

PLANNING, PROPERTY & DEVELOPMENT DEPARTMENT

# Life Safety Tests In Buildings

General requirements and responsibilities of consultants, contractors, city authority, and building owners



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**NOTE:** Life safety is a very serious concern. This pamphlet is intended as a guide in assisting consultants, contractors and building owners to have a clearer understanding of what Life Safety Tests are all about.

#### What is a Life Safety Test?

Generally, 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 function in conformance with adopted measures for life safety in designated buildings and include, but are not limited to, the following:

- 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.

#### Which buildings require a Life Safety Test?

A Life Safety Test is required for:

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

The degree of testing, especially in the latter two instances, varies 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 its Planning, Property and 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 gets notification that a Life Safety Test is required and when is this 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 issuance of the building permit. Upon issuance of the building permit, the applicant will receive written notification regarding a required Life Safety Test from the City Enforcement Branch.

Where a designer is unsure if a building requires a Life Safety Test, the designer should consult with the City authorities in the earliest preliminary stages of building permit approval process.

#### Whose responsibility is it to ensure that a Life Safety **Test is performed?**

The building owner is responsible to ensure that a Life Safety Test is carried out when required.

#### Does the owner actually run the Test?

Not necessarily. In most cases the owner or the owner's representative will appoint a Life Safety Test Co-ordinator. This could be the project co-ordinator, general contractor, etc.

#### What's the first step?

The appointed co-ordinator and design consultants should review the project at various stages with the City well in advance of a Test being requested. This should begin shortly after issuance of the building permit, in order to identify any site problems at an early stage, and to minimize misunderstandings. 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 in order to review submitted certifications and verification reports, and to schedule a pre-test meeting between the City and the Project Life Safety Test Co-ordinator.

#### 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, the teams report back to both co-ordinators for evaluation.

What is the City's role in a Life Safety Test? The City inspection personnel attend a Life Safety Test as observers. They do not perform actual tests themselves nor do they witness the Test of every component (i.e. all smoke detectors). They will witness the interaction and performance of the installed life safety systems.

#### What are the responsibilities of a project appointed Life Safety Test Co-ordinator?

The Co-ordinator normally conducts the Test, but may delegate the task to someone else. In either case, the Co-ordinator is responsible for:

- 1. Ensuring that all required certifications and verifications are properly submitted and, in the case of verifications and field reports, ensuring that they have been reviewed by the design consultant responsible for them.
- 2. Ensuring that all consultants (Mechanical/Electrical/Architectural) or their designates are in attendance at the Test.
- 3. Ensuring that the appropriate trades are in attendance at the Test. This includes but is not limited to Electrical Contractor, Mechanical Contractor, Plumbing Contractor, Elevator Contractor, Sprinkler Contractor, Fire Alarm Supplier and building owner and/or representative.
- 4. Ensuring that there are appropriate numbers of people and necessary equipment to run the Test.
- 5. Ensuring that a clear outline of how the Test will be run is established (what systems will be tested, how they will function, and in what sequence).
- 6. Ensuring that a pre-test is carried out and supported by a report confirming its success.
- 7. Ensuring that 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 the occupants that 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 in the request:
  - Copies of all appropriate Certifications, Verifications and Test Reports.
  - Confirmation of who will run the Test.
  - Confirmation of all persons to be in attendance at the Test.
  - An outline of how Test will be run.
  - The pre-test Report.

#### What are the responsibilities of the City appointed Life Safety Test Co-ordinators?

The City appointed Life Safety Test Co-ordinator is responsible for:

- Working with the Project Life Safety Test Co-ordinator to establish meeting and test dates and to identify problems or concerns, etc.
- Ensuring that appropriate documents are received and reviewed by the City.
- Ensuring that appropriate City personnel attend the Test.
- Compiling acceptance reports from each observing City inspector and issuing a general Test acceptance/deficiency report.
- Ensuring that if a Test is requested outside of normal working hours, that any additional inspection fees are established and paid prior to the Test being conducted.

**NOTE:** The City appointed Life Safety Test Co-ordinator is usually the Building Inspection Division Supervisor of Enforcement.

#### What are the responsibilities of the contractors/ installers?

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?

The designers are responsible for:

- Advising the City about the design of the life safety systems and how they are expected to function at various stages.
- Ensuring that all required certifications and verification reports are completed. All verification reports should indicate clearly that 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 determine the sequence of operation.
- Ensuring that the designer or designate are in attendance at the Test.

#### What are the responsibilities of building owners?

The building owner has the ultimate responsibility of ensuring Building Code and Bylaw compliance related to the property. More specifically, the owner is responsible for:

- Ensuring that a Life Safety Test is carried out when required.
- Where a Life Safety Test may take place in an occupied building, notifying the building occupants of the Test and confirming this notification with the Project Life Safety Test Co-ordinator.
- Care should be exercised by the owner to avoid premature occupancy commitments. Arranging for occupancy of a building before Life Safety Test and Occupancy Permit approvals are given can cause hardship and further delays (especially if the Test fails) not only to the prospective occupants but to the designers and trades.
- While not part of the Life Safety Test requirements, the owner is responsible for submitting a FIRE SAFETY PLAN to the Fire Department outlining procedures that are in place to facilitate evacuation. Also pursuant to the FIRE SAFETY PLAN it is the owner's responsibility (by obtaining assistance from the designer) to develop procedures regarding the operation and maintenance of the life safety systems and submitting a copy of these procedures to the Fire Department.

#### Is there a cost to having a Life Safety Test?

The cost of a Life Safety Test is included in the Building Permit fee provided that the Test is carried out during normal working hours. Any Test requested outside of normal working hours would require additional inspection fees as determined by the Development Fees Bylaw. Information could be obtained by calling the Permits Branch at 986-7007.

#### Is there any 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 upon successful completion of a Test.

#### **Can a partial Life Safety Test be considered?**

In special projects, the Test can be broken down 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 in order for the Test to be successful.

### What comes first — the Occupancy Permit or the Life Safety Test?

Any buildings subject to a Life Safety Test requires the successful completion of the Test before any 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 that the required life safety systems are operational in accordance with the 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 an Occupancy Permit requires that all work (building, electrical and plumbing/mechanical installations) is complete in conformity with Building Code and Bylaw requirements to the point where it is safe and ready for occupancy.



For more information regarding this booklet please call or write:

### Enforcement Branch (204) 986-2722

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