WORKING AT HEIGHTS AND LADDER SAFETY

1.0 PURPOSE

To establish a procedure to protect workers when required to work at heights where a Fall Hazard exists and to promote the inspection, safe use, and maintenance of portable ladders and fixed access structures.

Trillium Lakelands District School Board requires all staff members, where their work requires them to be above 3.05 metres (10 feet), to have working at heights training.

2.0 REFERENCES AND RELATED DOCUMENTS

2.1 OHSA, O. Reg. 213/91, Construction Projects, Section 26
2.2 OHSA, O. Reg. 213/91, Construction Projects, Section 64
2.3 Canadian Standard Association CSA/CAN3-Z11-M18: Portable Ladders
2.5 Ministry of Labour Data Engineering Sheet 2-024, Fixed Access Ladders.
2.6 Reg. 851. R.R.O. 1990, Industrial Establishments, Sections 17, 18, 19, 43, 73
2.7 Reg. 213/91 Construction Projects, Sections 72, 78-84, 128-131
2.8 Reg. 297/13 Occupational health and safety awareness and training

3.0 TERMS AND DEFINITIONS

3.1 Fall Hazard: A worker is exposed to a Fall Hazard when they are at risk of falling:

   a) 3.05 metres (10 feet) or more above the nearest safe surface (3.05 metres (10 feet) is defined as the distance from the surface to the soles of the worker’s feet);
   b) more than 1.2 metres (4 feet) if the work area is used as a path for a wheelbarrow or similar equipment;
   c) into operating machinery;
   d) through an opening in a work surface;
   e) into water or another liquid; and
   f) into a hazardous substance or object.
3.2 Fall Hazard Zone (Control Zone): The Fall Hazard zone is the area 2 metres (6.6 feet) or less from the edge of the roof where a Fall Hazard exists. Fall Arrest equipment is required at all times when a worker is working within the Fall Hazard zone unless a guardrail system is present.

3.3 Safe Zone: the central area of a flat roof which is 2 metres (6.6 feet) or more from an edge where a Fall Hazard exists.

3.4 Fall Protection: maintaining 3-point contact while climbing or working off a fixed or portable ladder while above 3 metres (10 feet).

3.5 Fall Arrest: equipment that is used to prevent an individual from falling to a below surface.

3.6 3-point contact: when two (2) hands and one (1) foot or two (2) feet and one (1) hand are on the ladder at all times.

3.7 Portable ladders include the following:
   a) Single ladders: extension ladders and combination ladders.
   b) Step ladders: self-supporting A-frame ladder that is non-adjustable in length.

3.8 Step stools: self-supporting, fixed or foldable stool up to 0.8 metres (2.6 feet) including one (1) and two (2) step stools with hidden wheels.

3.9 Fixed ladders: is a vertical ladder mounted permanently to a structure.

3.10 Flat roof: any roof with a pitch less than 3/12.

3.11 Roof edge: any roof’s edge where there is a potential to fall 3.05 metres (10 feet) or more.

3.12 Competent person: A competent person is defined in the Occupational Health and Safety Act as someone who is qualified because of knowledge, training and experience to organize the work and its performance, is familiar with this Act and the regulations that apply to the work, and has knowledge of any potential or actual danger to health or safety in the workplace.

4.0 ADMINISTRATIVE PROCEDURE

4.1 APPLICATION

This procedure applies to all TLDSB staff members whose position may require them to work at heights where a Fall Hazard may exist.

Trustees, visitors, such as community members and parents, volunteers, and permit holders shall not be working at heights.
Students with Fall Arrest training and under supervision are permitted to work at heights for curriculum purposes.

Contractors are subject to their own employer’s health and safety working at heights procedures.

4.2 GENERAL DUTIES OF WORKPLACE PARTIES

4.2.1 Facility Services/Health and Safety Coordinator: It is the responsibility of Facility Services staff and the Health and Safety Coordinator to maintain this program, and to provide support to supervisors and principals.

4.2.2 Purchasing: It is the responsibility of the Purchasing Department to ensure that the equipment purchased meets the legislated standards.

4.2.3 Joint Health and Safety Committee (JOHSC): It is the responsibility of the Site-Based JOHSC to make recommendations to improve the safety of workers.

4.2.4 Workers: It is the responsibility of the custodial and maintenance staff to complete the appropriate training provided.

4.2.5 Contract Workers: It is the responsibility of contract workers performing work to ensure that the safety procedures and the contractor’s health and safety policy are followed under the Occupational Health and Safety Act. Contractors are required to supply their own equipment that meets legislated requirements.

4.2.6 Principal/Supervisor: It is the responsibility of the principal/supervisor to ensure this policy is understood and implemented; ensure that those employees who require the training have received the appropriate training as per this policy, Fall Arrest training when applicable, and the required Fall Arrest protection is available for the job.

4.3 Each location will maintain and post a Working At Heights Roof Top Plan on the health and safety bulletin board and at each roof access hatch outlining any equipment that is within the Fall Hazard zone (2 metres/6.6 feet from the edge) and requires Fall Arrest if a guardrail system is not present.

4.4 As appropriate, each principal/supervisor must ensure that adequate fall protection (Fall Prevention, Fall Arrest) is in place and used by all workers when working within the Fall Hazard zone.
4.5 All workers must use all equipment and protective devices required to safely carry out working at heights. All fall protection equipment must be visually inspected for damage, wear, and obvious defects by a competent person before each use.

4.6 All workers must immediately report to the principal/supervisor any hazard and any defect in safety related equipment or material of which the worker may be aware.

4.7 IDENTIFICATION

Roof access hatches will be properly marked with signage that reads: “Warning – Fall Arrest equipment and training is required for all persons working

a) within the Fall Hazard zone (2 metres (6.6 feet) from the edge of the roof)
b) where there is a possibility of falling 3.05 metres (10 feet) or more.”

4.8 FALL PROTECTION

The two primary methods of protecting workers working on flat roofs within the Fall Hazard zone include Fall Prevention and Fall Arrest systems as outlined below.

4.8.1 Fall Prevention

This includes the following, as appropriate:

a) Guardrail systems

Guardrails are required for all working surfaces on heights (stages are exempt) when Fall Arrest is not used. Where guarding is required, it must be 1.1 metres (3.6 feet) high with a mid-rail. If there is a risk of tools or objects falling below, a toe board must be installed.

b) 3-point contact

4.8.2 Fall Arrest

A Fall Arrest system must include the following:

a) A CSA approved full body harness; and
b) A lanyard equipped with a shock absorber.
These items must:

a) prevent the worker from hitting the ground or any object or level below the work;
b) be arranged so the worker cannot fall freely for a vertical distance of more than 1.5 metres (5 feet).

If Fall Arrest equipment is required, contact Facility Services and it will be provided.

4.8.3 Utilize tool belts, pouches, rope, etc. as may be required. The handing off of such equipment and tools to a second person could also take place, if deemed necessary and approved by the principal-supervisor.

4.8.4 If a roof top entry hatch was used to gain access to the roof and poses a Fall Hazard, the roof top hatch should be safely lowered after access has been gained to prevent anyone from falling through the opening.

4.8.5 While Working on Roofs

Upon arriving on top of the roof, the following safety requirements are applicable:

a) No one is permitted to go within 2 metres (6.6 feet) of the roof’s edge without the appropriate Fall Arrest equipment or guardrail system in place;
b) If an object has to be retrieved from within 2 metres (6.6 feet) of the roof’s edge, and where guarding is not in place, then a tool such as a pole shall be used.

4.9 FIXED AND SINGLE LADDERS: Safe Roof Access and General Use

4.9.1 Fixed access ladders must meet code requirements and be maintained in good condition. Employees shall:

a) always face the ladder when climbing up or down a ladder;
b) utilize tool belts, pouches, rope, etc. as may be required.

All fixed ladders must be inspected annually as part of the Annual Gymnasium and Playground Inspection Report.

4.9.2 Portable ladders will be provided where access is required to a roof in which fixed access ladders are not present.
The following safety steps must be performed by a competent person when utilizing a portable ladder for general use as well as safe roof access:

a) Required Inspections of Portable Ladders Before Usage
   i) Check the condition of rails, braces, steps and rungs and non-slip feet.
   ii) Defective ladders must be identified and taken out of service and repaired, or if irreparable be properly disposed of.
   iii) Make sure the appropriate ladder that meets the accreditation CSA standard (i.e. height, materials, ladder type) is being used according to specifications. All portable ladders (excluding step stools) shall be CSA-approved.

b) Set Up and Usage of a Portable Ladder
   i) Check the work area and ensure it is free of electrical conductors and/or equipment.
   ii) Clear debris, tools and other objects from the area where the ladder will be placed to ensure the ladder is secured.
   iii) Clean muddy or wet soles of shoes/boots before mounting a ladder.
   iv) Set up ladder on firm level footing. Never place a ladder on uneven or unstable footings.
   v) For a non-folding straight portable ladder, ensure that the ladder is erected one (1) foot out from the wall for every four (4) feet in ladder height.
   vi) Where a ladder exceeds 6 metres (19.69 feet) in length and is not securely fastened, it must be held in place by one or more workers while being secured or unsecured.
   vii) Ladders exceeding 6 metres must be tied off to prevent from moving or falling over.
   viii) The legs of a portable ladder must be fully extended and locked before use and must never be leaned against a wall for use as a non-folding straight portable ladder.
   ix) Always maintain three (3) points of contact (i.e. one hand and two feet) when working from and/or climbing up and/or down the ladder while above 3.05 metres/10 feet;
   x) Always face the ladder when climbing up and/or down a ladder.
   xi) Utilize tool belts, pouches, hoisting, etc. as may be required.
   xii) Upon arriving on top of a roof, immediately move a minimum of 2 metres (6.6 feet) from the roof’s edge and remain there for the duration of work.
xiii) Upon leaving the top of a roof, re-enter the 2 metres (6.6 feet) area to safely exit following the above noted steps.

xiv) Under no circumstances are chairs to be used in place of a step stool or ladder.

xv) Never use the top of the ladder as a step.

4.9.3 Purchasing of Ladders

i) All single and step ladders must be CSA approved Grade 1 or 2.

ii) Step stools do not have to be CSA approved, however it is recommended that the selected step stool have upper handle bar support.

4.9.4 Portable Ladder Storage & Access

All portable ladders are to be stored in designated areas. Portable ladders greater than six (6) feet in length are to be properly secured while being stored.

4.10 Inspection and Certification of Scaffold by Competent Person

Scaffolds must be constructed by a competent person who has received the appropriate training before any work begins. Scaffolding is not to be used as a storage unit. Scaffolding must be inspected as part of the Annual Gymnasium and Playground Inspection Report.

4.11 Scissor Lift

All scissor lift operators must be competent and must have received the appropriate training.