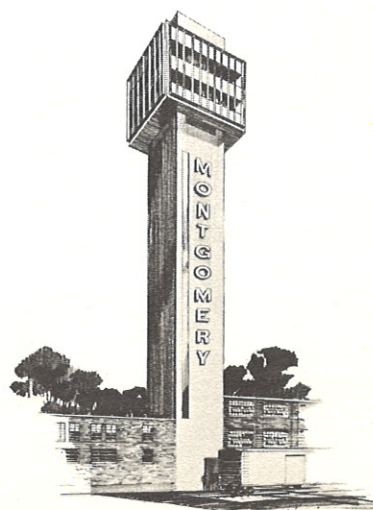
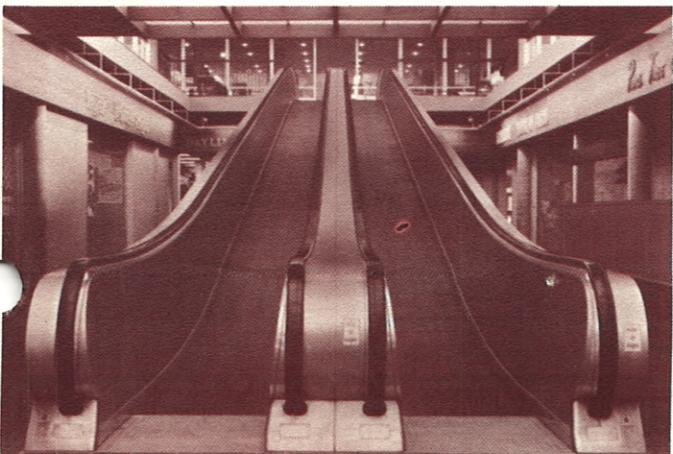




montgomery[®] planning guide

for elevators, escalators,
power walks and ramps
and other specialized transportation equipment



montgomery[®] elevator company

West Canada Headquarters
Montgomery Elevator Co., Ltd.
PETERSON-COWAN division
150 Cordova St. E.
Vancouver, B.C.

UNITED STATES
and
Corporate Headquarters
Moline, Illinois


East Canada Headquarters
Montgomery Elevator Co., Ltd.
ROELOFSON division
15 Shorncliffe Road
Toronto, Canada

FOR 75 YEARS

the Montgomery Elevator Company has manufactured and erected thousands of elevators in cities throughout the Western Hemisphere. Many are outstanding structures such as those pictured to the right, and include high-rise office buildings; hospitals; hotels; department stores; apartment buildings, etc. Montgomery escalators serve Shopping and Civic Centers and Auditoriums; Hotels; Airports; Subways; Department Stores and Financial Institutions. Montgomery has designed and manufactured Automatic Conveyor Systems and special application equipment for unusual projects including the "Gateway Arch" feature of the Jefferson National Expansion Memorial in St. Louis.

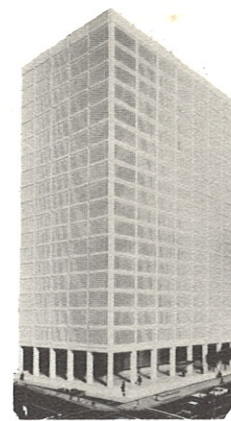
MONTGOMERY MODERNIZATION

is a carefully planned program that assures the building owner of the most modern elevator facilities, for low cost efficient operation, at a reasonable remodeling cost. The program includes an expert study of the building's traffic requirements; careful examination of existing equipment, and a comprehensive program of modernization with a minimum of interference in the everyday business of the building's tenants. The plans are developed by experienced elevator modernization engineers in field offices — and in the principle offices of the company in Canada and the United States.

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GEARED electric	5
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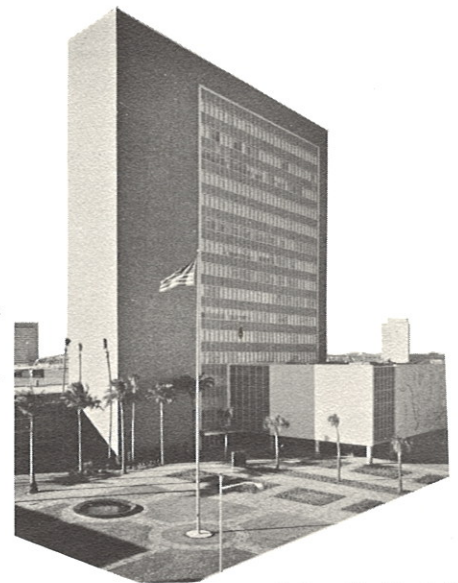
480 University Ave. Building
Toronto, Canada
6 gearless passenger elevators
with Measured Demand
and 1 hydraulic passenger elevator
Architect:
Webb, Zerafe & Menkes
Owner-Builder
Olympia-York Investment



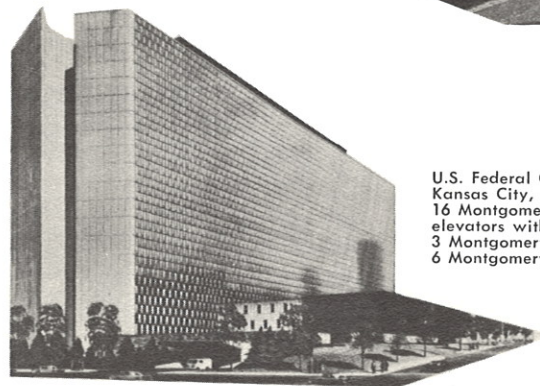
Towne House
Phoenix, Arizona
8 Montgomery passenger elevators
with Measured Demand
4 Montgomery freight elevators



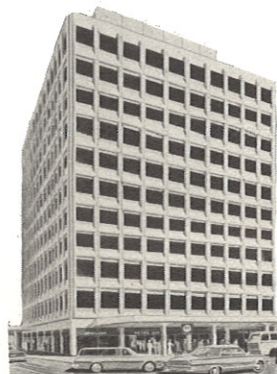
Executive House
Victoria B. C.
3 passenger elevators
Architect:
Earl Morrison
General Contractor:
Farmer Constr. Ltd.



Jacksonville City Hall
Jacksonville, Florida
6 Montgomery
passenger elevators
1 Montgomery
freight elevator

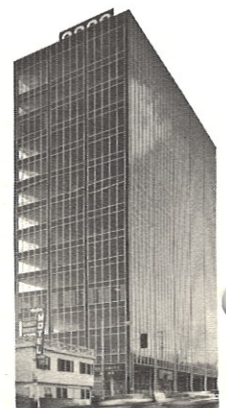


U.S. Federal Office Building
Kansas City, Missouri
16 Montgomery passenger
elevators with Measured Demand
3 Montgomery service elevators
6 Montgomery escalators



Security Bank Building
9000 Sunset Los Angeles
4 Montgomery passenger
elevators with
Measured Demand


Maisonnette Office Building
at Guy & Burnside, Montreal
4 gearless passenger elevators
with Measured Demand, 1
hydraulic passenger & 1 hydraulic
freight elevator.
Architect:
Mayerovitch & Bernstein
Owner-Builder:
David Bloom Inc.



montgomery ESP MEASURED DEMAND®

GROUP SUPERVISORY CONTROL SYSTEM


A Registered Trade Mark of the Montgomery Elevator Company

Montgomery's ESP  Measured Demand System with Electronic Sensor Programming provides tomorrow's ultimate in elevator service, today.

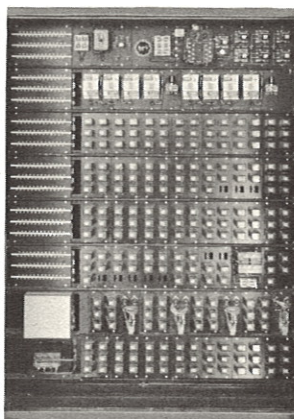
ESP anticipates each demand for service throughout the building and positions the elevators in the system for immediate response. ESP automatically adjusts to the constantly changing pattern of traffic demand. ESP provides the most efficient utilization of each elevator in the system, under every condition in the wide variation of traffic requirements from heavy incoming traffic, in the morning, to heavy outgoing traffic, in the evening, and to every possibility between these extremes.

The amazing flexibility of ESP permits engineered adjustment to the precise requirements of each building. Montgomery engineers carefully determine these requirements and assemble the basic module of the ESP system to exactly match the Demand.

ESP with ZS (Zones of Service) automatically parks the elevators within selected zones throughout the building during periods of light traffic demand. This system assures immediate response to any demand for service, with minimum car movement. ZS reduces power consumption and equipment wear by limiting car movement only to that necessary to service traffic demand.

ESP  Measured Demand — a product of the continuing program of Research and Development at Montgomery — where tomorrow's systems are being developed and perfected today.

The Master Control and Indicator Panel monitors the overall operation of the entire elevator system. This panel is located in the lobby of the building adjacent to elevators. Each panel is custom designed and engineered for that particular project. The panel shown is typical. Intercom is optional.

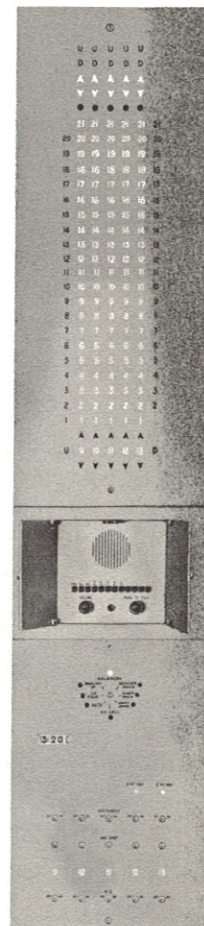
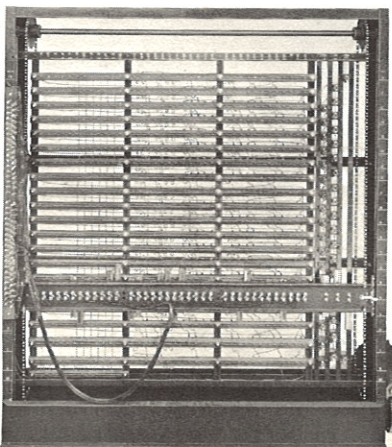


TYPICAL COMMON PANEL

This electronic brain of the ESP Group Supervisory Control system is custom designed and built for each job. Its function is to evaluate traffic demand and coordinate the movement of the group of elevators. Panel is enclosed in steel cabinet with double door access in front and removable panels in rear.

TYPICAL SUPERVISORY PANEL

Custom designed and built for each elevator of each job. The Supervisory Panel controls the movement of its individual car in response to commands from the Common Panel. Panel is enclosed in steel cabinet with double door access in front and removable panels in rear.



TYPICAL FLOOR SELECTOR

Cable driven with fixed ratio proportion allowing accurate adjustments that remain set. Cut-off points preset at factory. The main function of the selector is to sense the position and direction of travel of the car in the hoistway and to provide the slow down command signal to the car prior to making a stop.

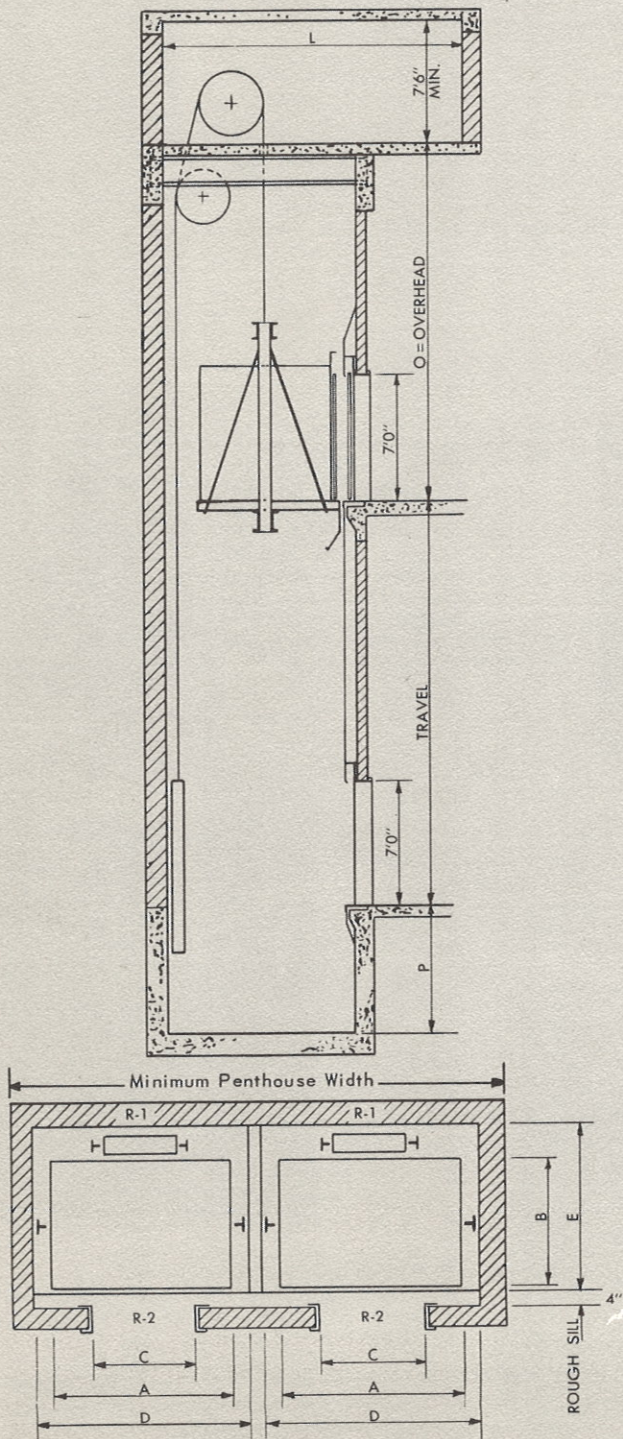
montgomery

PASSENGER ELEVATORS

The Montgomery Elevator Company is the largest exclusive independent manufacturer of elevators and escalators, offering a complete line of vertical, horizontal and inclined transportation equipment.

Montgomery has pioneered and proved many "firsts" in electric and oil-hydraulic passenger and freight elevators, escalators, power walks, power ramps, dumbwaiters and elevator equipment for automatic parking garages.

high speed traction



RECOMMENDED SIZES AND CAPACITIES

TYPE BUILDING	AVERAGE OFFICE HOTEL		LARGE OFFICE OR STORE
CAPACITY	2500#	3000#	3500#
A	7' - 0"	7' - 0"	7' - 0"
B	5' - 0"	5' - 6"	6' - 2"
C	3' - 6"	3' - 6"	3' - 10"
D	8' - 4"	8' - 4"	8' - 4"
E	6' - 6"	7' - 0"	7' - 8"

MINIMUM PIT - OVERHEAD & MACHINE ROOM DIMENSIONS

SPEED	400	500	600	700	800
L	23' - 0"	23' - 0"	23' - 0"	23' - 0"	24' - 0"
O	17' - 7"	18' - 4"	19' - 5"	21' - 6"	21' - 11"
P (U.S.)	7' - 4"	8' - 8"	8' - 11"	12' - 6"	12' - 6"
P (Canada)	6' - 5"	7' - 5"	8' - 11"	12' - 5"	12' - 5"

OVERHEAD LOADS/LBS. APPROXIMATE PER ELEVATOR

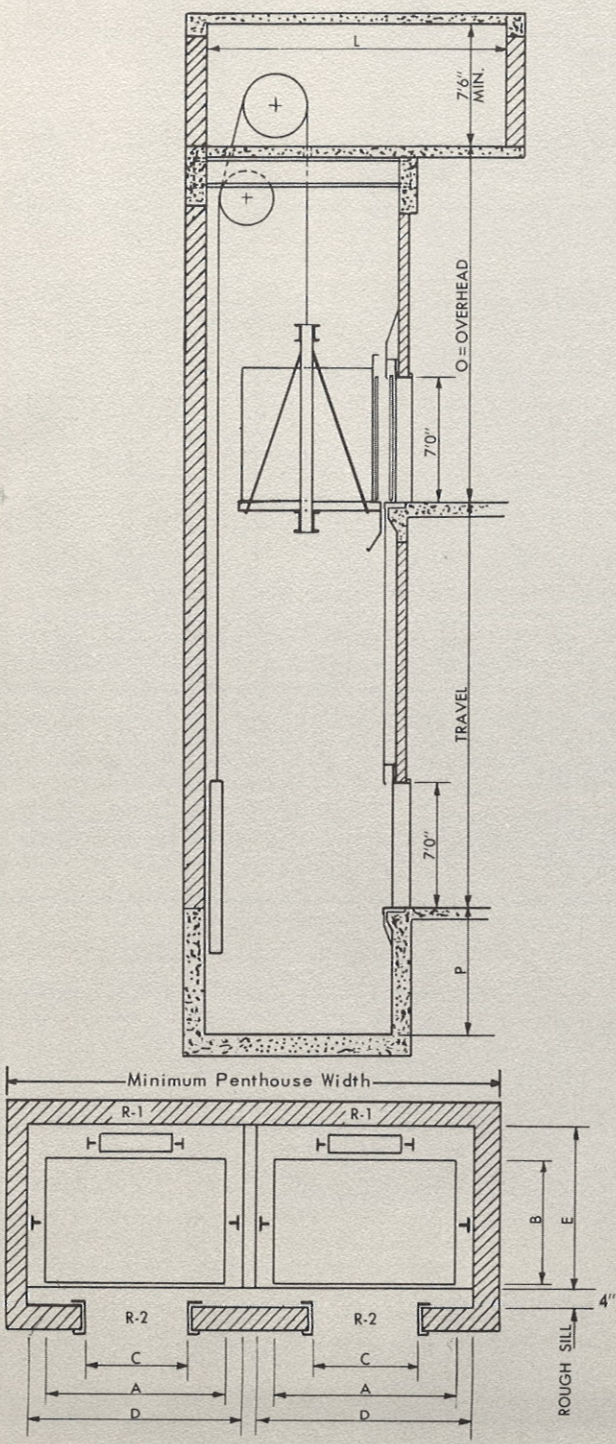
CAPACITY	SPEED	R-1	R-2
2500#	400	25000	15000
	500	26000	16000
	600	28000	18000
	700	29000	19000
	800	30000	20000
3000#	400	26000	15000
	500	27000	16000
	600	29000	18000
	700	30000	19000
	800	31000	20000
3500#	400	30000	21000
	500	32000	22000
	600	34000	23500
	700	36000	25000
	800	39000	27500

NOTES:

1. Reactions include allowances for impact but DO NOT include weight of concrete slab.
2. Pit depths, overhead clearance and pent house sizes are in accordance with A.S.E. and C.S.A. code requirements. Local codes may vary these requirements.
3. Layouts and dimensions shown are for center opening type entrances.
4. Consult your Montgomery Representative for specific recommendations where space is limited or other conditions may necessitate further study.



medium and low speed traction



RECOMMENDED SIZES AND CAPACITIES

TYPE BUILDING	SMALL APART-MENT	SMALL OFFICE	AVERAGE OFFICE HOTEL		LARGE OFFICE OR STORE
CAPACITY	1200#	2000#	2500#	3000#	3500#
A	5' - 0"	6' - 4"	7' - 0"	7' - 0"	7' - 0"
B	4' - 0"	4' - 5"	5' - 0"	5' - 6"	6' - 2"
C	2' - 6"	3' - 0"	3' - 6"	3' - 6"	3' - 10"
D	6' - 4"	7' - 8"	8' - 4"	8' - 4"	8' - 4"
E	5' - 4"	5' - 9"	6' - 6"	7' - 0"	7' - 8"

MINIMUM PIT-OVERHEAD & MACHINE ROOM DIMENSIONS

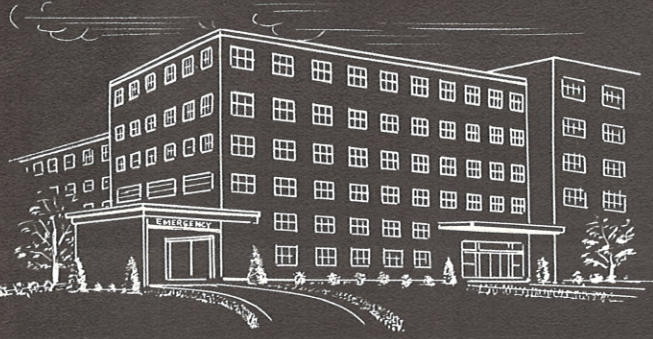
SPEED	100	200	250	300	350	400	450
L	12' - 6"	12' - 6"	12' - 6"	13' - 6"	13' - 6"	18' - 0"	18' - 0"
O	16' - 6"	16' - 6"	16' - 11"	16' - 11"	17' - 3"	17' - 7"	18' - 2"
P (U.S.)	4' - 0"	5' - 6"	5' - 10"	6' - 4"	6' - 9"	7' - 4"	8' - 8"
P (Canada)	4' - 0"	4' - 3"	5' - 3"	5' - 3"	6' - 0"	6' - 5"	7' - 5"

OVERHEAD LOADS/LBS. APPROXIMATE PER ELEVATOR

CAPACITY IN LBS.	SPEED FPM	R-1	R-2
1200#	100	12000	6500
2000#	100	12500	8800
	200	15200	9900
	250	15500	10800
	300	15800	11000
	350	19800	12000
	400	24000	14500
2500#	450	25000	15000
	100	14900	10300
	200	16700	11500
	250	17200	12300
	300	17500	12500
	350	20400	12800
3000#	400	25000	15000
	450	26000	16000
	100	17100	12100
	200	19400	12200
	250	19800	12600
	300	20200	13200
3500#	350	20400	13300
	400	26500	16000
	450	27000	16500
	100	18300	13300
	200	21000	14100
	250	21300	14400
	300	21800	14700
	350	25200	15100
	400	28000	16800
	450	29200	17000

NOTES:

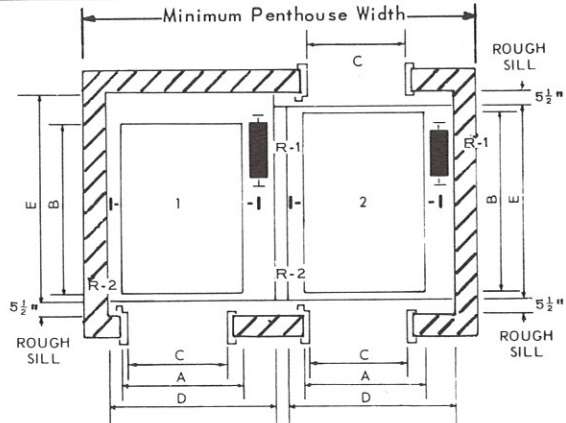
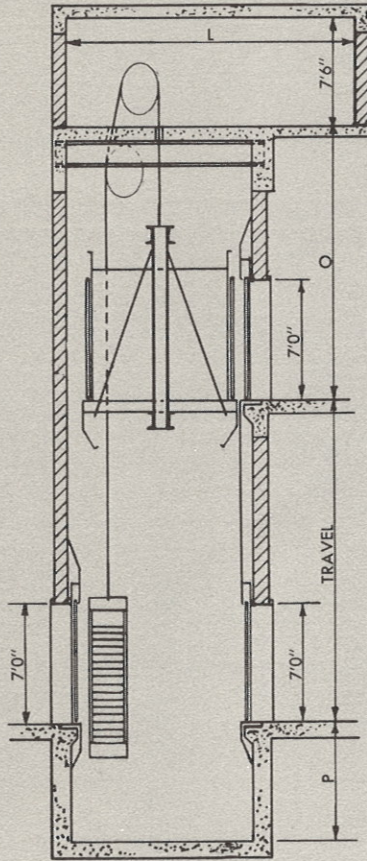
1. Reactions include allowances for impact but DO NOT include weight of concrete slab.
2. Pit depths, overhead clearance and pent house sizes are in accordance with A.S.E. and C.S.A. code requirements. Local codes may vary these requirements.
3. Layouts and dimensions shown are for center opening type entrances.
4. Consult your Montgomery Representative for specific recommendations where space is limited or other conditions may necessitate further study.



Montgomery hospital elevators, electric and oil-hydraulic, are dependable. This is proven in the hundreds of outstanding hospitals in which Montgomery equipment is providing "round the clock" service.

Montgomery heavy duty dumbwaiters also fill an important hospital need and are designed, manufactured and installed to meet the heavy service requirements of our largest hospitals.

hospital traction



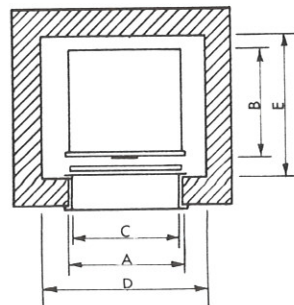
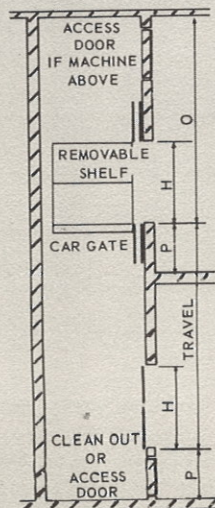
RECOMMENDED SIZES & CAPACITIES						OVERHEAD LOADS IN LBS. APPROXIMATE PER ELEVATOR HOSPITAL PASSENGER ELEVATORS			
	3500#		4000#		5000#		CAPACITY	SPEED	R-1
	#1	#2	#1	#2	#1	#2	3500	75	19300
A	5'-4"	5'-4"	5'-8"	5'-8"	6'-4"	6'-4"	100	100	19500
							200	200	23000
							350	350	27400
							500	500	33000
B	8'-4"	8'-9 1/2"	8'-8"	9'-1 1/2"	8'-10"	9'-3 1/2"	4000	75	20600
							100	100	20900
							200	200	23900
							350	350	27900
							500	500	34000
C	3'-8"	3'-8"	4'-0"	4'-0"	4'-6"	4'-6"	5000	200	25600
D	7'-5"	7'-5"	7'-9"	7'-9"	8'-5"	8'-5"	350	350	29500
							500	500	35200
E	8'-9"	9'-2"	9'-1"	9'-6"	9'-3"	9'-8"			17300
									19600
									26000

NOTES: 1. Reactions include allowances for impact but DO NOT include weight of concrete slab.
2. Pit depths, overhead clearance and pent house sizes are in accordance with A.S.E. and C.S.A. code requirements. Local codes may vary these requirements.

3. Layouts and dimensions shown are for two speed type entrances.

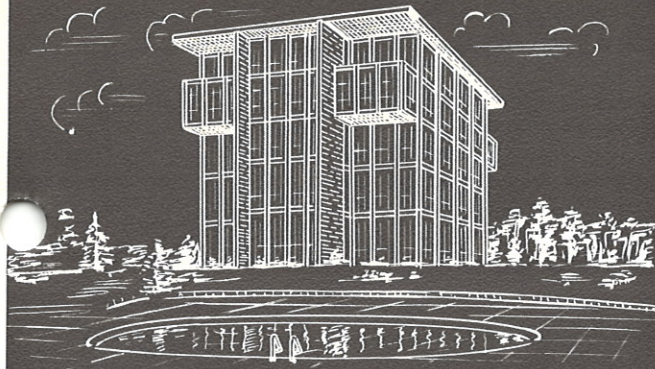
4. Consult your Montgomery Representative for specific recommendations where space is limited or other conditions may necessitate further study.

dumbwaiters electric

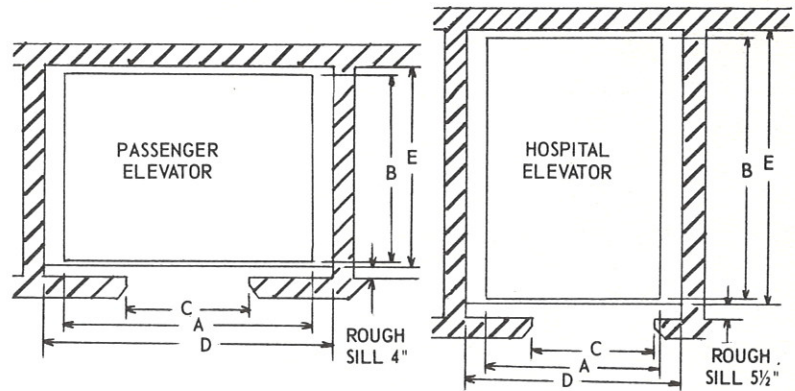
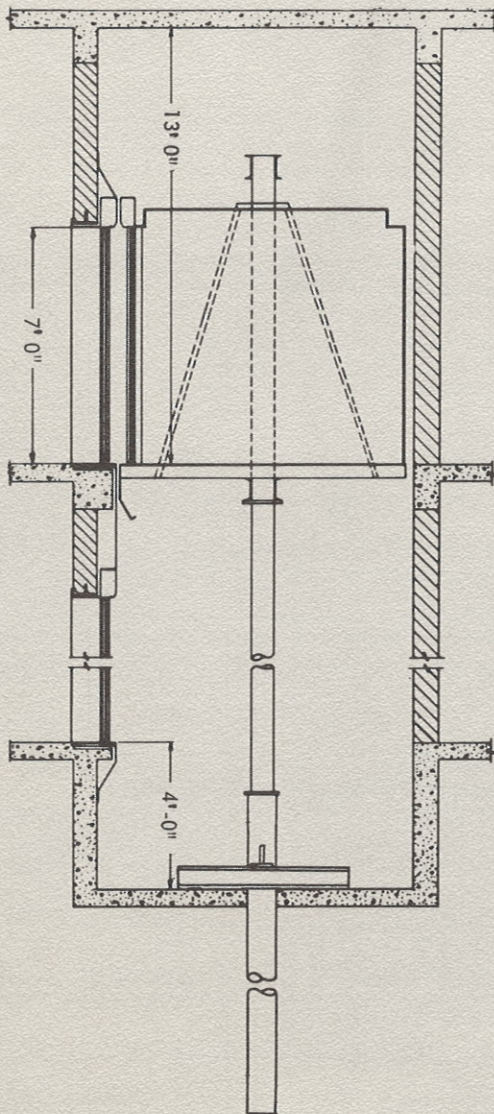


LOAD	100	200	300	400
A	20"	24"	30"	36"
B	24"	24"	30"	36"
*C	18"	22"	28"	34"
D	32"	36"	42"	48"
**E	28"	28"	34"	40"
H	28"	36"	36"	48"
O	9'-0"	9'-0"	9'-0"	10'-0"
***P	30"	30"	30"	30"
	UP TO 3 STOPS	4 TO 6 STOPS	OVER 6 STOPS	
SPEED	50 FPM	100 FPM	150 FPM	

***If Machine below "P" at lowest landing is 34" minimum.
**If rear door add 2". Add 1 1/4" for each car gate required.
*One door large enough for removal of car.



oil-hydraulic



FOR OFFICE BUILDINGS, HOTELS, MOTELS APARTMENTS, BANKS, STORES, LIBRARIES, ETC.

CAPACITY	1500	2000	2500	3000	3500
A	5'-9"	6'-4"	7'-0"	7'-0"	8'-0"
B	4'-0"	4'-5"	5'-0"	5'-6"	5'-6"
C	3'-0"	3'-0"	3'-6"	3'-6"	4'-0"
D	7'-1"	7'-8"	8'-4"	8'-4"	9'-4"
E	4'-5"	4'-10"	5'-5"	5'-11"	5'-11"

HOSPITALS AND INSTITUTIONS

1 - Single Entrance
2 - Double Entrance

CAPACITY	3500		4000		5000	
	1	2	1	2	1	2
A	5'-4"	5'-4"	5'-8"	5'-8"	6'-4"	6'-4"
B	8'-4"	8'-9 1/2"	8'-8"	9'-1 1/2"	8'-10"	9'-3 1/2"
C	3'-8"	3'-8"	4'-0"	4'-0"	4'-6"	4'-6"
D	6'-9"	6'-9"	7'-3"	7'-3"	8'-0"	8'-0"
E	8'-9"	9'-2"	9'-1"	9'-6"	9'-3"	9'-8"

PUMPING UNIT OVER-ALL DIMENSIONS

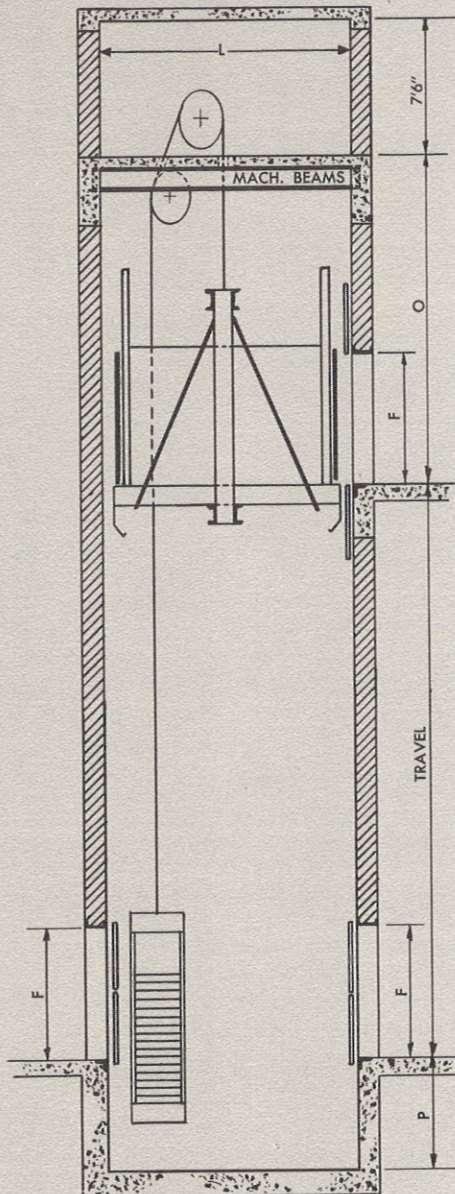
TYPE 410-H	44" Long	28" Wide	40" High
TYPE 430-H	52" Long	33" Wide	53" High
TYPE 450-H	65" Long	40" Wide	61" High

NOTES: 1- Allow about 3'-0" clearance on all sides and top of Pumping Unit for working space. Pumping Units can be located at any landing on any side of hoistway within a radius of approximately 20 feet.
2- Layout and dimensions shown for passenger elevators based on center opening type entrances and for hospital elevators based on two-speed type entrances.

montgomery

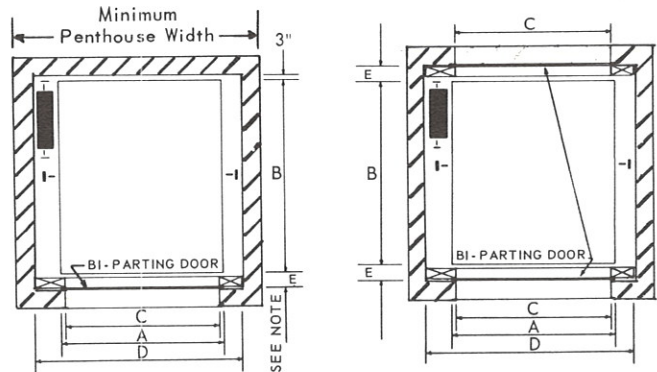
FREIGHT ELEVATORS

traction



DOOR HEIGHT 7'0" ON LIGHT DUTY,
8'0" OR AS REQUIRED FOR
HEAVY DUTY

The design and manufacture of freight elevators (electric or oil-hydraulic) is an important part of the company's operations. So, important, in fact, that Montgomery equipment was selected for the world's largest hydraulic elevator, the "People Wall" conveying 36 tons (450 people) a distance of 56 feet at a 45 degree angle in the IBM Pavilion at the New York World's Fair. Montgomery also was selected to design and manufacture three 100,000# oil-hydraulic freight elevators in the Chrysler Corporation's Stamping Plant, Midland, Michigan.



LIGHT AND MEDIUM DUTY FREIGHT ELEVATORS						
CAPACITY	2500#	3000#	4000#	6000#	8000#	10,000#
A	5' -4"	6' -4"	6' -4"	8' -4"	8' -4"	10' -4"
B	7' -0"	8' -0"	8' -0"	10' -0"	10' -0"	14' -0"
C	5' -0"	6' -0"	6' -0"	8' -0"	8' -0"	10' -0"
D	7' -4"	8' -4"	8' -4"	10' -4"	10' -10"	12' -10"
L	13' -0"	14' -0"	14' -0"	14' -0"	14' -0"	15' -0"

HEAVY DUTY POWER TRUCK FREIGHT ELEVATORS					
CAPACITY	10,000#	12,000#	16,000#	18,000#	20,000#
A	8' -4"	10' -4"	10' -4"	10' -4"	12' -4"
B	12' -0"	14' -0"	14' -0"	16' -0"	20' -4"
C	8' -0"	10' -0"	10' -0"	10' -0"	12' -0"
D	11' -4"	13' -6"	14' -0"	14' -2"	16' -6"
L	14' -0"	15' -0"	15' -0"	17' -0"	21' -0"

MINIMUM PIT-OVERHEAD DIMENSIONS				
CAR SPEED	50	75	100	200
O	16' -0"	16' -0"	16' -0"	16' -0"
P	5' -6"	5' -6"	5' -6"	6' -0"

NOTES:

1. Pit depths, overhead clearances and pent house sizes are in accordance with A.S.E. and C.S.A. code requirements. Local codes may vary these requirements.

2. For capacities over 20,000 lbs. or speeds over 200 fpm, consult your Montgomery Representative.

Dimensions E = 5" for regular type counter balanced hoistway doors.

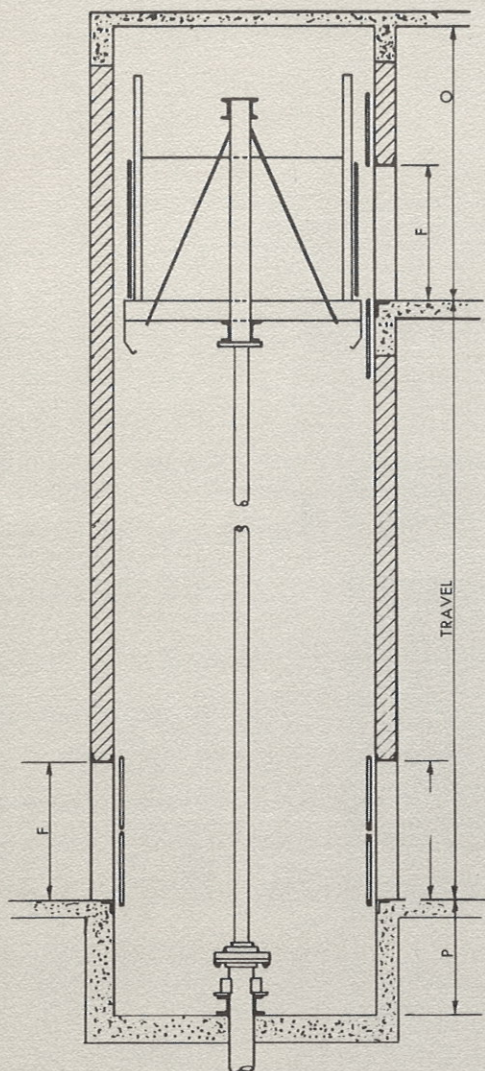
Dimensions E = 6¾" for pass type counter balanced hoistway doors.

Pass type hoistway doors are required when floor heights are less than 11'-6" for 7'-3" openings and less than 14'-6" for 9'-3" openings.

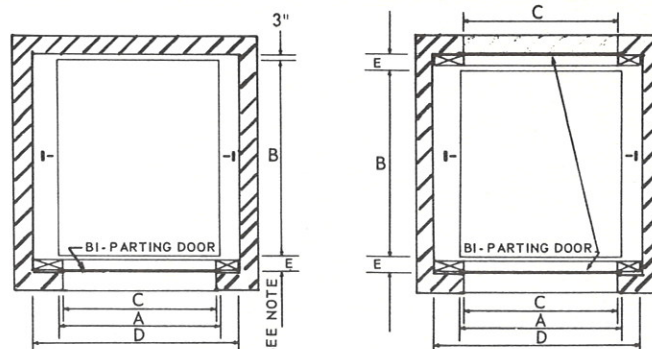
Dimension F = 7'-0" on light and medium duty; 8'-0" or as required for heavy duty doors. Doors higher than 8'-0" require additional overhead height.

For large heavy duty doors dimension E should be increased to 6¾".

oil-hydraulic



DOOR HEIGHT 7' 0" ON LIGHT DUTY,
8' 0" OR AS REQUIRED FOR
HEAVY DUTY



LIGHT AND MEDIUM DUTY HYDRAULIC FREIGHT ELEVATORS

CAPACITY	2000	3000	4000	5000	6000	7500	10,000
A	5' - 0"	5' - 6"	6' - 6"	8' - 6"	8' - 6"	8' - 6"	10' - 6"
B	6' - 0"	7' - 0"	8' - 0"	10' - 0"	12' - 0"	12' - 0"	14' - 0"
C	4' - 8"	5' - 2"	6' - 2"	8' - 2"	8' - 2"	8' - 2"	10' - 2"
D	6' - 4"	6' - 10"	7' - 10"	9' - 10"	9' - 10"	10' - 2"	12' - 2"

HEAVY DUTY ^{POWER TRUCK} HYDRAULIC FREIGHT ELEVATORS

CAPACITY	10,000	12,000	16,000	18,000	20,000
A	10' - 6"	10' - 6"	10' - 6"	10' - 6"	12' - 6"
B	14' - 0"	14' - 0"	16' - 0"	16' - 0"	20' - 0"
C	10' - 2"	10' - 2"	10' - 2"	10' - 2"	12' - 2"
D*	13' - 6"	13' - 6"	13' - 6"	13' - 6"	15' - 6"

*These dimensions include space for double column guide rail supports to be furnished by owner.

PIT-OVERHEAD DIMENSIONS

SPEED	25	50	75	100
P	4' - 6"	4' - 6"	5' - 0"	5' - 0"
O (7' - 0" Door)	13' - 2"	13' - 2"	13' - 2"	13' - 2"
O (8' - 0" Door)	14' - 2"	14' - 2"	14' - 2"	14' - 2"

PUMPING UNIT OVERALL DIMENSIONS

TYPE 410H	44" Long	28" Wide	40" High
TYPE 430H	52" Long	33" Wide	53" High
TYPE 450H	65" Long	40" Wide	61" High

Allow about 3'-0" clearance on all sides and top of Pumping Unit for working space. Pumping units can be located at any landing, on any side of hoistway within a radius of approximately 20 feet.

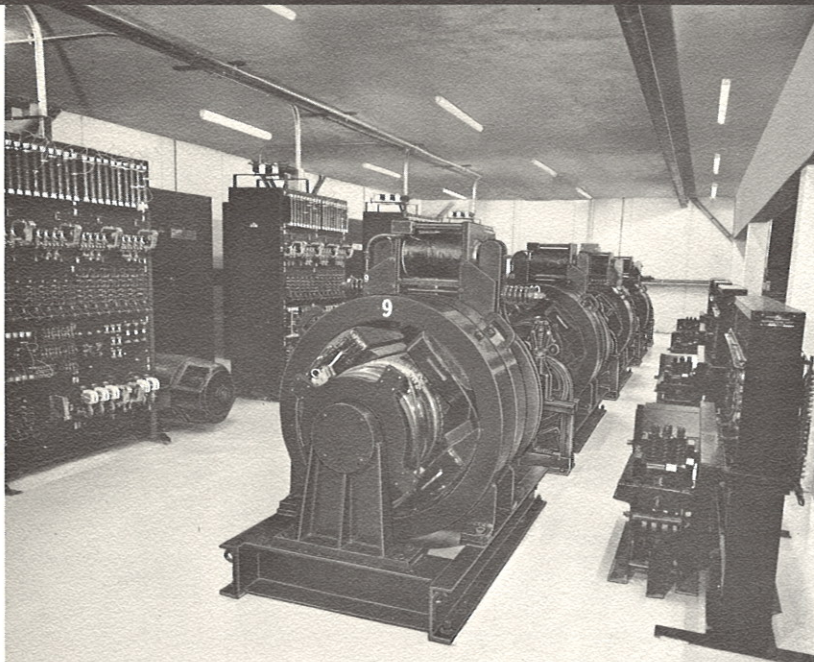
NOTES:

Dimension E = 5" for regular type counter balanced hoistway doors.
Dimension E = 6¾" for pass type counter balanced hoistway doors.
Pass type hoistway doors are required when floor heights are less than 11'-6" for 7'-3" openings and less than 14'-6" for 9'-3" openings.
For large heavy duty doors dimension E should be increased to 6¾".
Dimension F = 7'-0" on light and medium duty, 8'-0" or as required for heavy duty.

For capacities over 20,000 lbs. consult your Montgomery Representative.

montgomery

TYPICAL EQUIPMENT ROOM ARRANGEMENT and LOBBY ELEVATOR ENTRANCES



◀ Typical Montgomery Equipment Room showing arrangement of Control Panels, Motor Generators, Gearless Hoist Machines, Lode-Master Weighing Devices and Floor Selectors in that order from left to right.

TYPICAL MONTGOMERY ELEVATOR ENTRANCES.

TOWNE HOUSE PHOENIX, ARIZONA

Eight Montgomery gearless passenger elevators with Measured Demand group supervisory control.

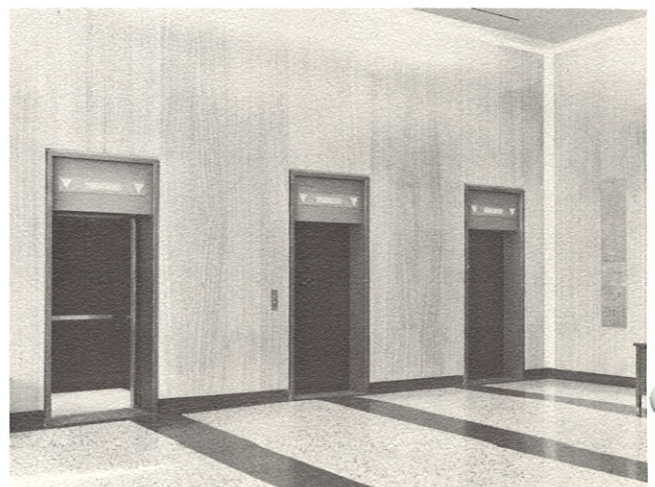
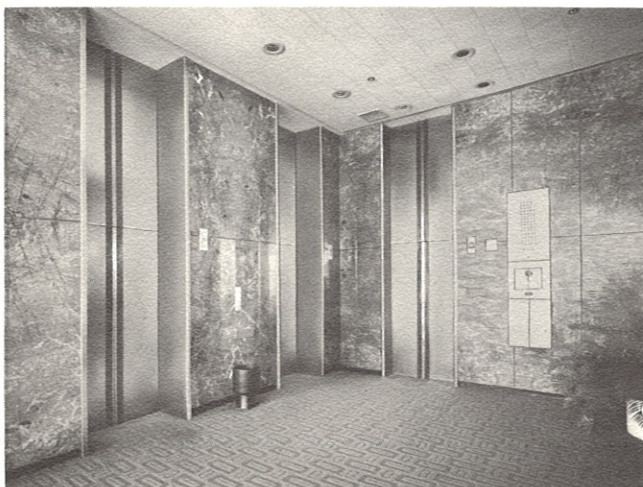


FEDERAL OFFICE BUILDING KANSAS CITY, MISSOURI

Seventeen Montgomery gearless passenger elevators with Measured Demand group supervisory control. Six Montgomery escalators.

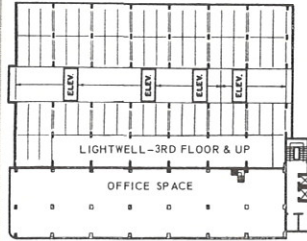
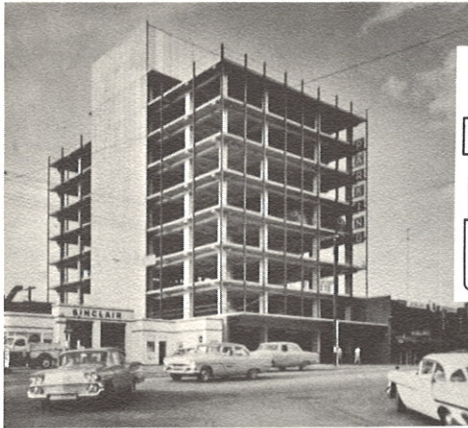
FEDERAL OFFICE BUILDING AND COURT HOUSE DENVER, COLORADO

Fourteen Montgomery passenger elevators (geared and gearless) with Measured Demand group supervisory control.



montgomery

PARKING GARAGES AND SPECIAL APPLICATIONS



Above is application drawing combining office (hotel or bank facilities) with "on the spot" parking facilities.

The Montgomery Elevator Company has been a supplier of elevator equipment for parking garages of the type shown here for many years – and NOW includes, in its line, a complete elevator system for multiple story parking garages.

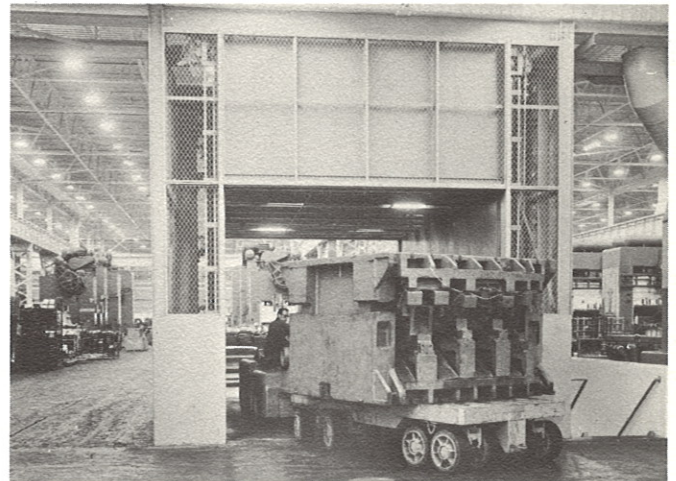
Montgomery Elevator Parking Garages are readily adaptable to the small or limited parking lot in congested downtown areas. This type of parking does not destroy the continuity of retail trade districts, nor does it distort the municipal tax base, nor depreciate nearby properties. Rather, the increased parking facility attracts more people to the area because of the ease, speed and convenience of parking and the proximity of major office buildings, banks, department stores and the many other business establishments.

The engineering skills and master craftsmanship of the Montgomery Elevator Company have produced special efficiently operating equipment for many unusual applications, uses and unique designs by leading Architects.

The several pictures on this page are but a few of these varied requirements. Each job was specially engineered and manufactured in our factories with the same detail and precision as our regular elevator equipment.

100,000 LB. CAPACITY MONTGOMERY HYDRAULIC FREIGHT ELEVATORS for the Chrysler Corporation Stamping Plant, Detroit, Michigan

These 3 heavy duty hydraulic freight elevators with 14' x 25' platforms were custom designed for handling the enormous (100,000 lb.) stamping dies used in the manufacture of Chrysler cars. Each elevator weighs 40,000 lb. and was pre-assembled and tested at the Montgomery factory, then dis-assembled for shipment to the job site.

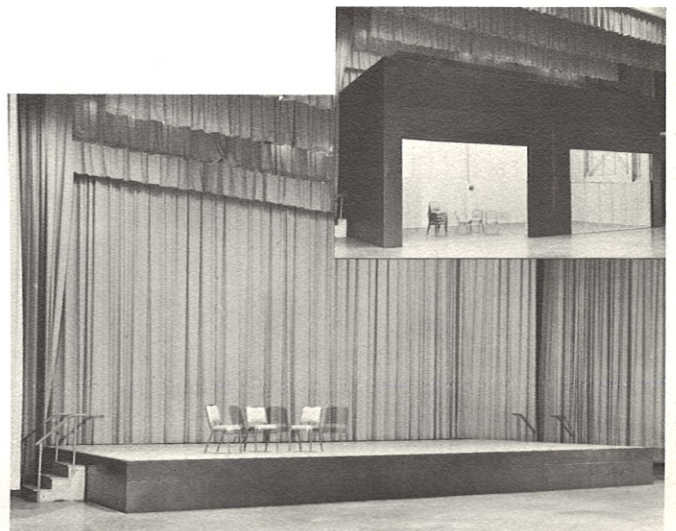


SPECTACULAR STAINLESS STEEL ARCH of the Jefferson National Expansion Memorial – St. Louis, Missouri

The Arch, pictured at the left, is the tallest monument in the world, and within each triangular leg contains a Montgomery Elevator. Due to the 78 degree angle of the legs, special engineering was required. Probably one of the least noticed experiences of the ride, but a very unique feature, is the fact that while rising (or descending) the 386 feet of travel the car will have moved 82 feet horizontally.

DOUBLE DECK MULTI-PISTON STAGE LIFT (equalized) in the Civic Convention Center, San Diego, California

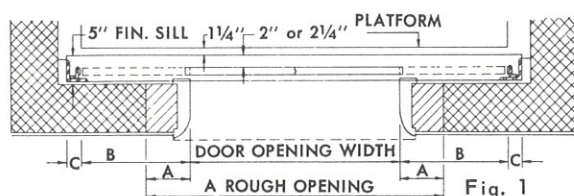
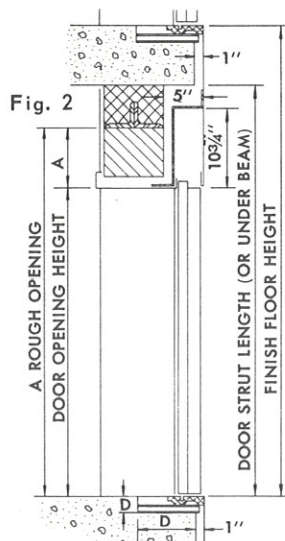
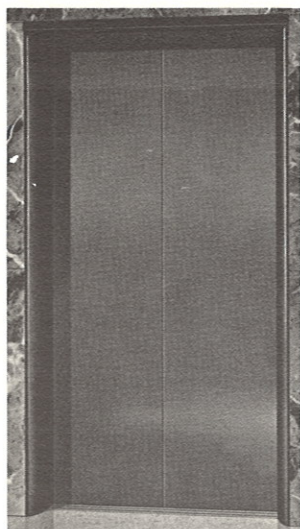
The top of the lift is the stage platform in normal position. The inset shows the complete 12 foot high structure fully elevated. Lower level has 2 access doors to the freight platform. Vertical travel is 20 ft.; lifting capacity 50,000 lbs.



montgomery

ELEVATOR ENTRANCE DETAILS

center opening doors



DIMENSION KEY - WHEREVER POSSIBLE, front hatch walls should not be erected until after door equipment has been installed. Contractor to fill around frames after they are set.

A - Otherwise rough openings for standard Unit-type frames to be: Width - door openings plus 8" on each side, Fig. 1. Height - door opening plus 8" above, Fig. 2.

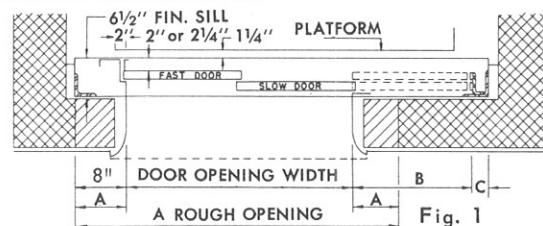
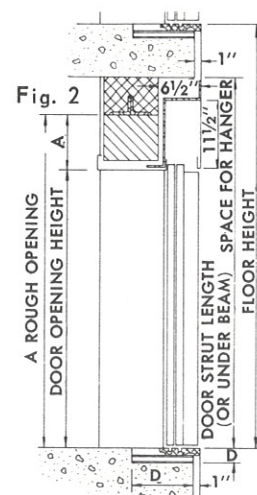
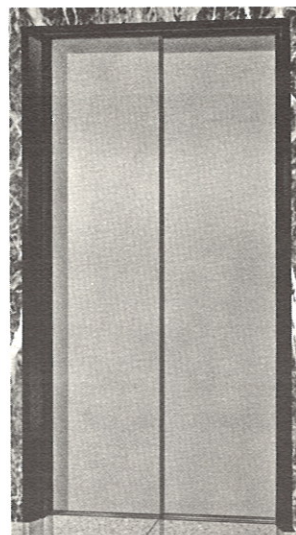
B - 1/2 landing door opening plus 3/4", Fig. 1.

C - 5" for power operated doors, 3" for manual operated doors, Fig. 1.

D - 2" x 8" sill pocket entire width of hatch, Fig. 2.

FEATURES - Provides opening approximately 1/2 width of car. - Designed primarily for power operation. - Symmetrical design permits attractive architectural treatment. - Simultaneous opening of each door panel, at equal speed, reduces opening time to 1/2 that required for other types of sliding doors. - Two speed center-opening doors available when additional opening width is required.

two-speed sliding doors



DIMENSION KEY - WHEREVER POSSIBLE, front hatch walls should not be erected until after door equipment has been installed. Contractor to fill around frames after they are set.

A - Otherwise rough openings for standard Unit-type frames to be: Width - door opening plus 8" on each side, Fig. 1. Height - door opening plus 8" above, Fig. 2.

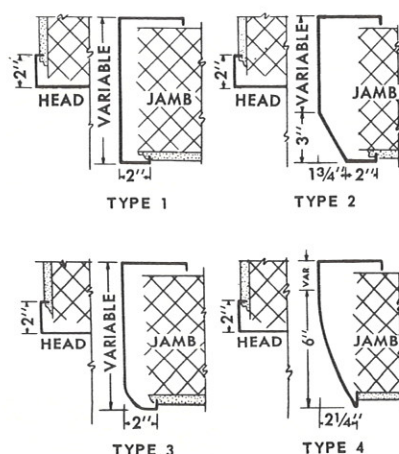
B - 1/2 landing door opening plus 1-1/8", Fig. 1.

C - 5" for power and manually operated door, Fig. 1.

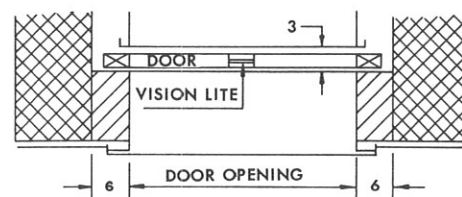
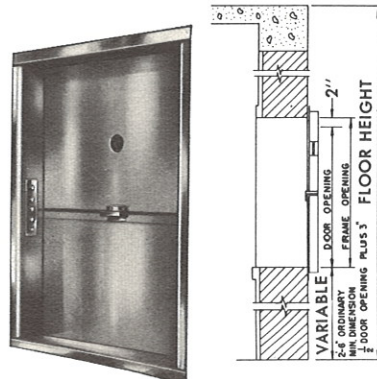
D - 2" x 9-1/2" sill pocket entire width of hatch, Fig. 2.

FEATURES - Door opening approximately 2/3 width of car. - For manual or power operation (Power operation recommended). - Three speed doors available when additional opening width is required. - For further information contact your local Montgomery office or Representative, or write Montgomery Elevator Company, Moline, Illinois.

passenger elevator door frame profiles



bi-parting dumbwaiter doors (counterbalanced type)



ALL DIMENSIONS ARE SHOWN ON DIAGRAM

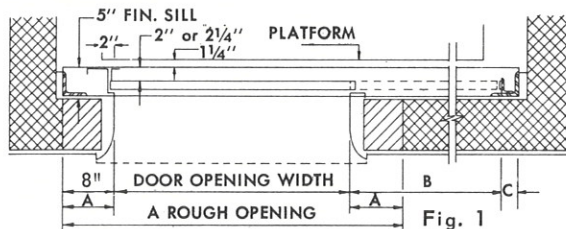
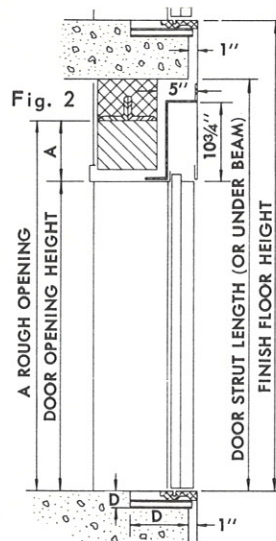
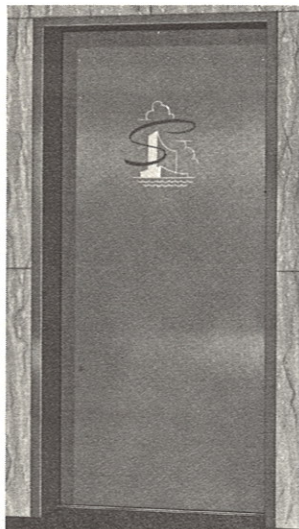
DIMENSION KEY - One opening must be larger than the car so the assembled car can be placed into the hatch. - Front walls to be left out until door frames are installed.

ELEVATOR ENTRANCE REQUIREMENTS

Rough openings must be square and plumb. Openings must be plumb one above the other. If hatch walls and rough openings are not plumb and square and in accordance with dimensions indicated, the necessary change work to building construction shall be done at owner's expense.



single sliding doors



DIMENSION KEY - WHEREVER POSSIBLE, front hatch walls should not be erected until after door equipment has been installed. Contractor to fill around frames after they are set.

A - Otherwise rough openings for standard Unit-type frames to be: Width - door opening plus 8" on each side, Fig. 1. Height - door opening plus 8" above, Fig. 2.

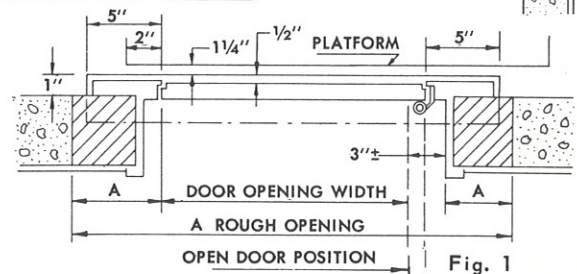
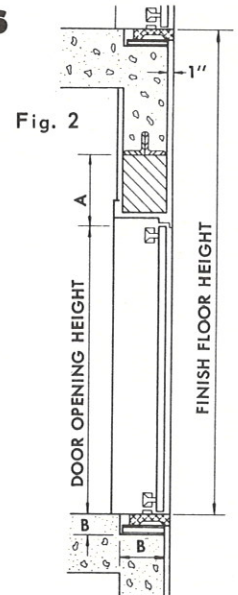
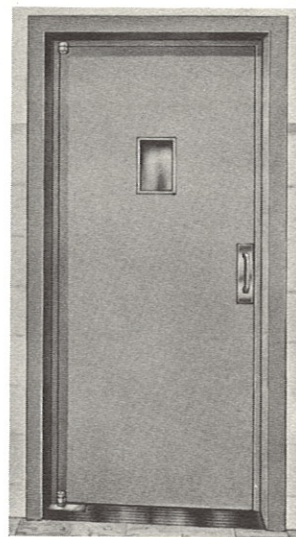
B - Landing door opening plus 1-1/2", Fig. 1.

C - 5" for power operated doors, 3" for manual operated doors, Fig. 1.

D - 2" x 8" sill pocket entire width of hatch, Fig. 2.

FEATURES - Maximum opening width approximately 1/2 width of car. Opening width should not exceed 3'. For special applications contact your Montgomery office or write Montgomery Elevator Company, Moline, Illinois. - Adaptable for manual or power operation. - Provides a sliding door at moderate cost.

single swing doors



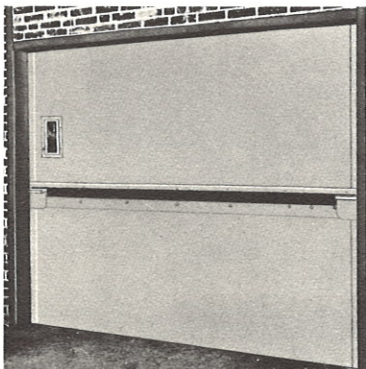
DIMENSION KEY - WHEREVER POSSIBLE, front hatch walls should not be erected until after door equipment has been installed. Contractor to fill around frames after they are set.

A - Otherwise rough openings for standard Unit-type frames to be: Width - door opening plus 8" on each side, Fig. 1. Height - door opening plus 8" above, Fig. 2.

B - 2" x 8" sill pocket entire width of hatch, Fig. 2.

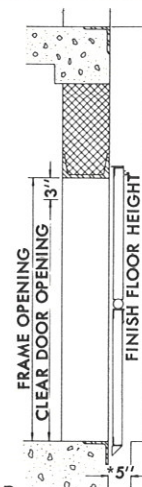
FEATURES - Lowest initial and maintenance cost. - Suitable for automatic elevators, small apartments, hospitals and office buildings. Not recommended for severe service requirements. - Provides maximum opening width for small elevators. Recommended maximum width of swing door opening not to exceed 3'-6". Not suitable for power operation. Usually equipped with standard closer and check.

freight doors (counterbalanced type)

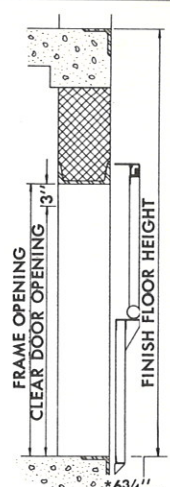


MINIMUM FLOOR HEIGHT according to opening height of door		
opening height of door*	minimum floor height	
	with reg. door	with pass door
6 ft.	9 ft. 6 in.	6 ft. 10 in.
6 ft. 6 in.	10 ft. 3 in.	7 ft. 4 in.
7 ft.	11 ft.	7 ft. 10 in.
7 ft. 6 in.	11 ft. 9 in.	8 ft. 4 in.
8 ft.	12 ft. 6 in.	8 ft. 10 in.
8 ft. 6 in.	13 ft. 3 in.	9 ft. 4 in.
9 ft.	14 ft.	9 ft. 10 in.
10 ft.	15 ft. 6 in.	10 ft. 10 in.
11 ft.	17 ft.	11 ft. 10 in.
12 ft.	18 ft. 6 in.	12 ft. 10 in.

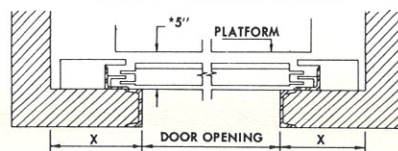
*opening height of frame = clear opening height + 3 in.



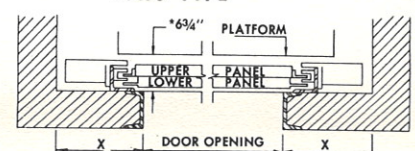
*Dimension varies with Mfr's. requirements Figures 1-2-3-4.



REGULAR FREIGHT DOOR



PASS TYPE



DIMENSION KEY

X - 12" minimum return required for motorized door of either type shown.

X - 9" minimum return required for manual door of either type shown. Minimum pit depth 1/2 door height plus 6".

Door frames must extend to floor beam above unless walls are other than poured concrete or brick.

Specify "Montgomery or equal"

montgomery

POWER WALKS and POWER RAMPS

provide fast safe, high-volume horizontal, or combined horizontal and inclined (to 15 degrees) transportation of people within buildings, or outdoors. Exposition centers, stadiums, auditoriums, transportation terminals, parking lots to buildings and in or out of buildings are a few walk-ramp applications to transport people where walking is disadvantageous.



Stapleton International Airport, Denver, Colorado, served by 10 Montgomery Escalators - 4 Montgomery Power Ramps - 6 Montgomery Elevators - and 2 Montgomery Dumbwaiters.

STANDARD EQUIPMENT INCLUDES

complete truss fabricated of seamless steel tubes; precision worm gear drive; roller and ball bearings throughout; flange mounted motor; portable controller; complete electrical and mechanical safety system; reversing stations; interchangeable precision assembled treadway pallets with interlocking treads on adjacent pallets; matched endless pallet chains; accurately aligned track system; complete balustrades including inner panels; decks with endless moving neoprene rubber hand rail

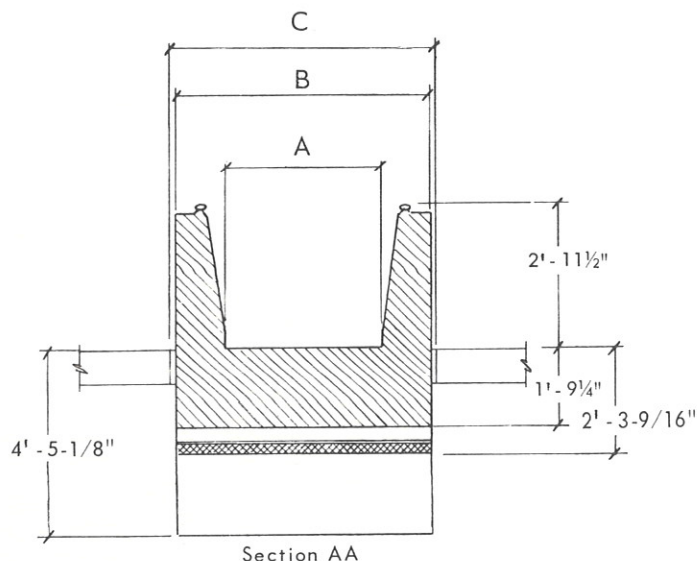
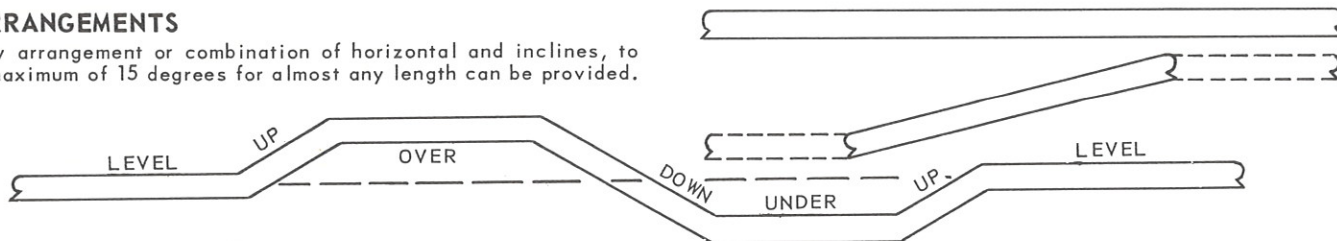
(color available); and floor access covers to upper and lower machinery wells both within truss area. Decorator panel exterior covering of balustrade, truss and soffit is optional.

CONSULT MONTGOMERY

Contact your local Montgomery representative or the Montgomery Elevator Company, Moline, Illinois, for application data, and layout or specification service. We will gladly provide all data needed to plan a complete installation.

ARRANGEMENTS

Any arrangement or combination of horizontal and inclines, to a maximum of 15 degrees for almost any length can be provided.



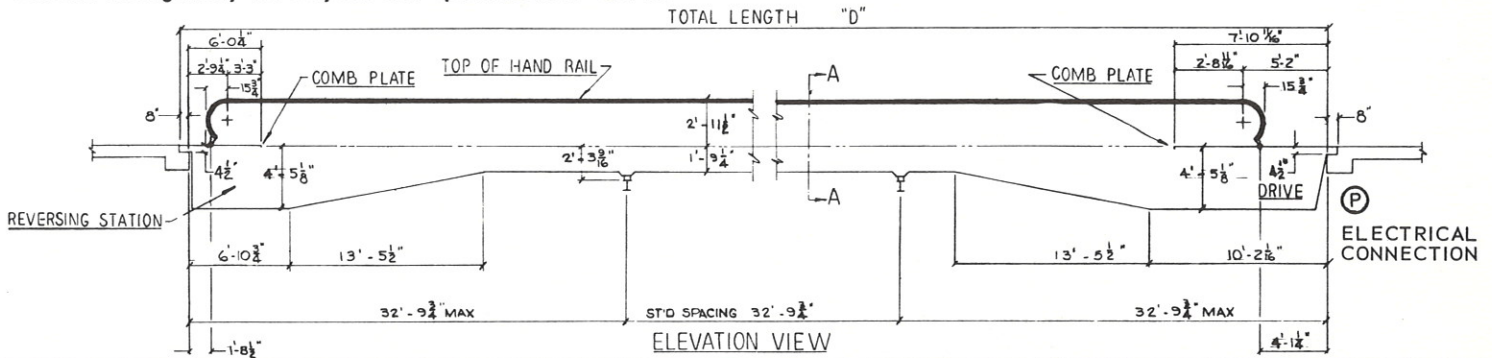
WIDTHS:

Three standard tread widths are 24", 32" and 40". The 24" width accommodates one adult; the 32" width provides ample room for adult and child or adult and shopping cart; the 40" width accommodates two adjacent adults or adult with luggage.

MODEL NO.	TREAD WIDTH	OVERALL WIDTH DECORATOR PANEL OR LATH & PLASTER EXTERIOR COVERING	WELL WIDTH ROUGH OPENING
	A	B	C
3W	24"	4'-4"	OVERALL WIDTH B + 2"
4W	32"	5'-0"	
5W	40"	5'-8"	

POWER WALKS

Consult Montgomery for Layout and Specification Service

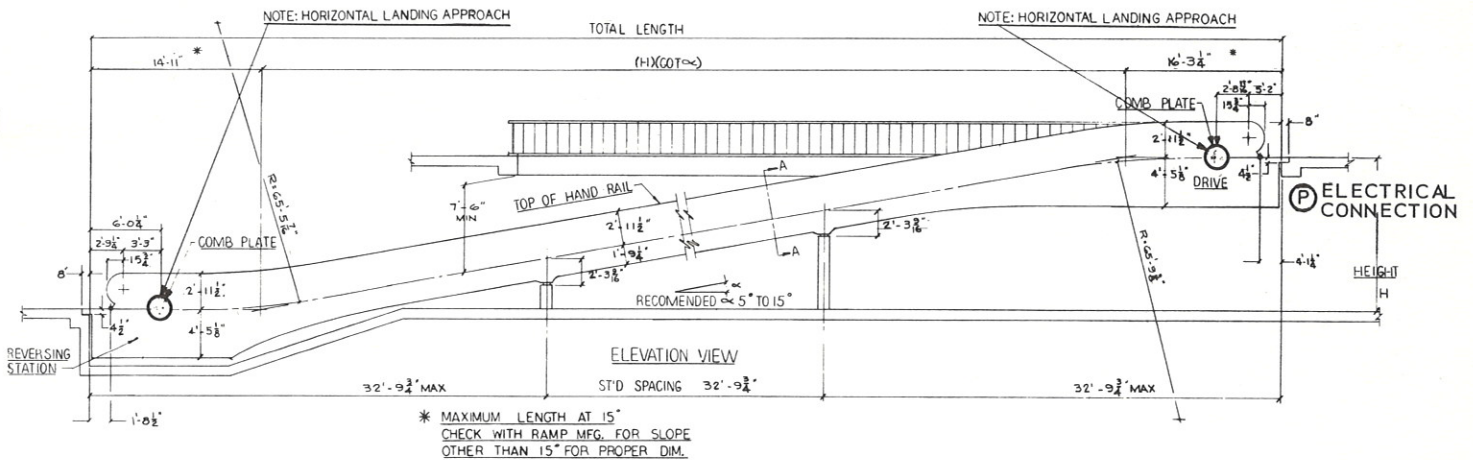


POWER RAMPS

WITH HORIZONTAL LANDINGS

Recommended for Inclines 5° to 15°

Consult Montgomery for Layout and Specification Service

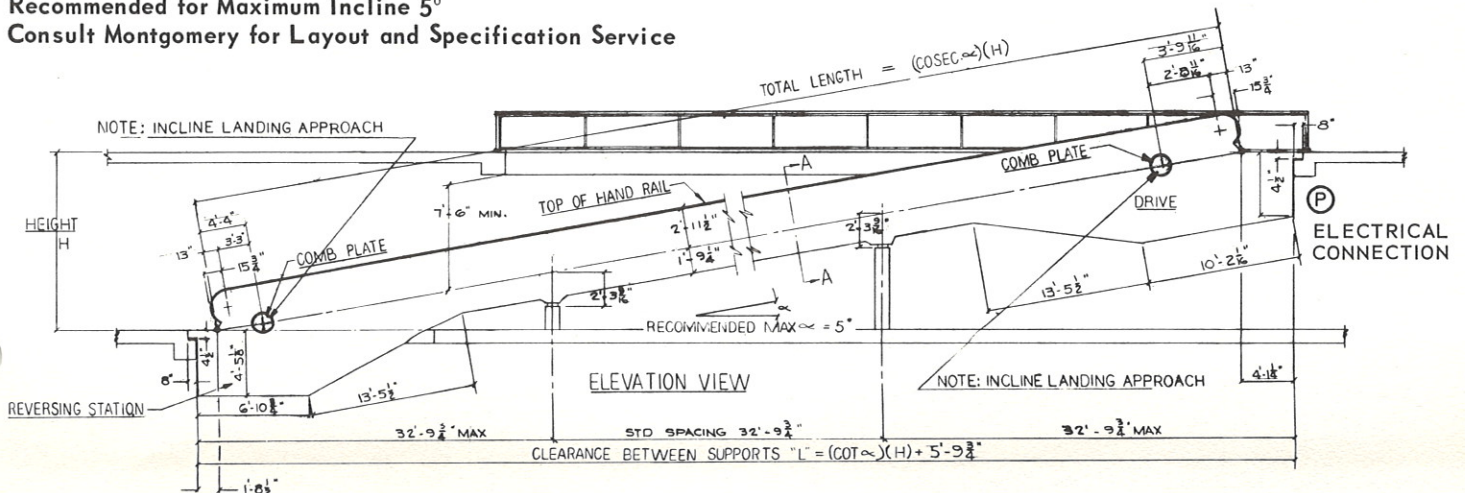


POWER RAMPS

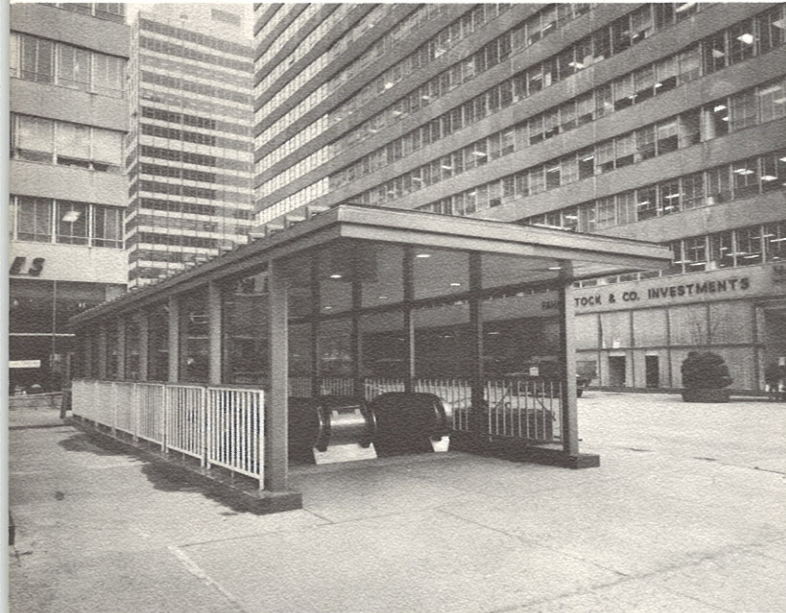
WITHOUT HORIZONTAL LANDINGS

Recommended for Maximum Incline 5°

Consult Montgomery for Layout and Specification Service



montgomery ESCALATORS



Subway Station 15th and Market Streets, Philadelphia, Pennsylvania, served by two 48" Montgomery Escalators.

ESCALATORS move more people at lower per passenger cost than any other form of vertical transportation. Escalators may be the primary carrier as in retail buildings, transportation terminals and in highly populated office buildings. Or, escalators can effectively augment elevator systems in high rise office buildings. Escalators operating from Main floors to: lower parking levels, mezzanine or second floor shops and restaurants, or top floor to penthouse restaurants, etc., provide the most efficient transportation in these heavy traffic locations allowing elevator systems to serve other areas of the building more efficiently.

SPECIFY montgomery escalators to obtain these benefits:

PRESTIGE – a **montgomery** escalated building is a "prestige" building.

TYPICAL MONTGOMERY ESCALATOR USERS

RETAIL

Federated Department Stores
F. W. Woolworth Company
J. C. Penney Company, Inc.
J. J. Newberry Company
May Company
Marshall Field & Company
Montgomery Ward & Company
R. H. Macy Company
Sears Roebuck & Company
T. Eaton Company, Ltd.
Z C M I
Belk Department Stores
Woodward & Lothrop, Inc.
Woodward Dept. Stores, Canada
Mercantile Stores Co., Inc.
Associated Dry Goods Company
Simpsons-Sears Ltd.

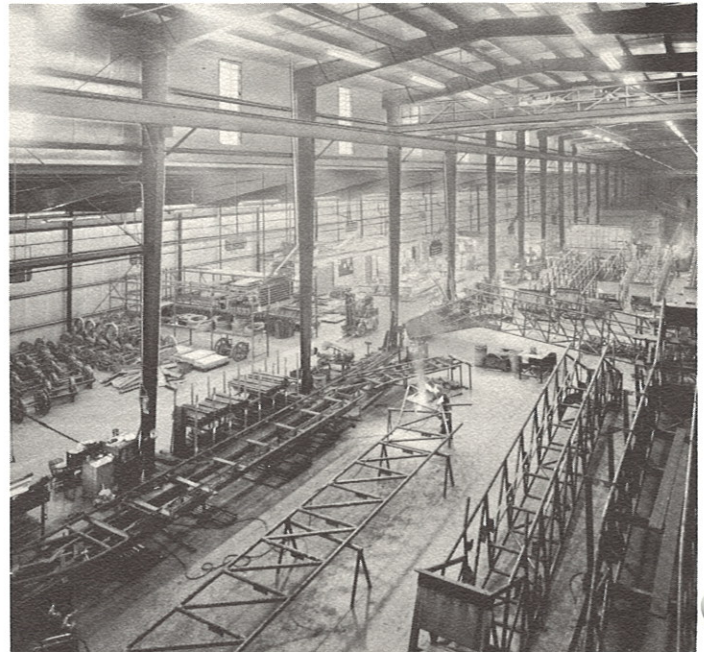
OFFICE – BANK – HOTEL

General Motors Corporation
Hilton Hotels Company
San Diego Imperial Corp.
Detroit First Federal Savings & Loan Assn.
Phoenix Municipal Office Bldg.
U.S. House of Representatives Office Bldg.
LTV Tower – NBC Office Bldg., Dallas
Beaumont First Security National Bank
Houston First Federal Savings & Loan Assn.
Wichita Plaza Office Bldg.
Federal Office Building, Kansas City
Exchange Park Building, Dallas
Muehlebach Hotel, Kansas City
Caterpillar Tractor Co.
Ford Motor Company
Connecticut General Insurance Co.
Sheraton-Brock Hotel, Niagara Falls

TRANSPORTATION & PUBLIC

Dulles International Airport
Ottawa, Canada Union Station
San Francisco International Airport
Mass Transit System, Montreal
Boston Subway, Mass. Transit Authority
Baltimore Civic Auditorium
Mobile Municipal Auditorium
Philadelphia Trade & Convention Center
Erie County Library, Buffalo, N.Y.
Stapleton Airport, Denver
Dallas County Government Center
Chicago Transit Authority
Minneapolis Auditorium
Olympia Stadium, Detroit
Detroit Metropolitan Wayne County Airport
Toronto Transit Commission
Expo 67 – 5 Pavilions, 3 Transit Stations

Interior view of new Montgomery Escalator Factory showing escalator trusses in various stages of manufacture.



EFFICIENCY – two steps on the same level at entry and exit speeds and safeguards traffic "a montgomery exclusive."

SAFETY – more and better safety devices than any other escalator.

APPEARANCE – durable modern materials retain attractive appearance.

LOW COST MAINTENANCE – attained by high quality equipment.

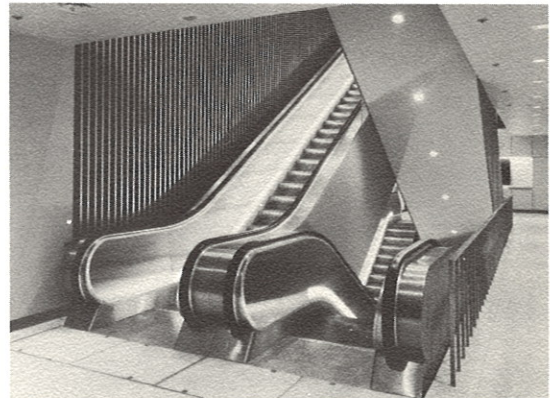
DEPENDABILITY – quickly and easily serviced – less "down" time.



Alexis Nihon Plaza, Montreal, Quebec, Canada. Served by ten 48" Montgomery Crystal Balustrade Escalators, two 48" Standard Balustrade Escalators, four 32" Montgomery Standard Balustrade Escalators and 13 Montgomery Elevators.

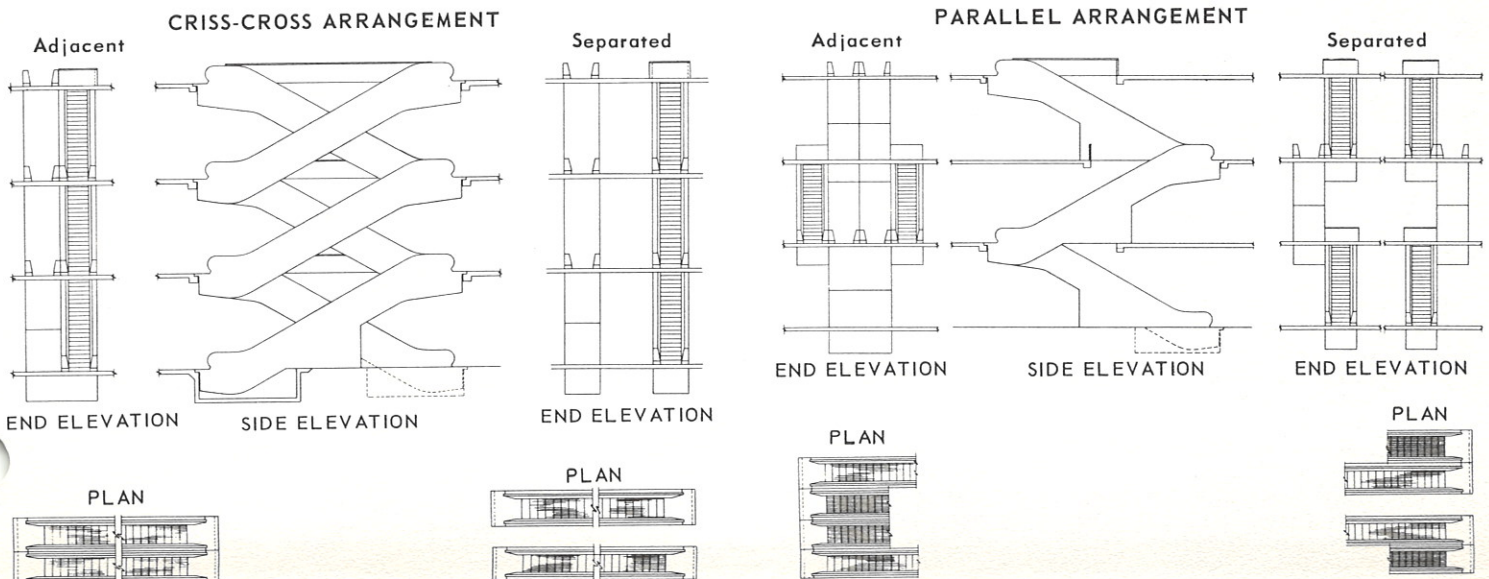


Frederick & Nelson Department Store (Division of Marshall Field & Co.), Aurora Village Shopping Center, Seattle, Washington, served by four 48" Montgomery Escalators and two Montgomery Elevators.



Four 48" Montgomery Escalators and four Montgomery Elevators in Cadillac Division, G.M.C., Administration and Engineering Building, Detroit, Michigan.

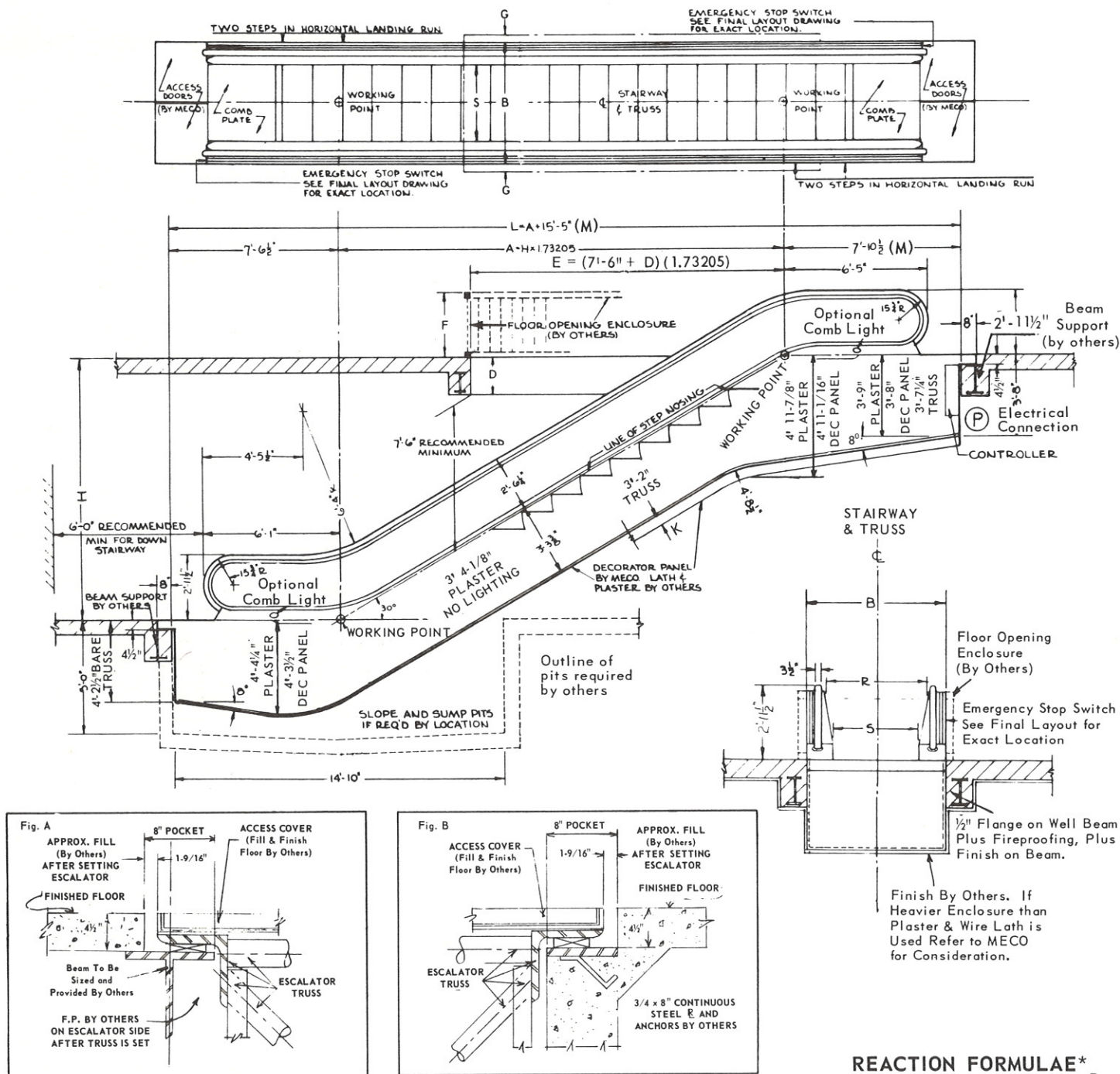
MONTGOMERY MULTIPLE ESCALATOR ARRANGEMENT



Specify "Montgomery or equal"

montgomery

ESCALATOR DETAILS



LAYOUT NOTE:

The following information, when available, must be shown on all layouts for use of the balustrade manufacturer.

D - Dimension from finished floor to the finished plaster ceiling or bottom of smoke guard.

E-F-G - Detail and kind of wellway railings or fire shutter enclosures which are not furnished by the balustrade manufacturer.

K - Dimension from bottom of truss to finished soffit. Lower soffit for lighting and sprinkler as required.

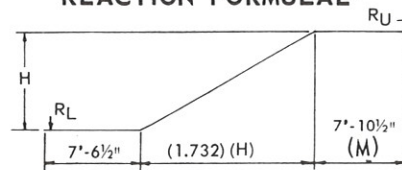
M - Upper working distance is 10' - 3" for California installations only. Total wellway length ($L = A + 17' - 9\frac{1}{2}"$).

WIDTH CHART

Model No.	Capacity Per Hour at 90fpm	Capacity Per Hour at 120fpm	Rated Width R	Step Width S	Over-All Width B	Well Width Rough Opening
3E	5,000	6,500	32"	24"	4' - 4"	Over-All Width B + 2"
4E	7,000	9,000	40"	32"	5' - 0"	
5E	8,000	10,000	48"	40"	5' - 8"	

- Other speeds available.
- Includes exterior decorator panels (fire-rated) rigidly fastened and trimmed with color anodized aluminum shapes by Montgomery or lath and plaster by others.

REACTION FORMULAE*



32" ESCALATOR	40" ESCALATOR	48" ESCALATOR
$RL = (550)H + 10,000$	$RL = (660)H + 10,570$	$RL = (660)H + 11,650$
$RU = (550)H + 11,100$	$RU = (660)H + 11,670$	$RU = (660)H + 12,750$

*Includes weight of metal lath and plaster covering on sides and soffit.

montgomery

ESCALATORS



STANDARD EQUIPMENT INCLUDES

complete truss fabricated of seamless steel tubes; precision worm gear drive; roller and ball bearings throughout; flange mounted motor; portable controller; complete electrical and mechanical safety system; reversing stations; interchangeable precision assembled steps with cleated risers; matched endless step chains; ac-

curately aligned track system; complete balustrade including skirts; inner panels, decks and endless moving neoprene rubber handrail; floor access covers to upper and lower machinery well both within truss area. Decorator panel exterior covering of balustrade, truss and soffit is optional. Crystal balustrades are optional.

OWNER TO PROVIDE AND INSTALL THE FOLLOWING

- 1 - All escalator supports including bearing plates if concrete beams are used.
- 2 - 3 phase, 60 cycle power supply and 110 volt light supply to controller.

- 3 - Combination lamp receptacle and convenience outlet in machine room and lower reversing station.
- 4 - Paper backed wire lath or its equivalent to be used for plaster enclosure of escalator.
- 5 - All items marked "by others."

REQUIREMENTS

- 1 - Floor around escalator is not to be laid until escalator is installed.
- 2 - Flooring within 8" of escalator floor access doors (top and bottom) is not to be laid until floor access doors are in place.
- 3 - Electric conduits, sprinkler pipes or soffit lights must be installed entirely outside of truss at all

points except where codes require sprinkler protection of escalator machinery. Consult Montgomery for location within truss.

- 4 - No walls or other parts of building structure are to be carried on truss.

- 5 - Fill and finish flooring for access doors.

VALID ONLY FOR 3 PHASE, 60 CYCLE

HORSE POWER	208 VOLTS		220 VOLTS		440 VOLTS		480 VOLTS		550 VOLTS	
	STARTING CURRENT	RUNNING CURRENT	STARTING CURRENT	RUNNING CURRENT	STARTING CURRENT	RUNNING CURRENT	STARTING CURRENT	RUNNING CURRENT	STARTING CURRENT	RUNNING CURRENT
10	118A	36.2A	112A	34.2A	56A	17.1A	51A	15.6A	45A	13.7A
15	174A	53.5A	165A	50.6A	83A	25.3A	75A	23.2A	66A	20.2A

SUGGESTED WIRING ARRANGEMENT

10 H.P.															
32" #3E ESCALATOR - 90 FPM 9'-10" TO 18'-1" FLOOR HEIGHT															
40" OR 48" #5E ESCALATOR - 90 FPM 9'-10" TO 16'-5" FLOOR HEIGHT															
NO. OF ESCALATORS	208 - 220V 3 PHASE 60 CYCLE					440 - 480V 3 PHASE 60 CYCLE					550 - 600V 3 PHASE 60 CYCLE				
	SWITCH	FUSE SIZE	FUSE-TRON SIZE	BRANCH CIRCUIT & FEEDER	WIRE TYPE RH	CONDUIT	SWITCH	FUSE SIZE	FUSE-TRON SIZE	BRANCH CIRCUIT & FEEDER	WIRE TYPE RH	CONDUIT	SWITCH	FUSE SIZE	FUSE-TRON SIZE
1	1A M	90	45	B F1	#6	1"	1A M	45	25	B F1	#8	3/4"	1A M	40	20
2	1A-2A M	90	45	B F2	#6	1 1/4"	1A-2A M	45	25	B F2	#8	3/4"	1A-2A M	40	20
3	1A-2A-3A M	90	45	B F3	#6	2"	1A-2A-3A M	45	25	B F3	#8	3/4"	1A-2A-3A M	40	20
4	1A-2A 3A-4A M	90	45	B F4	#6	2"	1A-2A 3A-4A M	45	25	B F4	#8	3/4"	1A-2A 3A-4A M	40	20

15 H.P.															
32" #3E ESCALATOR - 90 FPM 18'-1" TO 21'-4" FLOOR HEIGHT															
40" (#4E) OR 48" (#5E) ESCALATOR - 90 FPM 16'-5" TO 21'-4" FLOOR HEIGHT															
NO. OF ESCALATORS	208 - 220V 3 PHASE 60 CYCLE					440 - 480V 3 PHASE 60 CYCLE					550 - 600V 3 PHASE 60 CYCLE				
	SWITCH	FUSE SIZE	FUSE-TRON SIZE	BRANCH CIRCUIT & FEEDER	WIRE TYPE RH	CONDUIT	SWITCH	FUSE SIZE	FUSE-TRON SIZE	BRANCH CIRCUIT & FEEDER	WIRE TYPE RH	CONDUIT	SWITCH	FUSE SIZE	FUSE-TRON SIZE
1	1A M	125	60	B F1	#4	1 1/4"	1A M	60	30	B F1	#6	1"	1A M	50	25
2	1A-2A M	125	60	B F2	#4	1 1/4"	1A-2A M	60	30	B F2	#6	1"	1A-2A M	50	25
3	1A-2A-3A M	125	60	B F3	#4	2"	1A-2A-3A M	60	30	B F3	#6	1"	1A-2A-3A M	50	25
4	1A-2A 3A-4A M	125	60	B F4	#4	2 1/2"	1A-2A 3A-4A M	60	30	B F4	#6	1"	1A-2A 3A-4A M	50	25

NOTE: Speeds other than 90 FPM - Consult Montgomery

CONTACT ANY OF OUR SALES AND SERVICE OFFICES TO OBTAIN EXPERT PLANNING ASSISTANCE INCLUDING COMPLETE LAYOUT AND SPECIFICATIONS

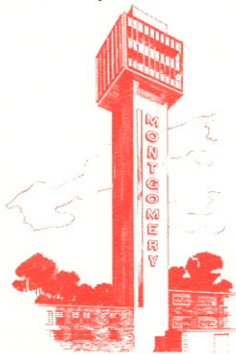
Specify "Montgomery or equal"

FOR 75 YEARS

the Montgomery Elevator Company has maintained the highest standard of quality in the design and manufacture of elevator equipment.

RESEARCH & DEVELOPMENT

A continuing program of Research and Development is a major effort of our Engineering Department. A recent addition to this continuing effort is Montgomery's high rise research tower shown here. Specialized equipment in the tower provides facilities for engineered testing of existing and proposed elevator equipment. Our search for improved design, greater safety and more economical operation is an unending project.



INDUSTRY "FIRSTS"

The introduction, by Montgomery, of the V-Grove Traction Machine in 1913 was one of the most important developments in the elevator industry. That design, a complete departure from the cable-winding drum-type machine, was the basis of modern high-rise elevators.

Montgomery introduced many other 'firsts' to the elevator industry that are now industry 'standards.' A few of these were the close-coupled geared hoist machine; simplified pushbutton controls; permanent magnet floor leveling device and the Montgomery oil-cushioned safety. The Montgomery Measured Demand group supervisory control system, developed years ago, was the forerunner of the current Montgomery ESP Measured Demand system.

SALES & SERVICE

The Montgomery Sales and Service organization, second largest in the industry, has more than 120 offices (over 70 factory branches and 45 authorized Representatives) throughout North America (U. S., Canada, Mexico, Caribbean) and overseas. Montgomery is the largest independent exclusive elevator and escalator manufacturer in the Western Hemisphere.

The Company has eight manufacturing locations, each fully staffed for the manufacture, assembly and servicing of elevator equipment. Their diverse locations: Moline, Illinois (3); Miami, Florida; San Diego and San Jose, California, and Vancouver and Toronto,

Canada, enable Montgomery to serve North America quickly, efficiently and economically.

PRODUCTS

The Montgomery product line includes: Electric Elevators, geared and gearless, passenger and freight; Escalators; Power Walks; Power Ramps; Dumbwaiters; Automatic Parking Garage Elevators; Cross-Over Bridges; Intricate Electrical Control Units; Sidewalk, Stage and other special Lifts.



PREVENTIVE MAINTENANCE

Montgomery's Preventive Maintenance service men are factory trained specialists. They check and inspect all safety devices, electrical controls and signals; they examine all parts and make necessary mechanical adjustments — on a regularly scheduled basis and are closely supervised. They keep a complete record of every elevator and escalator in their care. Should a breakdown occur, you are assured of prompt and complete repair with the right skills, the right tools and the right parts.

When you specify Montgomery PM service, you are assured of the finest service at the lowest cost.

CANADIAN OPERATIONS

The Roelofson division of Montgomery has successfully served Eastern Canada in the manufacture and installation of elevators and related equipment for over 50 years. Since merging with Montgomery Elevator Co., Limited, Roelofson division has built a new factory with greatly expanded manufacturing capabilities to produce the full Montgomery line including escalators and ESP Measured Demand Group Supervisory Control elevator systems.

The Peterson & Cowan division, established in 1919 in Vancouver, represented the Montgomery Elevator Company for many years before becoming a subsidiary in 1955. Peterson & Cowan had firmly established its position in the elevator industry in Western Canada prior to joining Montgomery. This division has installed many passenger and freight elevators of all types. There are many Montgomery escalator installations in the area. Montgomery escalators are fast becoming Western Canada's most accepted mode of people transportation.

For the address of the Montgomery Branch or Representative in your area, check the Yellow Pages of your telephone Directory or write to:

montgomery elevator company

OFFICES IN MAJOR CITIES THROUGHOUT NORTH AMERICA

Western
Canadian Headquarters
Montgomery Elevator Co., Ltd.
PETERSON-COWAN division
150 Cordova St. E.
Vancouver, B.C.

United States and
Corporate Headquarters
30 - 20th Street
Moline, Illinois

Eastern
Canadian Headquarters
Montgomery Elevator Co., Ltd.
ROELOFSON division
15 Shorncliffe Road
Toronto, Canada