

## SNOW LOADING & ROOF FAILURES ALERT

2002-02

The collapse of the arena in Temagami, Ontario this past week causes the Ontario Recreation Facilities Association to re-issue the following alert.

It is important to note that no cause has officially been identified for the roof collapse but regardless, a reminder of the following information would appear timely.

The Occupational Health and Safety Act requires an employer to ensure that a roof “is capable of supporting all loads to which it may be subjected without causing the materials therein to be stressed beyond the allowable unit stresses established under the Building Code Act” [s. 25(1)(e)]. The Occupational Health & Safety Act, section 9 (23) further requires that “all physical conditions of each building be inspected for safety at least once a month”.

The Ministry of Labour (MOL) makes the following recommendations and a local MOL Office should be consulted if additional information and or clarification is required:

- Owners of workplaces and/or employers at workplaces where there is snow on the roof of buildings should have the roofs assessed by a professional engineer to determine whether:
  - the snow load is significant, or
  - there are any visible signs of structural distress, for example, twisting, bending or cracking.
- If snow is excessive or a roof shows signs of distress, the owner or employer should implement a safe snow removal procedure.
- A snow removal operation should avoid producing any uneven or concentrated loading on the roof.
- Areas onto which snow will be dumped from a roof should be secured to prevent access.
- Also, workers on a roof must use fall-arrest or travel-restraint equipment in accordance with the fall-protection requirements of the Regulations for Industrial Establishments (RRO 851, s. 85).
- A civil or structural engineer should be consulted: (1) to determine whether snow loads are excessive; (2) to determine whether there are signs of structural distress; (3) to obtain a removal procedure that will not cause more structural problems; or (4) to reinforce a structure that is overstressed.

The Ministry of Labour no longer releases reminders to owners of such obligations (MOL Bulletin of Apr. 4/97) and it is therefore an owner responsibility to have structural inspections performed on an as required basis by a structural engineer.

The Professional Engineers of Ontario have also published a guideline entitled, “Arenas: Structural Adequacy” which may be helpful and may be obtained at (416) 224-1100.

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