

# LEGISLATIVE INTERPRETATIONS

Topic: Welding – Flame retardant clothing	Issued by: Director, Compliance & Regulatory Review
Statute: General Regulation 91-191	Date Issued: September 8, 1997
Section: 276	Date Revised: September 19, 2017

## Question 1

How does WorkSafeNB define flame-retardant clothing and material offering equivalent protection?

## Answer 1:

### Flame-retardant clothing

The intention of section 276 is to ensure that workers wear protective equipment appropriate for the task they are performing. The concern in welding is the hazard presented by showers of sparks. Workers should wear clothing made of natural fibres such as 100% wool, cotton or denim. It is important, also, that clothing is clean: that it is not soaked with grease, oil or other combustible products. Workers should not wear clothing made of synthetic fibres, which can burst into flame or melt on the skin when exposed to sparks.

The Northern Alberta Institute of Technology recommends wearing denim or cotton clothing and laundering it in Borax detergent to retain and increase the clothing's protective nature<sup>i</sup>.

### Material offering equivalent protection

Leather is frequently used in the welding trade. In the past, asbestos aprons were also used because of the excellent flame-retardant qualities. However, asbestos is no longer recommended because of the health issues associated with it..

WorkSafeNB has not formally defined an acceptable equivalent to leather, but other materials are not precluded from use if they are flame-retardant, do not tend to hold sparks and do not

pose other health and safety concerns. The information provided by the supplier or manufacturer should confirm whether the alternative product provides equal or better protection.

**Question 2:**

Does section 276(b) only apply to body coverings exposed to the hazard?

**Answer 2 :**

Yes, it does. The intention of section 276(b) is to protect the employee engaged in welding, cutting, burning or soldering from radiation, ignition, electric shock and trapping of sparks by the flame-retardant clothing. An employee may have flame-retardant outerwear (coveralls, coats) and the clothing underneath does not need to be flame-retardant. Similarly, flame-retardant clothing does not require the employee's undergarment to be flame-retardant.

**Referenced Legislation**

**276** An employer shall ensure that an employee engaged in a welding, cutting, burning or soldering operation wears, and an employee engaged in such an operation shall wear, appropriate protective equipment except that:

(a) the protective gloves required by paragraph 42(a) shall be leather gauntlet type gloves with arm protection, and

(b) the adequate body covering required by paragraph 42(c) shall be flame retardant work clothing and an apron of leather or of other material offering equivalent protection