



Hard Hat Impact Standards vs Cold Weather

CAGC SAFETY ALERT

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REFERENCE: CSA Standard for Hard Hats (CSA Z94.1-2005)

This standard is designed to identify personal protective headwear best practices for selection, care and use. Performance minimums are also specified to withstand voltage, fire, and impact on apparel such as safety glasses, face shield visors, and hard hats, etc. The Canadian standard Z94.1-2005 is equivalent to USA standard ANSI Z89.1-2003, and does not apply to any of the following equipment:

- “Bump caps”
- Firefighting helmets
- Rescue helmets
- Crash Helmets
- Sports & recreation helmets
- Riot control helmets

What does the Canadian standard Z94.1-2005 cover?

Helmets are divided into two classes: Type 1 for absorbing impact; Type 2 absorbs impact and protects against voltage. Helmets showing the CSA and/or ANSI logos have passed tests which include temperature extremes of -30 Celsius and +50.

What if the weather forecast is colder than -30 C ? Will my hard hat still work?

The answer is YES! The test certification simply compares and documents how each tested helmet brand performed. Not all helmets on the market have passed the CSA Z94.1 standard. There are two easy ways to tell:

1. Check the helmet for CSA or ANSI markings
2. Check with your headwear supplier or manufacturer

How old is your hard hat?

If you work in Alberta, and the hard hat was made after July 1, 2009 it must have the CSA mark indicating it passed the CSA test version 2005 as per Alberta OHS Code (or the USA ANSI test 2003 version). Replacement varies by manufacturer and region.

If you work in BC, they cite a 1992 version (of the same CSA standard). Amongst other differences were performance specifications for chin straps. The 2005 version required only that chin straps be the ones actually compatible with that particular model of hard hat, and used in situations where the hard hat could slip out of place. ANSI standard Z89.1-1986 was also viewed as equivalent.

If you work in Saskatchewan, no specific standard is identified. The provincial code says “wear approved headwear”.

If you work in Manitoba, the CSA 2005 version is specified with equivalency granted to ANSI 2003 version.

If you work in Yukon, the CSA 2005 version is specified with equivalency granted to ANSI 2003 version.

If you work in Nunavut or NWT — the CSA 2005 version is specified with no equivalency granted to ANSI 2003 version.