

SECTION 14 20 10

RESIDENTIAL ELEVATOR

*(Freedom Hydro Residential Elevator)*

1. GENERAL
	1. SECTION INCLUDES
		1. Residential Elevator.
	2. RELATED SECTIONS
		1. Section 03 30 00 – Cast-in-Place Concrete.
		2. Section 06 10 00 – Rough Carpentry.
		3. Section 08 10 00 – Doors and Frames.
		4. Section 09 21 16 – Gypsum Board Assemblies.
		5. Section 09 60 00 – Flooring.
		6. Section 28 36 33 – Water Detection Sensors
		7. Division 16 – Electrical.
			1. Electrical service and disconnects.
			2. Wire routing and connections.
			3. Telephone service.
	3. REFERENCES
		1. ASME A17.1 / CSA B44 – Safety Code for Elevators and Escalators.
		2. NFPA 70 – National Electric Code.
		3. CSA C22.1 – Canadian Electric Code.
		4. Local state, province, city, township applicable codes.
	4. REGULATORY REQUIREMENTS
		1. Obtain approvals from local jurisdiction authority.
		2. Complete work in compliance with national and local codes as listed in 1.3.
	5. SUBMITTALS
		1. Submit under provisions of 01 30 00.
		2. Product Information.
			1. Site preparation instructions.
			2. Freight receiving, handling, and storage instructions.
			3. Installation methods.
		3. 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.
		4. Finish Selection.
			1. Make finish selections available digitally and physically.
			2. Provide video with 3D virtual walk thru showing elevator with selected finishes.
	6. DELIVERY, STORAGE, AND HANDLING
		1. Store products (unopened) until installation.
		2. Store products in covered, dry location.
		3. Protect products from theft and vandalism.
	7. PROJECT CONDITIONS
		1. Elevator may not be used for hoisting materials and personnel during construction period.
	8. WARRANTY
		1. Provide a 10-Year Warranty on mechanical components.
		2. Provide a 3-Year Warranty on electrical components.
		3. Provide a 1-Year Warranty on labor.
	9. MAINTENANCE SERVICE
		1. Provide service and maintenance for one year after date of substantial completion.
		2. Provide maintenance contract for paid maintenance beyond 1st year.
		3. Provide 24/7 phone support.
2. PRODUCTS
	1. MANUFACTURER
		1. 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](http://www.elevators.com)
		2. Substitutions not permitted.
	2. FREEDOM HYDRO RESIDENTIAL ELEVATOR
		1. Model Name.
			1. Freedom Hydro.
		2. Drive System.
			1. Roped Hydraulic (hole-less).
			2. Submersible pump unit.
		3. 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.
		4. 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.
		5. Controls.
			1. Fully automatic push button in cab and at landings.
			2. Automatic car lighting.
			3. Position indicator in cab.
			4. Microprocessor based controller.
		6. Speed.
			1. 40 fpm (0.20 m/s).
		7. Number of Levels Serviced.
			1. \_\_\_\_ levels.
		8. Travel.
			1. \_\_\_\_ feet \_\_\_\_ inches.
		9. 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*
		10. 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*
		11. 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).
		12. Cab Fixtures Finish. *(choose one of the options below)*
			1. Stainless Steel. *-OR-*
			2. Oil Rubbed Bronze. *-OR-*
			3. Brass.
		13. Cab Gate(s). *(choose one of the options below)*
			1. Folding accordion gate. *-OR-*
			2. Sliding 2-speed gate.
		14. 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
		15. 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.
		16. 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.
		17. 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.
		18. Cab Ceiling. *(choose one of the options below)*
			1. White Melamine. *-OR-*
			2. Match cab walls.
		19. Cab Lighting. *(choose one of the options below)*
			1. LED recessed lights.
3. EXECUTION
	1. EXAMINATION
		1. Site must be properly prepared prior to starting installation.
		2. Hoistway must be built to correct finished dimensions.
		3. Landing openings must have correct size and centerline location.
		4. Electrical power must be provided to disconnects as directed.
		5. Phone line must be provided.
		6. Controller space must have proper electrical clearances.
		7. Light and GFI outlet provided in machine room.
	2. PREPARATION
		1. Clean surfaces thoroughly prior to installation.
		2. Prepare surfaces according to manufacturer’s recommendations.
	3. ELEVATOR INSTALLATION
		1. Install elevator in compliance with applicable codes noted in section 1.3.
		2. Install according to manufacturer’s manuals and drawings.
		3. Startup and adjust equipment according to manufacturer’s instructions.
	4. FIELD QUALITY CONTROL
		1. Perform tests in compliance with applicable codes as noted in section 1.3.
		2. Perform tests/inspections as required by local jurisdiction.
		3. Demonstrate operation in front of Owner and Contractor.
	5. CLEANING
		1. Remove protective films and coverings from equipment.
		2. Clean all components.
	6. PROTECTION
		1. Protect installed products until completion of the project.
		2. Touch-up, repair, or replace any damaged components prior to completion.

END OF SECTION