

## **SURFSTYLE RETAIL STORE**

**Issue:** Vertical accessibility to a mezzanine.

**Analysis:** The applicant is requesting a waiver from providing vertical accessibility from the ground level to a mezzanine. The issue was previously approved by the Commission, allowing the applicant one year from issuance of the Final Order to install a wheelchair lift. Subsequently, it was determined that the height exceeded that permitted for travel by a chair lift, necessitating the use of either a LULA or passenger elevator. The alteration will cost approximately \$375,000 for the main floor and \$85,000 for the mezzanine. An estimate of \$33,900 was provided indicating the cost of a LULA. The applicant stated this would be disproportionate to the cost of construction

### **Project Progress:**

The project is under construction.

### **Items to be Waived:**

Vertical accessibility to a mezzanine, as required by Section 553.509, Florida Statutes.

553.509 Vertical accessibility. Nothing in Sections 553.501-553.513 or the guidelines shall be construed to relieve the owner of any building, structure or facility governed by those sections from the duty to provide vertical accessibility to all levels above and below the occupiable grade level regardless of whether the guidelines require an elevator to be installed in such building, structure or facility, except for:

- (1) Elevator pits, elevator penthouses, mechanical rooms, piping or equipment catwalks and automobile lubrication and maintenance pits and platforms;
- (2) Unoccupiable spaces, such as rooms, enclosed spaces and storage spaces that are not designed for human occupancy, for public accommodations or for work areas; and
- (3) Occupiable spaces and rooms that are not open to the public and that house no more than five persons, including, but not limited to equipment control rooms and projection booths.

**Waiver Criteria:** There is no specific guidance for a waiver of this requirement in the code. The Commission's current rule, authorized in Section 553.512, Florida Statutes, provides criteria for granting waivers and allows consideration of unnecessary or extreme hardship to the applicant if the specific requirements were imposed.

**REQUEST FOR WAIVER FROM ACCESSIBILITY REQUIREMENTS  
OF CHAPTER 553, PART V, FLORIDA STATUTES {to "OF CHAPTER 553, PART V,  
FLORIDA STATUTES " \ 2}**

Your application will be reviewed by the Accessibility Advisory Council and its recommendations will be presented to the Florida Building Commission. You will have the opportunity to answer questions and/or make a short presentation, not to exceed 15 minutes, at each meeting. The Commission will consider all information presented and the Council's recommendation before voting on the waiver request.

**1. Name and address of project for which the waiver is requested.**

Name: Surfstyle Retail Store

Address: 421 Lincoln Road, Miami Beach, FL 33139

**2. Name of Applicant. If other than the owner, please indicate relationship of applicant to owner and written authorization by owner in space provided:**

Applicant's Name: Robert S. Fine, Esq.

Applicant's Address: Greenberg Traurig, 1221 Brickell Avenue, Miami, FL 33131

Applicant's Telephone: 305-579-0826 FAX: 305-961-5826

Applicant's E-mail Address: finer@gtlaw.com

Relationship to Owner: Legal counsel

Owner's Name: MED Properties and Barry Noam

Owner's Address: 421 Lincoln Road, Miami Beach, FL 33139

Owner's Telephone: c/o Applicant FAX c/o Applicant

Owner's E-mail Address: c/o Applicant

Signature of Owner: \_\_\_\_\_

Contact Person: Robert S. Fine

Contact Person's Telephone: 305-579-0826 E-mail Address: finer@gtlaw.com

This application is available in alternate formats upon request.  
Form No. 2001-01

3. Please check one of the following:

- New construction.  
 Addition to a building or facility.  
 Alteration to an existing building or facility.  
 Historical preservation (addition).  
 Historical preservation (alteration).

4. **Type of facility.** Please describe the building (square footage, number of floors). Define the use of the building (i.e., restaurant, office, retail, recreation, hotel/motel, etc.)

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Retail store located in two-story building space.

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5. **Project Construction Cost (Provide cost for new construction, the addition or the alteration):** Store in total= \$ ± 375,000. Mezzanine area= ±\$ 85,000

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6. **Project Status:** Please check the phase of construction that best describes your project at the time of this application. Describe status.

- Under Design  Under Construction\*  
 In Plan Review  Completed\*

\* Briefly explain why the request has now been referred to the Commission.

The ground floor of the store is under construction. However, the mezzanine phase of the project has been delayed pending the hearing for this application for waiver.

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7. **Requirements requested to be waived.** Please reference the applicable section of Florida law. Only Florida-specific accessibility requirements may be waived.

**Issue**

1: \_\_\_§ 553.509, Fla. Stat. Vertical Accessibility from the main entrance level to the mezzanine.

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**Issue**

2: \_\_\_\_\_

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**Issue**

3: \_\_\_\_\_

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8. **Reason(s) for Waiver Request:** The Florida Building Commission may grant waivers of Florida-specific accessibility requirements upon a determination of unnecessary, unreasonable or extreme hardship. Please describe how this project meets the following hardship criteria. Explain all that would apply for consideration of granting the waiver.

The hardship is caused by a condition or set of conditions affecting the owner which does not affect owners in general.

In the original application for waiver, it was assumed that a wheelchair lift could be used to provide vertical accessibility to the mezzanine. Upon further study and consultation with the building department, it became apparent that the elevation of the mezzanine was too high to use a wheelchair lift leaving a LULA or elevator as the only viable, albeit more expensive, options.

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Substantial financial costs will be incurred by the owner if the waiver is denied.

The cost to provide vertical accessibility is disproportionate to the cost of the area containing a primary function that would be served by the vertical accessibility.

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[ ] The owner has made a **diligent investigation** into the costs of compliance with the code, but cannot find an efficient mode of compliance. Provide detailed cost estimates and, where appropriate, photographs. Cost estimates must include bids and quotes.

See attachments.

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9. Provide documented cost estimates for each portion of the waiver request and identify any additional supporting data which may affect the cost estimates. For example, for vertical accessibility, the lowest documented cost of an elevator, ramp, lift or other method of providing vertical accessibility should be provided, documented by quotations or bids from at least two vendors or contractors.

a. \_\_\_ see attachments

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b. \_\_\_\_\_

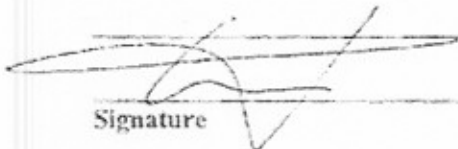
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c. \_\_\_\_\_

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10. **Licensed Design Professional:** Where a licensed design professional has designed the project, his or her comments **MUST** be included and certified by signature and affixing of his or her professional seal. The comments must include the reason(s) why the waiver is necessary.

This project was previously submitted for a waiver which was granted allowing the owner to open his business and provide vertical accessibility to the mezzanine within one year. At the time of that waiver application, the owner thought he could use a wheelchair lift to provide vertical accessibility from the main level to the mezzanine. Additionally, at the time of the prior application, the owner was unaware that the law provided relief from providing vertical accessibility if the cost to do so was disproportionate to the cost of the alteration to the primary function area being served by the lift. Notwithstanding that, the owner might have been willing to provide such access anyway. Unfortunately, unbeknown to the owner at the time of the prior waiver application, the height from the ground floor to the mezzanine is in excess of that which may be traveled by wheelchair lift necessitating the use of a LULA or elevator, at much higher cost. As such, it is our opinion that the cost to provide vertical accessibility to the mezzanine is disproportionate to the costs of the alterations to the primary function areas on the mezzanine.



A. L. Spear  
Printed Name

Signature

Phone number 954.925.9292

(SEAL)



**CERTIFICATION OF APPLICANT:**

I hereby swear or affirm that the applicable documents in support of this Request for Waiver are attached for review by the Florida Building Commission and that all statements made in this application are to the best of my knowledge true and correct.

Dated this 13 day of May, 2005

  
Signature

Robert S Fine  
Printed Name

By signing this application, the applicant represents that the information in it is true, accurate and complete. If the applicant misrepresents or omits any material information, the Commission may revoke any order and will notify the building official of the permitting jurisdiction. Providing false information to the Commission is punishable as a misdemeanor under Section 775.083, Florida Statutes.

REVIEW AND RECOMMENDATION BY LOCAL BUILDING DEPARTMENT

Please state why the issue is being referred to the Florida Building Commission as well as a recommendation for disposition. The Building Official or his/her designee should review the application and indicate that to the best of his or her knowledge, all information stipulated herein is true and accurate. Further, if this project is complete, explain why it is being referred to the Commission. The Building Official or his or her designee should sign a copy of the plans accompanying this application as certification that such plans are the same as those submitted for building department review. Please reference the applicable section of the Accessibility Code.

- a. FS Section 553.509 Vertical Accessibility to all levels requirement.
- b. \_\_\_\_\_
- c. \_\_\_\_\_

Has there been any permitted construction activity on this building during the past three years? If so, what was the cost of construction?

Yes  No Cost of Construction \$375,000.00

Comments/Recommendation: We recommend that the waiver be granted given that the cost of providing vertical accessibility to all levels will exceed the 20% of the cost of construction and that the building is a two story building.

Jurisdiction: City of Miami Beach

Building Official: \_\_\_\_\_

Signature

Hamid Dolikhani/ Richard McConachie  
Printed Name

BU00000853/ BU00000774  
Certification Number

(305) 673-7000 Ext 6753 / (305) 535-7513  
Telephone/Fax

1700 Convention Center Drive, 2<sup>nd</sup> Floor, Miami Beach, FL 33139  
Address

Address: 421 Lincoln Rd  
Miami Beach, FL 33139



# FloridaLifts

• floridalifts.com •  
A State Certified MBE Company

9737 NW 41<sup>st</sup> Street  
Box 173  
Miami, FL 33178  
Phone: 305-757-6667  
Fax: 305-757-6776  
Phone: (Monroe Cty) 672-4802

February 3, 2005

Louie Ferrino  
Tran, Inc

## Re: Proposal for LULA elevator

Florida Lifts, Inc. proposes to provide hydraulic LULA elevator with the following **specifications and components:**

**Travel:** not to exceed 16'

**Stops:** 2

**Load Capacity:** 1400 lbs.

**Speed:** 30 fpm

**Cab size:** 42"x 54" , on/off same side

**Doors:** Automatic power sliding two-speed hoistway and car doors, primed ready for painting

**Controls:** Automatic Relay logic

**Pit:** 14

**Controller:** full collective microprocessor

### Other standard features:

Automatic Interior Lighting

Safety descent (power failure ) bottom terminal floor

Emergency lighting

Car and hall call acknowledgement lights

Overspeed governor

Audible and visual alarm

Tactile/Braille

Full height photo electric screen

Two year limited parts warranty

Standard Color: Pearl white texture

**Price: \$33,900** (includes material, shipping, installation, taxes, permitting, inspection )

Terms: 50% deposit, 40% material deliver/installation, 10% at completion

Submitted \_\_\_\_\_ Jennifer Kearney

Approved \_\_\_\_\_ Date \_\_\_\_\_

Print Name \_\_\_\_\_

Fax approved document to 305-757-6776 to initiate order. General lead time 6 weeks for manufacture, 1 week for shipping, 1 week for installation.

March 28, 2005

*Custom*  
**ELEVATOR**  

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**m a n u f a c t u r i n g**  
**company, inc.**

*Roped Hydraulic*  
*Limited Use/Limited Application*  
**(LU/LA)**  
**Elevator Planning Guide**



P.O. Box 749, 5191 Stump Rd., Plumsteadville, PA 18949 Toll Free: 888-443-2800, Phone: 215-766-3380, Fax: 215-766-3385

[www.customelevatorinc.com](http://www.customelevatorinc.com)

# Introduction

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*This planning guide is intended to provide a general guideline for builders, architects, and owners designing for a limited use/limited application elevator manufactured by Custom Elevator Manufacturing Company. It is recommended that you contact your local authorities governing the installation of public elevators in your area and follow all guidelines for commercial building requirements and any regulations that may take precedence over any recommendations listed or detailed in this guide.*

*If you should have any questions or would like to locate a dealer in your area, please call our sales department at 1-888-443-2800.*

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# Equipment Overview

## ➤ General:

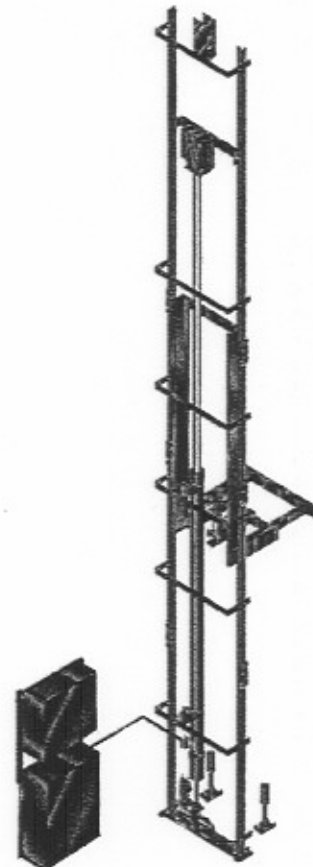
- Travel up to 25'-0" (as per ASME A17.1/ CSA B44-00)
- Up to four (4) stops
- Load capacity: 1400 lbs
- Speed: 30 fpm
- Overhead: 11'-0" minimum (9'-6" minimum with alternative means for existing buildings)
- Pit depth: 3'-6" minimum (14" minimum with alternative means)
- Roped Hydraulic Drive
  - 1:2 roped hydraulic
  - Governor actuated safety
  - Remote machine room can be located up to 40' from the hoistway.
  - 5 HP submersed motor with two-speed valve assembly
- 220 volt single phase power supply

## ➤ Standard Features:

- Car size: 42" x 60" interior
- 81" interior ceiling height
- No. 4 (brushed) stainless steel hall call and car operating panel
- Brushed Stainless Steel handrail
- Fire rated wood core cab wall panels faced with plastic laminate and black filled reveals to simulate applied panels
- Car entrance including strike column, return panel, and transom are #4 brushed stainless steel finish
- Two speed reinforced hollow metal horizontal sliding car doors with #4 brushed stainless steel finish
- Infrared door edge protection with automatic door reopen system
- Steel canopy with fire rated thermoclear panel suspended ceiling and fluorescent lighting above
- Extruded aluminum car sill
- #4 brushed stainless steel certificate frame
- Two speed horizontal sliding fire rated hoistway door and frame assemblies with prime (paintable) finish and extruded aluminum sills
- Heavy duty DC master door operator
- Unfinished plywood floor
- Sill set for 1/4" finished floor
- Digital floor position indicator with car direction arrows and audible signal
- Car and hall "Acknowledge" lights
- Automatic on/off cab lighting
- Braille tags in car and hall
- Keyed emergency stop and alarm bell
- Emergency cab lighting
- Car light override key switch
- Floor selectable battery lowering
- Homepark feature
- Manual lowering device
- Top of car inspection operation
- Recessed telephone box in cab
- Microprocessor based control system
- Two year limited parts warranty

## ➤ Optional Features:

- Custom car sizes, additional travel, and additional floor stops available
- Direct acting hydraulic drive in lieu of roped 1:2
- Wide variety of plastic laminate color choices
- Steel with baked enamel finish cab wall panels
- #4 brushed stainless steel cab wall panels
- #4 brushed stainless steel base (kickplates)
- Protection pads and hooks
- Car top emergency exit
- Exhaust fan
- Plastic laminate faced car door(s)
- #4 brushed bronze cab metal finishes
- Fire rated accordion car door(s) available in chalk, light oak, or aluminum finish in lieu of two speed horizontal sliding doors
- Automatic car door operator for accordion car door(s)
- 36" x 80" fire rated swing door entrance(s) with prime (paintable) finish in lieu of two speed horizontal sliding doors
- Digital hall position indicators with direction arrows incorporated into the hall call station
- Car travel lantern with audible signal
- Fire service phase I and II with alternate return floor
- ADA compliant phone
- #4 brushed bronze faceplate/button finishes
- Keyed control switches in car and/or hall
- Remote-set solenoid on governor for testing from the machine room



**1:2 ROPED HYDRAULIC**

# Work by Others

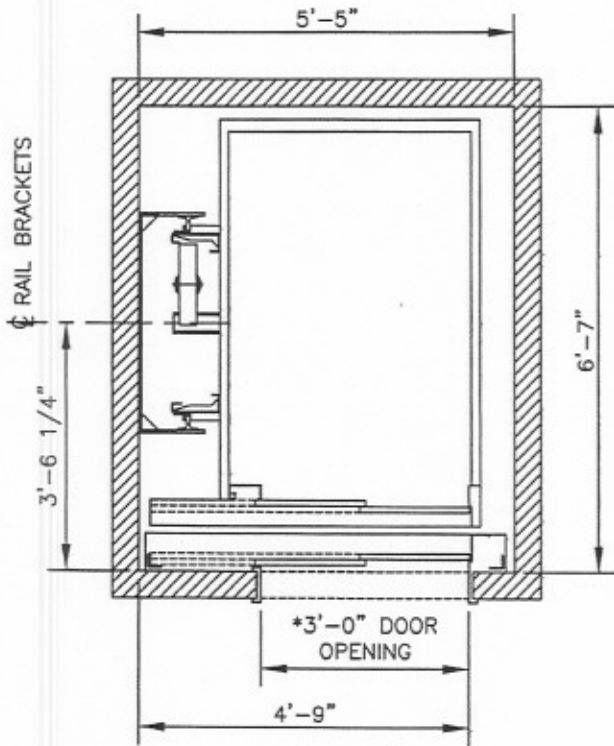


*Customer, or customer's contractor, shall be responsible, at the customer's expense, for the following prior to the commencement of work by the elevator contractor.*

1. Finished hoistway guaranteed plumb within 1/8 inch from top to bottom, and conforming to the dimensions indicated on layout drawings provided. All walls and side members must be square and extend from sill to beam above. Inside surface of hoistway must be flush. Interior of hoistway should be finished prior to installation. Hoistway must be constructed in accordance with ASME A17.1/CSA B44-00 and all state and local building code requirements.
2. Adequate supports shall be provided for fastening rail brackets as indicated on the layout drawings. Supports must withstand rail forces indicated.
3. Where wood frame construction is used, double 2 X 12's spaced as indicated on layout drawings, and extending the full height of the hoistway are recommended.
4. For masonry walls, inserts shall be provided by elevator contractor and installed by the general contractor.
5. Total travel distance from finished bottom floor to finished top floor must be held within 1" of that shown on layout drawings.
6. Overhead clearance: (top floor to underside of hoistway ceiling or obstruction) to be maintained per the layout drawings. If a minimum of 11'-0" cannot be achieved, contact factory for alternate arrangement.
7. A poured pit conforming to the dimensions indicated on the layout drawings must be provided. The pit must be designed for the impact load indicated and must be guaranteed dry and level from wall to wall. If a minimum of 3'-6" cannot be achieved, contact factory for alternate arrangement.
8. A sump pump and sump pump hole with cover is recommended in the elevator pit where water seepage is encountered. A G.F.I. receptacle is required if a sump pump is furnished. Coordinate location with elevator contractor.
9. A pit light with switch and a GFI duplex receptacle in accordance with National Electric Code. Coordinate location with elevator contractor.
10. All screens, railings, steps, and ladders as required for legal hoistway.
11. Barricades outside all hoistway openings for protection shall be provided and installed by general contractors.
12. All blockouts for hall buttons must be provided. Location to be coordinated with elevator contractor.
13. The entire wall of the hoistway around each opening must not be constructed until the hoistway door frames are set. Swing door entrances are to be installed by the general contractor.
14. Adequate supports for sill angles and sills across full width of hoistway shall be furnished at each landing. Sills are to be grouted after installation.
15. All wall patching, painting, and grouting by others. Finish painting of all hoistway doors and frames by others.
16. An adjacent machine room built to conform to the layout drawings, N.E.C., ASME A17.1/CSA B44-00, and all state and local code requirements. It shall have suitable access, a lockable door, a convenience outlet, and light switch. Machine room temperature must be maintained between 60 and 100 degrees Fahrenheit. Relative humidity not to exceed 95%.
17. A 220V, single phase, 60 AMP service, with neutral, to a lockable safety disconnect switch fused with time delay fuses shall be furnished in the machine room in accordance with N.E.C. A normally open electric interlock contact is required in the switch for battery isolation. **5 horsepower** source for single phase heavy-duty switches (or equal): Square "D" Cat. #H222N, electric interlock EK-300-1; ITE Cat. #SN-322, electric interlock #SC-5. Cutler Hammer Cat. #DH222NGK, electric interlock #DS200EK1.
18. A 120VAC, single phase, 15 AMP service to a lockable fused disconnect switch or circuit breaker located in the machine room shall be provided for the cab lighting in accordance with N.E.C.
19. A telephone line to the machine room and tied into the elevator controller as per ASME A17.1/CSA B44-00 code.
20. Machine room vents if required by local code.
21. Knock-out in walls between the machine room and elevator hoistway for routing hydraulic and electrical lines shall be coordinated with elevator contractor.
22. A fixed vertical ladder to the pit floor extending 3'-6" above the lowest landing shall be provided when the pit depth exceeds 3'-0". Location to be coordinated with elevator contractor.
23. A lockable self closing 2'-0" x 2'-0" governor access door with electric contact shall be provided in accordance with layout drawing (when required).

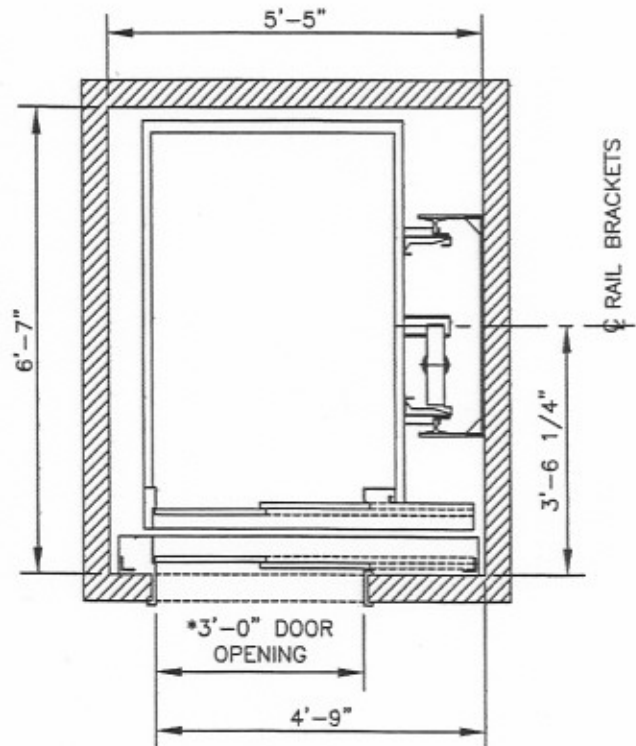
# Hoistway Size Requirements

**PLAN - A**



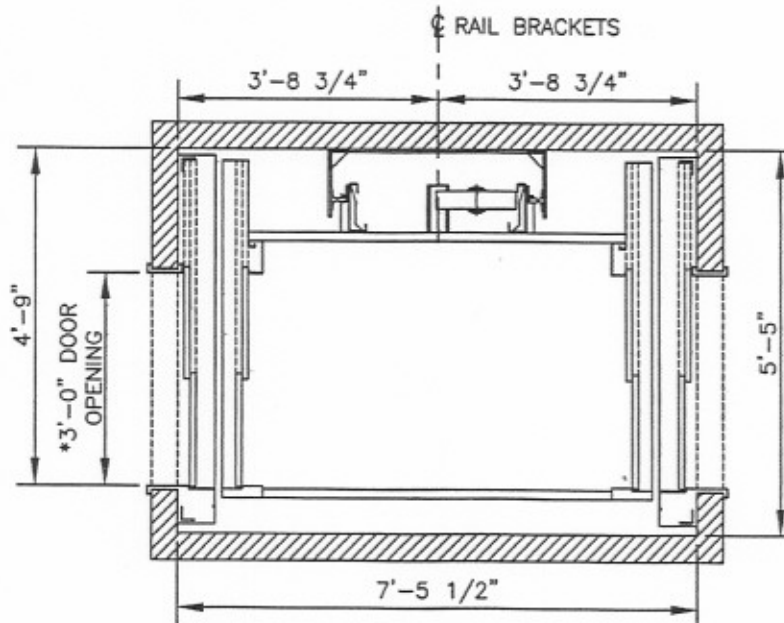
**RIGHT HAND IN-LINE OPENING**

**PLAN - B**



**LEFT HAND IN-LINE OPENING**

**PLAN - C**

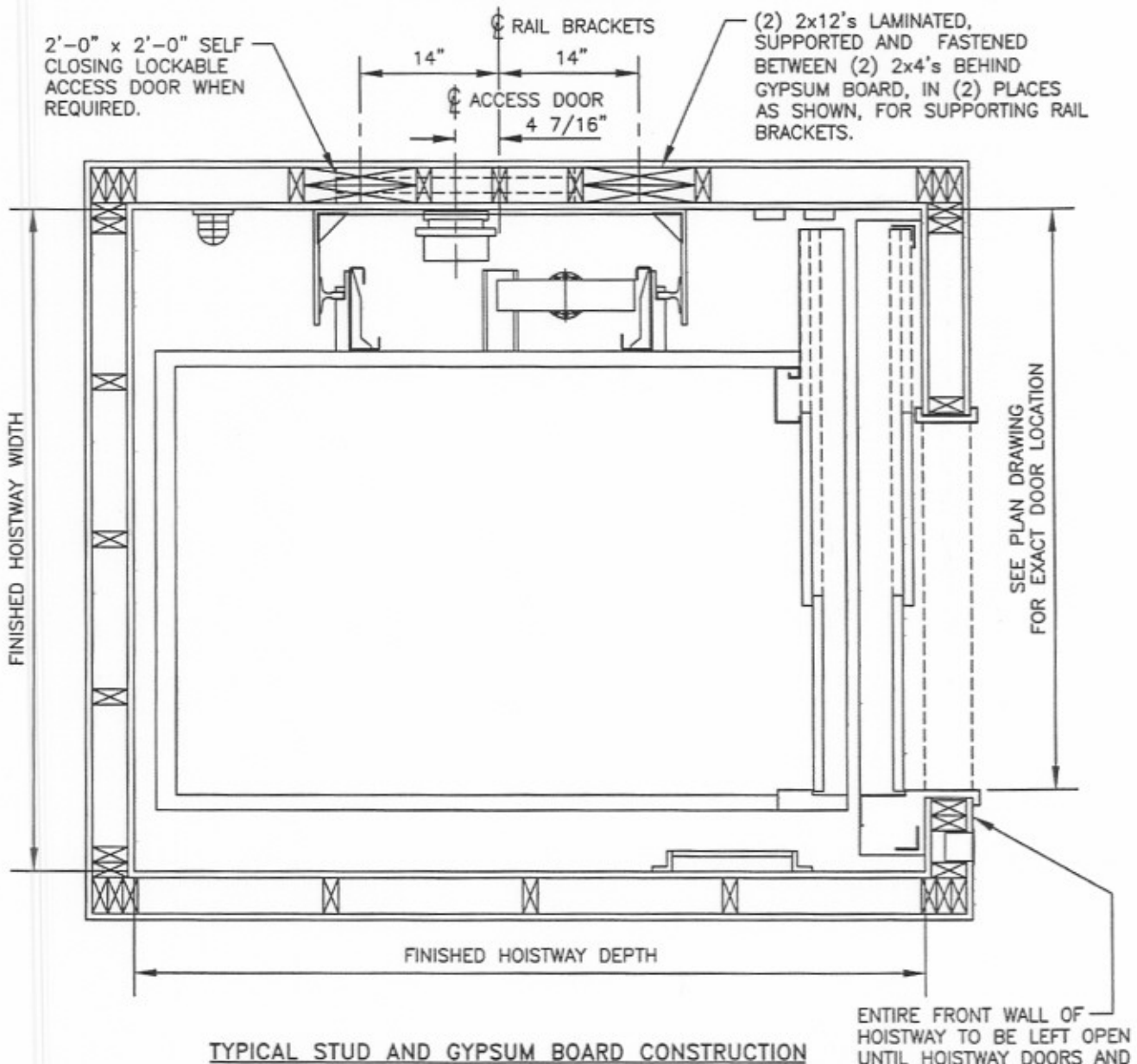
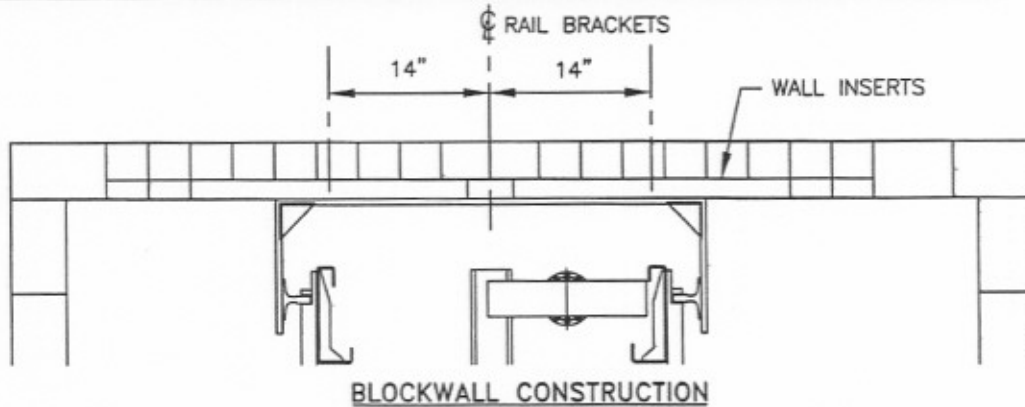


**FRONT AND REAR OPENING**

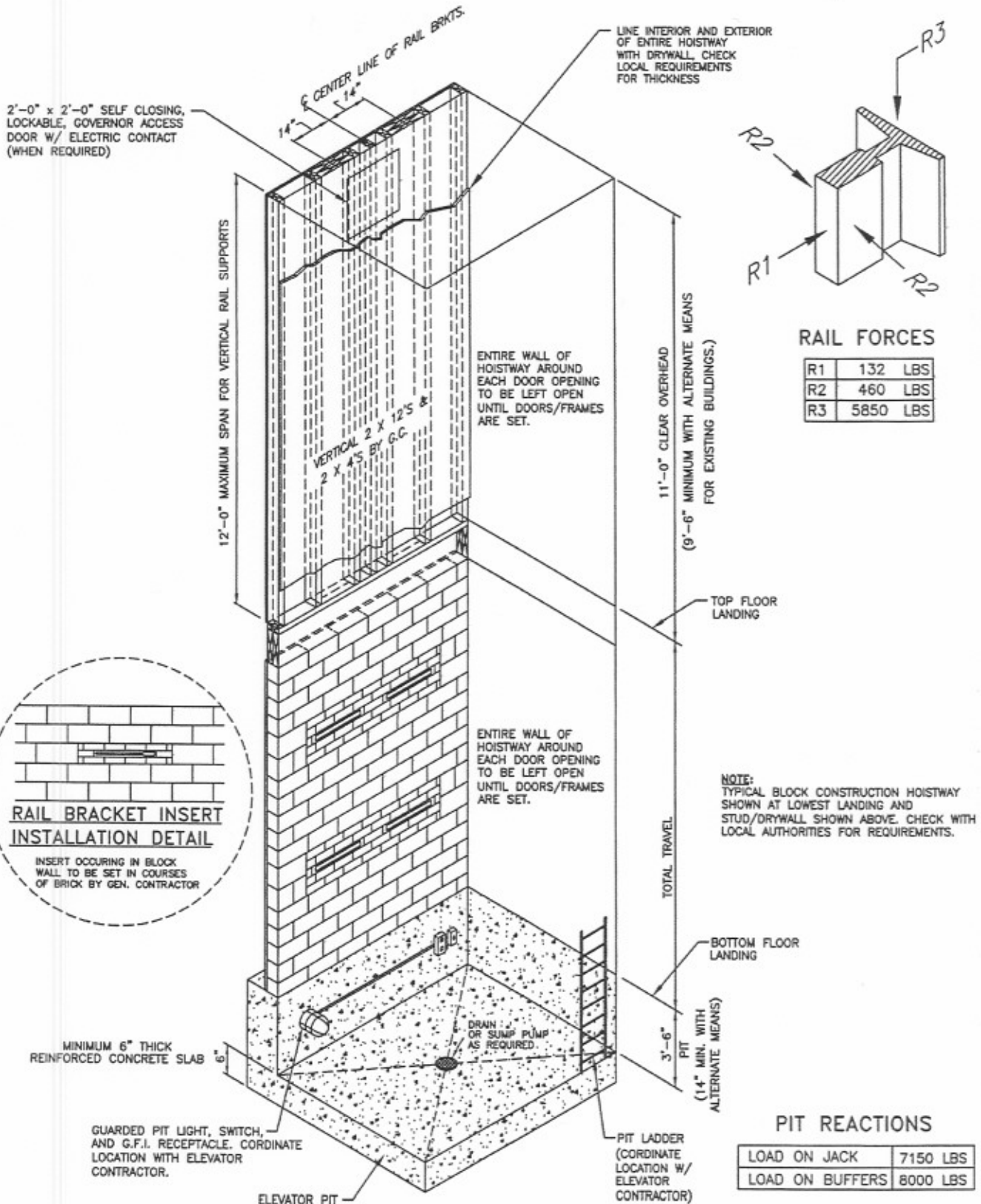
**NOTE:**  
CONTACT CUSTOM ELEVATOR MFG. CO. FOR  
CUSTOM CAR AND HOISTWAY DIMENSIONS.

\* LEAVE ENTIRE FRONT WALL OPEN AROUND  
EACH HOISTWAY DOOR UNTIL DOORS AND  
FRAMES ARE INSTALLED.

# Recommended Hoistway Construction Plan



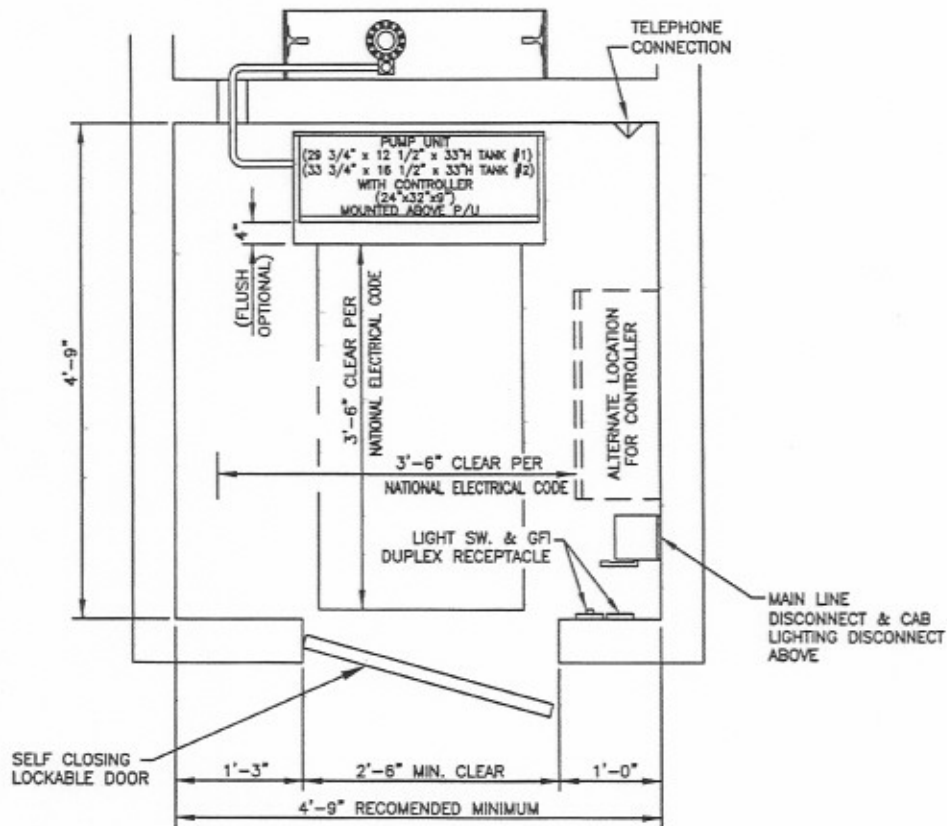
# Recommended Hoistway Construction Elevation





# Machine Room Plan

## STANDARD MACHINE ROOM LAYOUT



### NOTE

MACHINE ROOM MUST COMPLY WITH ALL STATE AND LOCAL CODE REQUIREMENTS.

#### MATERIAL REQUIRED BY OTHERS:

- MAIN LINE DISCONNECT (SEE SPECIAL REQUIREMENTS)
- CAR LIGHT DISCONNECT
- LIGHT, LIGHT SWITCH, AND GFI DUPLEX RECEPTACLE
- TELEPHONE CONNECTION
- HEAT
- LOCKABLE ACCESS DOOR
- KNOCK-OUT BETWEEN MACHINE ROOM AND HOISTWAY

SEE "WORK BY OTHERS" FOR MORE DETAILED REQUIREMENTS

## Part 1: General

### 1.1 Description of Work

To furnish all labor and materials required to cover a complete installation of (one) roped hydraulic limited use/limited application (LU/LA) elevator. The elevator is to be installed in a first class workmanlike manner in accordance with the specifications and drawings provided.

### 1.2 Work By Others

The following preparatory work to accommodate the elevator installation is to be done by others and is part of work of other sections.

#### A. Hoistway

1. A finished, plumb hoistway of proper size and construction conforming to ASME A17.1/CSA B44-00, all applicable building codes, and the elevator layout drawings.
2. Adequate supports shall be provided for fastening rail brackets as indicated on the layout drawings. Supports must withstand rail forces indicated.
3. A poured pit conforming to all applicable codes and to the dimensions indicated on the layout drawings must be provided. The pit must be designed for the impact load indicated and must be guaranteed dry and level from wall to wall. A fixed pit ladder shall be provided when pit depth exceeds 3'-0".
4. Knock-out in walls between the machine room and elevator hoistway for routing hydraulic and electrical lines and for hall buttons shall be coordinated with the elevator contractor.
5. All wall patching, painting, and grouting by others. Finish painting of all hoistway doors and frames by others.
6. Adequate sill supports at each landing are to be provided for hoistway entrances. Swing door entrances (when provided) are to be installed by general contractor.
7. A lockable self closing 2'-0" x 2'-0" governor access door with electric contact shall be provided in accordance with layout drawing (when required).

#### B. Machine Room

An adjacent machine room built to conform to the layout drawings, NFPA 70, ASME A17.1, and all applicable building code requirements. It shall have suitable access, a lockable door, a convenience outlet, and light switch. Machine room temperature must be maintained between 60 and 100 degrees Fahrenheit. Relative humidity not to exceed 95%.

2. A telephone line to the machine room and tied into the elevator controller as per ASME A17.1/CSA B44-00 safety codes.
3. Machine room vents as required by local code.

#### C. Electrical Requirements

1. A 220VAC, single phase service, with neutral, to a lockable safety disconnect switch, fused with time delay fuses shall be furnished in the machine room in accordance with NFPA 70. A normally open electric interlock contact is required in the switch for battery isolation.
2. A 120VAC, single phase, 15 AMP service to a lockable fused disconnect switch, or circuit breaker, located in the machine room shall be provided for the cab lighting in accordance with NFPA 70.
3. A pit light with switch and a GFI duplex receptacle shall be furnished in accordance with NFPA 70.

### 1.3 Quality Assurance

The elevator shall be designed, manufactured, installed, and inspected in accordance with ASME A17.1/CSA B44-00 standards and all applicable regulations of federal, state, and local codes and ordinances as adopted by local agencies having jurisdiction.

#### A. References

1. American National Standards Institute (ANSI)
2. American Society of Mechanical Engineers (ASME)
3. National Electric Code (NFPA 70)
4. CSA B44.1/ASME A17.5, elevator and escalator electrical equipment requirements.
5. CSA B44-00 safety code for elevators.

#### B. Qualifications

The installation shall be performed by a company with no less than (5) years of successful experience in the assembly and erection of similar type elevators and who has adequate product liability insurance.

#### C. Regulatory Requirements

The elevator installer shall verify requirements of the local authority having jurisdiction and shall obtain and pay for necessary municipal and state permits and inspections as required, and make tests as called for by the regulations of such authorities.

## Part 2: Submittals

### 2.1 Product Data

Submit manufacturers literature including product data, cab designs, color charts, signal fixtures, and specifications.

### 2.2 Layout Drawings

Layout drawings shall be submitted showing the general arrangement of the elevator equipment including dimensions, clearances, location of machine equipment, and all loads and reactions imposed on pit and building structure.

## Part 3: Product

### 3.1 Manufacturer

The roped hydraulic LU/LA elevator shall be manufactured by Custom Elevator Manufacturing Co. Inc. Plumsteadville, PA. US. Toll Free 1-888-443-2800 or 215-766-3380 Fax 215-766-3385 and installed by \_\_\_\_\_

### 3.2 Characteristics

Type: Roped 1:2 Hydraulic  
Capacity: 1400 lbs.  
Car Speed: 30 FPM  
Operation: SAPB/single button collective  
Travel: (25'-0" max. per ASME A17.1)  
Number of Stops:  
Number of Openings:  
Inside Car Dimensions: 42" X 60" X 81" high  
Doors: 36" x 80" two speed, horizontal sliding  
Power Supply: 220 Volt, single phase, 60 Hz.  
Cab Finish:  
Push Button Faceplates and Handrail Finish:

### 3.3 Equipment

#### A. Operation

Operation of the elevator shall be fully automatic. Control shall be single automatic push button or single button collective (field programmable); momentary pressure on any button will call or send the elevator to the corresponding landing and the car and hoistway doors shall open and close automatically.

1. **Battery lowering:** In the event of a power failure, the elevator shall automatically descend to the homepark landing, wait 30 seconds, then proceed to the bottom landing while monitoring all safety circuits. Elevator door(s) shall open and close automatically. Batteries are to have an automatic charging system.
2. **Emergency car lighting:** An emergency car light shall be furnished in the car operating panel that provides an illumination of not less than (2) foot candles at a point (48) inches above the car floor

- and (11) inches in front of the car operating panel for a minimum of (4) hours.
3. **Homepark feature:** The elevator shall automatically return to a field programmable designated landing after one minute without use.
  4. **Automatic car light timer:** With the in car light key switch in the "on" position, the cab lights shall time out automatically after (3) minutes and illuminate automatically when the elevator is called to a landing.
  5. **Automatic two-way leveling:** The leveling device shall automatically stop and maintain the car within  $\frac{1}{4}$  inch of the landing regardless of the change in load.
  6. **Low oil control:** A low oil control feature shall be provided, designed to automatically cause an up traveling car to descend to the lowest terminal landing if the elevator should fail to reach a landing in a predetermined time or if the system does not have a sufficient reservoir of oil.
  7. **Inspection operation:** Inspection operation shall be provided on the top of the car and from the main controller located in the machine room. Controller inspection shall be rendered inoperable when on top-of-car inspection. Inspection operating stations shall consist of a transfer switch and constant pressure "up", "down", and enable buttons. Top-of-car inspection station shall include an emergency stop, GFI protected duplex outlet, and a guarded light with a light switch. Controller shall be prepared with car and hoistway door bypass switches in accordance with ASME A17.1/CSA B44-00 safety codes.
  8. **Hoistway access switch:** A (3) position spring return key switch shall be furnished adjacent to the top landing door used to permit movement of the car with the top landing door and car door in the open position allowing service personnel to gain access to the car top when the distance from the top of the car to the landing sill exceeds (35) inches when the car is level with the landing below.
- B. Control System**  
A microprocessor based control system certified and labeled to the requirements of CAN/CSA-B44.1/ASME A17.5 shall be provided. It shall include a motor starter with a potential relay, motor overload device, an uninterrupted power supply with battery charging circuit, and redundant device circuits that prevent the car from moving in the occurrence of a single ground or failure of any critical circuit contactors or relays and such devices shall be monitored prior to each start to assure that these devices are functioning in their intended manner. All circuits shall be fuse protected. All to be enclosed in a single key lockable cabinet.
- C. Hydraulic Power Unit**  
The hydraulic power unit shall include a submersible motor, rotary screw type pump, two-speed control valve, and oil reservoir with an oil level gauge. The control valve shall include a safety check valve, up and down acceleration, deceleration, leveling, and soft stop adjustments, pressure relief valve, manual lowering valve, constant down speed regulation, pressure gauge with shutoff, negative pressure switch, and manual shutoff valve all mounted and enclosed in a compact unit assembly with a key lockable cover.
- D. Plunger and Cylinder**  
The cylinder shall be constructed of steel pipe with a steel bulkplate welded to the lower end and a cylinder head welded on the upper end which houses the self-adjusting packing, bearings, wiper, air bleeder, and leach line hose.  
The plunger shall be manufactured from accurately ground and polished tubing fitted with a steel stop ring welded to the bottom to prevent the plunger from leaving the cylinder in the up direction.
- E. Pipe Rupture Valve**  
An automatic shut off valve at the cylinder inlet shall be provided to stop and hold the elevator in the event of a main oil line failure or if the elevator should overspeed in the down direction.
- F. Car Frame and Platform**  
The car frame shall be fabricated from structural and formed steel members, welded and bolted construction, of the cantilevered design. It shall be fitted with roller guide shoes, car safeties, and a slack cable switch that will disconnect power to the control valve if a rope should become slack or broken. The car platform shall be fabricated from steel framing covered with plywood protected with a fire retardant material. A toe guard shall be provided at each car entrance extending below the platform.
- G. Car Suspension**  
The elevator car frame shall be suspended by (3)  $\frac{3}{8}$ " diameter, 6 X 19, traction steel cables. The cables shall dead end to the pit steel on one end, pass over a "U" groove sheave, and attach to the car safety device with approved type wedge sockets.
- H. Overspeed Governor**  
An overspeed governor shall be provided in the overhead and a tension weight with idler sheave shall be located in the pit. The governor cable shall be  $\frac{1}{2}$ " 8 x 19 traction steel and attach to the car safety device. The governor shall be designed to activate the car safeties in the event of an overspeed in the down direction. Governor shall be self resetting and be provided with means to seal the tripping speed adjustment.
- I. Guide Rails**  
The car guide rails shall consist of (2) machined steel "tee" sections, no less than 8 lb. per foot, securely fastened to the hoistway structure with steel brackets. All rail end sections shall be tongue & groove type joined with steel splice plates.
- J. Spring Buffers**  
Spring buffers shall be furnished in the pit when pit depth exceeds (21) inches. Buffers shall have sufficient load and stroke ratings in accordance with applicable codes.
- K. Car Operating Panel**  
Car operating panel shall consist of metal lens call pushbuttons with red LED halo lighting and Braille tags for each landing, door open buttons, an alarm button, emergency stop key switch, light key switch, emergency light, integral phone box with telephone, and a digital car position indicator with direction arrows and audible signal all mounted onto a brushed stainless steel faceplate.
- L. Landing Controls**  
Landing control stations shall consist of a metal lens call button with red LED halo lighting mounted onto a brushed stainless steel faceplate.
- M. Hoistway Doors**  
Each hoistway entrance shall consist of a two speed horizontal sliding reinforced hollow metal UL-B 1-1/2 hour fire rated door and frame assembly with prime (paintable) finish and extruded aluminum sill. Each opening shall be protected with an electro-mechanical interlock to prevent operation of the elevator unless all doors are closed and locked.
- N. Car Doors**  
Each car entrance shall be provided with a two speed horizontal sliding reinforced hollow metal door panels faced with brushed stainless steel finish. An electric contact shall be provided on each car door opening to prevent operation of the elevator unless the car door(s) are in the fully closed position. Car doors shall be equipped with a zone lock used to prevent opening of the car doors unless the car is within a landing zone.

O. Door Operator

A heavy duty DC master door operator with adjustable speed and torque shall be provided for each cab opening operable even during a power failure. Door operation shall be smooth and quiet through belt transmission and door movement shall be cushioned or checked at both limits of travel. Car doors shall be equipped with a clutch used to unlock and control the individual landing doors. Doors shall open automatically at each landing upon arrival of the car then close after a predetermined time interval

P. Door Safety Edge

Each car door shall be equipped with a full height infrared light curtain that will cause the doors to stop and reverse when closing if an obstruction is detected in the door openings. The door shall return to its open position and remain open for a predetermined time then close automatically.

Q. Door Hangers and Tracks

Door hangers and tracks shall be provided for each car and hoistway entrances. Track shall be rolled steel with working surfaces contoured to match the door Hanger rollers. Hangers shall be designed for two point suspension of each door panel and shall be equipped with up thrust rollers on each hanger assembly including a secondary upthrust retainer device. A cable drive shall be used to transmit motion from one car door panel to the other and a secondary door interlock devices shall be furnished to prevent the doors from ever separating. All hanger rollers shall have polyurethane tires with pre-lubricated and sealed bearings.

R. Car Enclosure

1. WALLS: ¾" thick fire rated wood core panels with plastic laminate faced interior and black-filled reveals to simulate applied panels.
2. CAR ENTRANCE: Strike column, return post, and transom shall be #4 brushed stainless steel.
3. CAR DOORS: Two-speed, side slide reinforced hollow metal construction faced on the interior with #4 brushed stainless steel finish.
4. CANOPY/LIGHTING: Canopy shall be steel with baked enamel white finish. Florescent lighting above a removable thermoclear panel drop ceiling supported in a aluminum "T" frame shall be furnished.
5. HANDRAIL: 3/8" x 2" #4 brushed stainless steel handrail shall be furnished on (1) side wall.
6. VENTILATION: Adequate protected vent openings shall be furnished in the car canopy and cab wall base.

S. Electrical Wiring

All wiring and electrical materials shall conform to NFPA 70 and with all applicable codes. Insulated wiring shall have flame-retardant and moisture proof outer covering and shall be run in conduit or electrical wireways as required. Traveling cables shall be flexible and suitably suspended to relieve strain. A pit stop switch located near and accessible from the lowest landing hoistway door shall be furnished.

T. Accessories

1. Cab Options

- Steel baked enamel finish wall panels
- #4 brushed stainless steel wall panels
- #4 brushed stainless steel base (kickplates)
- Protection pads and hooks
- Car top emergency exit
- Exhaust fan
- Plastic laminate faced car door(s)
- #4 brushed bronze metal finishes
- Custom car sizes (consult factory)

2. Door Options

- Fire rated accordion car door(s) available in chalk, light oak, or aluminum finish in lieu of two speed horizontal sliding doors
- Automatic car door operator for accordion car door(s)
- 36" x 80" fire rated swing door entrance(s) with prime (paintable) finish in lieu of two speed horizontal sliding doors. Swing doors include hinges, passage sets, delay action closers, and vision panel in door.
- Low energy fully automatic power swing door operator(s)
- #4 Brushed stainless steel entrances (two-speed only).
- Plastic laminate doors (two-speed only).
- Baked enamel hoistway entrances (two-speed only).

3. Controls/Pushbutton Options

- Digital hall position indicators with direction arrows incorporated into the hall call station
- Car travel lantern with audible signal
- Fire service phase I and II with alternate return floor
- ADA compliant phone
- #4 brushed bronze faceplate/button finishes
- Keyed control switches in car and/or hall

4. Other Options

- Direct acting hydraulic in lieu of roped 1:2
- 208/230/480 volt, 3 phase power
- Car top/bottom stopping devices (alternate means)
- Remote-set solenoid on governor for testing from the machine room.
- Tank heater

## Part 4: Execution

### 4.1 Examination

Elevator installer shall verify dimensions of hoistway, pit, machine room, and inspect conditions of supports and structure prior to installation.

### 4.2 Installation

The elevator shall be installed in accordance with the manufacturer's instructions and shall conform to ASME A17.1/CSA B44-00 and all state and local code requirements.

### 4.2 Operating Instructions

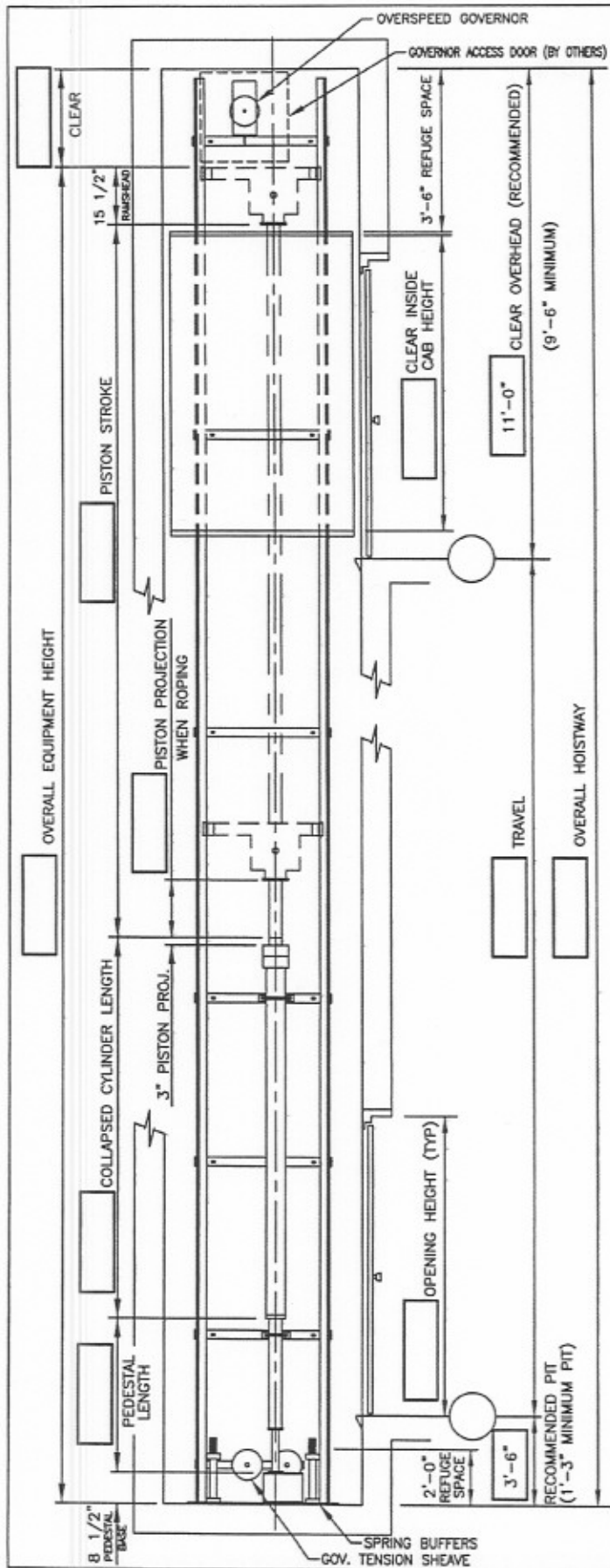
Upon completion of the installation, the owner shall be instructed on the elevator's operation, safety precautions, and maintenance requirements. The owner shall be supplied with an owner's manual to retain for reference.

### 4.3 Maintenance

The elevator shall be maintained in accordance with the manufacturer's recommendations and all applicable codes.

### 4.4 Warranty

The elevator shall have a (2) year limited parts warranty.



## GENERAL NOTES AND PROVISIONS REQUIRED BY OTHERS

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2. WHERE WOOD FRAME CONSTRUCTION IS USED, DOUBLE 2" X 12'S SPACED AS INDICATED ON LAYOUT DRAWINGS, AND EXTENDING THE FULL HEIGHT OF THE HOISTWAY ARE RECOMMENDED.
3. FOR MASONRY WALLS, INSERTS SHALL BE PROVIDED BY ELEVATOR CONTRACTOR AND INSTALLED BY THE GENERAL CONTRACTOR.
4. TOTAL TRAVEL DISTANCE FROM FINISHED BOTTOM FLOOR TO FINISHED TOP FLOOR MUST BE HELD WITHIN 1" OF THAT SHOWN ON LAYOUT DRAWING.
5. OVERHEAD CLEARANCE: (TOP FLOOR TO UNDERSIDE OF HOISTWAY CEILING OR OBSTRUCTION) TO BE MAINTAINED PER THESE LAYOUTS. IF A MINIMUM OF 11'-0" CAN NOT BE ACHIEVED, CONTACT FACTORY FOR ALTERNATE ARRANGEMENT.
6. A PIT CONFORMING TO THE DIMENSIONS INDICATED ON THE LAYOUT DRAWINGS MUST BE PROVIDED. THE PIT MUST BE DESIGNED FOR THE IMPACT LOAD INDICATED AND MUST BE GUARANTEED DRY AND LEVEL FROM WALL TO WALL. IF A MINIMUM OF 3'-6" CAN NOT BE ACHIEVED, CONTACT FACTORY FOR ALTERNATE ARRANGEMENT.
7. A SUMP PUMP AND SUMP PUMP HOLE WITH COVER IS RECOMMENDED IN THE ELEVATOR PIT WHERE WATER SEEPAGE IS ENCOUNTERED. A G.F.I. RECEPTACLE IS REQUIRED IF A SUMP PUMP IS FURNISHED. COORDINATE LOCATION WITH ELEVATOR CONTRACTOR.
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### RAIL BRKT. SPACING CHART

BRKT. NO.	ELEV. FROM PIT FLOOR	PEDESTAL BRKT.	CYL. BRKT.	RAIL BRKT.	OVERSPEED GOVERNOR MOUNTING BRKT.
8					
7					
6					
5					
4					
3					
2					
1					

### 8 LB/FT GUIDE RAILS REQ'D.

NO. OF PCS.	RAIL LENGTH
2	10'-0"

### LANDING LOCATION CHART

LANDING	FRONT	REAR	SIDE
2			
1			

### PIT REACTIONS

LOAD ON JACK	LBS
LOAD ON BUFFERS	LBS

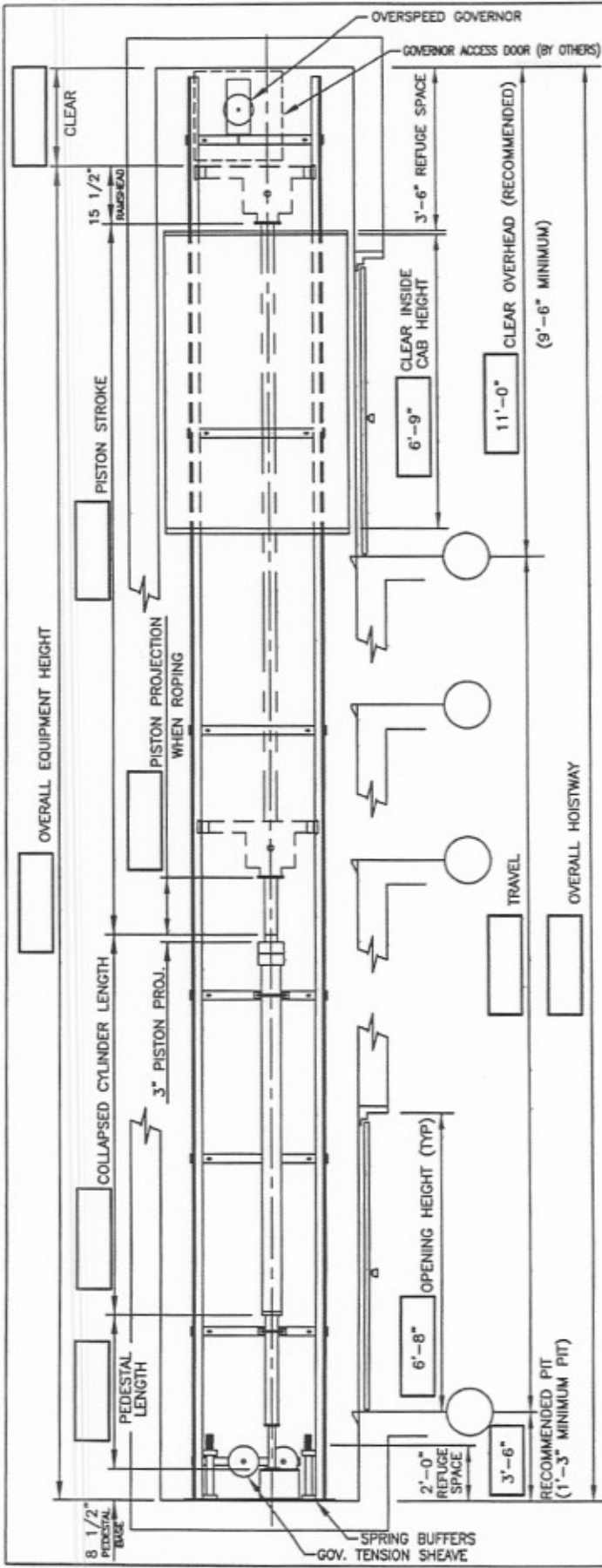
### 2 STOP HOISTWAY ELEVATION

*Custom*  
**ELEVATOR**  
manufacturing  
company, inc.

P.O. BOX 749 5191 STUMP RD.  
PLUMSTEADVILLE, PA. 18949  
PHONE: 215-766-3380  
FAX: 215-766-3385

ROPED HYDRAULIC  
LULA ELEVATOR

PROJECT:		
PRELIMINARY DATE:	APPROVED BY:	FINAL DATE:
DRAWN BY:		DRAWING NUMBER:
SCALE: N.T.S.		
PLAN NUMBER: 2 STOP ELEVATION		



### GENERAL NOTES AND PROVISIONS REQUIRED BY OTHERS

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8					
7					
6					
5					
4					
3					
2					
1					

### 8 LB/FT GUIDE RAILS REQ'D.

NO. OF PCS.	RAIL LENGTH
2	10'-0"


### LANDING LOCATION CHART

LANDING	FRONT	REAR	SIDE
4			
3			
2			
1			

### PIT REACTIONS

LOAD ON JACK	LBS
LOAD ON BUFFERS	LBS

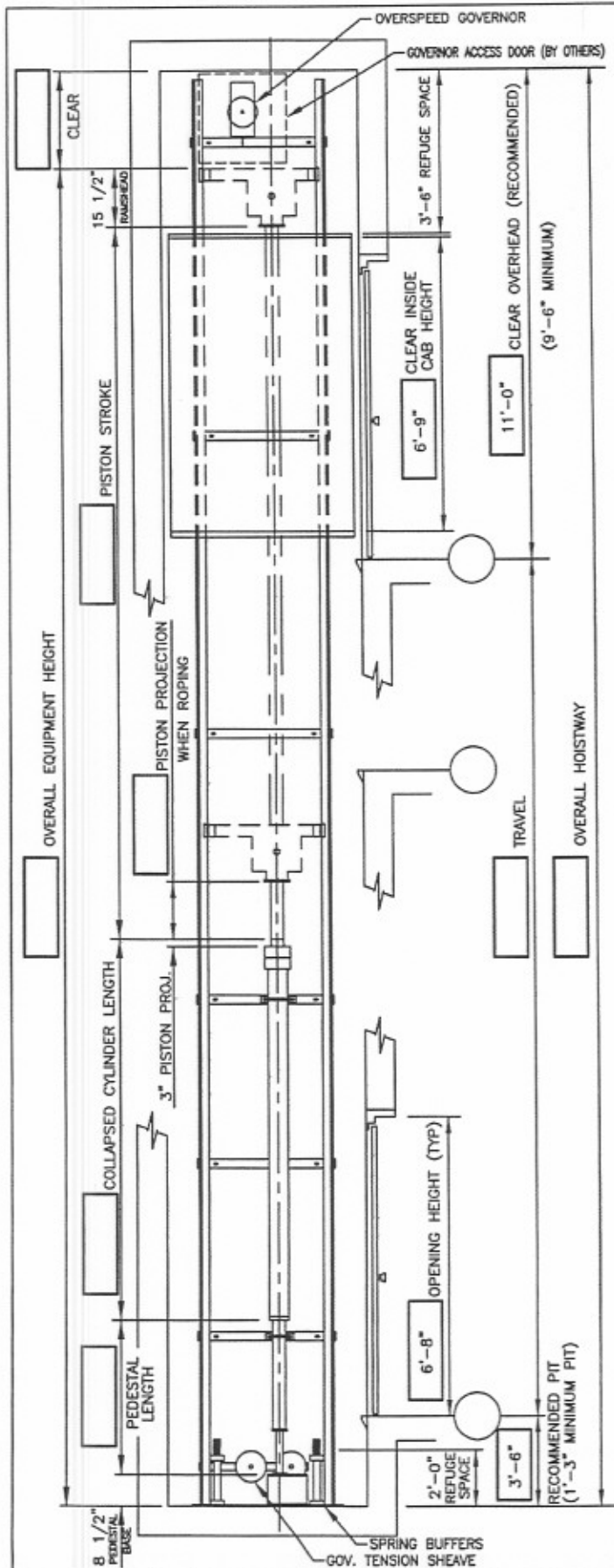
### 4 STOP HOISTWAY ELEVATION


**Custom ELEVATOR**  
 manufacturing company, inc.

P.O. BOX 749 5191 STUMP RD.  
 PLUMSTEADVILLE, PA. 18949  
 PHONE: 215-766-3380  
 FAX: 215-766-3385

**ROPED HYDRAULIC LULA ELEVATOR**

PROJECT:		
PRELIMINARY DATE:	APPROVED BY:	FINAL DATE:
DRAWN BY:		DRAWING NUMBER:
SCALE: N.T.S.		
PLAN NUMBER: 4 STOP ELEVATION		



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### 8 LB/FT GUIDE RAILS REQ'D.

NO. OF PCS.	RAIL LENGTH
2	10'-0"

### LANDING LOCATION CHART

LANDING	FRONT	REAR	SIDE
3			
2			
1			

### PIT REACTIONS

LOAD ON JACK	LBS
LOAD ON BUFFERS	LBS

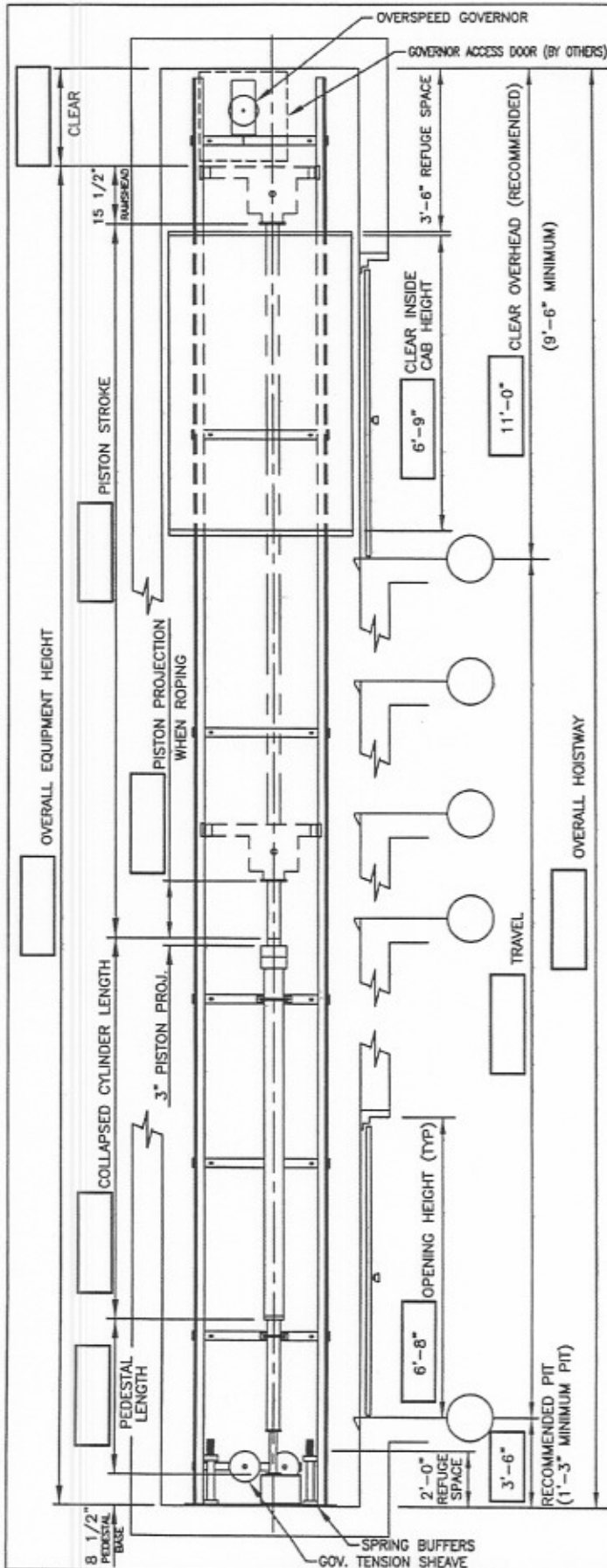
### 3 STOP HOISTWAY ELEVATION

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PLUMSTEADVILLE, PA. 18949  
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ROPED HYDRAULIC  
LULA ELEVATOR

PROJECT:		
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DRAWN BY:		DRAWING NUMBER:
SCALE: N.T.S.		
PLAN NUMBER: 3 STOP ELEVATION		



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### 8 LB/FT GUIDE RAILS REQ'D.

NO. OF PCS.	RAIL LENGTH
2	10'-0"

### LANDING LOCATION CHART

LANDING	FRONT	REAR	SIDE
5			
4			
3			
2			
1			

### PIT REACTIONS

LOAD ON JACK	LBS
LOAD ON BUFFERS	LBS

### 5 STOP HOISTWAY ELEVATION

**Custom ELEVATOR**  
manufacturing company, inc.

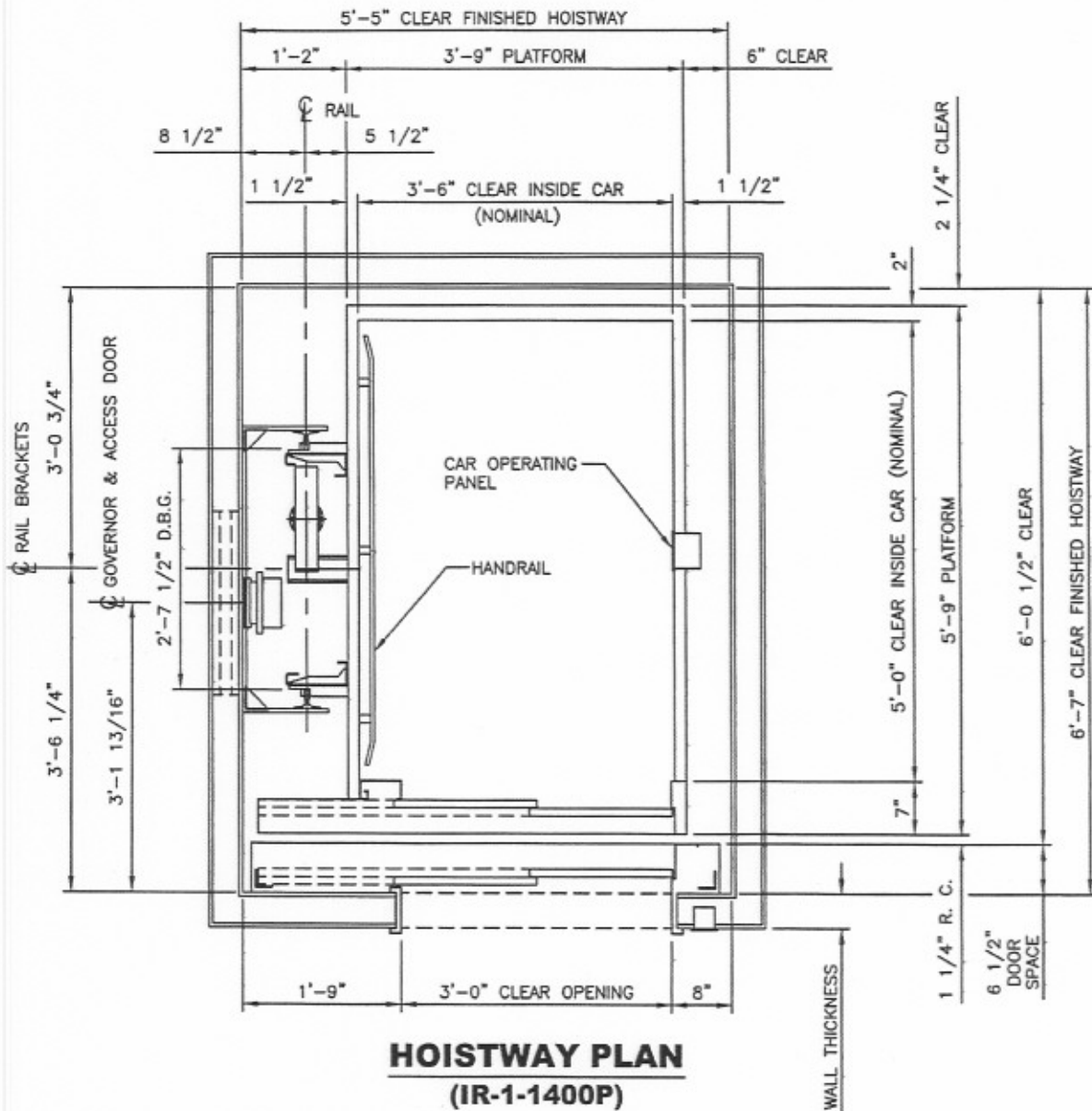
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ROPED HYDRAULIC  
LULA ELEVATOR

PROJECT:		
PRELIMINARY DATE:	APPROVED BY:	FINAL DATE:
DRAWN BY:		DRAWING NUMBER:
SCALE: N.T.S.		
PLAN NUMBER: 5 STOP ELEVATION		



REVISIONS		
REV	DATE	DESCRIPTION



**GENERAL NOTES AND PROVISIONS  
REQUIRED BY OTHERS**

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2. ADEQUATE SUPPORTS MUST BE PROVIDED FOR FASTENING RAIL BRACKETS AS INDICATED ON THE LAYOUT DRAWINGS. SUPPORTS MUST WITHSTAND RAIL FORCES INDICATED.
3. ALL BLOCKOUTS FOR HALL BUTTONS MUST BE PROVIDED. LOCATION TO BE COORDINATED WITH ELEVATOR CONTRACTOR.
4. THE ENTIRE WALL OF THE HOISTWAY AROUND EACH OPENING MUST NOT BE CONSTRUCTED UNTIL THE HOISTWAY DOOR FRAMES ARE SET. SWING DOOR ENTRANCES ARE TO BE INSTALLED BY THE GENERAL CONTRACTOR.
5. ADEQUATE SUPPORTS FOR SILL ANGLES AND SILLS ACROSS FULL WIDTH OF HOISTWAY SHALL BE FURNISHED AT EACH LANDING. SILLS ARE TO BE GROUTED AFTER INSTALLATION.
6. ALL WALL PATCHING, PAINTING, AND GROUTING BY OTHERS. FINISH PAINTING OF ALL HOISTWAY DOORS AND FRAMES BY OTHERS.
7. A LOCKABLE SELF CLOSING 2'-0" x 2'-0" GOVERNOR ACCESS DOOR WITH ELECTRIC CONTACT SHALL BE PROVIDED IN ACCORDANCE WITH LAYOUT DRAWING (WHEN REQUIRED).

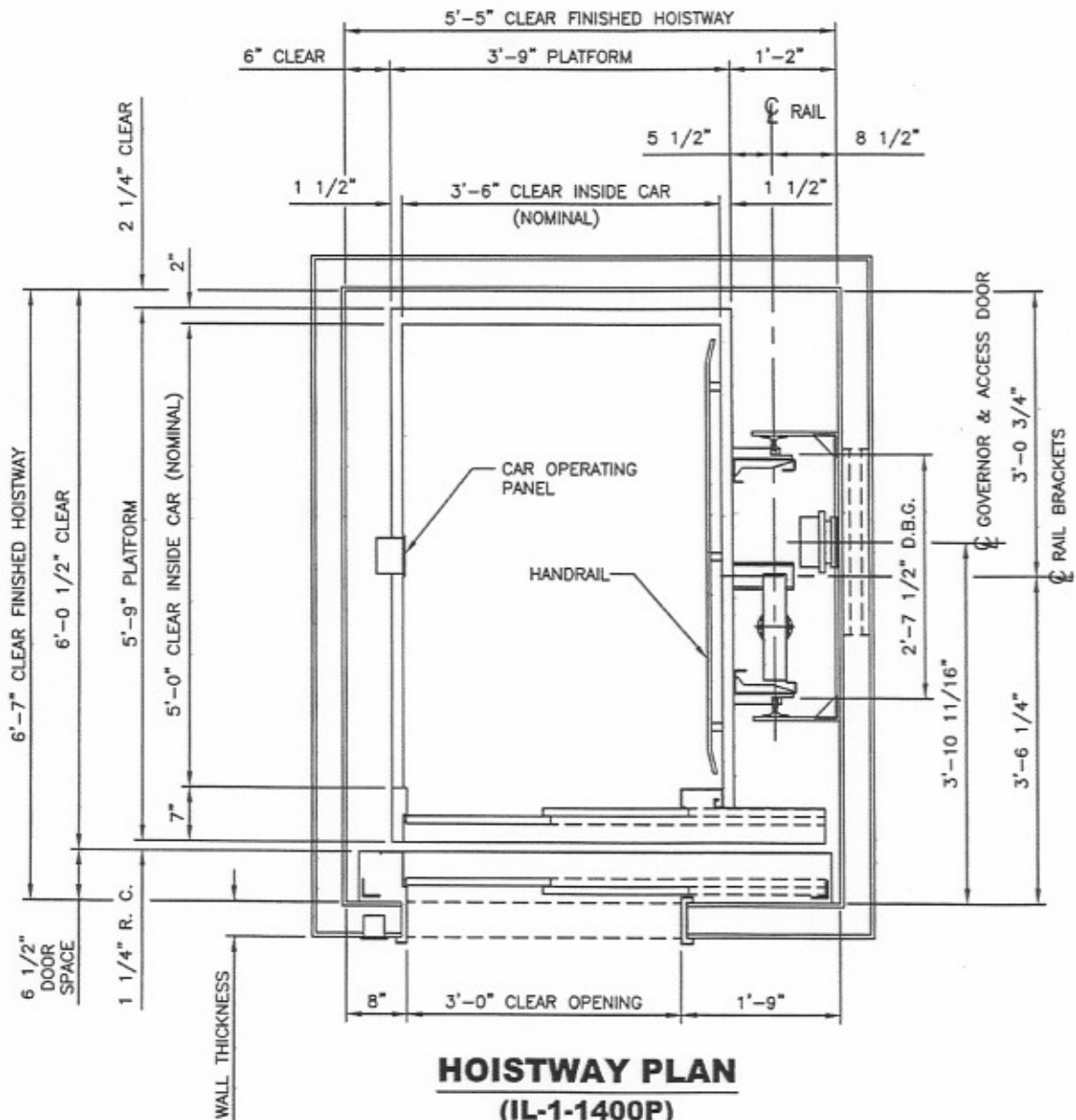


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PHONE: 215-766-3380  
FAX: 215-766-3385

ROPED HYDRAULIC  
LULA ELEVATOR


PROJECT:		
PRELIMINARY DATE:	APPROVED BY:	FINAL DATE:
DRAWN BY:		DRAWING NUMBER:
SCALE: N.T.S.		
PLAN NUMBER: IR-1-1400P		

REVISIONS		
REV	DATE	DESCRIPTION

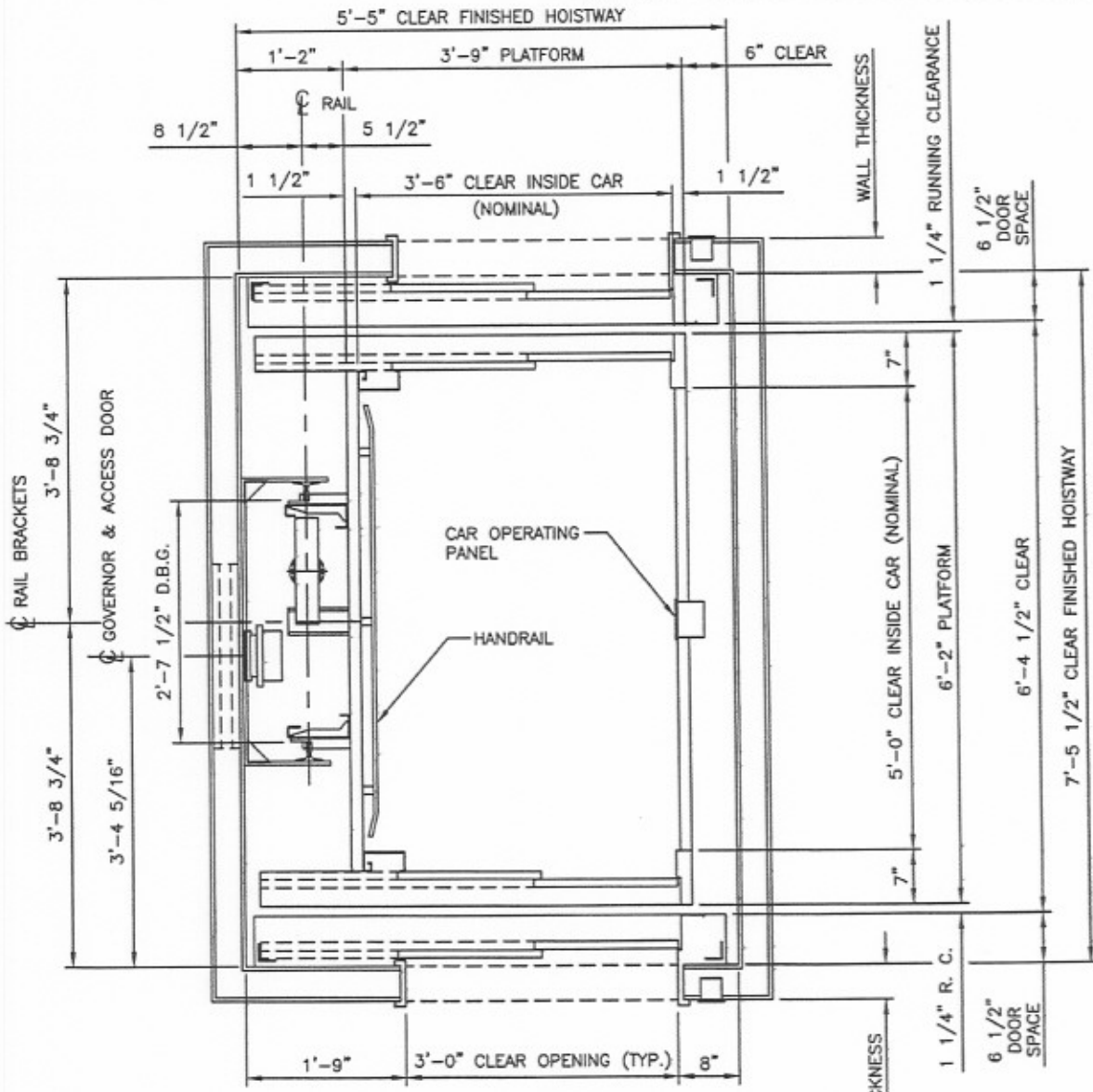


**GENERAL NOTES AND PROVISIONS  
REQUIRED BY OTHERS**

1. FINISHED HOISTWAY MUST CONFORM TO THE DIMENSIONS INDICATED ON LAYOUT DRAWINGS. ALL WALLS AND SIDE MEMBERS MUST BE SQUARE AND EXTEND FROM SILL TO BEAM ABOVE. INSIDE SURFACE OF HOISTWAY MUST BE FLUSH.
2. ADEQUATE SUPPORTS MUST BE PROVIDED FOR FASTENING RAIL BRACKETS AS INDICATED ON THE LAYOUT DRAWINGS. SUPPORTS MUST WITHSTAND RAIL FORCES INDICATED.
3. ALL BLOCKOUTS FOR HALL BUTTONS MUST BE PROVIDED. LOCATION TO BE COORDINATED WITH ELEVATOR CONTRACTOR.
4. THE ENTIRE WALL OF THE HOISTWAY AROUND EACH OPENING MUST NOT BE CONSTRUCTED UNTIL THE HOISTWAY DOOR FRAMES ARE SET. SWING DOOR ENTRANCES ARE TO BE INSTALLED BY THE GENERAL CONTRACTOR.
5. ADEQUATE SUPPORTS FOR SILL ANGLES AND SILLS ACROSS FULL WIDTH OF HOISTWAY SHALL BE FURNISHED AT EACH LANDING. SILLS ARE TO BE GROUTED AFTER INSTALLATION.
6. ALL WALL PATCHING, PAINTING, AND GROUTING BY OTHERS. FINISH PAINTING OF ALL HOISTWAY DOORS AND FRAMES BY OTHERS.
7. A LOCKABLE SELF CLOSING 2'-0" x 2'-0" GOVERNOR ACCESS DOOR WITH ELECTRIC CONTACT SHALL BE PROVIDED IN ACCORDANCE WITH LAYOUT DRAWING (WHEN REQUIRED).

 <b>Custom ELEVATOR</b> <small>manufacturing company, inc.</small>	P.O. BOX 749 5191 STUMP RD. PLUMSTEADVILLE, PA. 18949 PHONE: 215-766-3380 FAX: 215-766-3385	
	ROPED HYDRAULIC LULA ELEVATOR	
PROJECT:		
PRELIMINARY DATE:	APPROVED BY:	FINAL DATE:
DRAWN BY:		DRAWING NUMBER:
SCALE: N.T.S.		
PLAN NUMBER: IL-1-1400P		


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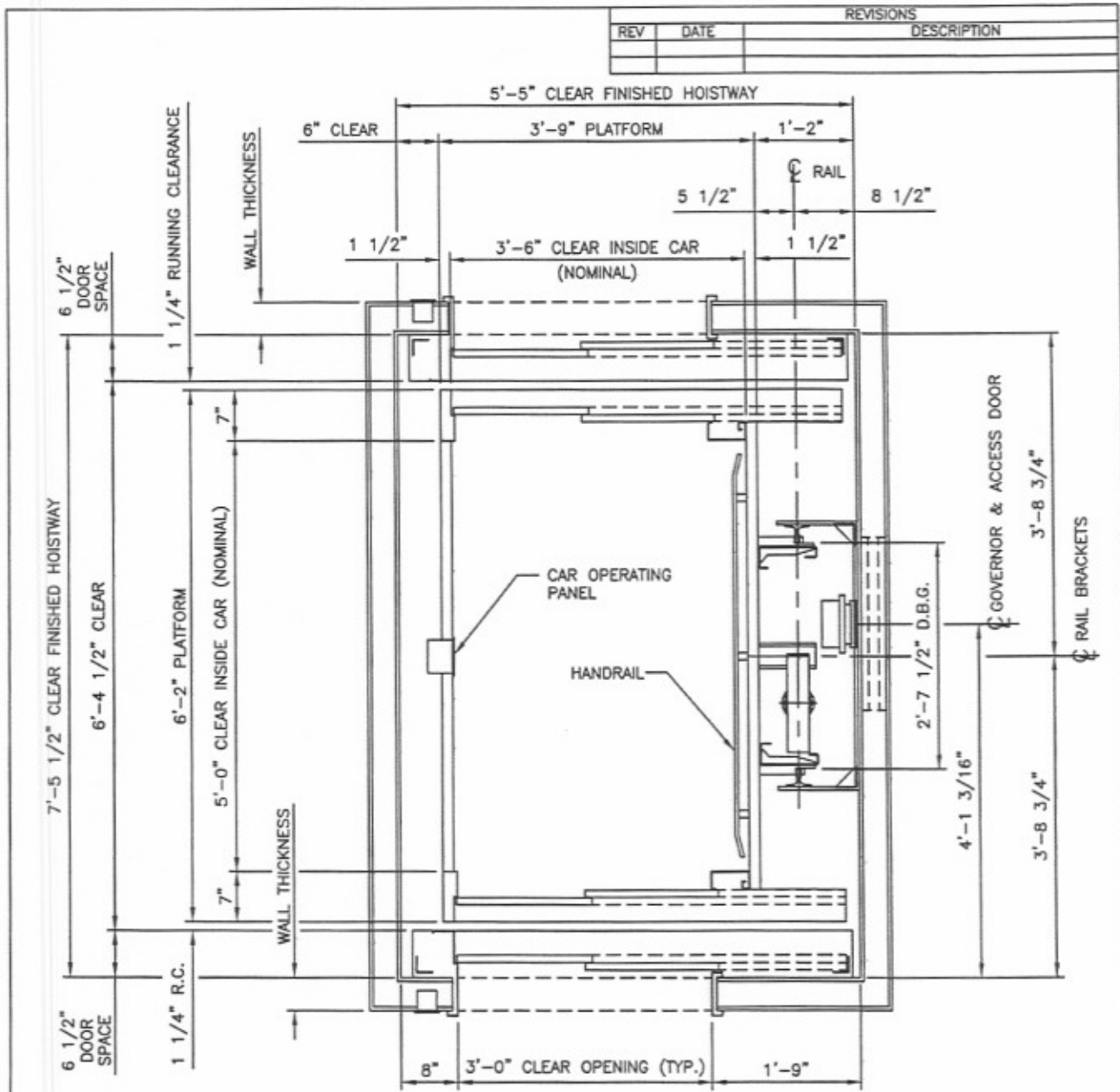


**HOISTWAY PLAN  
(RR-1-1400P)**

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REQUIRED BY OTHERS**

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<b>ROPED HYDRAULIC LULA ELEVATOR</b>		
PROJECT:		
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REVISIONS		
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**HOISTWAY PLAN  
(RL-1-1400P)**

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	<b>ROPED HYDRAULIC LULA ELEVATOR</b>

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PLAN NUMBER: RL-1-1400P		

**Limited Use/Limited Application (LU/LA) Elevator  
Hole-less Hydraulic**

**Custom Elevator Manufacturing  
Design Specification**

prepared for:

**Garaventa USA / Florida**  
**[www.garaventa-florida.com](http://www.garaventa-florida.com)**

3500 NE 11<sup>th</sup> Ave., Ft. Lauderdale, FL 33334  
Phone 954/567-1252 FAX 954/567-1178

## SPECIFICATIONS

### Limited Use/Limited Application (LU/LA) Elevator -- Section 14200

#### PART 1 GENERAL

##### 1.1 GENERAL PROVISIONS

Attention is directed to the General Documents, as listed in the table of contents, and to applicable portions of Division \_\_\_\_ which are herewith made a part of this section.

##### 1.2 WORK TO BE PERFORMED/SCOPE OF WORK

- A. The General Contractor shall provide an approved 2-hour fire rated elevator hoistway including concrete pit and pit floor.
- B. The elevator subcontractor shall provide the hoistway door assemblies, elevator rails, cylinder, cable, and all associated wiring, plumbing and telephone connections for the installation of the elevator cab.
- C. These specifications are intended to cover the complete installation of a limited use/limited access handicap elevator in a first-class workmanlike manner and includes all Work and materials in accordance with the drawings and as specified.

##### 1.3 RELATED WORK

- A. The following work is to be performed under the designated sections and coordinated with the work in this section:

Section 03300 - Concrete	}	<i>as required</i>
Section 04400 - Masonry		
Section 06100 - Carpentry		
Section 15000 - Electrical		
...		

- B. Work by Others - The following items of Work are specifically included under the Work of the General Contractor:

- 1. Provide legal hoistway, pit and machine room, including concrete pad for machine support as shown on the drawings.
- 2. Cut all walls, floors or partitions together with any repairs made necessary thereby.
- 3. Provide adequate support for monorail system as located on the drawings.
- 4. Provide guards and protect the hoistway during the time the equipment is being erected.
- 5. Finish painting of the landing entrances and access door(s) as required by the architect.
- 6. Provide and install electric power feeders to the terminals of the controller including main line fused disconnect switch and main power feeder to the final upper limit as shown on the drawings.
- 7. Provide requisite hoistway outlet for the car light and provide for the necessary telephone connection, including services of local telephone company or vendor to make final connection to the telephone network.
- 8. Provide the necessary electric power for installing, testing and adjusting the elevator equipment.

##### 1.4 SUBMITTALS

###### A. Manufacturer's Data

- 1. Submit the manufacturer's specifications and installation instructions for each complete system.
- 2. Include a complete listing and description of performance and operating characteristics.
- 3. Show maximum and average power demands.

B. Shop Drawings

1. Include shop drawings for each elevator system, including typical details of assembly, erection and anchorage drawn at large scale.
2. Include wiring diagrams of power distribution, control, and signals for the entire system.
3. Before beginning work, the contractor shall submit to the Project Manager for his approval, detailed drawings, showing the complete layout of the equipment, location of all machinery and apparatus, together with any suggested alterations to the items specified.

C. Samples. Submit samples of each exposed finish required for the work.

D. Maintenance Manual

1. Submit one copy of bound maintenance manual.
2. Include full maintenance and operating instructions, parts lists, recommended spare parts and emergency parts inventory, sources of purchases and similar information.

1.5 JOB CONDITIONS

- A. The elevator shall not be used for the hoisting of materials or personnel during the construction period.

1.6 QUALITY ASSURANCE

- A. Manufacturer: Must be a firm experienced in the manufacturing of elevators/lifts, with evidence of experience with similar installations of the type specified.
- B. Installer: Must be a contractor licensed to install equipment of this scope, with evidence of experience with this equipment.
- C. The installer must also employ competent personnel, maintain an adequate stock of replacement parts, have qualified people available to ensure fulfillment of maintenance and call-back service without unreasonable loss of time in reaching the job site.
- D. Regulatory Requirements: Elevator Code: Comply with applicable requirements of ANSI/ASME A17.1, "Safety Code for Elevators and Escalators", as amplified or modified by applicable Florida State Regulations (hereafter referred to as the "Code").

1.7 GUARANTEE

- A. Submit written guarantee to repair or replace defective materials and workmanship of the elevator during the guarantee period at no cost to the Using Agency.
- B. See Section 2.12 below for specific guarantee provisions.

1.8 MAINTENANCE

- A. The cost of renewals or repairs caused by reason of negligence, misuse, or accidents beyond the control of the elevator/lift contractor shall not be his responsibility.
- B. The maintenance service (including emergency call-back) shall be performed solely by the contractor, shall not be assigned or transferred to any agent or sub-contractor and shall be done during the regular working hours and days of the elevator/lift contractor.
- C. If call-back service is required between regular inspections, and is necessitated by defects which are not covered by the guarantee, this contractor will be reimbursed.
- D. Call-back service necessitated by defects which are covered by the guarantee shall be provided without charge.

**PART 2 EQUIPMENT**

2.1 Elevator: One (1) Limited Use/Limited Application (LU/LA) Elevator as manufactured by Custom Elevator Manufacturing Co. Inc., Plumsteadville, PA, furnished and installed by Garaventa USA Inc.- South Florida, (954) 567-1252.

- A. Type: Hydraulic, hole-less
- B. Capacity: 1400 lbs.

- C. Power Unit: CD rotary screw pump unit mounted in oil tank
- D. Speed: 30 feet per minute
- E. Travel: From \_\_\_\_\_ to \_\_\_\_\_, approximately \_\_\_\_\_ feet. (25 feet maximum)
- F. Cab openings: \_\_\_\_\_ cab opening(s), arranged inline exit/entry configuration, enter front lower landing exit front upper landing (one cab door); or arranged opposite with a straight through exit/entry configuration, enter front lower landing leave rear upper landing (2 cab doors).
- G. Landings: \_\_\_\_\_ landings (up to five landings), arranged inline or opposite.
- H. Operation: Automatic push button with automatic leveling and emergency lowering device
- I. Control: Soft start two speed, alternating current
- J. Platform size: 42" x 60"
- K. Cab: Steel frame with plastic laminate finish on ¾" thick fire rated wood core panels.
- L. Landing Doors, provide \_\_\_\_\_ landing doors:  
Sliding Landing doors to be 3'-0" x 6'-8" two-speed, two-panel, side-slide door assemblies with full frame, sill, header and trim, equipped with:
  1. Electro-mechanical interlocks
  2. Automatic opening and closing
  3. Infra-red safety edge
  4. Automatic re-open function
  5. Rated for "B" Label (1½ hour fire resistance)
  6. Sills and fascia included
  7. Automatic locking when car is idle
  8. Doors and frames to be supplied by Elevator Subcontractor, frames to be hung by General Contractor, coordinating with Elevator Subcontractor.
  9. Primed for painting by others.
- M. Car Doors: One for each car opening:  
 3'-0" x 6'-8" two-speed, two-panel, side-slide car door assembly to match landing doors.  
 (supplied with automatic side-slide landing door option)
- N. Signals
  1. Flush mounted car controls and car travel lantern with audible signal. Emergency lighting and battery alarms.
  2. Digital Car Position Indicator with direction arrows in the car.
  3. Floor "stop/pass" signal in car.
- O. Telephone. One (1) emergency auto-dial telephone, with hands-free operation and call confirmation feature.
- P. Fire Service Phase I and II with alternate return floor
- Q. Power: 220 volts, single (1) phase, 60 hertz, 60-amp service with neutral, using wire sizes as specified by the manufacturer.

## 2.2 Electric Wiring and Piping

- A. All necessary wiring and piping shall be furnished and installed in the machine room and hoistway in accordance with the applicable codes.
- B. All wire and traveling cables shall have a flame retarding and moisture resistant outer cover.
- C. All wiring shall be in metal conduit, metallic tubing, wire ducts or raceways.
- D. Traveling cables shall be flexible and suitably suspended so that there is no strain in the individual conductors.
- E. Flexible control cables shall be of approved design and quality.
- F. All Work shall conform to all requirements of Section 16000 – Electrical

## 2.3 Car

- A. The car shall be 42" wide by 60" front to back
- B. Steel frame assembly.
- C. Sides shall be faced with plastic laminate on ¾" thick fire rated wood core panels.
- D. Car shall have a steel white finished ceiling with florescent lighting above removable thermonuclear panel drop ceiling.



- 2.4 Platform
- A. The car platform shall be fabricated from steel framing covered with fire retardant unfinished plywood including a toe guard provided at each entrance extending below the platform.
  - B. The sill shall be set for 1/4" finished floor by others.
- 2.5 Machine Location
- A. Machine shall be located adjacent to the hoistway as shown on the Drawings.
- 2.6 Guide Rail
- A. Car guide rail shall be 8 lb/ft planed steel "tee" rail, provided with mounting bracket supports, with heavy duty splice bolts at rail splices.
  - B. Rail sections are to be number-matched and ground for easy installation.
- 2.7 Machine
- A. The machine shall be constant displacement rotary screw pump unit and motor mounted in the oil tank reservoir. For noise suppression, a submerged motor is standard equipment.
- 2.8 Operation and Control
- A. Operation shall be by single automatic push button in flush mounted car operating panel and shall include the light key switch and alarm switch. Keyed operation is available as option.
  - B. The momentary pressure activation of a numbered landing button shall dispatch the car to the corresponding landing.
  - C. An keyed emergency stop switch shall also be provided in the car to interrupt the power supply and to apply the brake independently of the regular operating device.
  - D. "Call" switches of the momentary contact type shall be mounted at each landing. Momentary activation of the switch shall start the car provided the interlock circuits are established and cause the car to stop at the respective landing. These call stations may be key-protected.
  - E. The operation shall be arranged to give the passenger in the car complete and uninterrupted use of the elevator until the car has reached the desired floor.
- 2.9 Car Enclosure Emergency Lighting
- A. A complete emergency battery-powered lighting system shall be provided and installed in the car enclosure in addition to the standard lighting system.
- 2.10 Telephone Cabinet and Cable
- A. The Elevator Subcontractor shall furnish and install a suitable telephone cabinet and emergency telephone instrument in the car and shall furnish and install the necessary telephone cable from the instrument to a junction box furnished by others in the machinery room or other suitable location.
- 2.11 Safety Devices. Furnish and install
- A. Broken cable instantaneous safety device on the car (if roped-hydraulic)
  - B. Over-run switches (final limit) in the hoistway
  - C. Slack cable main line disconnect switch in the machine room
  - D. Car door/gate interlocks and hoistway door interlocks at all openings
  - E. Intermediate landings will be protected by solenoid-operated retiring cam type GAL interlocks.
- 2.12 Guarantee
- A. The Elevator Contractor shall guarantee that all workmanship and materials comply with the specifications for the project.
  - B. Any defects in the equipment that occur within one (1) year of the date of completion shall be corrected at no expense to the Owner, providing that written notice of such defect is provided within the one year time period.
  - C. Defects due to ordinary wear and tear, improper use or abuse, or improper care or maintenance are specifically excluded.

- D. The Elevator Contractor shall provide two (2) copies of his comprehensive guarantee in writing at the time of Substantial Completion.
- E. The guarantee commencement date will be the date of Substantial Completion, whereby the elevator is tested and certified by the local and state authorities having jurisdiction. Any other date or time period relating to actual use of the elevator shall not supersede the test date and subsequent one (1) year guarantee from that date.

#### 2.13 Maintenance

- A. The equipment installed under these specifications requires periodic maintenance by competent mechanics trained to examine, lubricate and adjust this type of equipment.
- B. The guarantee above will not supplant the normal preventive maintenance servicing of this equipment, as provided in this specification.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. General: Comply with manufacturer's written installation instructions applicable to products and applications indicated, except where more stringent requirements apply.
- B. Enclose wiring within housings of units where practicable. Exposed wiring shall be run in approved conduit, EMT or Wire-Mold as specified. Concealed wiring will be the work of other trades (Electrical) and will be coordinated by the owner.
- C. Alignment: Coordinate landing limits with platform travel and positioning, for accurate alignment and minimum clearance between landings.
- D. Adjust stops for accurate leveling at each landing, within specified tolerances. Leveling Tolerance: 1/4 inch (6 mm) up or down, regardless of load and direction of travel.
- E. Lubricate operating parts of elevator, including drive mechanism, guide rails, gates, safety devices, and hardware.

#### 3.2 FIELD QUALITY CONTROL

- A. Acceptance Testing: Upon nominal completion of each installation, and before permitting the use of elevators, perform acceptance tests as required and recommended by the "Code" and by authorities having jurisdiction.
- B. In addition to above testing, test operate elevator continuously between lowest and highest landings served, lifting full-rated capacity load for a minimum period of 30 minutes. Readjust stops and other devices and signal equipment for accurate landings and operation of system.

#### 3.3 DEMONSTRATION

- A. Instruct Owner's maintenance personnel in the proper use, operation, and maintenance of elevators. Review emergency provisions, including access and procedures to be followed in checking for sources of operational failures or malfunctions. Confer with Owner on requirements for a complete maintenance program.
- B. Check each elevator operation with Owner's maintenance personnel present before time of Substantial Completion. Determine that control system, operating components, and safety devices are functioning properly.

END OF SECTION - 14200

Proposal Number: \_\_\_\_\_  
Proposal Date: July 21, 2005  
Expiration Date: 30 days from above



## PROPOSAL

### Limited Use/Limited Application Elevator

Project: **Surfstyle Store**  
Location: **Miami Beach, FL**  
Specification: **Limited Use/Limited Application Elevator/14200**

I. Summary. This proposal represents our offer to furnish and install the full scope of work described in the plans and specifications. Compliance with plans, specifications and design intent is certified, with exceptions, if any, listed in paragraph VII below.

II. Materials to be provided: One (1) **Limited Use/Limited Application Elevator**, according to the following schedule:

<u>Model</u>	<u>Location</u>
IR/L-1-1400P	Per Plans

Equipment Configuration:

1400 lb (max) capacity	Drop ceiling w/ fluorescent lighting
Digital floor position indicator w/ direction arrows in car	Front car
Automatic push button controls in car & hall stations	Car Grab Rail
(2) Hoistway Automatic Sliding Doors	Pitted Construction
(1) Cab Automatic Sliding Doors	42" X 60" Platform
Manual Lowering Device	Fire service – Phase I & II
Emergency Stop/Alarm	State Certification
ADA telephone w/ voice announce	2-year warranty
	Emergency Lowering Feature
	2:1 Roped Hydraulic Drive

III. Labor to be provided: All labor and incidental materials necessary for the delivery, set-up, installation, adjusting, inspecting, testing and delivery to the owner of the complete elevator system at a location in the building prepared by others.

IV. Proposal amount: **\$ 34,340.00.**

V. Terms: per negotiated schedule of values.

Materials which are not accepted upon an attempt to deliver will be stored and scheduled for re-delivery at the owner's expense. Invoices are payable upon presentation. Title to all equipment shall remain with Garaventa USA, Inc. until all invoices are paid in full.

Customer agrees to bear all costs of collection of overdue invoiced amounts, including any agent/attorney's fees incident thereto.

VI. Delivery: In accordance with the project phasing schedule, but not earlier than \_\_\_\_\_ weeks from approval of submittals or shop drawings. Shop drawings may be expected within \_\_\_\_\_ weeks of acceptance by all parties of this proposal or other form of contract/purchase order. These time estimates are provided for planning purposes only and do not represent a contractual obligation or commitment.

VII. Exceptions to specification: (none)

**Garaventa USA**

3500 NE 11<sup>th</sup> Ave, Ft. Lauderdale, FL 33334

[www.GaraventaUSA.com](http://www.GaraventaUSA.com)

Phone: (954) 567-1252 FAX: (954) 567-1178

VIII. Comments/conditions:

1. All mains electrical power to the drive machine location is the responsibility of the owner, including any permits required for this portion of the work. This work includes: (1) mains power (220 volt 1-phase, 60 amps, with neutral) with fused disconnect in the machine room, (2) cab lighting service (115 volt, 20 amp) and disconnect in the machine room, (3) convenience outlets and lighting in hoistway and machine room.
2. Local building permits, variances or reviews are the responsibility of the owner. We will apply and pay for the state elevator installation permits and acceptance tests.
3. Quoted price includes installation by qualified and licensed technicians during normal working hours as scheduled with the owner in advance.
4. A two year warranty is included in the quoted proposal amount.
5. Upon acceptance of this proposal, and unless otherwise specified in contract documents, a cancellation fee will apply if this agreement is canceled by the customer prior to the fabrication of the equipment. The amount of the cancellation fee will be (10) percent of the proposal price (less installation, taxes and freight charges) or actual costs, whichever is greater. Cancellation after the equipment has been fabricated and offered for delivery will be subject to a cancellation fee equal to the full contract value less installation labor.

Thank you for your interest in the Garaventa line of products and services. Please contact me directly if you have any questions or concerns.

**For Garaventa USA, Inc**

\_\_\_\_\_  
Tim Cleckner

<p><u>Acceptance:</u></p> <p><input type="checkbox"/> This proposal is accepted as written</p> <p><input type="checkbox"/> as modified by our contract/purchase order</p> <p>_____</p> <p>(authorized signature)</p> <p>_____</p> <p>(print name and title)</p> <p>_____</p> <p>(Date accepted)</p>
---