

WorkSafe Services

PO Box 160
Saint John NB E2L 3X9
Phone 506 632-2200
Toll free (Claims) 1 800 222-9775
N.E. Regional Office 1 800 561-2524
Web www.whscc.nb.ca

Services de travail sécuritaire

Case postale 160
Saint John NB E2L 3X9
Téléphone 506 632-2200
Sans frais (Réclamations) 1 800 222-9775
Bureau de la Région du N.-E. 1 800 561-2524
Web www.whscc.nb.ca



May 30, 2005

"The Employer"

The Chief Compliance Officer is writing in response to the employer's letter dated May 13, 2005, in which the employer requests a deviation to the *Occupational Health and Safety Act*, General Regulation 91-191, Section 97(2)(a) that states:

A guardrail shall be made of wood, metal pipe, angle iron or wire rope and if made of wood, the top rail, vertical supporting posts and intermediate rail shall be constructed of at least 50 mm x 100 mm No. 1 grade or better spruce or fir.

The employer's reason for requesting the deviation is that the employer is finding that No. 1 grade lumber is increasingly difficult to obtain for this use and feels that the use of alternative grade lumber will provide equal or better protection if constructed properly.

The employer indicates that the employer was part of the Fall Protection Technical Committee in 2003/2004. The review of requirements for guardrails was considered under the scope of this committee and changes have been proposed. The employer believes that the proposed changes relating to the construction of wooden guardrails were based on a previous study and further verified by testing carried out at UNB. The employer understands that it was found that No. 2 grade or better SPF has the same required strengths as No. 1 grade or better spruce or fir, provided the guardrail is constructed as prescribed.

The employer believes that constructing wooden guardrails with No. 2 grade or better SPF in such a way will provide the same or better protection as guardrails constructed with No. 1 grade or better spruce or fir. The intention is that guardrails will be constructed such that they will:

- withstand a load of 675 N (200 lb) on the top rail and 450N (150 lb) on the intermediate rail
- be a height of 0.9 m to 1.07 m (3 – 3 ½ ft)
- have vertical posts 2.4 m (8 ft) apart maximum (or 3 m (10 ft) on scaffolding)
- not be painted

As the employer indicated, the Fall Protection Technical Committee did investigate guardrail strengths. As a result of the study completed by the Wood Sciences Centre, the Committee agreed to propose changes to the guardrail requirements that would allow for the use of grade 2 lumber. As the employer is aware, in addition to lowering the grade requirement, other provisions were proposed. Some of these additions were included in the employer's request above. However there are a few additional requirements that are found in the proposed changes to fall protection legislation that must be followed as well.

WorkSafe • Travail sécuritaire

A deviation to section 97(2)(a) is granted provided the guardrail is manufactured to meet the following:

- be of sufficient strength and rigidity to support loads which may be imposed on it, with the following minimums
 - 675 N (150 lbs) in any direction, at any point along the top rail, and
 - 450N (100lbs) in any direction, at any point along the intermediate rail
- has a top rail not less than 900 mm or more than 1.07 m from the floor level fastened to the top or inside of the vertical supporting posts and an intermediate rail fastened to the inside of the vertical supporting posts midway between the top rail and the floor level,
- has a toeboard at least 127 mm high fastened to the inside of the vertical supporting posts, and with a space not more than 6 mm between the bottom of the toeboard and the floor
- has vertical supporting posts adequately fastened to the structure to support loads imposed upon it, that are not more than 2.4 m apart along its entire length unless otherwise specified in manufacturers specifications or used on scaffolding in which case the posts shall not be more than 3 metres apart
- be constructed of at least 50 mm x 100 mm (2" x 4") No. 2 grade or better SPF
- not be painted other than by being preserved with a transparent protective coating

By copy of this letter, the Chief Compliance Officer has advised WHSCC staff of the decision.

Regards,

Chief Compliance Officer