Bureau de normalisation du Québec

CAN/BNQ 2910-500/2015 (R 2022)

Explosives — Magazines for Industrial Explosives

STANDARD

CAN/BNQ 2910-500/2015
(R 2022)

Explosives — Magazines for Industrial Explosives

Explosifs — Dépôts d'explosifs industriels

Bureau de normalisation du Québec

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SECOND EDITION — 2022-04-13

This is a reaffirmation (reapproval) of the edition dated June 30, 2015.

The decision resulting from the systematic review that will enable to determine whether the current document shall be modified, revised, reaffirmed or withdrawn will be implemented no later than at the end of April 2027.

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FOREWORD

This document was developed in compliance with the Standards Council of Canada (SCC)'s Requirements and Guidance for standards development organizations and approved as a reaffirmed National Standard of Canada by the SCC. Its reaffirmation was approved by a Standards Development Committee, whose members were:

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INGRAM, Cary	Workers' Safety and Compensation Commission (WSCC) — Northwest Territories & Nunavut
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Users

DAOUST, Arianne	General Dynamics — Ordnance and Tactical Systems — Canada
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FAIRHURST, Duane	Petroleum Services Association of Canada (PSAC)
FRÉCHETTE, Éric	Canadian Pyrotechnic Council (CPC)

GARLAND, Rod	Canadian Association of Geophysical Contractors (CAGC)
LOAN, Al	Orica Mining Services Canada

General interest

DI MODICA, Domenic	Technical Expert, Delfort
HELAL, Alexander	CANMET — Canadian Explosives Research Laboratory (CERL)
McARTHUR, Johnathon	Royal Canadian Mounted Police (RCMP)

Coordination

CORREIA MOREAU, Elisabeth (Standards Developer)[1]	Bureau de normalisation du Québec (BNQ)

1 At the time of publication of this standard, the aforementioned person no longer worked for the Bureau de normalisation du Québec (BNQ).

The 2015 edition of this document was approved as a National Standard of Canada by the Standards Council of Canada (SCC). It was prepared and approved by a Standards Development Committee, whose voting members were:

Suppliers

CASTONGUAY, Stéphane	Protexplo
HARTGERINK, David	Kodiak Enterprises

Regulatory authorities

BENGTS, Peter	Workers' Safety and Compensation Commission — NWT & Nunavut (WSCC)
DIONNE, Serge	Natural Resources Canada (NRCan) — Explosives Safety and Security Branch (ESSB)
HOFFMAN, Al	Ministry of Energy, Mines and Natural Gas, British Columbia
NORMAND, Mélanie	Sûreté du Québec

Users

DAOUST, Arianne	General Dynamics — Ordnance and Tactical Systems — Canada Inc.
FAIRHURST, Duane	Petroleum Services Association of Canada (PSAC)
FRÉCHETTE, Éric	Canadian Pyrotechnic Council (CPC)
GALT, Aaron	Canadian Explosives Industry Association (CEAEC)
LOAN, Al	Orica Mining Services Canada
McCALLUM, Stewart	Canadian Association of Geophysical Contractors (CAGC)

General interest

KURONEN, Kal	Kal Kuronen, Technical Expert
McARTHUR, Johnathon	Royal Canadian Mounted Police (RCMP)
VON ROSEN, Bert	CANMET — Canadian Explosives Research Laboratory (CERL)

Coordination

ALLARD, Sylvain (Standards Developer)	Bureau de normalisation du Québec (BNQ)

The collaboration of the following people is also worthy of mention:

ANDERSON, Paul	Blue Oceans — SkyHawk
CLUPP, Kenneth	Royal Canadian Mounted Police (RCMP)
COULTER, Robert	Canadian Pyrotechnic Council (CPC)
GILLINGHAM, Mark	Blue Oceans — SkyHawk
GINGRAS, Marie-Claude	Bureau de normalisation du Québec (BNQ)
GINGRAS, Sylvie	Bureau de normalisation du Québec (BNQ)
LEMOYNE, Sylvain	General Dynamics — Ordnance and Tactical Systems — Canada Inc.
MacLEOD, Andrew	Canadian Association of Geophysical Contractors (CAGC)
McINTOSH, Dale	Natural Resources Canada (NRCan) — Explosives Safety and Security Branch (ESSB)
MILLER, Jeanne	Petroleum Services Association of Canada (PSAC)
MORIN, René A.	Canadian Explosives Industry Association (CEAEC)

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EXPLOSIVES — MAGAZINES FOR EXPLOSIVES

INTRODUCTION

Explosives are hazardous materials. While some types of explosives are more sensitive than others, if not properly stored and handled, most will explode and can cause serious physical harm, including death and significant damage to property.

Improper storage of blasting explosives, detonating cords and initiation systems (detonators, fuses and igniters) can cause misfires, incomplete or accidental detonation and the burning of charges in boreholes.

Proper storage of explosives serves to ensure safety and security of persons and property.

Every effort must be taken to ensure that magazines used to store explosives are of substantial construction and are equipped with strong locks to prevent unauthorized access to the interior of the magazine and to thwart attempts by persons seeking to gain access to the magazine for criminal purposes.

Effective security procedures designed to control access to magazines and their contents are essential to mitigate the risk of explosion and losses due to improper handling, theft and neglect.

For these reasons, magazines used to store explosives should meet the following requirements:

- Protection against weather conditions.
- Protection against physical damage.
- Fire protection.
- Protection against theft.
- Protection from the effect of explosions occurring in adjacent magazines.

It is important that permanent magazines for the storage of explosives be capable of withstanding bullets, fire, intrusion and weather and be well ventilated.

1 PURPOSE

This standard specifies the minimum requirements for the construction and surveillance of magazines for the safe and secure storage of industrial explosives.

2 SCOPE

This standard is intended to serve as a guide for all stakeholders taking part in the planning, use or construction of explosives magazines licensed under the *Explosives Act* of Canada and the *Explosives Regulations, 2013* of Canada and other applicable regulations.

NOTE — It is recommended that regulators be consulted during the early planning stages, and definitely before purchasing or constructing a magazine or establishing a magazine area, since buildings and sites not meeting the established standards will be unacceptable for licensing and use.

3 NORMATIVE REFERENCES

3.1 GENERAL

The references below (including any amendment or errata) are normative references, and are therefore considered mandatory. They are essential to the understanding and use of this document, and are cited in appropriate places in the text.

It should be noted that a dated normative reference refers to that specific edition of the reference, while a non-dated normative reference refers to the latest edition of the reference in question.

NOTE — A bibliography of references on topics covered in this document is also annexed.

3.2 DOCUMENTS FROM STANDARDS BODIES

ASTM International [www.astm.org]

ASTM A36	*Fatigue Crack Growth Rate Behavior of A36 Steel using ASTM Load-Reduction and Compression Precracking Test Methods.*
ASTM C1107	*Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink).*
ASTM F883	*Standard Performance Specification for Padlocks.*

BHMA (Builders Hardware Manufacturers Association) [www.buildershardware.com]

ANSI/BHMA 156.5	*Cylinders and Input Devices for Locks.*