

Planning Guide

Cable-Waiter[™] Paca-Waiter[®]

Dumbwaiters

Your local provider:



(855) DME-LIFT (855-363-5438) info@dmelift.com www.dmelift.com

Serving Illinois - Wisconsin - Indiana



We are a proud member of the Accessibility Equipment Manufacturers Association. This symbol assures you of our commitment to high quality and accessibility to everyone.

Waupaca Elevator's Mission Statement



Our company's mission is to supply and service products that meet or exceed our customers' expectations of high quality, value, delivery and longevity. Our success is a direct reflection of our employees' involvement and commitment to excellence. We strive to continuously improve our products to ensure meeting the future requirements of our customers and facilitate competitive growth.



CSI 3-Part Specifications

Customize and download CSI 3-Part Specifications by logging on to:

<u>www.arcat.com</u> - specify Waupaca Elevator as the requested manufacturer <u>www.waupacaelevator.com</u> - go to "Architect Section" click on linking icon

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Introduction

This Planning Guide is to be used as a reference to determine parameters of installation and steps taken to achieve a proper dumbwaiter installation. This guide may be used by the architect, contractor, dealer or home owner. The information in this guide is intended as an overview. Each installation will have job specific specifications that must be followed. Do not attempt to construct a hoistway on this information.

Dumbwaiter installation is to be done by an authorized elevator contractor, and in accordance with installation instructions provided by the manufacturer. Installation must also be in compliance with requirements of the National Electric Code, American Society of Mechanical Engineers safety code, and state and local building codes. Waupaca Elevator's products are designed to meet the requirements of ASME - A17.1 National Elevator Codes for dumbwaiters. Manufacturer assumes no liability for equipment not installed in compliance with these codes.

Waupaca Elevator Company, Inc., reserves the right to modify the design, technical specifications and dimensions of the products shown in this document.

Planning Steps

- 1. Locate local dealer and together determine the following:
 - A Select weight capacity, car type and design specifications
 - B Address national, state and local code requirements
 - C Hoistway size
 - D Car size, layout and options
 - E Machine location
 - F Electrical requirements
- 2. Obtain and follow site specific field drawings while building hoistway, doorways and any other construction related to the dumbwaiter.
- 3. Coordinate with dealer to install dumbwaiter.



Dumbwaiter Reference Chart

		Residential	Units	Commer	cial Units	
Mechan	ical Features	Cable-Waiter	Pa	aca-Wait	er	
Weight Capacity	Up To	100 lbs.	200 lbs.	300 lbs.	500 lbs.	
Travel	Up To	50'	34'	5	0'	
Stops	Up To	6 Stops	6 Stops	5 St	ops	
Nominal Speed	Feet Per Minute	30 FPM	50 FPM	60 FPM		
Overhead	Recommended space above top of car. Additional overhead required for some car gates or overhead machine configurations	1'-6"	2'-0"	2'-	3"	
Electrical Requirements	Phase	Single		Single		
(Buck Boost Required on	Voltage	110 V		230 V		
Paca-Waiter Units)	Amperage	15 A	10 A	30	Α	
Drive System		Winding Drum		Winding Drum		
Motor	Horsepower	3/4 HP	1 HP	2 HP	3 HP	
Controller Size	Height x Width x Depth	18" x 18" x 6"	18" x 18" x 6"	24" x 2	4" x 8"	
Sheave	Diameter	4"	6-3/8"	7-3	/4"	
Drum	Diameter	5-1/4"	5-3/4"	7-3	/4"	
Cable Type		1/8" x 7 x 19	3/16" x 7 x 19	1/4" x	7 x 19	
Rail Type	Steel	1-1/2" x 1-1/2" x 1/8" Angle	2" x	1" x 3/16" C Cha	innel	
Machine Placement		Above or Below		Above or Below		

Access Door	Gates (required)	UL "B" Label Hoistway Door(s)					
Materials:	Bi-parting or Slide-up:	Types:	Material:	Options:			
- Primed Steel	- Powder Coated Steel	- Bi-parting	- Primed Steel	- Stainless Sill(s)			
- Stainless Steel #4	- Stainless Steel #4	- Slide-up	- Stainless Steel #4	- Counter Loading			
- By Others	Tambour (rolltop):	- Swing		- Floor Loading			
	- PVC (CW 100 & PW 200	- By Others		- Fusible Link			
	residential dumbwaiters only)			- Emergency Release			

Car	Additional Options:	Interlock(s) (required)				
Material:	- Door Open Buzzer	- HG-1 Single Contact Interlock (Commercial				
Powder Coated Steel	(CW 100 & PW 200)	Doors Only)				
Stainless Steel #4	- Door & Gate Open Alarm					
	(PW 300 & PW 500)	- GAL and Cam(s)				
Car Options:	- Car Here	- EMI				
- Shelves - In use		* Note: Either GAL or HG-1 Interlock(s) Are				
- Light - Lantern & Gong		Required On Commercial Units				



Car Gate Reference Chart

The dumbwaiter car gate, is attached to the front of the car and travels with it up and down the hoistway. The gate prevents items from leaving or entering the car.

Steel Car with PVC or Metallic Rolltop Gate	Cable-Waiter	Paca-Waiter
	Available in 100 lb. cars Available Finishes & Material: PVC or Metallic Steel w/ PVC Coating	Available in 200 lb. cars Available Finishes & Material: PVC or Metallic Steel w/ PVC Coating
Steel Car with Bi-Parting Gate	Cable-Waiter Available in 100 lb. cars Available Finishes & Material: Powder Coated Steel or Stainless Steel	Paca-Waiter Available in 200 lb., 300 lb. & 500 lb. cars Available Finishes & Material: Powder Coated Steel or Stainless Steel
Steel Car with Slide-Up Gate	Cable-Waiter This Option Is Not Available	Paca-Waiter Available in 300 lb. & 500 lb. cars Available Finishes & Material: Powder Coated Steel or Stainless Steel



Commercial Hoistway Door Reference Chart

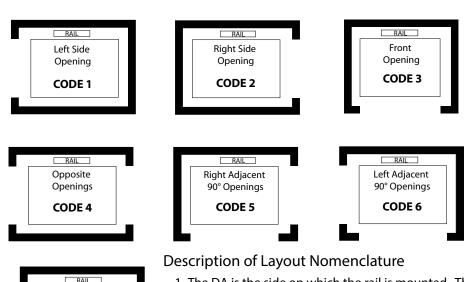
The door prevents items from accidentally entering the hoistway when the dumb-waiter car is elsewhere. An interlock located at each opening prevents the door from being opened if the dumbwaiter car is not waiting at that landing. We offer the following doors made to your specification. Every opening must have a door.



Note:

- Dumbwaiter to be installed in accordance with ASME A17.1 Part 7.1, 7.2, and all local codes.
- Electrical room must meet N.E.C. clear space requirements and all local codes. Temperature in machine room to be maintained between 60-110° F and must not be exposed to the elements.
- All hoistway doors require an interlock, door handle, and latch set.
- Any alterations to the equipment without written authorization by Waupaca Elevator Company, Inc., will void all warranties.
- Hoistway must be plum within 1/8 inch per 10 ft of height and square at any point within 1/4 inch based on difference in diagonal measurements.
- Structure must be capable of supporting the appropriate loads. Local engineering support is recommended.
- Do not complete door and associated framing to one door (preferably at grade level), until dumbwaiter is completely installed.
- The following hoistway illustrations are showing finished dimensions. Finished hoistway dimensions include drywall, plaster, and paint.
- The following information represented for Cable-Waiter (CW) and Paca-Waiter (PW) units are listed as residential **R** and commercial **C** units. Note the appropriate application when considering a dumbwaiter. If the application is appropriate a commercial unit may installed in a residence.

Car Opening Configurations and Coding



- 1-The DA is the side on which the rail is mounted. The rail is assumed to be mounted on the DA wall as a general point of reference.
- 2-The first letter refers to the hinged side of the door.
- 3-The second letter refers to the strike side of the door.

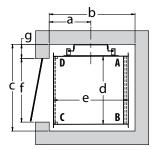


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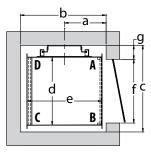
The dumbwaiters listed in the following section are based upon our standard cars. Dumbwaiter cars can be customized to meet your unique needs in accordance with ASME A17.1.

Steel Car with Rolltop Gates



LEFT OPENINGS (DC) Code 1

			Finished Hoistway Dimensions								
	Dumbwaiter Type	Car Size	а	b	С	d	е	f	g		
R	Cable-Waiter 100 lbs.	20"x20"x30"	12.25"	25.25"	25.5"	20"	22"	18.75"	4.125"		
R	Paca-Waiter 200 lbs.	26"x26"x36"	15.25"	31.25"	33.25"	26"	28"	24.75"	4.875"		
R	Paca-Waiter 300 lbs.	30"x30"x40"	17.25"	35.25"	37.25"	30"	32"	28.75"	4.875"		

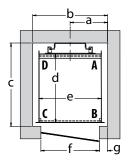


RIGHT OPENINGS (AB) Code 2

			Finished Hoistway Dimensions							
	Dumbwaiter Type	Car Size	а	b	С	d	е	f	g	
R	Cable-Waiter 100 lbs.	20"x20"x30"	12.25"	25.25"	25.5"	20"	22"	18.75"	4.125"	
R	Paca-Waiter 200 lbs.	26"x26"x36"	15.25"	31.25"	33.25"	26"	28"	24.75"	4.875"	
R	Paca-Waiter 300 lbs.	30"x30"x40"	17.25"	35.25"	37.25"	30"	32"	28.75"	4.875"	

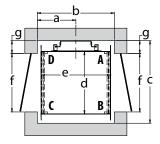
The dumbwaiters listed in the following section are based upon our standard cars. Dumbwaiter cars can be customized to meet your unique needs in accordance with ASME A17.1.

Steel Car with Rolltop Gates



FRONT OPENINGS (CB) Code 3

			Finished Hoistway Dimensions								
	Dumbwaiter Type	Car Size	а	b	С	d	е	f	g		
R	Cable-Waiter 100 lbs.	20"x20"x30"	12"	24"	26.75"	22"	20"	18.75"	2.625"		
R	Paca-Waiter 200 lbs.	26"x26"x36"	16"	32"	33.5"	28"	26"	24.75"	3.625"		
R	Paca-Waiter 300 lbs.	30"x30"x40"	18"	36"	37.5"	32"	30"	28.75"	3.625"		



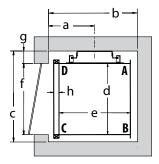
OPPOSITE OPENINGS (AB DC) Code 4

			Finished Hoistway Dimensions							
	Dumbwaiter Type	Car Size	а	b	С	d	е	f	g	
R	Cable-Waiter 100 lbs.	20"x20"x30"	12.375"	24.75"	26.5"	20"	22.25"	18.75"	4.125"	
R	Paca-Waiter 200 lbs.	26"x26"x36"	15.375"	30.75"	33.25"	26"	28.25"	24.75"	4.875"	
R	Paca-Waiter 300 lbs.	30"x30"x40"	17.375"	34.75"	37.25"	30"	32.25"	28.75"	4.875"	



The dumbwaiters listed in the following section are based upon our standard cars. Dumbwaiter cars can be customized to meet your unique needs in accordance with ASME A17.1.

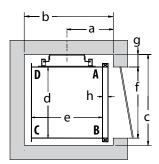
Steel Car with Bi-parting or Slide-up Gates



LEFT OPENING (DC) Code 1

		Finished Hoistway Dimensions							
Dumbwaiter Type	Car Size	а	b	С	d	е	f	g	h
R Cable-Waiter 100 lbs.	20"x20"x30"	13"	25"	25.5"	20"	20"	20"	3.5"	1.5"
R Paca-Waiter 200 lbs.	26"x26"x36"	16"	31"	33.25"	26"	26"	26"	4.25"	1.5"
R Paca-Waiter 300 lbs.	30"x30"x40"	18"	35"	37.25"	30"	30"	30"	4.25"	1.5"
R Paca-Waiter 500 lbs.	36"x36"x48"	21"	41"	43.25"	36"	36"	36"	4.25"	1.5"

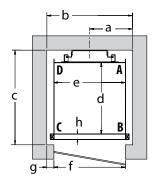
^{*} Slide-up gates not available on CW 100 & PW 200 cars.



RIGHT OPENING (AB) Code 2

			Finished Hoistway Dimensions							
	Dumbwaiter Type	Car Size	а	b	С	d	е	f	g	h
R	Cable-Waiter 100 lbs.	20"x20"x30"	13"	25"	25.5"	20"	20"	20"	3.5"	1.5"
R	Paca-Waiter 200 lbs.	26"x26"x36"	16"	31"	33.25"	26"	26"	26"	4.25"	1.5"
R	Paca-Waiter 300 lbs.	30"x30"x40"	18"	35"	37.25"	30"	30"	30"	4.25"	1.5"
R	Paca-Waiter 500 lbs.	36"x36"x48"	21"	41"	43.25"	36"	36"	36"	4.25"	1.5"

Slide-up gates not available on CW 100 & PW 200 cars.



FRONT OPENING (CB) Code 3

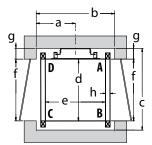
			Finished Hoistway Dimensions									
	Dumbwaiter Type	Car Size	а	b	С	d	е	f	g	h		
R	Cable-Waiter 100 lbs.	20"x20"x30"	12"	24"	26.5"	20"	20"	20"	2"	1.5"		
R	Paca-Waiter 200 lbs.	26"x26"x36"	16"	32"	33.25"	26"	26"	26"	3"	1.5"		
R	Paca-Waiter 300 lbs.	30"x30"x40"	18"	36"	37.25"	30"	30"	30"	3"	1.5"		
R	Paca-Waiter 500 lbs.	36"x36"x48"	21"	42"	43.25"	36"	36"	36"	3"	1.5"		

Slide-up gates not available on CW 100 & PW 200 cars.



The dumbwaiters listed in the following section are based upon our standard cars. Dumbwaiter cars can be customized to meet your unique needs in accordance with ASME A17.1.

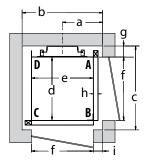
Steel Car with Bi-parting or Slide-up Gates



OPPOSITE OPENINGS (AB DC) Code 4

				Finished Hoistway Dimensions											
	Dumbwaiter 1	Гуре	Car Size	а	b	С	d	е	f	g	h				
R	Cable-Waiter	100 lbs.	20"x20"x30"	13"	26"	26.5"	20"	20"	20"	3.5"	1.5"				
R	Paca-Waiter	200 lbs.	26"x26"x36"	16"	32"	33.25"	26"	26"	26"	4.25"	1.5"				
R	Paca-Waiter	300 lbs.	30"x30"x40"	18"	36"	37.25"	30"	30"	30"	4.25"	1.5"				
R	Paca-Waiter	500 lbs.	30"x30"x48"	21"	42"	43.25"	36"	36"	36"	4.25"	1.5"				

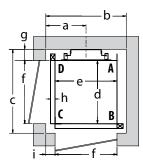
^{*} Slide-up gates not available on CW 100 & PW 200 cars.



RIGHT ADJACENT OPENINGS (AB CB) Code 5

					Finis	hed Hois	stway	/ Dime	ensior	าร		
	Dumbwaiter 1	Type	Car Size	а	b	С	d	е	f	g	h	i
R	Cable-Waiter	100 lbs.	20"x20"x30"	13"	26"	26.5"	20"	20"	20"	3.5"	1.5"	3"
R	Paca-Waiter	200 lbs.	26"x26"x36"	16"	32"	33.25"	26"	26"	26"	4.25"	1.5"	3"
R	Paca-Waiter	300 lbs.	30"x30"x40"	18"	36"	37.25"	30"	30"	30"	4.25"	1.5"	3"
R	Paca-Waiter	500 lbs.	36"x36"x48"	21"	42"	43.25"	36"	36"	36"	4.25"	1.5"	3"

^{*} Slide-up gates not available on CW 100 & PW 200 cars.



LEFT ADJACENT OPENINGS (DC BC) Code 6

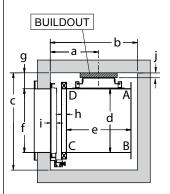
				Finish	ned Hois	tway	Dime	nsion	5		
	Dumbwaiter Type	Car Size	Α	В	С	D	Е	F	G	Н	- 1
R	Cable-Waiter 100 lbs.	20"x20"x30"	13"	26"	26.5"	20"	20"	20"	3.5"	1.5"	3"
R	Paca-Waiter 200 lbs.	26"x26"x36"	16"	32"	33.25"	26"	26"	26"	4.25"	1.5"	3"
R	Paca-Waiter 300 lbs.	30"x30"x40"	18"	36"	37.25"	30"	30"	30"	4.25"	1.5"	3"
R	Paca-Waiter 500 lbs.	36"x36"x48"	21"	42"	43.25"	36"	36"	36"	4.25"	1.5"	3"

^{*} Slide-up gates not available on CW 100 & PW 200 cars.



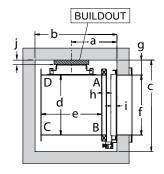
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Steel Car with Bi-parting or Slide-up Gates and Commercial Doors



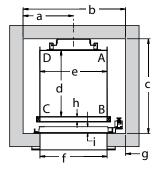
LEFT OPENING (DC) Code 1

				Finishe	d Hoist	way [Dimer	sions				
	Dumbwaiter Type	Car Size	а	b	С	d	е	f	g	h	i	j
C	Paca-Waiter 300 lbs.	30"x30"x40"	20"	37"	41.25"	30"	30"	30"	5"	1.5"	2"	.75"
C	Paca-Waiter 500 lbs.	36"x36"x48"	23"	43"	47.25"	36"	36"	36"	5"	1.5"	2"	.75"



RIGHT OPENING (AB) Code 2

				Finished	d Hoistv	vay D	imen	sions				
	Dumbwaiter Type	Car Size	а	b	С	d	е	f	g	h	i	j
C	Paca-Waiter 300 lbs.	30"x30"x40"	20"	37"	41.25"	30"	30"	30"	5"	1.5"	2"	.75"
C	Paca-Waiter 500 lbs.	36"x36"x48"	23"	43"	47.25"	36"	36"	36"	5"	1.5"	2"	.75"

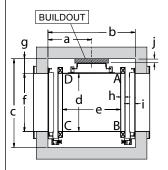


FRONT OPENING (CB) Code 3

				Fin	ished H	oistw	ay Di	mensi	ions		
	Dumbwaiter Type	Car Size	а	b	С	d	е	f	g	h	i
C	Paca-Waiter 300 lbs.	30"x30"x40"	20"	41.25"	39.25"	30"	30"	30"	6.25"	1.5"	2"
C	Paca-Waiter 500 lbs.	36"x36"x48"	23"	47.25"	45.25"	36"	36"	36"	6.25"	1.5"	2"

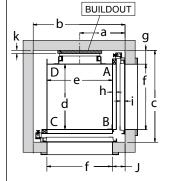
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Steel Car with Bi-parting or Slide-up Gates and Commercial Doors



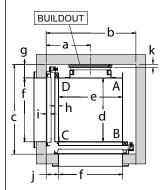
OPPOSITE OPENINGS (AB DC) Code 4

			Fir	nished F	loistv	vay D	imen	sion	S		
Dumbwaiter Type	Car Size	а	b	С	d	е	f	g	h	i	j
C Paca-Waiter 300 lbs.	30"x30"x40"	20"	40"	41.25"	30"	30"	30"	5"	1.5"	2"	.75"
C Paca-Waiter 500 lbs.	36"x36"x48"	23"	46"	47.25"	36"	36"	36"	5"	1.5"	2"	.75"



RIGHT ADJACENT OPENINGS (AB CB) Code 5

				Finished Hoistway Dimensions									
	Dumbwaiter Type	Car Size	а	b	С	d	е	f	g	h	i	j	k
C	Paca-Waiter 300 lbs.	30"x30"x40"	20"	41.25"	41.25"	30"	30"	28"	6.25"	1.5"	2"	7"	2"
C	Paca-Waiter 500 lbs.	36"x36"x48"	23"	47.25"	47.25"	36"	36"	34"	6.25"	1.5"	2"	7"	2"

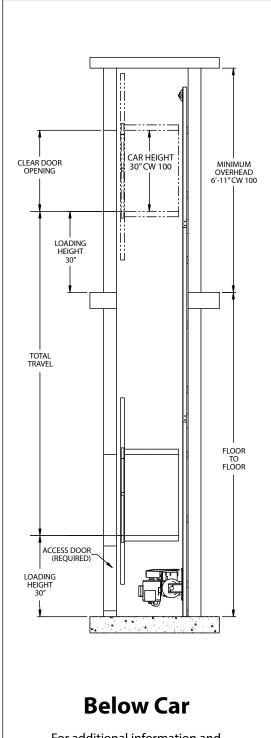


LEFT ADJACENT OPENINGS (DC BC) Code 6

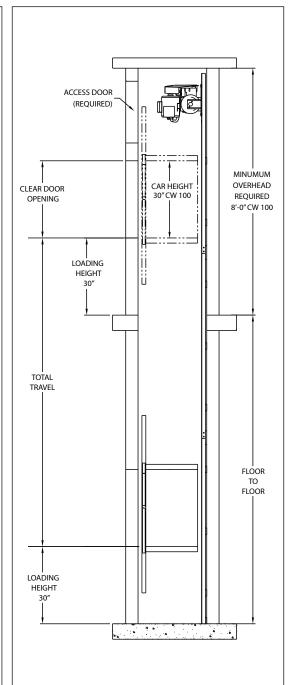
				Fin	ished F	loist	way [Dime	nsion	s			
	Dumbwaiter Type	Car Size	а	b	С	d	е	f	g	h	i	j	k
C	Paca-Waiter 300 lbs.	30"x30"x40"	20"	41.25"	41.25"	30"	30"	28"	6.25"	1.5"	2"	7"	2"
C	Paca-Waiter 500 lbs.	36"x36"x48"	23"	47.25"	47.25"	36"	36"	34"	6.25"	1.5"	2"	7"	2"



Elevation Layout - Residential Cable-Waiter



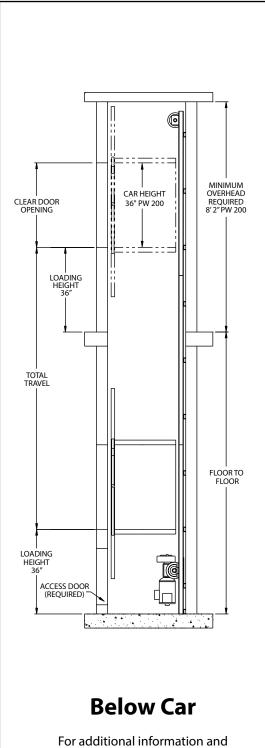
For additional information and dimensions contact your local dealer.



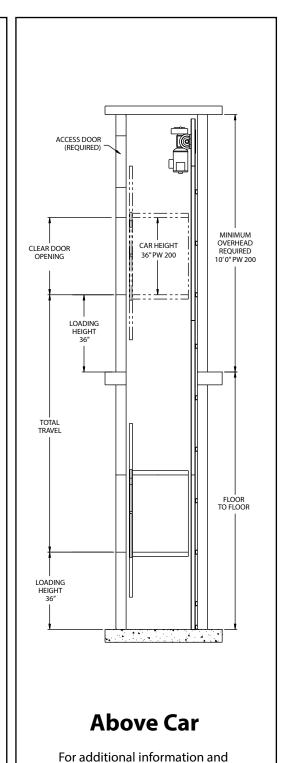
Above Car



Elevation Layout - Residential Paca-Waiter

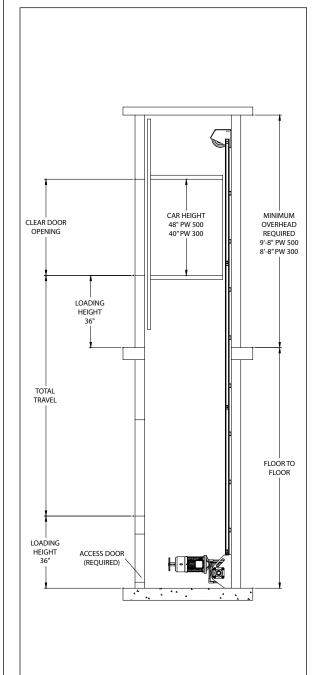


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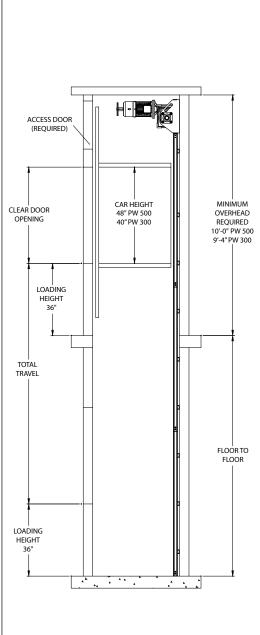
dimensions contact your local dealer.

Elevation Layout - Commercial Paca-Waiter



Below Car

For additional information and dimensions contact your local dealer.



Above Car

Hoistway Rail Layout

The typical layouts shown here may vary from your actual hoistway. The purpose of these layouts are for a general understanding. Please refer to Waupaca Elevator Company, Inc., drawings and specifications provided by your local dealer.

These drawings depict sample layouts only. It is the responsibility of the installer/contractor or engineer to design and specify structural supports. All construction to be in compliance with local codes.

Residential Residential Cable-Waiter Paca-Waiter 203 LBS. MAX SHEAR PER FASTENER 990 LBS. MAX TENSION HORIZONTAL PULLOUT FORCES PER FASTENER SUPPORT WALL SUPPORT WALL RΔII ATTACHMENT POINT 56 LBS. MAX TENSION 72" TYPICAL 72" TYPICAL MINIMUM RAIL BACKING DETAIL (1) 2" X 12" RAIL SUPPORT ENTIRE HEIGHT OF HOISTWAY MINIMUM RAIL BACKING DETAIL (4) 2" x 6" RAIL SUPPORT ENTIRE HEIGHT OF HOISTWAY 24" TYPICAL TYPICAL

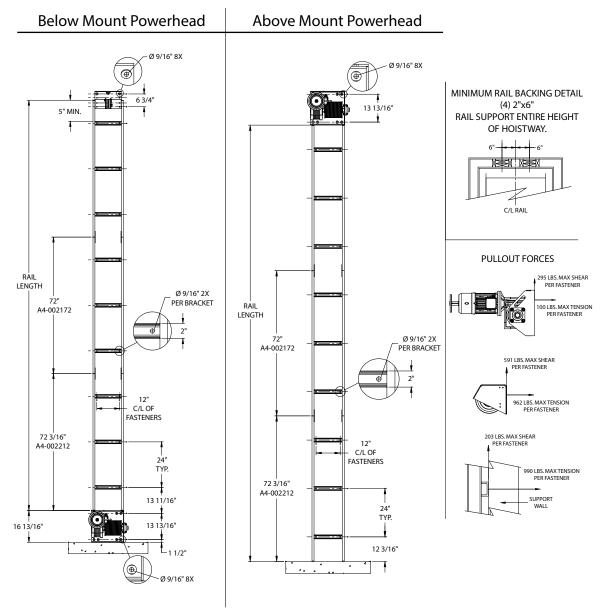


Hoistway Rail Layout

The typical layouts shown here may vary from your actual hoistway. The purpose of these layouts are for a general understanding. Please refer to Waupaca Elevator Company, Inc., drawings and specifications provided by your local dealer.

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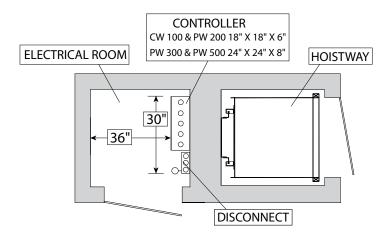
Commercial Paca-Waiter





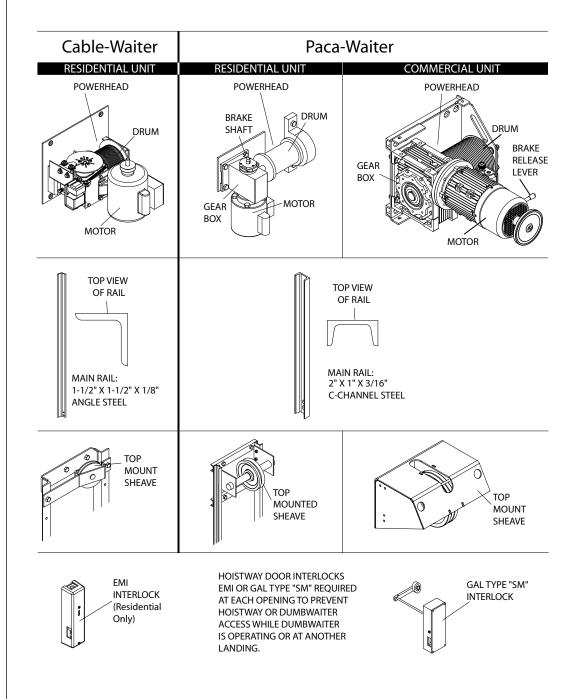
Electrical Room Layout

Typical Electrical Layout (Layouts may change depending on application)



- 1. Electrical room must meet N.E.C. clear space requirements and all local codes.
- 2. The controller requires a clear space of 36" x 30" directly in front.
- A lockable fusible service disconnect must be placed within sight of the controller and accessible from the latch side of the doorway.
- 4. Temperature in machine room to be maintained between 60-110° F and must not be exposed to the elements.

Typical Dumbwaiter Equipment

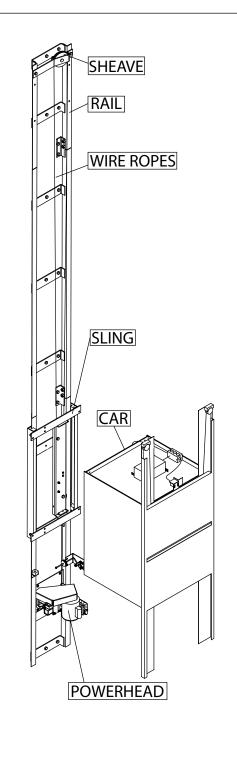


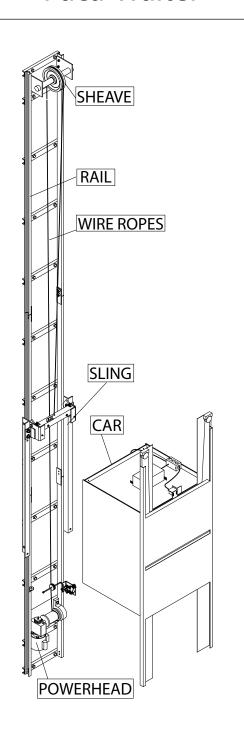


Residential Mechanical Illustrations

Cable-Waiter

Paca-Waiter





Commercial Mechanical Illustrations

Paca-Waiter

