

April 2023

## ELEVATOR PERIODIC CATEGORY TESTS AND INSPECTION FREQUENCY

All elevators require regular periodic tests to be performed. Certain older model elevators may not have had testing and inspection requirements established within their original code of construction. Newer editions of elevator safety codes have introduced testing requirements to verify the safe operation of elevators. To remove ambiguity with how newer safety code editions apply to older model elevators, *The Passenger and Freight Elevator Regulations, 2017* were modernized to clarify periodic test requirements for all elevators in the province. Many older elevators that may not have been subject to regular safety testing are now due for their safety test in 2023.

The owner shall ensure the following:

- that in addition to regular maintenance, Periodic Category 1, and Periodic Category 5 Tests are performed at the respective 1 and 5-year intervals;
- that Periodic Category 1 and Periodic Category 5 Tests follow the applicable sections of *ASME A17.1- 2013/CSA B44-13, Safety Code for Elevators and Escalators* in the conduct and evaluation of tests (or a more recent code edition used for the design of the elevator);
- that the completion of, and results of these tests be recorded within the required equipment record or log maintained within the machine room, and;
- that the completion of, and results of these tests be submitted to TSASK.

Owners shall coordinate with their maintenance contractor the timing and scheduling of periodic tests for their elevators. Owners may tender testing services to any licensed contractor when periodic tests are not a part of their maintenance service contract. Failure to have a safety test completed at the required time may result in your elevator being sealed out-of-service.

### BULLETIN APPLIES TO ALL ELEVATORS

This bulletin applies to all elevators including electric elevator types, hydraulic elevators, roped hydraulic elevators, rack and pinion elevators, LU/LA elevators, material lifts, and dumbwaiters.

### PERIODIC CATEGORY SAFETY TESTS

Periodic Category Tests are an important part of a preventative maintenance program. In addition to regularly scheduled maintenance performed on elevators, Periodic Category 1, and Category 5 Tests shall be completed at their required intervals as described below, based on the age of the elevator. Owners should not consider these tests within the scope of their regular preventative maintenance activities to the extent that they delay normal maintenance activities, but as additional.

Periodic Category 1 and Periodic Category 5 Test checklists have been included to create a standard for the accurate and whole completion of all required component tests with applicable references to the ASME A17.1/CSA B44 code rules. Note that the required component Periodic tests may be completed individually over a period of scheduled visits, but all tests shall be completed within the calendar year.

The checklists for completing the Periodic Category 1 and Periodic Category 5 Tests include references to the *ASME A17.1-2013/CSA B44-13, Safety Code for Elevators and Escalators* Section 8.6 (Maintenance, Repair, Replacement, and Testing) as well as the *ASME A17.2-2012 Guide for Inspection of Elevators, Escalators, and Moving Walks* (Items/Parts). To be referenced as a minimum standard to be used as test procedures only. In addition, all company safety procedures/policies are to be followed if they differ in procedures referenced in this guide.

The completed Category Test Checklists shall be submitted to [elevatorsafety@tsask.ca](mailto:elevatorsafety@tsask.ca) upon completion of the final component test, but no later than December 31. Periodic Category Tests shall be completed by a licensed Elevating Device Mechanic (EDM).

## FREQUENCY OF REQUIRED SAFETY TESTS

### **All elevators installed on or after January 1, 2018:**

Periodic Category 1 Tests shall be completed annually, and Periodic Category 5 Tests shall be completed every 5 years from the date of installation following Section 8.6 of the ASME A17.1/CSA B44 code edition the elevator construction was based upon.

### **For electric elevators installed before January 1, 2018:**

The Periodic Category 1 Tests and the modified Periodic Category 5 Tests must be carried out at intervals not exceeding 5 years. The modifications of the Periodic Category 5 Tests are established within the Regulations (section 26) and as outlined in the included checklist. It has now been 5 years since this requirement was introduced and all elevators in this category shall have these tests carried out by December 31, 2023, if not already completed.

### **For hydraulic and roped hydraulic elevators installed before January 1, 2018:**

The Periodic Category 1 Tests and modified Periodic Category 5 Tests must be carried out at intervals not exceeding 5 years. The modifications of the Category 5 Tests are established within the Regulations (section 27) and as outlined in the included checklist. It has now been 5 years since this requirement was introduced and all elevators in this category shall have this test carried out by December 31, 2023, if not already completed.

### **For all elevators operating in an industrial application regardless of the year of installation:**

In addition to the above required frequency of periodic tests, industrial application use elevators shall have the Periodic Category 1 Test carried out annually. An industrial application elevator is an elevator that operates in an extreme environment such as caustic, corrosive, explosive, or wet conditions or operates with direct exposure to the weather.

## MAINTENANCE AND INSPECTION RECORDS

Every owner of an elevating device and every contractor shall maintain a record or log (commonly in the form of a logbook) for each elevating device that they own or maintain. The record or log shall contain up-to-date data and entries on all maintenance, tests, and inspection activities. The record or log shall be available at the location of the elevating device to an inspector, maintenance mechanic, and other persons designated by the owner. The record or log shall be kept for at least five years from the date of the last entry.



### Periodic Category 1 Tests Checklist for All Elevators

Elevating device owners shall ensure that the required Periodic Category 1 Tests are completed annually for elevators installed on or after January 1, 2018, and every 5 years if installed before January 1, 2018.

Category 1 Periodic Tests Checklist for all Elevators				
<b>UNIT DETAILS</b>	<b>Contractor Name &amp; Licence #</b>			
	<b>8.11.1.1.2 Periodic Tests Approved EDM:</b>			
	<b>Unit Licence #</b>			
	<b>Elevator Type: Passenger      Freight      MRL      Other</b>			
	<b>Address</b>			
	<b>City</b>		<b>Building Name</b>	

CATEGORY 1 TESTS 8.6.4.19 Periodic Test Requirements	CONDITION/RESULTS/DATA P = Passed    NA= Not applicable Or Values as applicable	TEST YEAR	DATE Day/ Month	MECHANIC'S SIGNATURE & EDM #
<b>Oil Buffers (ASME A17.1 Rules 8.6.4.19.1 / 8.6.5.14.3 (d) &amp; ASME A17.2 Guide Item 5.9.2.1(a))</b>				
PRE-EXAMINATION				
TESTS				
POST-EXAMINATION				
<b>Safeties (ASME A17.1 Rules 8.6.4.19.2 / 8.6.5.14.3 (c) &amp; ASME A17.2 Guide Items 2.29.2(a-d) &amp; 5.8.2)</b>				
PRE-EXAMINATION				
TESTS Slow Speed				
POST-EXAMINATION				
<b>Governors (ASME A17.1 Rules 8.6.4.19.3 / 8.6.5.14.3 (b) &amp; ASME A17.2 Guide Items 2.13.2.1(a) &amp; 2.13.2.2(a))</b>				
EXAMINATION				
TESTS				
<b>Slack-Rope Devices and Stop Motion Switch on Winding Drum Machines (ASME A17.1 Rules 8.6.4.19.4 &amp; ASME A17.2 Guide Item 2.20)</b>				
EXAMINATION				
TESTS				
<b>Normal and Final Terminal stopping Devices (ASME A17.1 Rules 8.6.4.19.5 / 8.6.5.14.3 (a) &amp; ASME A17.2 Guide 2.20, 2.28.2.1, 3.5.2 &amp; 3.6.2.1)</b>				
EXAMINATION				
TESTS				

<b>CATEGORY 1 TESTS</b>	<b>CONDITION/RESULTS/DATA</b>	<b>TEST YEAR</b>	<b>DATE Day/ Month</b>	<b>MECHANIC'S SIGNATURE &amp; EDM #</b>
<b>8.6.4.19 Periodic Test Requirements</b>	<b>P = Passed NA= Not applicable Or Values as applicable</b>			
<b>Firefighters' Emergency Operation (ASME A17.1 Rules 8.6.4.19.6 / 8.6.5.14.3 (e) &amp; ASME A17.2 Guide Part 6)</b>				
<b>EXAMINATION</b>				
<b>Standby or Emergency Power Operation (ASME A17.1 Rules 8.6.4.19.7 / 8.6.5.14.3 (f) &amp; ASME A17.2 Guide Item 1.17.2) * test of auxiliary or alternate power if applicable</b>				
<b>EXAMINATION</b>				
<b>TESTS</b>				
<b>Power Operation of Door System (ASME A17.1 Rules 8.6.4.19.8 / 8.6.5.14.3 (g) / 8.6.5.14.6 &amp; ASME A17.2 Guide Items 1.8.1 &amp; 1.8.2 and Power Closing of Hoistway Doors and Sequence of Operation 4.6 &amp; 4.7)</b>				
<b>EXAMINATION</b>				
<b>TESTS</b>				
<b>Broken Rope, Tape, or Chain Switch (ASME A17.1 Rules 8.6.4.19.9 &amp; ASME A17.2 Guide Item 3.26.1)</b>				
<b>EXAMINATION</b>				
<b>TESTS</b>				
<b>Functional Safety of SIL Rated Device(s) (ASME A17.1 Rules 8.6.4.19.10)</b>				
<b>EXAMINATION</b>				
<b>TESTS</b>				
<b>Ascending Car Overspeed Protection and Unintended Car Movement Devices (ASME A17.1 Rules 8.6.4.19.11)</b>				
<b>EXAMINATION</b>				
<b>TESTS</b>				
<b>Traction-Loss Detection Means (ASME A17.1 Rules 8.6.4.19.12)</b>				
<b>EXAMINATION</b>				
<b>Occupant Evacuation Operation (ASME A17.1 Rules 8.6.4.19.14) – Not applicable per <i>The Passenger and Freight Elevator Regulations, 2017</i> Appendix Part 1 repealing ASME A17.1 Rule 2.27.11</b>				
<b>Emergency Communications (ASME A17.1 Rules 8.6.4.19.15 &amp; ASME A17.2 Guide Item 1.6) * Required if applicable to hydraulic elevators</b>				
<b>EXAMINATION</b>				
<b>TESTS</b>				



<b>CATEGORY 1 TESTS</b> <b>8.6.4.19 Periodic Test Requirements</b>	<b>CONDITION/RESULTS/DATA</b> <b>P = Passed    NA= Not applicable</b> <b>Or Values as applicable</b>	<b>TEST YEAR</b>	<b>DATE Day/ Month</b>	<b>MECHANIC'S SIGNATURE &amp; EDM #</b>
<b>Means to Restrict Hoistway or Car Door Opening</b> (ASME A17.1 Rules 8.6.4.19.6 & ASME A17.2 Guide Item 1.18)    * Required if applicable to hydraulic elevators				
EXAMINATION				
TESTS				
<b>Relief Valve Verification of Setting and System Pressure Test</b> (ASME A17.1 Rules 8.6.5.14.1 & ASME A17.2 Guide Item 2.31)				
RELIEF TESTS				
PRE- EXAMINATION				
FULL SYSTEM TEST				
POST-EXAMINATION				
<b>Hydraulic Cylinders and Pressure Piping</b> (ASME A17.1 Rules 8.6.5.14.2 & ASME A17.2 Guide Item 2.36)				
PRE- EXAMINATION				
TESTS				
POST-EXAMINATION				
<b>Emergency Terminal Speed-Limiting Device and Terminal Stopping Device</b> (ASME A17.1 Rules 8.6.5.14.3(h) & ASME A17.2 Guide Item 3.6.2.2)				
EXAMINATION				
TESTS				
<b>Low Oil Protection operation</b> (ASME A17.1 Rules 8.6.5.14.3(i) & ASME A17.2 Guide Item 2.39.2)				
TESTS				
<b>Flexible Hose and Fitting Assemblies</b> (ASME A17.1 Rules 8.6.5.14.4 & ASME A17.2 Guide Item 2.34)				
PRE- EXAMINATION				
TESTS				
<b>Pressure Switch</b> (ASME A17.1 Rules 8.6.5.14.5 & ASME A17.2 Guide Item 2.37)				
EXAMINATION				
TESTS				
<b>Slack-Rope Device</b> (ASME A17.1 Rules 8.6.5.14.7 & ASME A17.2 Guide Items 3.31.1 & 3.31.2)				
PRE- EXAMINATION				
TESTS				
<b>8.6.1.7.2 PERIODIC TEST RECORD</b> (SECURELY ATTACHED TO THE CONTROLLER)				



### Category 5 Tests Checklist for All Elevators Installed Before January 1, 2018

Elevating device owners shall ensure that the required Periodic Category 1 and Category 5 Tests are completed every five years.

Category 5 Periodic Tests Checklist for All Elevators Installed Before January 1, 2018				
<b>UNIT DETAILS</b>	<b>Contractor Name &amp; Licence #</b>			
	<b>8.11.1.1.2 Periodic Tests Approved EDM:</b>			
	<b>Unit Licence #</b>			
	<b>Elevator Type: Passenger      Freight      MRL      Other</b>			
	<b>Address</b>			
	<b>City</b>		<b>Building Name</b>	

CATEGORY 5 TESTS Pre-2018	CONDITION/RESULTS/DATA P = Passed    NA= Not applicable Values as applicable	TEST YEAR	DATE Day/ Month	MECHANIC'S SIGNATURE & EDM #
<b>Governors (ASME A17.1 Rules 8.6.4.19.3 / 8.6.4.20.2 &amp; ASME A17.2 Guide Items 2.13.2.1(a) &amp; 2.13.2.2(a))</b>				
<b>EXAMINATION</b>				
<b>TESTS</b>				
<b>Safeties (ASME A17.1 Rules 8.6.4.19.2)</b>				
<b>PRE-EXAMINATION</b>				
<b>TESTS</b>				
<b>8.6.1.7.2 PERIODIC TEST RECORD (SECURELY ATTACHED TO THE CONTROLLER)</b>				



### Category 5 Tests Checklist for All Elevators Installed On or After January 1, 2018

Elevating device owners shall ensure that the required Periodic Category 1 Tests are completed annually and the Category 5 Tests are completed every five years.

Category 5 Periodic Tests Checklist for All Elevators Installed On or After January 1, 2018				
<b>UNIT DETAILS</b>	<b>Contractor Name &amp; Licence #</b>			
	<b>8.11.1.1.2 Periodic Tests Approved EDM:</b>			
	<b>Unit Licence #</b>			
	<b>Elevator Type: Passenger      Freight      MRL      Other</b>			
	<b>Address</b>			
	<b>City</b>		<b>Building Name</b>	

CATEGORY 5 TESTS 8.6.4.20 PERIODIC TEST REQUIREMENTS	CONDITION/RESULTS/DATA P = Passed    NA= Not applicable Values as applicable	TEST YEAR	DATE Day/ Month	MECHANIC'S SIGNATURE & EDM #
<b>Car and Counterweight Safeties (ASME A17.1 Rules 8.6.4.20.1 / 8.6.5.16.1 &amp; ASME A17.2 Guide Item 2.29.2(e))</b>				
EXAMINATION				
TESTS				
POST-EXAMINATION				
<b>Governors (ASME A17.1 Rules 8.6.4.20.2 / 8.6.5.16.1 &amp; ASME A17.2 Guide Items 2.13.2.1(b) &amp; 2.13.2.2(b))</b>				
PRE-EXAMINATION				
TESTS				
POST-EXAMINATION				
<b>Oil Buffers (ASME A17.1 Rules 8.6.4.20.3 / 8.6.5.16.1 &amp; ASME A17.2 Guide Item 5.9.2.1(b))</b>				
PRE-EXAMINATION				
TESTS				
POST-EXAMINATION				
<b>Driving Machine Brake(s) (ASME A17.1 Rules 8.6.4.20.4)</b>				
PRE-EXAMINATION				
TESTS				
<b>Emergency Terminal Stopping and Speed Limiting Devices (ASME A17.1 Rules 8.6.4.20.6 &amp; ASME A17.2 Guide Items 2.28.2.1(b) &amp; 5.3.2.1(b))</b>				
EXAMINATION				
TESTS				



<b>CATEGORY 5 TESTS</b> <b>8.6.4.20 PERIODIC TEST REQUIREMENTS</b>	<b>CONDITION/RESULTS/DATA</b> <b>P = Passed    NA= Not applicable</b> <b>Values as applicable</b>	<b>TEST YEAR</b>	<b>DATE Day/ Month</b>	<b>MECHANIC'S SIGNATURE &amp; EDM #</b>
<b>Power Opening of Doors</b> (ASME A17.1 Rules 8.6.4.20.7 & ASME A17.2 Guide Item 1.10.2(a)) – * Advanced Opening				
TESTS				
<b>Leveling Zone and Leveling Speed</b> (ASME A17.1 Rules 8.6.4.20.8 & ASME A17.2 Guide Item 1.10.2(b))				
TESTS				
<b>Inner Landing Zone</b> (ASME A17.1 Rules 8.6.4.20.9 & ASME A17.2 Guide Item 1.10.2.1)				
TESTS				
<b>Braking System, Traction, and Traction Limits</b> (ASME A17.1 Rules 8.6.4.20.10)				
TESTS				
<b>Emergency Brake</b> (ASME A17.1 Rules 8.6.4.20.11 & ASME A17.2 Guide Item 2.19.3.2)				
EXAMINATION				
TESTS				
<b>Coated Ropes</b> (ASME A17.1 Rules 8.6.5.16.2)				
MAGNETIC FLUX				
EXAMINATION				
<b>Wire Rope Fastenings</b> (ASME A17.1 Rules 8.6.5.16.3 & ASME A17.2 Guide Item 3.23)				
EXAMINATION				
<b>Plunger Gripper</b> (ASME A17.1 Rules 8.6.5.16.4 & ASME A17.2 Guide Item 8.10.3.2.5(n))				
PRE-EXAMINATION				
TESTS				
<b>Overspeed Valve(s)</b> (ASME A17.1 Rules 8.6.5.16.5 & ASME A17.2 Guide Item 5.15.2)				
EXAMINATION				
TESTS				
<b>Class C2 Loading Freight Elevator</b> (ASME A17.1 Rules 8.6.5.16.6 & ASME A17.2 Guide Item 2.17.2.2)				
TESTS				
<b>8.6.1.7.2 PERIODIC TEST RECORD</b> (SECURELY ATTACHED TO THE CONTROLLER)				





## References for Elevator Contractors and Elevator Mechanics

This section identifies references considered and used in the development of the bulletin and checklists for elevator contractors and mechanics to make use of in better understanding the requirements.

### *The Passenger and Freight Elevator Regulations, 2017 Sections 23 to 27*

- 23 General Duty Re Safe Condition
- 24 Standards for Certain New Elevators
- 25 Standards for Certain Existing Elevators
- 26 Periodic Inspections and Tests for Existing Electric Elevators
- 27 Periodic Inspections Testing of Existing Hydraulic and Roped Hydraulic Elevators

Modifications to Periodic testing requirements for electric elevators installed prior to 2018 are referenced in section 26 and further reference to comply with Rules 8.6.4.19 and 8.6.4.20.2 of the ASME A17.1/B44 code at intervals not exceeding 5 years.

Modifications to Periodic testing requirements for hydraulic and roped hydraulic elevators installed prior to 2018 are referenced in section 27 and further reference to comply with Rules 8.6.5.14, 8.6.4.19.2, 8.6.4.19.3 and 8.6.4.20.2 of the ASME A17.1/B44 code at intervals not exceeding 5 years.

The specific test and inspection requirements are found within the *ASME A17.1-2013/CSA B44-13, Safety Code for Elevators and Escalators* Section 8.6 Maintenance, Repair, Replacement, and Testing. Further reference to Section 8.11 Periodic Inspections and Witnessing of Tests is used.

As a reminder that the term elevator is expanded to include additional devices, refer to the following ASME A17.1/CSA B44 code references for special case elevators directing one to their specific test requirements. These include:

- 8.6.6.1.1 – Rack and pinion elevators shall be subject to all applicable tests specified in 8.6.4.19 & 8.6.4.20 as well as any additional testing requirements for the equipment.
- 8.6.7.2.1 – LU/LA elevators shall be subject to all applicable tests specified in 8.6.4.19, 8.6.4.20, and 8.6.5.14 through 8.6.5.16 as well as any additional testing requirements for the equipment.
- 8.6.10.1.1/8.6.10.2.1 – Material lifts and dumbwaiters shall be subject to all applicable tests specified in 8.6.4.19 and 8.6.5.14 Part 7 ASME A17.2 as well as any other applicable requirements for the equipment.

All alternative testing means shall be pre-approved by TSASK before being conducted. (Reference ASME A17.1/CSA B44 code sections 8.6.11.10, 8.6.1.7.2 and 8.6.4.20)

Note: If any alternative testing methods are performed, it shall be indicated in the results/comment area of the applicable test (8.6.1.7.2) and the alternative test method report (8.6.11.10.4) shall be attached to this document to be accepted as completed and compliant.

The *ASME A17.2 Guide for Inspection of Elevators, Escalators, and Moving Walks* is used to provide references within the checklists to further guide the work of contractors and mechanics.

## TSASK

### Elevator and Amusement Ride Inspections

Phone: 1-866-530-8599 | Email: [elevatorsafety@tsask.ca](mailto:elevatorsafety@tsask.ca)

