



SECTION 14 20 10

RESIDENTIAL ELEVATOR

(Freedom Hydro Residential Elevator)

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Residential Elevator.

1.2 RELATED SECTIONS

- A. Section 03 30 00 – Cast-in-Place Concrete.
- B. Section 06 10 00 – Rough Carpentry.
- C. Section 08 10 00 – Doors and Frames.
- D. Section 09 21 16 – Gypsum Board Assemblies.
- E. Section 09 60 00 – Flooring.
- F. Section 28 36 33 – Water Detection Sensors
- G. Division 16 – Electrical.
 - 1. Electrical service and disconnects.
 - 2. Wire routing and connections.
 - 3. Telephone service.

1.3 REFERENCES

- A. ASME A17.1 / CSA B44 – Safety Code for Elevators and Escalators.
- B. NFPA 70 – National Electric Code.
- C. CSA C22.1 – Canadian Electric Code.
- D. Local state, province, city, township applicable codes.

1.4 REGULATORY REQUIREMENTS

- A. Obtain approvals from local jurisdiction authority.
- B. Complete work in compliance with national and local codes as listed in 1.3.

1.5 SUBMITTALS

- A. Submit under provisions of 01 30 00.
- B. Product Information.
 - 1. Site preparation instructions.
 - 2. Freight receiving, handling, and storage instructions.
 - 3. Installation methods.
- C. Shop Drawings.
 - 1. Plan view with finished dimensions.
 - 2. Elevation view with travel distances and anchor locations.
 - 3. Isometric view showing orientation of openings.
 - 4. Machine room details.
 - 5. Electrical requirements.
- D. Finish Selection.
 - 1. Make finish selections available digitally and physically.
 - 2. Provide video with 3D virtual walk thru showing elevator with selected finishes.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products (unopened) until installation.
- B. Store products in covered, dry location.
- C. Protect products from theft and vandalism.

1.7 PROJECT CONDITIONS

- A. Elevator may not be used for hoisting materials and personnel during construction period.

1.8 WARRANTY

- A. Provide a 10-Year Warranty on mechanical components.
- B. Provide a 3-Year Warranty on electrical components.
- C. Provide a 1-Year Warranty on labor.

1.9 MAINTENANCE SERVICE

- A. Provide service and maintenance for one year after date of substantial completion.
- B. Provide maintenance contract for paid maintenance beyond 1st year.

- C. Provide 24/7 phone support.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Acceptable Manufacturer: Nationwide Lifts
 - 1. Address: 10 Holden Avenue, Queensbury, NY 12804
 - 2. Email: info@elevators.com
 - 3. Toll Free: 888-323-8755
 - 4. Website: www.elevators.com
- B. Substitutions not permitted.

2.2 FREEDOM HYDRO RESIDENTIAL ELEVATOR

- A. Model Name.
 - 1. Freedom Hydro.
- B. Drive System.
 - 1. Roped Hydraulic (hole-less).
 - 2. Submersible pump unit.
- C. Safety Features.
 - 1. Overspeed valve.
 - 2. Safety brake system.
 - 3. Emergency alarm and stop switch.
 - 4. Final limit switches.
 - 5. Gate switch.
 - 6. Landing door interlocks.
- D. Electrical Requirements.
 - 1. 230V, 30A service to a fused, lockable disconnect with auxiliary contact.
 - 2. 115V, 15A service to a fused, lockable disconnect (for lighting circuit).
 - 3. Functional phone line.
- E. Controls.
 - 1. Fully automatic push button in cab and at landings.

2. Automatic car lighting.
 3. Position indicator in cab.
 4. Microprocessor based controller.
- F. Speed.
1. 40 fpm (0.20 m/s).
- G. Number of Levels Serviced.
1. ____ levels.
- H. Travel.
1. ____ feet ____ inches.
- I. Capacity. *(choose one of the options below)*
1. 950 lbs (431 kg). -OR-
 2. 1000 lbs (454 kg). -OR-
 3. 1400 lbs (635 kg). *not allowed in all regions*
- J. Car Size. *(choose one of the options below)*
1. 36 inches by 48 inches (914 mm by 1219 mm). -OR-
 2. 36 inches by 54 inches (914 mm by 1372 mm). -OR-
 3. 36 inches by 60 inches (914 mm by 1524 mm). -OR-
 4. 40 inches by 48 inches (1016 mm by 1219 mm). -OR-
 5. 40 inches by 54 inches (1016 mm by 1372 mm). -OR-
 6. 44 inches by 48 inches (1118 mm by 1219 mm). -OR-
 7. 40 inches by 60 inches (1016 mm by 1524 mm). *requires 1400 lb capacity -OR-*
 8. 44 inches by 54 inches (1118 mm by 1372 mm). *requires 1400 lb capacity -OR-*
 9. 48 inches by 48 inches (1219 mm by 1219 mm). *requires 1400 lb capacity*
- K. Platform Configuration. *(choose one of the options below)*
1. Enter/exit same side. -OR-
 2. Enter/exit opposite sides (front and rear). -OR-
 3. Enter/exit 90 degrees (front and side).
- L. Cab Fixtures Finish. *(choose one of the options below)*
1. Stainless Steel. -OR-
 2. Oil Rubbed Bronze. -OR-
 3. Brass.
- M. Cab Gate(s). *(choose one of the options below)*
1. Folding accordion gate. -OR-
 2. Sliding 2-speed gate.
- N. Cab Gate Finish. *(choose one of the options below)*
1. White Vinyl. -OR-

2. Clear Acrylic. -OR-
 3. Aluminum. -OR-
 4. Unfinished Veneer. - Cherry -OR-
 5. Unfinished Veneer. - Maple -OR-
 6. Unfinished Veneer. - Oak
- O. Landing Doors. *(choose one of the options below)*
1. Solid core wood doors at each landing, provided by GC. -OR-
 2. Sliding 2-speed doors, provided by Nationwide Lifts.
- P. Landing Door Finish. *(choose one of the options below)*
1. By GC. -OR-
 2. Primed for paint. -OR-
 3. Stainless Steel. -OR-
 4. Unfinished Veneer – Cherry. -OR-
 5. Unfinished Veneer – Maple. -OR-
 6. Unfinished Veneer – Oak.
- Q. Cab Wall Finish. *(choose one of the options below)*
1. Melamine – Cherry. -OR-
 2. Melamine – Maple. -OR-
 3. Melamine – Oak. -OR-
 4. Melamine – White. -OR-
 5. Unfinished Hardwood Veneer – Cherry. -OR-
 6. Unfinished Hardwood Veneer – Maple. -OR-
 7. Unfinished Hardwood Veneer – Oak. -OR-
 8. Finished Hardwood Veneer – Cherry. -OR-
 9. Finished Hardwood Veneer – Maple. -OR-
 10. Finished Hardwood Veneer – Oak. -OR-
 11. Finished Raised Hardwood Veneer – Cherry. -OR-
 12. Finished Raised Hardwood Veneer – Maple. -OR-
 13. Finished Raised Hardwood Veneer – Oak.
- R. Cab Ceiling. *(choose one of the options below)*
1. White Melamine. -OR-
 2. Match cab walls.
- S. Cab Lighting. *(choose one of the options below)*
1. LED recessed lights.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Site must be properly prepared prior to starting installation.
- B. Hoistway must be built to correct finished dimensions.
- C. Landing openings must have correct size and centerline location.
- D. Electrical power must be provided to disconnects as directed.

- E. Phone line must be provided.
- F. Controller space must have proper electrical clearances.
- G. Light and GFI outlet provided in machine room.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces according to manufacturer's recommendations.

3.3 ELEVATOR INSTALLATION

- A. Install elevator in compliance with applicable codes noted in section 1.3.
- B. Install according to manufacturer's manuals and drawings.
- C. Startup and adjust equipment according to manufacturer's instructions.

3.4 FIELD QUALITY CONTROL

- A. Perform tests in compliance with applicable codes as noted in section 1.3.
- B. Perform tests/inspections as required by local jurisdiction.
- C. Demonstrate operation in front of Owner and Contractor.

3.5 CLEANING

- A. Remove protective films and coverings from equipment.
- B. Clean all components.

3.6 PROTECTION

- A. Protect installed products until completion of the project.
- B. Touch-up, repair, or replace any damaged components prior to completion.

END OF SECTION