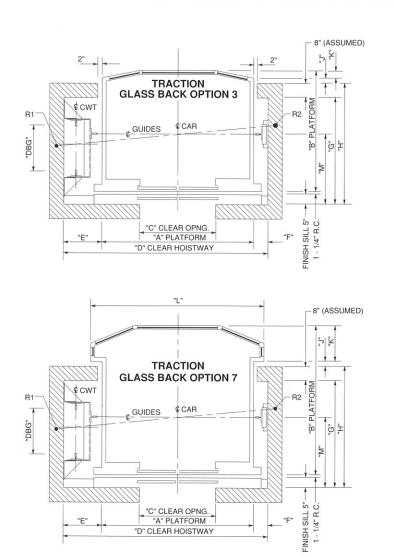
- \* Dimension when no shroud is used.

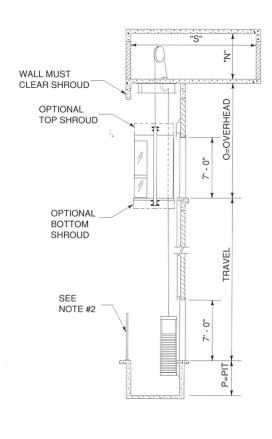
  \*\* Dimension when 2'-0" shroud is used.

  (1) Based on standard height cab (8'-0" to underside of canopy

  → The relationships between dimensions G, H, J and K are by
- → The hoistway dimensions shown are based on a counterwei

### **Traction Geared Observation Elevators**





| 1 200 350 200 350 200 350 200 fpm   |                 |
|---|-----------------|
| 25"   31"   25"   31"   37"     |                 |
| 7'- 0" 7'  | Option<br>7     |
| 5'- 8" 5'-10" 5'-10" 6'- 6" 6'- 2" 6'- 7" 6'-11" 7'- 6" 7'- 6" 8'- 1" 8'- 1" 8'- 1" 8'- 1" 8'- 1" 8'- 1" 8'- 1" 8'- 1" 8'' 1'- 8" 1'- 8  | 37"             |
| 3'- 6" 3'- 7½" 5'- 7½  | 7'- 0"          |
| 9'- 5" 9'- 9" 9" 9" 9" 9" 9" 9" 9" 9" 9" 9" 9" 9"  | 7'- 7"          |
| 1'- 8" 1'  | 3'- 6"          |
| 9" 9" 9" 9" 9" 9" 9" 9" 9" 9" 9" 9" 9" 9  | 9'- 5"          |
| 4'- 7½" 5'- 1½" 4'- 7½" 5'- 1½" 5'- 7½" 5'- 1½" 5'- 1½" 5'- 7½  | 1'- 8"          |
| 5'- 3½" 5'- 9½" 5'- 9½" 6'- 3½" 5'- 9½" 6'- 3½  | 9"              |
| 10½" 6½" 1¹- 0½" 1¹- 2½" 4½" 1¹- 3½" 1¹- 3½" 1¹- 8½" 1¹- 8½" 1¹- 8½" 2¹- 3½" N/A  | 5'- 71/2"       |
| N/A   | 6'- 31/2"       |
| N/A   | 13/4"           |
| 3'- 4'/2" 3'- 6" 3'- 4'/4" 3'-10'/2" 3'- 8" 3'-10'/2" 3'-10'/2" 3'-10'/2" 4'- 4'/2" 4'- 4'/4" 4'- 4'/4" 7'- 6" 7'-  | 1'- 8"          |
| 7'- 6" 7'  | 8'- 0"          |
| 13'- 8"   13'-    | 4'- 41/4"       |
| 200 350 200 350 200 350 200 350 200 350 200 350 fpm   | 7'- 6"          |
| fpm   | 3'- 8"          |
| " 15'-2" 15'-10" 15'- 2" 15'-10" 15'- 2" 15'-10" 15'- 2" 15'-10" 15'- 2" 15'-10" 15'- 2" 15'-10" 15'- 2" 15'-10" 15'-2" 15'-10" 15'-2" 15'- 6" 15'-2" 15'-10  | 00 350<br>m fpm |
|   | -2" 15'-6       |
|   | -2" 15'-6       |
| 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 | -4" 5'-0        |
| 5'-4" 5'-10" 4'-10" 5'-4" 4'-10" 5'-4" 5'-10" 5'-4" 5'-10" 5'-4" 5'-10" 5'-4" 5'-10" 5'-4" 5'-10" 5'-4" 5'-10" 5'-4" 5'-10" 5'-4" 5'-10" 5'-4" 5' | -4" 5'-4        |





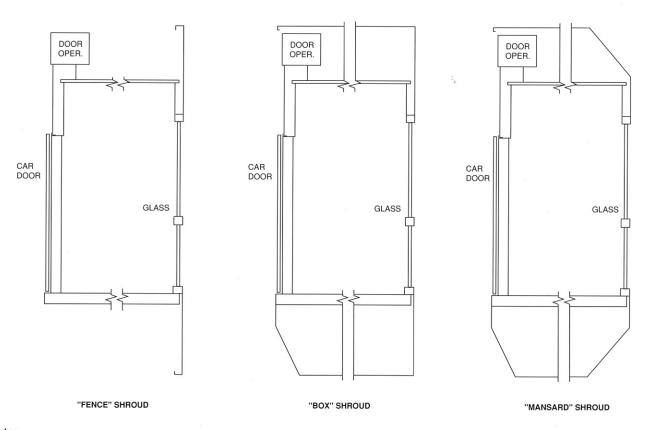
# **Traction Geared Observation Elevators**

#### Shrouding (Hydraulic - or - Traction):

The interior of this brochure makes reference to OPTIONAL SHROUDING used at the car top and/or car bottom. Shrouding is used in conjunction with Observation Elevators to provide an optical barrier which effectively "hides" certain mechanical devices which are inherent in Hydraulic and Traction elevators at the top and/or bottom of the car.

Shrouding can be fabricated from a variety of materials.

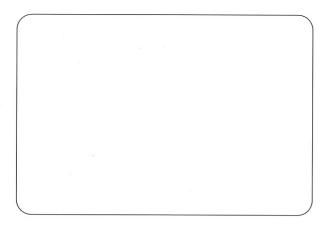
While shrouding can take on very sophisticated design elements, there are basically three types which are incorporated most frequently in Observation Elevators. These types are the "Fence", "Box" and "Mansard" designs. These types are detailed below.



#### Note:

Dimensions pertaining to shrouds vary depending upon application. Use of shrouding at the top and/or bottom can affect required Overhead and Pit dimensions.

For more information regarding the application of shrouding to your proposed Observation Elevator installation, please consult your Montgomery Professional.





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