

Life Safety Tests in Buildings

General requirements and responsibilities for consultants, contactors, building owners and the Authority Having Jurisdiction (AHJ).

What is a Life Safety Test?

A Life Safety Test is a process of proving that the intended level of performance of a building's life safety systems has been achieved. These systems are required to conform to adopted measures for life safety in designated buildings and include, but are not limited to:

- Smoke controls systems
- Fire alarm system
- Voice communication capability of a fire alarm system
- Elevators
- Standpipe and sprinkler systems
- Fire pump
- Emergency generator
- Emergency lighting

What buildings require a Life Safety Test?

- High-rise buildings
- Buildings of special design
- Buildings specified above, where alterations affect existing life safety systems
- Buildings specified above, where upgrading to life safety systems occur

The degree of testing will vary, depending upon the types of building alterations and the changes to the life safety systems.

Who determines when a Life Safety Test is required?

The City of Winnipeg, through the Planning, Property & Development Department, determines if a Life Safety Test is required. It does so in conjunction with the review of plans relative to issuance of a building permit.

Who receives notification a Life Safety Test is required and when is notification given?

The design consultants, during the process of plan review, are notified in writing by the Plan Examination Branch if a Life Safety Test is required. This is done prior to issuing a building permit. If a designer is unsure if a building requires a Life Safety Test, they should consult with Mechanical and Electrical Plan Examination in the earliest stages of the building permit approval process.

Who is responsible for ensuring a Life Safety Test is performed?

The building owner is responsible for ensuring a Life Safety Test is carried out when required.

Does the owner run the test?

Not necessarily. In most cases, the owner or a representative will appoint a Life Safety Test Coordinator (a project coordinator, general contractor, etc.).

What's the first step?

The appointed coordinator and design consultants should review the project at various stages with the City well in advance of requesting a test. This should begin shortly after issuance of the building permit, to identify any problems at an early stage. This is especially important where design changes may be incorporated or specific requirements of the fire protection design must be implemented.

How much notice does the City require to attend a test?

A minimum notice of five working days is required to review submitted certifications and verification reports, and to schedule a pre-test meeting between the City and the Project Life Safety Test Coordinator.

What happens at a typical Life Safety Test?

At a pre-determined time, the Project Life Safety Test Coordinator, along with the City-appointed Life Safety Test Coordinator, will assign teams consisting of trades, consultants and City inspection personnel, together with an agenda, outlining how the test will be conducted. At the conclusion of the test, City staff report to the City-appointed Life Safety Test Coordinator, who will give the test a pass or fail grade.

What is the City's role in a Life Safety Test?

The City inspection personnel witness the interaction and performance of the installed life safety systems and attend as observers. They do not perform tests, nor do they witness the testing of every component (i.e. all smoke detectors).

What are the responsibilities of a project-appointed Life Safety Test Coordinator?

The Coordinator normally conducts the test, but may delegate the task to someone else. In either case, the Coordinator is responsible for:

1. Ensuring all required certifications and verifications are properly submitted and, in the case of verifications and field reports, ensuring they have been reviewed by the design consultant responsible for them.
2. Ensuring all consultants (mechanical, electrical, architectural) or their designate(s) attend the test.
3. Ensuring the appropriate trades attend the test. This includes but is not limited to the electrical contractor, mechanical contractor, plumbing contractor, elevator contractor, sprinkler contractor, fire alarm supplier, and building owner/representative.
4. Ensuring there are appropriate amounts of people and equipment to run the test.
5. Ensuring there is a clear outline of how the test will be run (what systems will be tested, how they will function, and in what sequence).
6. Ensuring a pre-test is carried out and supported by a report confirming its success.

7. Ensuring there are no unnecessary interruptions during the test (i.e. interference by continuing work).
8. Ensuring that, in the case of a Life Safety Test taking place in an occupied building, the building owner has notified occupants the test is being conducted.
9. Submitting a letter to the City-appointed Life Safety Test Coordinator requesting a test date (allowing five working days from its receipt for proper review by the City) and including the following:
 - copies of all appropriate certifications, verifications and test reports
 - confirmation of who will run the test
 - confirmation of all persons who will attend the test
 - an outline of how test will be run
 - the pre-test report
 - all required documents organized in a binder and submitted in triplicate to the City-appointed Life safety Test Coordinator
 - ensuring the applicable fee has been paid before the test date

What are the responsibilities of the City-appointed Life Safety Test Coordinator?

The City-appointed Life Safety Test Coordinator is responsible for:

- Working with the Project Life Safety Test Coordinator to establish meeting and test dates and to identify concerns.
- Ensuring appropriate documents are received and reviewed by the City.
- Ensuring appropriate City personnel attend the test.
- Chairing the pre-test meeting.
- Collecting and evaluating feedback from City staff immediately after the test and giving a pass or fail grade.

Note: The City-appointed Life Safety Test Coordinator is usually the Occupancy Coordinator.

What are the responsibilities of a contractor/installer?

The contractor/installer is responsible for submitting the test results and verification reports to the designer responsible for reviewing these documents.

What are the responsibilities of the designers?

- Advising the City about the design of life safety systems and how they are expected to function at various stages.
- Ensuring all required certifications and verification reports are completed. All verification reports should indicate they have been reviewed by the appropriate design consultant prior to submission.
- Working with the appointed Project Life Safety Test Coordinator to establish test procedures, including identifying the components that require testing and determining the sequence of operation.
- Ensuring the designer or designate attend the pre-test meeting and the Life Safety Test.

What are the responsibilities of the building owner?

The building owner has the ultimate responsibility of ensuring Building Code and By-law compliance related to the property. The owner is responsible for:

- Ensuring a Life Safety Test is carried out when required.
- Notifying building occupants of the test and confirming this notification with the Project Life Safety Test Coordinator.
- Exercising care to avoid premature occupancy commitments. Arranging for occupancy of a building before Life Safety Test and Building Occupancy Permit approvals are in place can cause delays (especially if the test fails), not only to the prospective occupants, but to the designers and trades.
- Submitting a Fire Safety Plan to the Fire Department outlining procedures in place to facilitate evacuation. By obtaining assistance from the designer, the building owner develops procedures regarding the operation and maintenance of the life safety systems and submits a copy of these procedures to the Fire Department.

What is the cost of a Life Safety Test?

The cost of a Life Safety Test is outlined in the current City of Winnipeg Fees & Charges Schedule. Fees are determined based on whether the test is to be conducted wholly or partially within normal business hours or outside of normal business hours. Information can be obtained by contacting the Occupancy Unit at 204-986-5136.

Is a certificate or document issued on successful completion of a Life Safety Test?

Because the Life Safety Test is carried out prior to issuance of an Occupancy Permit, no separate document is issued.

Can a partial Life Safety Test be considered?

In special projects, the test can be broken into specific phases and a partial Life Safety Test may be considered. However, those components required to function in each of the phases must all function for the test to be successful.

What comes first - the Occupancy Permit or the Life Safety Test?

Any building subject to a Life Safety Test requires the successful completion of the test before Occupancy Permit approval will be considered.

What is the difference between a Life Safety Test approval and Occupancy Permit approval?

A Life Safety Test is designed to ensure the required life safety systems are operational according to Building Code requirements. This approval does not necessarily mean that the building is completed to the stage where occupancy of the premises is possible.

Approval of a Building Occupancy Permit requires that all work (building, electrical and plumbing/mechanical installations) is completed according to Building Code and By-law requirements to the point where it is safe and ready for occupancy. For more information regarding Life Safety Tests, contact the Occupancy Unit by phone at 204-986-5136 or by email at occupancy@winnipeg.ca.