ULC-S321:1991-REV3
(Includes Revision 3)

STANDARD FOR BURGLARY RESISTANT VAULT DOORS AND MODULAR PANELS

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Standard for Burglary Resistant Vault Doors and Modular Panels, ULC-S321

First Edition, Dated May 1, 1991

Summary of Topics

This revision of ULC-S321 dated March 23, 2021 is being issued to remove its NSC status and the CAN designation.

Text that has been changed in any manner or impacted by UL's electronic publishing system is marked with a vertical line in the margin.

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STANDARD FOR BURGLARY RESISTANT VAULT DOORS AND MODULAR PANELS

ICS 13.310; 91.060.50

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Normes ULC

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REFERENCE PUBLICATIONS

The documents shown below are referenced in the text of this Standard. Unless otherwise stated elsewhere in this Standard such reference shall be considered to indicate the edition and/or revisions of the document available at the date on which the Committee approved this ULC Standard.

Document Published by the National Research Council Canada (NRC)
1200 Montreal Road, Bldg. M-58, Ottawa, ON K1A 0R6 Canada
Telephone: (613) 993-9101 or 1-877-672-2672
www.nrc-cnrc.gc.ca

• Supplement to the National Building Code of Canada, 1990

Documents Published by Underwriters' Laboratories of Canada (ULC)
7 Underwriters Road, Toronto, ON M1R 3B4 Canada
Telephone: (416) 757-3611 or 1-866-9373-ULC
www.ulc.ca

• ULC Subject C768-1974, Guide for the Investigation of Combination Locks

• ULC Subject C969, Guide for the Investigation of Marking and Labelling Systems

• ULC/ORD-C72A-1992, Fire Resistance of Prefabricated Structure Supported Vaults

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PREFACE

This is t the First Edition of the Standard for Burglary Resistant Vault Doors and Modular Panels, ULC-S321.

This Edition of the Standard has been formally approved by the ULC Standards Committee on Physical Security Equipment.

Only metric SI units of measurement are used in this Standard. If a value for measurement is followed by a value in other units in parentheses, the second value may be approximate. The first stated value is the requirement.

In Canada, there are two official languages, English and French. All safety warnings must be in French and English. Attention is drawn to the possibility that some Canadian authorities may require additional markings and/or installation instructions to be in both official languages.

Attention is drawn to the possibility that some of the elements of this Canadian standard may be the subject of patent rights. ULC Standards shall not be held responsible for identifying any or all such patent rights.

Requests for interpretation of this Standard should be sent to ULC Standards. The requests should be worded in such a manner as to permit a “yes” or “no” answer based on the literal text of the requirement concerned.

The initiation of the review of this Standard will commence within 5 years of the date of publication, unless the Standard is identified as fitting within a stabilized category, whereby the review will commence within the appropriate time frame set out by ULC Standards.

Comments or proposals for revisions on any part of the Standard may be submitted at any time. Proposals should be submitted via a Proposal Request in the On-Line Collaborative Standards Development System (CSDS) at https://csds.ul.com/canada.

This Standard is intended to be used for conformity assessment.

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1 SCOPE

1.1 These requirements cover vault doors and vault modular panels (for use in the construction of vault floors, walls and ceilings), of the type intended for use in financial institutions, commercial, industrial and mercantile properties, and the like, and that are relied upon to protect the contents of enclosed spaces from burglary attack.

NOTE: Requirements for fire resistant rating of vaults and vault doors are outside the scope of this Standard and should be determined in accordance with Chapter 2 of the Supplement to the National Building Code of Canada or in accordance with ULC/ORD-C72A, Fire Resistance of Prefabricated Structure Supported Vaults.

1.2 These requirements are intended to establish the burglary resistant rating of vault doors and modular panels according to the length of time they withstand attack by common mechanical tools, electrical tools, cutting torches, or any combination of these means in the hands of experienced operators. The ratings based on the net working time to effect entry are as follows:

Class

C1-30 Minimum 30 min protection

C2-60 Minimum 60 min protection

C2-90 Minimum 90 min protection

C3-120 Minimum 2 h protection

2 GENERAL

2.1 A component of a product covered by this Standard shall comply with the requirements for that component, and shall be used in accordance with its recognized rating and other limitations of use.

2.2 A component need not comply with a specific requirement that involves a feature or characteristic not needed in the application of the component in the product covered or superseded by a requirement in this Standard.

3 GLOSSARY

3.1 For the purpose of this Standard, the definitions in Clauses 3.2 through 3.15 shall apply.

3.2 *COMMON HAND TOOLS* – Chisels, punches, wrenches, screwdrivers, pliers, hammers, sledges not exceeding the 3.5 kg size, and pry bars and ripping tools not exceeding 1500 mm in length.

3.3 *CUTTING TORCH* – A heavy duty commercially available oxy-fuel cutting torch, to a maximum No. 20 tip which contains six preheat holes, each 1.40 mm diameter and one oxygen hole of 5 mm diameter. A maximum of five oxygen bottles and two acetylene bottles may be connected to manifolds to provide continuous flow.

3.4 *ENTRY* – Constitutes:

A Opening the door;

B Making an opening with a minimum size of 620 cm^2 entirely through the panel or a seam joining two or more modular panels or through the door and/or frame including the grouted-in portion within the frame.

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