

thyssenkrupp Elevator Corporation

New Installation Proposal



Submitted to: Mr. Gary Feldman

July 23, 2020

Norman J Clement Community Center |

Thyssenkrupp Elevator Corporation is dedicated to delivering the safest, highest quality vertical transportation solutions. I am pleased to present this customized Proposal in the amount of \$78,879 sales tax included and bond included to furnish and install one (1) thyssenkrupp Passenger Elevator; based solely on the plans dated April 22, 2020, along with the clarifications noted immediately below and the conditions set forth on the pages that follow.

This price will remain in effect for the next ninety (90) days and is contingent upon all work described in this Proposal being completed prior to December 24, 2021. Any work performed after this date will be subject to escalation. *This price is also expressly contingent on purchaser and thyssenkrupp entering into a separate and mutually agreeable new installation agreement for this work.*

Clarifications to Architectural Plans and Specifications:

1. Per conversation 7 23-2020
2. Quote based on ThyssenKrupp standard package.
3. Quote based on a 2500lb Endua with machine room adj to shaft.
5. Flooring to be by others . Manufactures carpet not included.
6. Hoist beam,By Others. Pit ladder and Sill angles are included in base cost.
- 7.Qt based on crews working M-T 7am to 5pm (4 ten hr. Days)
- 8.Project schedule shall be mutually agreed upon by both parties in writing before becoming effective.
9. Pricing based on the dimensions provided on drawings sheet A404
10. taxes ,and bond cost are included in base price.

In the event you have any questions regarding the content of this Proposal please contact me at 850-529-7590.

We appreciate your consideration.

Regards,

A handwritten signature in blue ink that reads "Matt Ellinor".

thyssenkrupp Elevator Corporation

Matt Ellinor

Construction Modernization sales Manager

Thyssenkrupp Elevator

850 Blountstown Hwy

Tallahassee, FL 32304

T 850-528-7590, email: matt.ellinor@thyssenkrupp.com

thyssenkrupp Elevator Description of Equipment

<p>Units¹ in Estimate: 1 Units in Group: 1 Product: endura A Application: Passenger Loading Class: A Seismic Equipment: Non-Seismic Capacity: 2500 lbs. Speed: 100 FPM Travel: 12 ft 8 in Future Travel: N/A Landings: 2 (2 front, 0 rear) Power Supply: 208 Volts / 3-PH / 60 Hz</p>	<p>Door Type: Single-speed Side-Opening Opening Size: 3 ft 6 in X 7 ft 0 in Clear Ceiling Height: 7 ft 4 in Clear Inside Cab Width: 5 ft 8 in Clear Inside Cab Depth: 4 ft 3 in Hoistway Width: 8 ft 4 in Hoistway Depth: 5 ft 9 in Pit Depth: 4 ft 0 in Clear Overhead²: 12 ft 8 in Machine Room Location: Not Applicable Controller: TAC32 Emergency Power³: Battery Lowering (Hydro) Jack Type: Twinpost Holeless - 2 Stage</p>	
<p>Cab</p> <p>Cab Type: TKS - Painted Steel Shell Panel Type: Vertical Panel or Wall Finish: Brushed Stainless Steel Cab Base: N/A Frieze, Reveal: N/A Front Return, Transom: Brushed Stainless Steel Cab Doors: Brushed Stainless Steel Cab Sill: Aluminum Cab Finished Floor: By Others (not to exceed 2") Canopy: 14 ga. cold rolled steel Ceiling: Downlight Ceiling Finish: Brushed Stainless Steel Lighting: LED Handrail Type: 1.5" Cylindrical Handrail Finish: Brushed Stainless Steel Handrail Location: Rear and Side Walls Handrail Row Quantity: One (1) Protective Pads: One (1) Set Pad Attachment: Buttons</p>	<p>Car Fixtures</p> <p>Type: Traditional Finish: Brushed Stainless Fixtures Included: Swing Return, Car Position Indicator, Car-Riding Lantern</p> <p>Hall Fixtures</p> <p>Type: Traditional Finish: Brushed Stainless Fixtures Included: Hall Stations, No Hall Lanterns,</p> <p>Limited Access Provisions</p> <p>Type: Card reader provisions in hall</p>	<p>Entrance Doors</p> <p>## Brushed Stainless Steel</p> <p>Entrance Frames</p> <p>## Brushed Stainless Steel</p> <p>Entrance Sills</p> <p>## Aluminum</p> <p>New Installation Maintenance</p> <p>Twelve (12) months</p>
<p>Additional Features: Two Speed Fan, Automatic Fan/Light Shutdown, Fire Service Provisions, Hoistway Access at Top & Bottom Landings, Emergency ADA Phone, Non-Proprietary Controller, Solid State Starting, Biodegradable Fluid, Pit Ladder</p>		

1 - Each individual elevator, escalator, etc. included in this Proposal will hereinafter be referred to as a "unit".

2 - The overhead is measured from the finished top floor, to the underside of the safety beam.

3 - Standby lowering and/or standby operation requires a properly sized backup power source furnished and installed by the Purchaser.

This Proposal is based on the applicability of all of the following conditions that shall be incorporated into a separate installation agreement between the parties as a condition for performing the work described above:

1. Payment Schedule

- Fifty percent (50%) of the contract price shall be due and payable within thirty (30) days from the receipt of the separate installation agreement. This initial progress payment will be applied to project management, permits, engineering and shop drawings, submittals, drilling mobilization (if required) and raw material procurement. Material will be ordered once this payment is received and the parties have both executed a separate installation agreement.
- An additional twenty five percent (25%) shall be due and payable when the material has been received at the thyssenkrupp warehouse. Receipt of this second payment is required prior to mobilization of labor. Progress payments shall be made throughout the life of the project. Should payments lag, thyssenkrupp reserves the right to remobilize until such a time that the payments have been brought up to date, and thyssenkrupp has the available manpower.
- thyssenkrupp shall retain exclusive ownership and control over all equipment installed until such time as Purchaser has paid thyssenkrupp 100% of the the price reflected in the separate installation agreement mentioned above. Purchaser agrees to waive any and all claims to the turnover and/or use of that equipment until such time as those amounts are paid in full. Default by Purchaser in payment terms may result in interest on sums due and unpaid at 1.5% per month or at the highest legal rate, and suspension of work until all outstanding balances are paid.

Any work that Purchaser may require prior to turnover of the equipment outside of the scope described in this Proposal - other than Temporary Use as described below - will be performed pursuant to a fully executed change order at the following rates:

<u>Scope of Work</u>	<u>Hourly Rate</u>
Mechanic Standard	\$ 212 per Man Hour
Team Standard	\$ 385 per Team Hour
Mechanic OT	\$ 485 per Man Hour

Note: Rates are subject to change after 12/31/2020.

2. Key Tasks and Approximate Lead Times

The following is a list of some of the key tasks that comprise a typical installation, along with their sequence and approximate durations or lead times for each such task:

Key Tasks to be performed by Purchaser prior to Equipment Fabrication:

1. Execution of a separate installation agreement covering the work described in this Proposal
2. Payment for pre-production and engineering
3. Approval of layout
4. Execution of thyssenkrupp's Material Release Form

Approximate Durations/Lead Times

Contract execution (can run concurrently with layout drawing package preparation and approval)	Varies
Preparation of layout drawing package (upon receipt of separate installation agreement and plans)	1Weeks
Approval of layout drawing package, by Purchaser (additional time required for cab, signal, entrance preparation and approval, if applicable. One revision is included in this Proposal price; additional charges and additional time will apply for additional revisions)	Varies
Fabrication time (from receipt of all approvals, fully executed contract, Material Release Form and PP&E payment)	13 Weeks per Elevator

The durations/lead times listed above are strictly approximations that can vary due to factors both within and outside of thyssenkrupp's control, are subject to change without notice to Purchaser and shall not be binding on thyssenkrupp.

3. Warranty

thyssenKrupp warrants any equipment it installs as described in this Proposal against defects in material and workmanship for a period of one (1) year from the date of Purchaser's execution of thyssenKrupp's "Final Acceptance Form" on the express conditions that all payments made under the separate installation agreement and any mutually agreed-to change orders have been made in full and that such equipment is currently being serviced by thyssenKrupp. In the event that thyssenKrupp's work is delayed for a period greater than six (6) months, the warranty shall be reduced by the amount of the delay. This warranty is in lieu of any other warranty or liability for defects. thyssenKrupp makes no warranty of merchantability and no warranties which extend beyond the description in this Agreement, nor are there any other warranties, expressed or implied, by operation of law or otherwise. Like any piece of fine machinery, the equipment described in this Proposal should be periodically inspected, lubricated, and adjusted by competent personnel. This warranty is not intended to supplant normal maintenance service and shall not be construed to mean that thyssenKrupp will provide free service for periodic examination, lubrication, or adjustment, nor will thyssenKrupp correct, without a charge, breakage, maladjustments, or other trouble arising from normal wear and tear or abuse, misuse, improper or inadequate maintenance, or any other causes other than defective material or workmanship. In order to make a warranty claim, Purchaser must give thyssenKrupp prompt written notice at the address listed on the cover page of this Proposal and provided all payments due under the terms of the separate installation agreement and any mutually agreed to written change orders have been made in full, thyssenKrupp shall, at its own expense, correct any proven defect by repair or replacement. thyssenKrupp will not, under any circumstances, reimburse Purchaser for cost of work done by others, nor shall thyssenKrupp be responsible for the performance of any equipment that has been the subject of service, repair, replacement, revisions or alterations by others. If there is more than one (1) unit which is the subject of work described in this Proposal, this section shall apply separately to each unit as accepted.

4. New Installation Maintenance (NIM)

For the period of twelve (12) months following thyssenKrupp's turnover of the units described in this proposal to Purchaser, thyssenKrupp will provide the following services and callbacks during normal working hours. Overtime callback services requested by purchaser are not included and will be billed at thyssenKrupp's published hourly rates.

As circumstances warrant, the examination and adjustment and lubrication of the equipment installed by thyssenKrupp and the dispatch of a thyssenKrupp technician to the location of the equipment in response to a call from the owner of the building where the unit has been installed or its designated representative, emergency personnel, passengers through the elevator's communication device and/or from remote monitoring through the equipment's communication line (if applicable) in order to free any entrapped passengers and/or to make covered repairs to the equipment installed by thyssenKrupp ("callback services"). Covered repairs to the equipment include a visual investigation to determine the source of shutdown along with any resulting necessary adjustments and parts replacement so long as they are not due to any one or more of the following: anyone's abuse, misuse and/or vandalism of the equipment; anyone's negligence in connection with the use or operation of the equipment; any loss of power, power fluctuations, power failure, or power surges that in any way affect the operation of the equipment; fire, smoke, explosions, water, storms, wind, lightening, acts of civil or military authorities, strikes, lockouts, other labor disputes, theft, riot, civil commotion, war, malicious mischief, acts of God, or any other reason or cause beyond thyssenKrupp's control that affects the use or operation of the equipment ("excluded work"). Purchaser will pay for all excluded work.

5. Additional Details and Work Not Included

There are certain items that are not included in this Proposal, many of which must be completed by Purchaser prior to and as a condition precedent to thyssenKrupp Elevator's performance of its work as described in this Proposal. In order to ensure a successful completion of this project, it is the Purchaser's sole responsibility to coordinate its own completion of those items with thyssenKrupp. The following is a list of those items that are not included in this Proposal:

A. General

1. In no event shall thyssenKrupp be responsible for liquidated, consequential, indirect, incidental, exemplary, and special damages associated with the work described in this Proposal.
2. This Proposal is made without regard to compliance with any special purchasing, manufacturing or construction/installation requirements including, but not limited to, any socio-economic programs, such as small business programs, minority or woman owned business enterprise programs, or local preferences, any restrictive sourcing programs, such as Buy American Act, or any other similar local, state or federal procurement regulations or laws that would affect the cost of performance. Should any such requirements be applicable to the work described in this Proposal, thyssenKrupp reserves the right to modify this Proposal or rescind it altogether.
3. thyssenKrupp is an equal opportunity employer.
4. thyssenKrupp's performance of the work described in this Proposal any separate installation agreement is contingent upon Purchaser furnishing thyssenKrupp with any and all necessary permission or priority required under the terms and conditions of government regulations affecting the acceptance of this Agreement or the manufacture, delivery or installation of the equipment. All applicable sales and use taxes, permit fees and licenses imposed upon thyssenKrupp as of the date of the Proposal are included in the price of the Proposal. Purchaser is responsible for any additional applicable sales and use taxes, permit fees and licenses imposed upon thyssenKrupp after the date of the Proposal or as a result of any law enacted after the date of the Proposal.
5. Purchaser agrees to provide thyssenKrupp's personnel with a safe place in which to work and thyssenKrupp reserves the right to discontinue work at the jobsite whenever, in thyssenKrupp's sole opinion, this provision is being violated.
6. In the event another subcontractor requires pit access during the installation process, upon a request from Purchaser thyssenKrupp will park the corresponding elevator at an upper landing and lock and tag out the equipment at no additional cost in exchange for Purchaser's executing thyssenKrupp's Special Use Work Order. Upon notice to thyssenKrupp from Purchaser that its subcontractor has completed its task and no longer requires pit access, thyssenKrupp will remove its lock and tag from the elevator.

B. Working Hours, Logistics and Mobilization

1. All work described in this Proposal and which is the subject of a separate installation agreement shall be performed during thyssenKrupp's regular working hours/regular working days, defined as regular IUEC working hours of regular working days, Monday thru Friday - IUEC recognized holidays excluded - unless otherwise specified and agreed to in writing by both thyssenKrupp and Purchaser (hereinafter "normal working hours"). thyssenKrupp shall be provided with uninterrupted access to the elevator hoistway and machine room areas to perform work during normal working hours.

2. Purchaser shall provide on-site parking to all thyssenkrupp personnel at no additional cost to thyssenkrupp.
3. Purchaser will be required to sign off on the Material Release Form, which will indicate the requested delivery date of equipment to the site. If Purchaser is not ready to accept delivery of the equipment within ten (10) business days of the agreed upon date, Purchaser will immediately make payments due for equipment and designate an area adjacent to the elevator shaft where Purchaser will accept delivery. If Purchaser fails to provide this location or a mutually agreeable alternative, thyssenkrupp is authorized to warehouse the equipment at the thyssenkrupp warehouse at Purchaser's risk and expense. Purchaser shall reimburse thyssenkrupp for all costs due to extra handling and warehousing. Storage beyond ten (10) business days will be assessed at a rate of \$100.00 per calendar day for each unit listed in this Proposal, which covers storage and insurance of the elevator equipment and is payable prior to delivery.
4. Purchaser agrees to provide unobstructed tractor-trailer access and roll-able access from the unloading area to the elevator or escalator hoistways or wellways (as applicable). Purchaser agrees to provide a dry and secure area adjacent to the hoistway(s) at the ground level for storage of the elevator equipment and tools within ten (10) business days from receipt at the local thyssenkrupp warehouse. Any warranties provided by thyssenkrupp for vertical transportation equipment will become null and void if equipment is stored in any manner other than a dry, enclosed building structure. Any relocation of the equipment as directed by Purchaser after initial delivery will be at Purchaser's expense.
5. thyssenkrupp includes one mobilization for installation to the jobsite. A mobilization fee of \$2,500.00 per crew per occurrence will be charged for pulling off the job or for any delays caused by others once material has been delivered and thyssenkrupp's work has commenced.
6. Access for this installation shall be free and clear of any obstructions. A forklift for unloading and staging material shall also be provided by Purchaser at no additional cost.

C. Hoistways and Equipment Rooms

1. Purchaser shall provide the following:
 - a. OSHA compliant removable barricades prior to thyssenkrupp's installation (thyssenkrupp will replace if removed by thyssenkrupp). Barricades must allow clearance for installation of entrance frames and should be located no less than 24" from the exterior face of the hoistway wall. Prior to beginning installation, entrance protection and netting must be installed in accordance to OSHA 1926.451(h)(1) to prevent any objects from falling down the shaft; please note that installation and netting are by others at no cost to thyssenkrupp. Purchaser agrees to indemnify, defend and hold thyssenkrupp harmless for any OSHA citations received as a result of Purchaser's non-compliance with OSHA standards.
 - b. A dry legal hoistway, properly framed and enclosed, and including a pit of proper depth and overhead. This is to include steel safety beam, inspection or access platforms, access doors, sump pump, lights, waterproofing, as required; dewatering of pit(s) and required screening.
 - c. An OSHA compliant steel safety beam with a minimum capacity verified by structural engineer 2" below the overhead roof deck as shown on the thyssenkrupp shop drawings prior to elevator installation.
 - d. A hoistway that is square and plumb within 1" from top to bottom of the total hoistway height. If the hoistway is outside of this required tolerance, Purchaser shall pay extra for any additional modifications required for a proper installation.
 - e. Adequate backing for the elevator guide rails (as shown on the elevator shop drawings). If not, Purchaser will be subject to extra charges due to any additional work required or delay.
 - f. 75 degree bevel guards on all projections, recesses or setbacks in excess of 4" in accordance with ASME A17.1.
 - g. A legal machine room, adequate for the elevator equipment, including floors, trap doors, gratings, foundations, lighting, ventilation sized per the thyssenkrupp shop drawings. Purchaser must maintain machine room temperature between 50 and 90 degrees Fahrenheit, with relative humidity less than 95% non-condensing at all times.
 - h. Rough openings for the entrances that shall be no less than what is delineated on the elevator shop drawings;
 - i. Adequate bracing of entrance frames to prevent distortion during wall construction.
 - j. All grouting, fire caulking, cutting and removal of walls and floors, patching, coring, penetrations and painting (except as specified) and removal of obstructions required for elevator work; along with all proper trenching and backfilling for any underground piping and/or conduit.
 - k. Any tube steel and/or rail backing, including embeds and weld plates, that may be required by thyssenkrupp for rail bracket attachment or guide rail support which Purchaser shall ensure is installed by others flush with the hoistway from pit floor to the top of the overhead to carry the loads of all equipment. Purchaser shall ensure that guide rails for traction elevators must attach to steel, CMU or concrete, not wood.
 - l. All labor and materials necessary to support the full width of the hoistway at each landing for anchoring or welding the thyssenkrupp sill support as detailed on the thyssenkrupp layouts along with all structural steel doorframes with extensions to beam above if required on hoistway sides and sills for freight elevators, including finish painting these items.
2. Purchaser must specify wall thickness for elevator entrance frames on the layout approvals. The standard range wall thickness for elevator entrance frames is 3.25 to 12.5 inches. thyssenkrupp can accommodate entrance thickness of up to 22 inches at an additional cost.
3. thyssenkrupp is not responsible for verifying field dimensions or related work by others. Purchaser must verify all dimensions on the submittal drawings prior to equipment fabrication.

D. Electrical and Life Safety

1. Purchaser shall provide the following:
 - a. Suitable connections from the power main to each controller and signal equipment feeders as required, including necessary circuit breakers and fused mainline disconnect switches per NEC prior to installation.
 - b. Piping and wiring to controller for mainline power, car lighting, and any other building systems that interface with the elevator controls is by others (per N.E.C. Articles 620-22 and 620-51).
 - c. A means to automatically disconnect the main line and the emergency power supply to the elevator prior to the application of water in the elevator machine room.
 - d. Any required hoistway, machine room, pit lighting and/or 110v service outlets;
 - e. Temporary 220v single phase (50 amps) within 50 feet of each hoistway.
 - f. A bonded ground wire, properly sized, from the elevator controller(s) to the primary building ground.
 - g. Conduit and wiring for remote panels to the elevator machine room(s) and between panels. Remote panels required by local jurisdictions are not included in this proposal.
 - h. Installed sprinklers, smoke/heat detectors on each floor, machine room and hoistways, shunt trip devices (not self-resetting) and access panels as may be required.
 - i. A dedicated, analog telephone line monitored 24 hours, as well as normally open dry contacts for smoke/heat sensors, which shall be terminated by Purchaser at a properly marked terminal in the elevator controller.
 - j. Emergency power supply including automatic time delay transfer switch and auxiliary contacts with wiring to designated elevator controller along with electrical cross connections between machine rooms for emergency power.

E. Miscellaneous

1. Should building settling occur which requires elevator rail alignment modifications during installation (or during any included New Installation Maintenance period as designated above), additional charges will apply.
2. Purchaser shall ensure full compliance with any governmentally required safety provisions not directly involved with the elevator installation.
3. Purchaser shall provide a finished cab floor with total thickness $\leq 3/8$ ", weighing ≤ 50 lb.
4. Unless indicated plastic laminate and powder coat are standard selections, other options are subject to price increase.
5. Purchaser shall provide an on-site dumpster. thyssenkrupp will be responsible for cleanup of elevator packaging material; however, composite cleanup participation is not included in this Proposal.

F. Temporary Use, Inspection and Turnover

1. Unless required by specification, thyssenkrupp will not provide for "temporary use" of the elevator(s) described in this Proposal prior to completion and acceptance of the complete installation. Temporary use shall be agreed to via a change order to the parties' separate installation agreement mentioned above which shall require Purchaser's execution of thyssenkrupp's standard Temporary Use Agreement. Cost for temporary use of an elevator shall be \$50.00 per calendar day per hydraulic elevator and \$75.00 per calendar day for each traction elevator for rental use only, excluding personnel to operate. All labor and parts, including callbacks required during the temporary use period will be billed at thyssenkrupp's standard local billing rates. In the event that an elevator must be provided for temporary use, thyssenkrupp will require 30 days to perform final adjustments and re-inspection after the elevator has been returned to thyssenkrupp with all protection, intercoms and temporary signage removed. This duration does not include any provisions for finish installation or for repairs of same, which shall be addressed on a project-by-project basis. Cost for preparation of controls for temporary use, refurbishment due to normal wear and tear, readjustment and re-inspection is \$3,500.00 per elevator up to 10 floors. For installations above 10 stops, an additional cost of \$1,500.00 / 10 floors shall apply. These costs are based on work performed during normal working hours. Temporary use excludes vandalism or misuse. Any required signage, communication devices, elevator operators, and protection are not included while Temporary Use is being provided. All overtime premiums for repairs during the temporary use period will be billed at our local service billing rates.
2. The Proposal price set forth above includes one (1) inspection by the applicable authority having jurisdiction if required by the government of the locality where the equipment is located. In the event the equipment fails that inspection due to no fault of thyssenkrupp will charge Purchaser for both the cost of each re-inspection which shall be \$3,000.00 and a remobilization fee which shall be \$2,500.00 via change order prior to scheduling a re-inspection.
3. Upon notice from thyssenkrupp that the installation of the equipment is complete, Purchaser will arrange to have present at the installation site a person authorized to make the final inspection and to execute thyssenkrupp's "Final Acceptance Form." The date and time that such person will be present at the site shall be mutually agreed upon but shall not be more than ten (10) business days after the date of thyssenkrupp's notice of completion to Purchaser unless both thyssenkrupp and Purchaser agree to an extension of that ten (10) day period in writing. Such final inspection and execution of thyssenkrupp's "Final Acceptance Form" shall not be unreasonably delayed or withheld.
4. Purchaser agrees to accept a live demonstration of equipment's owner-controlled features in lieu of any maintenance training required in the bid specifications.
5. Purchaser agrees to accept thyssenkrupp's standard owner's manual in lieu of any maintenance, or any other, manual(s) required in the bid specifications.

G. Specific Equipment Type Requirements

1. Conventional Hydraulics Only: Purchaser shall provide the following:
 - a. A crane to hoist elevator equipment as needed, including hydraulic cylinders to be placed in the ground. When required, the excavation of the elevator cylinder well hole will be based on drilling through soil free from rock, sand, water, building construction members and obstructions.
 - b. A 32" x 32" block-out, or as the block-out indicated on thyssenkrupp layouts, in the pit floor.
 - c. Adequate ingress and egress, including ramping, shall be provided for a truck-mounted drill rig.
 - d. Removal of all dirt and debris from each hole location. Only thyssenkrupp standard hdpe or pvc protection system with bottomless corrugated steel casing will be provided for "in-ground" hydraulic jack assemblies. Should obstructions be encountered, thyssenkrupp will proceed only after written authorization has been received from the purchaser. The price of this proposal shall be increased by the amount of additional labor at thyssenkrupp's standard hourly rates, and the actual cost of any additional material plus 15%.
 - e. Any required trenching and backfilling for underground piping or casings, and conduit as well as any compaction, grouting, and waterproofing of block-out.
 - f. The engineering and installation of methane barriers or coordination/access.
 - g. Access to 2" pressurized water supply within 100'-0" of the jack hole location.
 - h. Layout when excavation of jack hole is from grade.
 - i. A 4' x 4' opening in the elevator hoistway overhead as required by thyssenkrupp.
2. Hydraulic Machine Roomless Applications Only: Purchaser shall provide the following:
 - a. A full rough opening to accept controller, typically on floor above bottom landing, an 8" minimum finished wall thickness at controller location and all interconnects (building power, fire alarm signals, phone line) to the top of the controller frame.
 - b. Cooling or heating as necessary to maintain 50-95 degree Fahrenheit temperature in hoistway at all times.
 - c. The shunt trip breaker provide by thyssenkrupp within the elevator controller will require a separate 120V power supply to the shunt trip relay and this signal must be monitored by the fire panel.
3. Building Supported Traction Machine Roomless Applications Only
 - a. For a synergy machine room-less installation, the top of the hoistway shall not be installed until after the hoist machines can be set in place with a crane. Purchaser agrees to provide a crane to hoist elevator equipment as needed and at no cost to thyssenkrupp.
 - b. For synergy machine room-less applications, Purchaser shall provide thyssenkrupp installation crew a work platform in the hoistway at the top landing. The platform shall be constructed to the specification provided to the Purchaser by thyssenkrupp.
 - c. Purchaser shall provide beam pockets with bearing plates to support the loads of the overhead machine assembly on synergy machine roomless applications per the thyssenkrupp layouts.
 - d. Purchaser shall provide a temporary 220 VAC - 30 amps single-phase terminal with disconnect for each traction elevator in the machine room(s) at the start of the job for temporary operation of work platform.

Hydraulic with machine room

endura

Twinpost above-ground



Jack types	Travel	Speed	Capacity
1-Stage	12'-8" ¹	80, 110, 150 fpm	2100-4000 lbs
2-Stage	23'-2½" ¹	80, 110, 150 fpm	2100-4000 lbs
3-Stage	33'-6½" ¹	80, 100, 125, 150 fpm	2100-4000 lbs

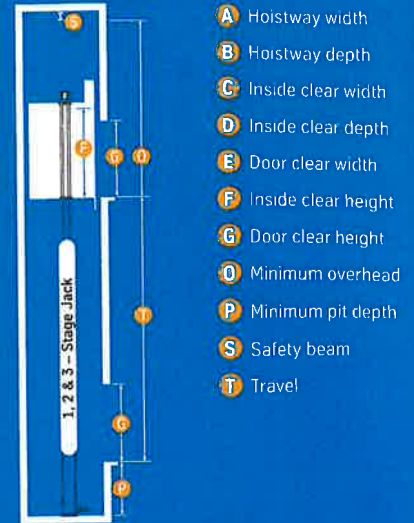
Passenger	1- and 2-Stage	3-Stage				
Capacity (lbs)	Hoistway ^{2,7} A x B	Hoistway ⁷ A x B	Front/rear	Inside clear C x D	Door type	Door width E
2100 ³	7'-4" x 5'-9"	7'-8" x 5'-9"	F	5'-8" x 4'-3"	One-speed	3'-0"
2100 ³	7'-4" x 6'-8¾"	7'-8" x 6'-8¾"	F/R	5'-8" x 4'-3½"	One-speed	3'-0"
2500	8'-4" x 5'-9"	8'-8" x 5'-9"	F	6'-8" x 4'-3"	One-speed	3'-6"
2500	8'-4" x 6'-8¾"	8'-8" x 6'-8¾"	F/R	6'-8" x 4'-3½"	One-speed	3'-6"
3000	8'-4" x 6'-3"	8'-8" x 6'-3"	F	6'-8" x 4'-9"	One-speed	3'-6"
3000	8'-4" x 7'-2¾"	8'-8" x 7'-2¾"	F/R	6'-8" x 4'-9½"	One-speed	3'-6"
3500 ⁴	8'-4" x 6'-11"	8'-8" x 6'-11"	F	6'-8" x 5'-5"	One-speed	3'-6"
3500 ⁴	8'-4" x 7'-10¾"	8'-8" x 7'-10¾"	F/R	6'-8" x 5'-5½"	One-speed	3'-6"
4000 ⁴	9'-4" x 6'-11"	9'-8" x 6'-11"	F	7'-8" x 5'-5"	One-speed	3'-6"/4'-0"
4000 ⁴	9'-4" x 7'-10¾"	9'-8" x 7'-10¾"	F/R	7'-8" x 5'-5½"	One-speed	3'-6"/4'-0"

Dimensional data shown above is for both seismic and non-seismic zones and complies with current ASME A17.1 and CSA B44 Safety Code for Elevators. Local codes may vary from the national codes. Consult your thyssenkrupp Elevator representative for details.

- F** Inside clear height: 7'-4" ⁵
- G** Door clear height: 7'-0"
- P** Minimum pit depth: 4'-0"
- B** Minimum overhead:
Up to 100 fpm: Over 100 fpm:
1-Stage – 12'-2" 1-Stage – 12'-5"
2-Stage – 12'-8" 2-Stage – 12'-8"
3-Stage – 12'-11" 3-Stage – 12'-11"
- S** Safety beam required per OSHA 1926.502 ⁶
- T** Max travel possible ¹:
1-Stage:
Up to 100 fpm – 18'-11"
Over 100 fpm – 18'-8"
2-Stage: 28'-6"
3-Stage: 48'-3½"

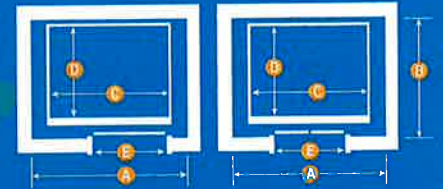
¹ Max travel possible in note T (above) is obtained by adding 1" of overhead/pit for every 1" (1-Stage) or 2" (2-Stage) or 3" (3-Stage) of net travel over the standard. Max 2'-0" allowed in overhead.
² In areas where a 7" deep pit ladder is required, additional hoistway width or wall pocket will be required.
³ This capacity is not available with center opening doors.
⁴ To meet the requirements of IBC code for 84" stretchers, a 4'-0" center opening (for 4000 lbs capacity only) or 3'-6" side opening (for 3500 lbs or 4000 lbs capacity) door is required.
⁵ Dimension shown is based on suspended ceiling design. An increase in cab height will result in an increase in overhead requirements.
⁶ Provided and installed by others, as directed by the local thyssenkrupp office. Minimum overhead is shown to the bottom of the safety beam.
⁷ For multiple elevators: Add 4" for a divider beam between hoistways.
 * Refer to page 14 for elevator machine room sizes.

Front opening (F)

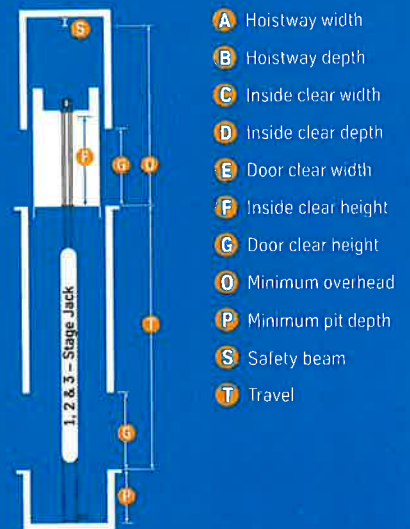


One-speed side opening doors

One-speed center opening doors

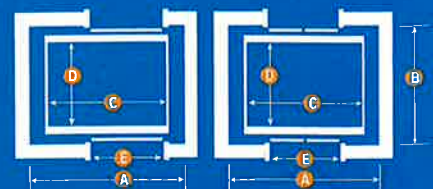


Front and rear opening (F/R)



One-speed side opening doors

One-speed center opening doors



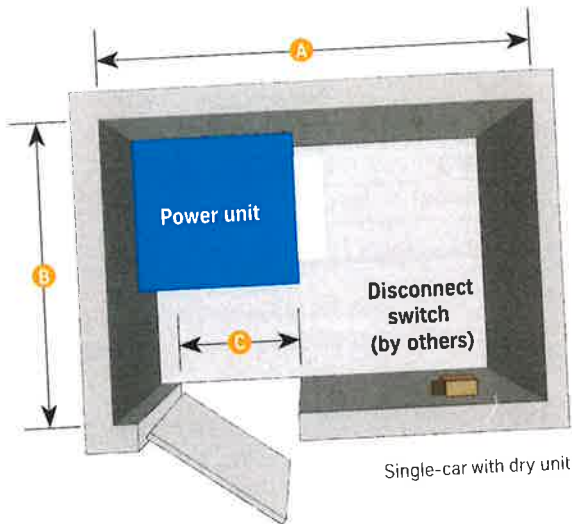
Machine room

Hydraulic elevator machine rooms

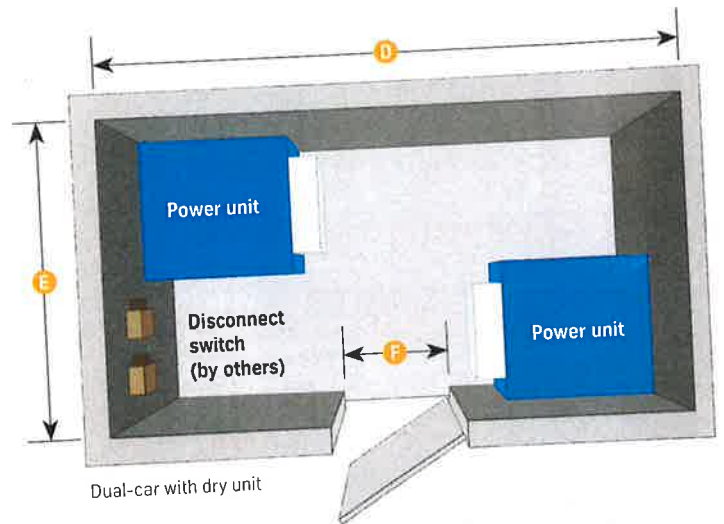
Your endura system determines the machine room you'll need.*

The most desirable controller closet location is on the lowest floor served, adjacent to the elevator hoistway. At an additional cost, the machine room can be located remotely from hoistway.

Single-car configurations



Dual-car configurations



Smaller machine rooms available in some cases. Consult your thyssenkrupp Elevator representative if needed.

Single-car					
Power unit	A	B	C ¹	Door height	Room height
Submersible (large)	7'-2"	7'-1½"	4'-0"	Min 7'-0"	Min 7'-6"
Dry (large)	9'-10"	5'-6"	4'-0"	Min 7'-0"	Min 7'-6"

Dual-car					
Power unit	D	E	F ¹	Door height	Room height
Submersible (large)	10'-5½"	10'-5½"	4'-0"	Min 7'-0"	Min 7'-6"
Dry (large)	14'-7"	7'-0¾"	4'-0"	Min 7'-0"	Min 7'-6"

¹ Clear opening.

* Consult your thyssenkrupp Elevator representative to help determine your needs, as machine room arrangements may vary from those shown.

Cab accessory options

Ceilings



Basic flat

Exposed cab top with optional recessed lighting is available in a powder coated steel finish. Ideal for service cars.



Suspended

White translucent diffusers for LED lighting are available with ceiling frames in a powder coated, aluminum or stainless steel finish.



Downlight ²

Metal pan downlight ceiling features LED lighting. Lights are mounted in your choice of powder coated or stainless steel ceiling panels.



Island downlight ^{2,3}

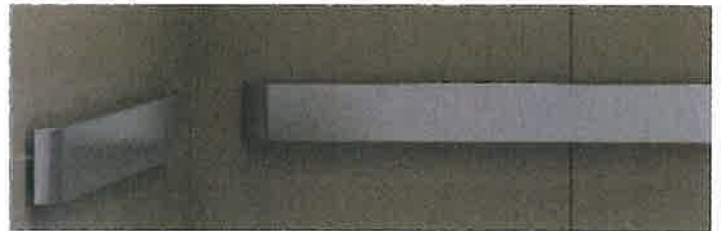
Particle board core faced with your choice of plastic laminate, stainless steel or bronze. Houses a concealed emergency exit, as well as concealed metal framework.

Handrails



Cylindrical

1½" cylindrical handrail is a continuous metal form with ends turned toward the wall. We also offer straight endcaps in lieu of the returned ends. Comes in brushed stainless steel.



Flat bar

Metal bar handrail is available in ¼" thickness and 2", 4", or 6" widths. Comes in brushed stainless steel.

Sills

Our cab sill finishes allow you to match your sills to any other design component inside the cab. The standard sill design is aluminum or bronze. You can upgrade the finish to nickel silver for maximum durability.

Aluminum ¹



Nickel silver



Braille



Option 1
Resin braille plate with raised floor and elevator identification. Adhered to door jamb.



Option 2
Surface mount cast Braille plate with raised floor elevator identification.



Option 3
Flush (inlaid) mount cast Braille plate with raised floor elevator identification.

¹ Comes standard. Finishes may vary based on your project selections. ² Lighting options may vary depending on cab size. ³ Not available on all models.

Applied panel



Steel shell wall with applied panel design

Mix beauty and practicality with this decorative and durable cab. The panel design is constructed with a high-quality steel shell

and vertical raised panels made with a core of urea formaldehyde wood.

Panel finish options

Plastic laminates

Woods

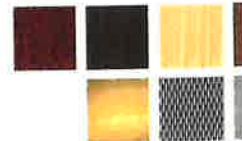


Solids

Patterns

Wood veneer and metals

Woods



Metals

Reveal, base, frieze finish options

Powder coats



Metals