



# Proposal

Tim Newton  
Phone (407) 235-1216  
Tim.Newton@us.schindler.com

October 10, 2016

## Customer Information

Matty Terrasi

## Project Information

33 East Pine  
33 E Pine St  
Orlando, FL 32801

**Offer #:** 0200481948

Matty,

Thank you for the opportunity to bid on 33 East Pine. Schindler Elevator Corporation's industry leading and knowledgeable construction superintendents, sales team and project managers will work closely with you to ensure your elevator is delivered as planned and installed on time with no surprises. We look forward to partnering with you on this project and being a part of your success!

We are pleased to submit our proposal to furnish and install in the referenced building, our products for the sum of Seventy-Seven Thousand Five Hundred Dollars and 00/100, (\$77,500.00).

## Specification Summary:

Item	Product	Load	Openings	Speed	Stops	Qty
AA	3300 MRL	2500	3 F	150	3	1

## Project Specific Qualifications and Clarifications

- 1) Proposal is based on product minimum dimensions and standard manufacturer finishes as listed in the attached Specification Summary sheet.
- 2) We have included the pit ladder and 12 months of Service to coincide with Warranty Period.
- 3) **Alternate:** 2 story model at 2,100 lb. capacity Deduct \$6,700
- 4) Storage space to be provided for material in parking area at rear of site

Schindler Elevator Corporation  
7100 TPC Drive  
Suite 300  
Orlando, FL 32822



**Contract Requirements:**

This proposal is based on furnishing our standard equipment as defined by the specification summary, in accordance with our attached standard terms and conditions. This proposal will become part of our agreement with you for this work.

We will require receipt of this fully executed proposal, including any attached amendments, final approved drawings, along with payment for pre-production and engineering costs equal to 35% of the above price prior to the release of the elevator equipment for fabrication.

You may indicate your acceptance of our proposal by signing below and returning this document to me. Upon execution this will become the final contract and will be binding to all parties.

Attached terms and conditions are fully incorporated.

Please note our proposal is valid for 45 days.

Respectfully submitted,

*Tim Newton*

Tim Newton

ACKNOWLEDGED AND ACCEPTED BY

Schindler Elevator Corporation

By \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

By \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

**Schindler Elevator Corporation**  
**Traction Elevator Specification Summary**

33 East Pine  
 33 E Pine St  
 Orlando, FL 32801

**Project Information:**

**Opportunity ID:** 0200481948-A-A  
**Unit(s) in Estimate:** 01  
**Units in Bank:** 01  
**Product Code:** 450  
**Sales Office:** 9684  
**Installation Office:** 9684

**Sales Rep Information:**

Tim Newton  
 7100 TPC Drive  
 Suite 300  
 Orlando, FL 32822  
 Phone: (407) 235-1216  
 Fax: (407) 235-1230  
 Tim.Newton@us.schindler.com

<b>Product:</b>	Schindler 3300	<b>Opening Size:</b>	3 Ft. 6.00 In. X 7 Ft. 0.00 In.
<b>Application:</b>	3300 MRL	<b>Cab Height:</b>	7 Ft. 9 In.
<b>Service:</b>	General Purpose	<b>Cab Type:</b>	3300
<b>Capacity:</b>	2500 Lbs	<b>Pit Depth:</b>	5 Ft. 0 In.
<b>Speed:</b>	150 FPM	<b>Overhead:</b>	12 Ft. 7 In.
<b>Travel:</b>	36 Ft. 0.00 In.	<b>Platform Width:</b>	6 Ft. 10 11/16 In.
<b>Cwt Location:</b>	Side	<b>Platform Depth:</b>	5 Ft. 1 1/8 In.
<b>Stops:</b>	3 (3 Front/ 0 Rear)	<b>Hatch Width:</b>	8 Ft. 6.00 In.
<b>Doors:</b>	Two Speed Side Opening	<b>Hatch Depth:</b>	5 Ft. 9.00 In.
<b>Power Supply:</b>	208 Volts 60 Hz 3 Phase	<b>Seismic Equipment:</b>	N
<b>Sprinklers In Hoistway</b>	Y	<b>NFPA Code Year</b>	2010

**Cab:**

**Cab Walls LH Side:** Laminate M999  
**Cab Walls RH Side:** Laminate M999  
**Cab Walls Rear:** Laminate M999  
**Base, Frieze:** None  
**Front Return, Transom:** #4 Stainless Steel  
**Cab Doors:** #4 Stainless Steel  
**Canopy:** Gettysburg  
**Ceiling:** 3300 Baked Enamel  
**Cab Threshold:** Aluminum  
 Threshold Extensions  
**Handrail Type:** Straight  
**Handrail Finish:** Aluminum  
**Handrail Location:** Sides & Rear  
**Handrail Row Qty:** 1  
**Platform Recess:** 0.375  
**Protective Pads:** None  
**Protective Pads Source:** None  
**Cab Finished Floor:** By Others

**Cab Fixtures:**

**Type:** Standard  
**Finish:** Glass w/Metal Accents  
 (1) L.E.D. Car Position Indicator  
 1 Main COP  
 (1) Car Lantern(s)  
 Certificate Frame

**Features:**

Follow IBC - 2012  
 Audible Gong (Std)  
 Infrared Door Protection (Std)  
 Phase Monitor Relay (Std)  
 Independent Service/HES (Std)  
 Top Exit Lock  
 FER Door Operator  
 T127 Rails  
 Keyed Emergency Stop Switch  
 Top Exit Switch  
 ADA Compliant Phone  
 Sliding Guide Shoes  
 1 Speed Fan  
 2 Hoistway Access Switches  
 Firefighter's Service Phase 2  
 Class B Fire Rating For Cab  
 Top Exit Guard  
 2 Intermediate Supports - by Customer  
 Intermediate Support(s): 2  
 Building Rescue Phone  
 Battery Evacuation  
**Pit Ladder Source: Schindler**

**Entrances:**

Emergency Escutcheons  
**Doors:**  
 (3) Baked Enamel  
**Frames:**  
 (3) Baked Enamel  
**Sills:**  
 (3) Aluminum  
**Sill Mounting:**  
 (3) Easy Match

**Hall Fixtures:**

Hall Fixtures Type:  
 Jamb Mounted  
 Hall Fixtures Finish:  
 (3)Glass PB w/Metal Accents  
 (1) Separate FER Switch

**New Product Service:**

12 Months, 8 Hours Callback

**This bid is subject to change after forty-five (45) days.**

Visit Our Website at [www.us.schindler.com](http://www.us.schindler.com)

**Schindler Elevator Corporation**  
**Traction Elevator Specification Summary**

33 East Pine  
 33 E Pine St  
 Orlando, FL 32801

**Alternate**

**Project Information:**

**Opportunity ID:** 0200481948-A-B  
**Unit(s) in Estimate:** 01  
**Units in Bank:** 01  
**Product Code:** 450  
**Sales Office:** 9684  
**Installation Office:** 9684

**Sales Rep Information:**

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 7100 TPC Drive  
 Suite 300  
 Orlando, FL 32822  
 Phone: (407) 235-1216  
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<b>Product:</b>	Schindler 3300	<b>Opening Size:</b>	3 Ft. 0.00 In. X 7 Ft. 0.00 In.
<b>Application:</b>	3300 MRL	<b>Cab Height:</b>	7 Ft. 9 In.
<b>Service:</b>	General Purpose	<b>Cab Type:</b>	3300
<b>Capacity:</b>	2100 Lbs	<b>Pit Depth:</b>	5 Ft. 0 In.
<b>Speed:</b>	150 FPM	<b>Overhead:</b>	12 Ft. 7 In.
<b>Travel:</b>	20 Ft. 0.00 In.	<b>Platform Width:</b>	5 Ft. 10 11/16 In.
<b>Cwt Location:</b>	Side	<b>Platform Depth:</b>	5 Ft. 1 1/8 In.
<b>Stops:</b>	2 (2 Front / 0 Rear)	<b>Hatch Width:</b>	7 Ft. 6.00 In.
<b>Doors:</b>	Two Speed Side Opening	<b>Hatch Depth:</b>	5 Ft. 9.00 In.
<b>Power Supply:</b>	208 Volts 60 Hz 3 Phase	<b>Seismic Equipment:</b>	N
<b>Sprinklers In Hoistway</b>	Y	<b>NFPA Code Year</b>	2010

<u>Cab:</u>	<u>Features:</u>	<u>Entrances:</u>
<b>Cab Walls LH Side:</b> Laminate M999	Follow IBC - 2012	Emergency Escutcheons
<b>Cab Walls RH Side:</b> Laminate M999	Audible Gong (Std)	<b>Doors:</b>
<b>Cab Walls Rear:</b> Laminate M999	Infrared Door Protection (Std)	(2) Baked Enamel
<b>Base, Frieze:</b> None	Phase Monitor Relay (Std)	<b>Frames:</b>
<b>Front Return, Transom:</b> #4 Stainless Steel	Independent Service/HES (Std)	(2) Baked Enamel
<b>Cab Doors:</b> #4 Stainless Steel	Top Exit Lock	<b>Sills:</b>
<b>Canopy:</b> Gettysburg	FER Door Operator	(2) Aluminum
<b>Ceiling:</b> 3300 Baked Enamel	T127 Rails	<b>Sill Mounting:</b>
<b>Cab Threshold:</b> Aluminum	Keyed Emergency Stop Switch	(2) Easy Match
<b>Threshold Extensions</b>	Top Exit Switch	
<b>Handrail Type:</b> Straight	ADA Compliant Phone	<b>Hall Fixtures:</b>
<b>Handrail Finish:</b> Aluminum	Sliding Guide Shoes	Hall Fixtures Type:
<b>Handrail Location:</b> Rear	1 Speed Fan	Jamb Mounted
<b>Handrail Row Qty:</b> 1	2 Hoistway Access Switches	Hall Fixtures Finish:
<b>Platform Recess:</b> 0.375	Firefighter's Service Phase 2	(2) Glass PB w/Metal Accents
<b>Protective Pads:</b> None	Class B Fire Rating For Cab	(1) Separate FER Switch
<b>Protective Pads Source:</b> None	Top Exit Guard	
<b>Cab Finished Floor:</b> By Others	2 Intermediate Supports - by Customer	
<b>Cab Fixtures:</b>	Intermediate Support(s): 2	
<b>Type:</b> Standard	Building Rescue Phone	
<b>Finish:</b> Glass w/Metal Accents	Battery Evacuation	
(1) L.E.D. Car Position Indicator	Pit Ladder Source: <b>Schindler</b>	
1 Main COP		
(1) Car Lantern(s)		
Certificate Frame		

**New Product Service:**

12 Months, 8 Hours Callback

**This bid is subject to change after forty-five (45) days.**

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## **TERMS AND CONDITIONS**

This Proposal is made subject to the following conditions:

1. A mutually agreeable form of contract (fully executed before a manufacturing date can be established in our factory) which includes the following provisions.
2. Our indemnity obligation will be limited to the extent of our negligence.
3. We will not be liable in any event for direct damages in excess of the amount of our Subcontract, whether in contract or in tort, nor in any event for special, indirect, consequential or liquidated damages of default or delay.
4. The purchaser agrees to accept in satisfaction of insurance requirements for the project a standard Schindler Certificate of Insurance with "per occurrence" limits not to exceed \$2 million. Schindler will not name additional insureds.
5. Schindler will participate as an insured in an OCIP/CCIP (Owner's / Contractor's Insurance Program), provided it is at no cost to Schindler, and under such circumstances we will provide additional insured coverage for offsite operations and auto liability only.
6. Partial waivers of lien for payments received by Schindler will be issued on a mutually agreeable form if the Purchaser so requests in writing. Schindler shall issue a full waiver of lien on a mutually agreeable form after the receipt of all monies to which it is entitled under this Agreement if the Purchaser so requests in writing.
7. Agreeable terms of payment shall be established in accordance with the following payment schedule: 35% of the above sum upon presentation of initial invoice; 95% progress payments based upon work in place and materials delivered and stored on or off site; balance for each unit completed within 30 days on completion on that unit hereunder. Payment of the initial invoice is a condition precedent to manufacture of materials. Payment of at least 95% is a condition precedent to equipment turnover.
8. Work shall be performed by Schindler during regular working hours on regular working days, and overtime by Schindler will be compensated at Schindler's standard rates.
9. You will have the hoistway/wellway in a safe and proper condition and in conformance to the dimensions contained in the final approval drawings.
10. In the case of delay in construction, you agree to pay for off-site storage of \$100 Per Day per equipment and additional handling should on-site storage not be available. Our proposal price assumes one mobilization; the charge for each additional mobilization will be \$3,500. You agree to pay any other increase in cost resulting from delays in construction.
11. ~~If an inground borehole is required to accommodate the jack unit, our bid shall be based on the assumption that the hole is drilled in normal uncontaminated soil, sand or gravel, using a truck mounted drilling rig. Adequate access will be provided for this rig. Should latent or concealed conditions be encountered in the performance of the work below the surface of the ground or should concealed or unknown conditions in an existing structure be at variance with conditions indicated by the contract documents, or differ materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this contract be encountered, we will be compensated for all additional costs for labor and material to overcome such obstacles. The additional costs shall be the difference between our estimate for the bid and our actual cost incurred and shall be billed at our standard billing rate. The time to complete the installation shall be extended to include the additional time required to overcome these obstacles while drilling the hole.~~
12. Satisfactory reference as to credit must be furnished including bank and bonding company references.
13. You agree to pay, as an addition to the price stated herein, the amount of any tax, or increase of any tax, based upon the sale, use, ownership or possession of equipment imposed by any law enacted after the date of this proposal, or imposed upon you by any existing law.
14. If the work for the above project does not proceed for any reason, we will be paid for costs incurred plus a reasonable mark-up for overhead and profit.



15. Any proprietary material, information, data or devices contained in the equipment or work provided hereunder, or any component or feature thereof, remains our property. This includes, but is not limited to, any tools, devices, manuals, software (which is subject to a limited license for use in this building/premises/equipment only), modems, source/ access/ object codes, passwords and the Schindler Remote Monitoring feature ("SRM") (if applicable) which we will deactivate and remove if the Agreement is terminated.
16. Should latent or concealed conditions be encountered in the performance of the work below the surface of the ground or should concealed or unknown conditions in an existing structure be at variance with the conditions indicated by the Purchaser, or should unknown physical conditions below the surface of the ground or should concealed or unknown conditions in an existing structure of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in the work of the character provided for in this contract be encountered the contract price and time shall be equitably adjusted by change order upon claim by either party made within **20** days after the first observance of the conditions.
17. Neither party shall be responsible for any loss, damage, detention or delay caused by labor trouble or disputes, strikes, lockouts, fire, explosion, theft, lightning, wind storm, earthquake, floods, storms, riot, civil commotion, malicious mischief, embargoes, shortages of materials or workmen, unavailability of material from usual sources, government priorities or requests or demands of the National Defense Program, civil or military authority, war, insurrection, failure to act on the part of either party's suppliers or subcontractors, orders or instructions of any federal, state, or municipal government or any department or agency thereof, acts of God, or by any other cause beyond the reasonable control of either party. Dates for the performance or completion of the work shall be extended by such delay of time as may be reasonably necessary to compensate for the delay.
18. Risk of loss of materials and equipment shall pass to Purchaser upon delivery of materials to the site. Title to materials and equipment shall pass to Purchaser upon payment by Purchaser to Schindler.
19. The amount set forth in Article 2 of the section titled "Project Specific Qualifications and Clarifications" of the Agreement is based upon Schindler's work being performed during regular working hours of regular working days. Purchaser may require overtime subject to Schindler's ability to comply, and Schindler shall be compensated for such work at its standard billing rates. Changes in the scope of work must be agreed upon in writing and the schedule and contract amount adjusted accordingly.
20. Notwithstanding anything to the contrary set forth herein, Schindler warrants that the work supplied hereunder will comply with the specifications and that there will be no defects in materials and workmanship for one year after completion of the work or acceptance thereof by beneficial use, whichever is earlier. The equipment furnished and installed under our Agreement requires maintenance service, such as periodic examinations, lubrication and adjustment by competent mechanics, specially trained to service said equipment. Our guarantee is not intended to take the place of this normal servicing of the equipment and it is not to be construed that we will provide maintenance service of this type, without charge, except as may be provided in our contract, or that we will correct, without charge, breakage, maladjustment or other issues arising out of maintenance provided by others. Schindler's sole duty under the warranty is to correct the nonconformance or defect at Schindler's expense within a reasonable time after the receipt of notice. The express warranties contained herein are in lieu of all other warranties, express or implied, including any warranties of merchantability or fitness for a particular purpose, purchaser's remedies hereunder are exclusive.
21. If either party shall default in the performance of its obligations hereunder, the nondefaulting party may send written notice reasonably describing the default. If the defaulting party does not commence to take reasonable steps to cure the default, within **10** days of the date of such notice, the nondefaulting party may terminate upon **10** days further notice.
22. Schindler shall be responsible for maintaining job progress in accordance with a schedule of performance mutually agreed upon by Schindler and Purchaser. Any change to the schedule of work shall require Schindler's consent.
23. Change Notices must be received and fully executed prior to Schindler Elevator Company performing any additional work outside the scope of the base contract. Written or verbal notices will not be accepted as a substitute for a fully executed change notice.

### **SCHINDLER BID CLARIFICATIONS - PREPARATORY WORK BY OTHERS FOR ELEVATORS.**

For delivery and installation dates please look at the specifications summary.

Installation work shall be performed during regular working hours of regular working days after hoistway(s) and machine/control room(s) has been properly prepared as described in the following items. All items must be performed or furnished at no cost to Schindler Elevator Corporation ("Schindler") by the Owner or General Contractor or their agents in accordance with all governing codes. The price and installation schedule of Schindler is based on these job-site conditions existing at the beginning and during the installation of the elevator equipment.



All work must be performed per the latest applicable revision of the national (ASME A17.1 or CSA B44) and/or local codes.

## 1.0 Job Conditions

1.1 Acceptable material unloading area within 100ft (30.5m) of hoistway with "rollable" access (planked or paved) or uninterrupted use of a crane or forklift and operator at no cost to Schindler. Dry and enclosed storage area of adequate size for elevator materials near hoistway. Any warranties provided by Schindler for elevator equipment are null and void if equipment is stored in a manner that does not comply with the requirements as defined above.

1.2 Power for construction adjacent to hoistways and machine/control rooms (110/220 volt, single phase, for welders and hoists) and sufficient 3-phase power to run elevator(s) at the same time. Refer to "electrician job" and "Schindler J44106627 Power Supply Data" sheets to meet the date upon which the elevators are to be turned over, the power for construction and permanent 3-phase power must be installed and available prior to the start of elevator installation.

1.3 All work areas, including hoistway, machine/control room and pit, clear of debris. Maintain minimum temperature of 55°F (13°C). Adequate work area in front of ground floor entrance required. Proper lighting of work areas.

1.4 Freestanding and removable construction barricades (per OSHA requirements) either outside of elevator hoistway(s), open hoistway top or between elevators inside of hoistway(s) as required. Barricades located 24" (0.61m) in front of the hoistway openings (refer to the "hoistway preparation" sheet). Openings include landing accesses, open hoistway top (if slab not built) and in general any other opening which may create falling hazard into the hoistway. Barricades shall be erected, maintained, and removed by others.

- a) Protection from Falls - As required by the Occupational Safety and Health Administration (OSHA) 1926.502 B) (1-3) a freestanding removable barricade at each hoistway opening at each floor. Barricades shall be 42" high, with mid-rail and kick board, and withstand 200 lbs. of vertical and horizontal pressure
- b) Protection from Falling Objects - As required by the Occupational Safety and Health Administration (OSHA) OSHA 1926.502(j) hoistway protection from falling debris and other trades materials by either:
  1. 8 foot screening/mesh in front of all elevator entrances or
  2. Secured/controlled access to all elevator lobbies (lock and Key) with posted Notice "only elevator personnel beyond this protection"

~~1.5 A temporary work platform is required for installation of the elevator. It is to be constructed at the top floor of each traction elevator. It must comply with applicable governing codes & regulations. The platform shall be securely fastened to the building structure. Erection, maintenance, and removal are by others. (refer to Schindler layout "Hoistway Preparation")~~

~~1.6 A crane, provided and paid for by others, may be requested to place the machine, controller, and machine supports (where applicable) into the machine/control room or hoistway overhead prior to enclosing these areas. Coordinate with Schindler field supervisor~~

1.7 Furnish adequate on-site refuse containers for the proper disposal of elevator packaging material. If adequate containers are not furnished, disposal of packaging material shall become the responsibility of the owner.

## 2.0 Electrician

2.1 Provide suitable feeder and branch wiring circuits from the building service to the controller, including main line switch, for signal systems, power operated doors, car lighting and convenience outlets. Refer to "Electrician Job" and "Schindler J44106627 Power Supply Data" sheets.

2.2 A permanent lighting fixture shall be provided and conform to A17.1-2.2.5. It shall provide illumination of 100lx at the pit floor and the pit platform, when provided. The light bulb should be externally guarded against breakage. Light switch to be provided that is accessible to pit access door. In addition to a light in the pit a GFCE convenience outlet shall be installed in the pit (NEC (NFPA 70 Rules 620-85) or (CSA C22.1-03 Section 38-085)).

- a) Pit - A permanent lighting fixture shall be provided and conform to A17.1-2.2.5. It shall provide illumination of 100lx at the pit floor and the pit platform, when provided. The light bulb should be externally guarded against breakage. Pit light located as defined on sheet 3 of 8, no less than 32" [0.81m] below bottom landing. Light switch to be provided that is accessible to pit access door. In addition to a light in the pit a GFCE convenience outlet shall be installed in the pit (NEC (NFPA 70 Rules 620-85) or (CSA C22.1-03 Section 38-085))
- b) Machine / Control Space - A permanent lighting fixture shall be provided for machine spaces, machine rooms, control spaces, and control rooms and conform to A17.1 2.7.9.1. It shall provide illumination of 200lx at floor level, standing surface of working platform or at the level of the standing surface when the car is in the blocked position. Light bulb should be externally guarded against breakage. Light switch to be provided that is accessible at the point of entry
- c) Floor Landings - A permanent lighting fixture should be provided for illumination at the landing sill conforming to A17.1 2010 2.11.10.2. It shall provide illumination of 100lx at the landing sill. Refer to "Electrician Job" sheet

2.3 Provide emergency power generator and automatic transfer switch(es) with feeders from ATS contacts to elevator controls. Conduit with fish tape, between control room/spaces where sequenced elevator operation is required due to generator capacity.

2.4 Follow Schindler Power data provided with construction layouts. Where specified include main and auxiliary disconnects (JH and JH1) in code-approved location as directed.

~~2.5 Where appropriate, provide a lockable 13.5" x 15.5" x 3.5" (minimum) metal cabinet with group 1 key to house required electrical schematics and maintenance history documents, wall mounted adjacent to the disconnect switch (by others) at the top landing. The supplier, location, and mounting of the cabinet shall be coordinated with Schindler.~~

2.6 NFPA 72 (Fire Apparatus Code) req. 6.1.5.2.2 requires the fire control panel relays that provide the dry contacts to the controller not be located more than 3 feet from the inspection and test panel jamb (where provided).

### 3.0 Hoistway

3.1 Hoistway dimensions are always nominal without building tolerance. Clear, plumb, hoistway with variations not to exceed

- a) 3300: +1in – 0in (25mm – 0mm) up to first 100ft (30.5m); Tolerance may increase +1/32in (0.8mm) for each additional 10ft (3.05m) up to a maximum of + 2in (50mm)

3.2 Hoistway enclosure to be fire rated per national code requirements and applicable building codes (rule 2.1.1 in cars following ANSI 2000 or greater or rule 100.1 for less than ANSI 2000). Hoistway, pit, and overhead dimensions to be as specified on Schindler final layout.

~~3.3 Where there is a blind hoistway, an emergency door shall be installed at every third floor, but not more than 36ft (11m) from sill to sill. The clear opening must be at least 28" (700mm) wide and 80" (2030mm) high (rule 2.11.1.2 in cars following ANSI 2000 or greater or rule 110.1 for less than ANSI 2000)~~

Hoistway enclosure to be fire rated per national code requirements and applicable building codes (Rule 2.1.1). Hoistway, pit, and overhead dimensions to be as specified on Schindler final layout drawing.

3.4 75° bevel guards on all projections, recesses or setbacks over 4" (100mm), except on side used for loading/unloading.

3.5 Provide venting of the hoistway per national code requirements and applicable building codes (Rule 2.1.4).

3.6 Dried-in hoistway(s) and machine/control room(s).

~~3.7 If machine room less (MRL) elevator with rear counterweight: Hoistway top open, to allow installation of overhead beams and machine with crane provided by others.~~



3.8 Firefighter elevators are not permitted to have sprinklers in the hoistway or machine room per IBC. Means to prevent water from entering must be installed e.g. lobby construction. A permanent light fixture should be provided to illuminate the entire hoistway, not less than 1 foot-candle (11lx) when a fire protection device is activated per IBC. Emergency power must be provided and protected to maintain a 2-hour fire rating. The building mains and other wiring critical to phase 2 must maintain the 2-hour fire rating.

~~3.9 Where there is a blind hoistway, an emergency door shall be installed at every third floor, but not more than 36' (11m) from sill to sill. The clear opening must be at least 28" (700mm) wide and 80" (2030 mm) high (Rule 2.11.1.2).~~

3.10 Clear, flat, vertical or horizontal surfaces for mounting rail brackets at each floor, in overhead, and intermediate levels (if required) in the same vertical plane as the clear hoistway line. This includes divider beams between cars for multiple elevators in a common hoistway. Rail bracket supports shall not intrude into the clear hoistway line. If applicable, intermediate bracket supports between floor(s) and in the overhead area may be required: Refer to Schindler final layout drawings for maximum bracket spacing and actual support locations.

3.11 For masonry block hoistway construction, Schindler will provide rail bracket inserts for installation by others, located in accordance with the Schindler final layout drawings. Where inserts are not used, hollow masonry blocks are not acceptable for bracket fastening: a concrete belt around hoistway or other acceptable support at each floor, in overhead and intermediate levels (if required) has to be provided. Minimum slab thickness ranges from 8 1/4" (210mm) to 18 1/8" (460mm) depending on bracket characteristics.

#### **4.0 Hoistway Front**

4.1 Blockout/cutout through wall as required, to accommodate hall button boxes, signal fixtures, and hatch duct. Provide for any repairs such as grouting, patching, painting, or fire proofing. Coordinate blockout/cutout with Schindler field supervisor.

4.2 If machine room less (MRL) application, hoistway front wall on overhead area has to support the weight of the electrical components fixed to this wall. GC to provide structural reinforcements where necessary (e.g. drywall construction) certain configurations may require a pocket recess above the top landing door. Refer to Schindler layout "Hoistway Preparation" for details.

4.3 Installation of door frames and sills, for masonry hoistway walls at entrances, provide rough opening of 8" (203mm) on each side, and 8" (203mm) on top of clear opening, referenced from the final floor level, for drywall hoistway walls at entrances: If floor height exceeds the clear door height + 28" (+ 700mm), additional structural support at CDH + 28" (+ 700mm) to be installed for entrance strut angle attachment. Walls are to be built after doorframes and sills are set in place.

For sill support fixation: An 8" (203mm) flat vertical surface is required below each landing level to fasten the sill support.

4.4 Entrance wall at the hoisting floor should be open the clear width of the hoistway. The hoisting floor is the floor designated to bring elevator equipment into the hoistway for installation.

4.5 Grouting around entrance frames and finished floor and grout to sill line after installation of entrance.

#### **5.0 Machine/Control Room**

~~5.1 Machine/control rooms shall have clear headroom of not less than 95 3/4" (2.4m). Access to the machine/control room and machinery space (Rule 2.7.3). Door(s) shall be self-closing, self-locking and operable from inside without a key. For machine room less (MRL), a means will be provided to keep the control space door(s) open when required for installation and/or service. Minimum door size 30" x 80" (0.75m x 2.03m) (Rule 2.7.3.4). Consult Schindler final layout drawings for required door sizes.~~

~~5.2 Where machine/control room(s) are remote from the hoistway, electrical duct runs will be in the overhead/coiling area. No provisions are made for underground installation.~~

5.3 GFCI convenience outlet and telephone outlet located in machine/control room for each elevator (national electrical code (NFPA 70 Rule 620-85) or (CSA C22.1-02 Section 38-085)). Dedicated analog telephone line capable of outgoing or incoming calls for emergency phone system (Rules 2.27.1.1 and 2.27.1.2) or Schindler remote monitoring (SRM).

5.4 Lighting, ventilation, and heating of machine/control room, control space and machinery space (Rule 2.7.5)

a) Minimum lighting to be 200 lux (20fc)

b) The ambient temperature at the controller location must be maintained between 32 and 104 degrees Fahrenheit (0 to 40

Celsius)

- c) Heating and/or cooling may be required to maintain the required temperatures
- d) Acceptable humidity level shall be maintained at 95% or less non-condensing
- e) For machine room less (MRL) application, a cutout in rear wall of control space closet for ventilation panel is required. Coordinate size and location with Schindler field supervisor
- f) Refer to "electrician job" and "Schindler J44106627 power supply data" sheets for heat emissions

5.5 For machine room less (MRL) application, a 42" (1050mm) clear space must be provided in front of control space closet for service barriers. Corridor width must accommodate this requirement as well as any additional requirements imposed by ADAAG or other codes.

5.6 Hoisting beam(s), ~~trap doors and other means of access to machinery space~~ of adequate size for maintenance and equipment removal (Rules 2.7.3.4 and 2.9.3.3). Hoisting beam(s) in each shaft located and load rated per Schindler final layout drawings. Lifting points or beam(s) shall be visibly marked with the safe working load.

5.07 Class "ABC" fire extinguishers in electrical machinery and control space. Extinguishers shall be located convenient to access door (Rule 8.6.1.6.5).

## 6.0 Pit

6.1 Dry pit reinforced to sustain vertical forces from rails and impact loads on buffers (Rule 2.2.2). Car and counterweight buffer impact loads as calculated (Rule 8.2.3). Refer to Schindler final layout drawings.

6.2 Adequate sealing and waterproofing of pit. Effective prevention of pit exposure to storm water or ground water.

6.3 Drains & sumps in elevator pits, where provided, shall comply with the applicable plumbing code and they shall be provided with a positive means to prevent water, gases and odors from entering the hoistway. Sumps and sump pumps in pits, where provided, shall be covered. The cover shall be secured and level with the pit floor (Rules 2.2.2.4 and 2.2.2.6) and should be located to clear elevator equipment (cannot be connected directly to storm drain or sewer).

6.4 GFCI convenience outlet and light fixture with guard in pit. (National Electrical Code (NFPA 70 rules 620-85) Minimum lighting to be 100 lux (10fc). (Rule 2.2.5 in cars following ANSI 2000 or greater or rule 106.1 for less than ANSI 2000)

6.5 Pit ladder by Schindler

## 7.0 Provisional Handover

7.1 Temporary Service: Schindler shall be reimbursed for any labor and material that is not part of the permanent elevator installation and that is required to provide temporary elevator service. Schindler's temporary acceptance form shall be executed and the elevator inspected before being placed into temporary service. The costs associated with the power, operation, maintenance, and rehabilitation of the equipment and any construction permits or fees required by governing authorities shall be paid for By Others.

7.2 In addition to the above, the following work must be completed before elevator(s) are placed into automatic operation. (Prior to code required municipal authority inspection, refer to Schindler acceptance inspection standard form).

- a) Finished cab flooring and if applicable, fitting of interior cab walls and/or ceiling.
- b) Machine/control room to comply with code and to suit Schindler standard equipment. Proper machine/control room dimensions and safety clearances to be provided as indicated on Schindler final layout drawings with recesses and ducts to be covered as required. Proper stairways or steps and guardrails to be provided. Proper lockable fire rated door, self-closing and self-locking

- with label to be provided (Rules 2.7.3 & 2.11.14).
- c) If applicable, smoke and/or heat detectors with signals to elevator controller(s).
  - d) If applicable, emergency power generator and automatic transfer switch with capacity to run at least one elevator at a time.
  - e) Seal all penetrations through 2-hour (or greater) rated walls with code approved material. Drywall liner behind all wall mounted hall fixtures. Penetration permitted by IBC 2012 Section 713.8.1 must be protected according to Section 713. Any penetration due to formed or poured concrete (e.g. block out) must be backfilled according to IBC.
  - f) Cab light circuits and all receptacles installed in machine/control rooms, machinery spaces and pits must have ground fault circuit interrupter protection (GFCI) (NEC 620 or CSA 38).
  - g) If applicable, conduit and wire runs from elevator(s) to remote status panel.
  - h) If applicable, conduit and wiring for fire alarm system to each elevator control in machine/control room.
  - i) If applicable, conduit and wire runs for emergency/rescue communications in central alarm & control facility, fire control room, security desk, etc.
  - j) If applicable, conduit and wire runs for remote alarm bell from machine/control room to remote location.
  - k) Adequate lighting of building corridors so that illumination at the landing sill is minimum 100 lux (10FC) (Rule 2.11.10.2).
  - l) Guarding of counterweights in multi-elevator hoistways: when a counterweight is located between elevators, the counterweight runway shall be guarded on the side next to the adjacent elevator (Rule 2.3.2.3).

## 8.0 Equipment Turnover Requirements

8.1 In addition to the above, the following work must be completed before elevator(s) are placed into automatic operation. (Prior to code required municipal authority inspection. Refer to Schindler Acceptance Inspection Standard form).

- a) Finished cab flooring and if applicable, fitting of interior cab walls and/or ceiling
- b) Machine/control room to comply with code and to suit Schindler standard equipment. Proper machine/control room dimensions and safety clearances to be provided as indicated on Schindler final layout drawings with recesses and ducts to be covered as required. Proper stairways or steps and guardrails to be provided. Proper lockable fire rated door, self-closing and self-locking with label to be provided (rules 2.7.3 & 2.11.14 in cars following ANSI 2000 or greater or rules 101.3 & 110.14 for less than ANSI 2000).
- c) If applicable, smoke and/or heat detectors with signals to elevator controller(s)
- d) If applicable, emergency power generator and automatic transfer switch with capacity to run at least one elevator at a time
- e) Seal all penetrations through 2-hour (or greater) rated walls with code approved material. Drywall liner behind all wall mounted hall fixtures. Penetration permitted by IBC 2012 Section 713.8.1 must be protected according to Section 713. Any penetration due to formed or poured concrete (e.g. block out) must be backfilled according to IBC.
- f) Cab light circuits and all receptacles installed in machine/control rooms, machinery spaces and pits must have ground fault circuit interrupter protection (GFCI) (NEC 620).
- g) If applicable, conduit and wire runs from elevator(s) to remote status panel
- h) If applicable, conduit and wiring for fire alarm system to each elevator control in machine/control room
- i) If applicable, conduit and wire runs for emergency/rescue communications in central alarm & control facility, fire control room, security desk, etc.
- j) If applicable, conduit and wire runs for remote alarm bell from machine/control room to remote location.
- k) Adequate lighting of building corridors so that illumination at the landing sill is minimum 100 lux (10fc) (rule 2.11.10.2 in cars following ANSI 2000 or greater or rule 110.10b for less than ANSI 2000).
- l) Guarding of counterweights in multi-elevator hoistways: when a counterweight is located between elevators, the counterweight runway shall be guarded on the side next to the adjacent elevator (Rule 2.3.2.3).

You agree to indemnify and save Schindler harmless against any and all liability and costs arising out of your failure to carry out any of the foregoing requirements.