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CSA S850:23
National Standard of Canada

Design and assessment of buildings subjected to blast loads

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Standards Council of Canada
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Canada

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M. Braiter	CSA Group, Toronto, Ontario, Canada	*Project Manager*

Preface

This is the second edition of CSA S850, *Design and assessment of buildings subjected to blast loads*. It replaces the previous edition published in 2012.

This Standard is intended for use in the design of new buildings and assessment of existing buildings to resist defined blast threats.

While building security, within the context of building protection against blast threats, is beyond the scope of this Standard, it is an essential aspect to evaluating or modifying the design threat and thus must be well understood by the designer.

The following are the major changes to this edition:

a) load combinations involving accompanying gravity loads have been revised;
b) dynamic increase factor tables have been updated, with a new DIF for bond between concrete and reinforcement;
c) response limits for wood buildings have been updated; and
d) Clause 9.2.9 has been added on precast and prestressed concrete buildings with a new table for response limits for prestressed concrete elements.

Although not specifically identified, users should be aware that the authority having jurisdiction might have additional approval requirements, which are outside of the scope of this Standard. See Clause A.1 for additional information on regulatory compliance.

CSA Group acknowledges that the development of this Standard was supported by Global Affairs Canada with financial support from National Defence: Defence Research and Development Canada's Centre for Security Science.

This Standard was prepared by the Technical Committee on Blast Resistant Buildings, under the jurisdiction of the Strategic Steering Committee on Construction and Civil Infrastructure, and has been formally approved by the Technical Committee.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

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1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
3) *This Standard was developed by consensus, which is defined by* CSA Policy governing standardization — Code of good practice for standardization *as "substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity". It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*
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