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Subjects 687 (291, 608)
(In reply, refer to Subject 687)

1655 Scott Blvd.
Santa Clara, CA 95050
May 24, 1996

TO: Burglary Protection Council of Underwriters Laboratories Inc.,
Subscribers to UL's Standards Service for
Automated Teller Systems,
Burglary-Resistant Safes,
Burglary Resistant Vault Doors and Modular Panels

SUBJECT: Request for Comments on Proposed Requirements for the Twelfth Edition of the
Standard for Burglary-Resistant Safes, UL 687, the Fourth Edition of the Standard for
Automated Teller Systems, UL 291, and the Fifth Edition of the Standard for Burglary
Resistant Vault Doors and Modular Panels; PROPOSED EFFECTIVE DATE

SUMMARY OF TOPICS

This bulletin proposes the following changes in requirements:

Revisions are proposed for the Standard for Automated Teller Systems, UL 291, the Standard for
Burglary Resistant Vault Doors and Modular Panels, UL 608, and the Standard for Burglary-Resistant
Safes, UL 687, to address the recent March 1, 1996 upgraded Group 2M combination lock rating.

COMMENTS DUE: JULY 8, 1996

Attached as Appendix A for your review and comment are proposed requirements for UL 291, UL 608,
and UL 687. Questions regarding interpretation of requirements should be directed to the responsible
UL Staff. Please see Appendix B of this bulletin regarding designated responsibility for the subject
product categories.

Please note that proposed requirements are of a tentative and early nature and are for review and
comment only. Current requirements are to be used to judge a product until these requirements are
published in final form.

PROPOSED EFFECTIVE DATE

The proposed requirements specified in paragraph 13.1.2 of UL 291, paragraph 5.1 of UL 608, and
paragraphs 5.2.1, 6.2.1, 7.2.1, and 8.2.1 of UL 687 will necessitate a review of currently Listed and
Recognized products. Therefore, UL proposes that the new requirements become effective six months
after publication. This is intended to provide safe and vault door manufacturers with sufficient time to

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implement the necessary changes in production. Please note that this also includes the time that will be needed by UL to update the files.

REQUEST FOR COMMENTS ON PROPOSALS

Please provide the following:

1. Your comments concerning the proposed requirements; and
2. Your comments concerning the proposed effective date, should the proposals be adopted.

Written comments should be sent to the attention of Michael Hieb at UL's Santa Clara office, 1655 Scott Blvd., Santa Clara, CA 95050-4169. Comments may be sent by mail or faxed to (408) 556-6045. Please reference all correspondence to Subject 687.

All comments should be sent by July 8, 1996.

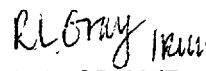
Unless specifically requested to do so, UL will not acknowledge comments indicating concurrence with these proposals.

UNDERWRITERS LABORATORIES INC.



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SR:RM

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PROPOSED REQUIREMENTS ARE OF A TENTATIVE AND EARLY NATURE AND ARE FOR REVIEW AND COMMENT ONLY. CURRENT REQUIREMENTS ARE TO BE USED TO JUDGE A PRODUCT UNTIL THESE REQUIREMENTS ARE PUBLISHED IN FINAL FORM.

APPENDIX A

PROPOSED REQUIREMENTS AND PROPOSED EFFECTIVE DATE
FOR THE FOURTH EDITION OF THE STANDARD FOR
AUTOMATED TELLER SYSTEMS, UL 291,
THE FIFTH EDITION OF THE STANDARD FOR
BURGLARY RESISTANT VAULT DOORS AND MODULAR PANELS, UL 608, AND
THE TWELFTH EDITION OF THE STANDARD FOR
BURGLARY-RESISTANT SAFES, UL 687

For your convenience in review, the original text is identified by (CURRENT) and is ~~lined-out~~, followed by the proposed text identified by (PROPOSED).

GROUP 2M RATING FOR COMBINATION LOCKS**RATIONALE**

To address concerns of UL Listed Group 2 combination locks against current manipulation techniques, UL proposed an upgraded rating for combination locks of 2M designation with a minimum 2-hour resistance against the manipulation test. This proposal was supported by the industry and subsequently several lock manufacturers submitted and certified products to this new 2M rating.

To further enhance and complete the initial anticipated upgrades to end-use products, UL is proposing to revise the requirements in the Standard for Automated Teller Systems, UL 291, the Standard for Burglary Resistant Vault Doors and Modular Panels, UL 608, and the Standard for Burglary-Resistant Safes, UL 687, to require the use of Group 2M combination locks in place of the currently used Group 2 products.

IMPACT

The proposed requirements specified in paragraph 13.1.2 of UL 291, paragraph 5.1 of UL 608, and paragraphs 5.2.1, 6.2.1, 7.2.1, and 8.2.1 of UL 687 will necessitate a review of currently Listed and Recognized products. Therefore, UL proposes that the new requirements become effective six months after publication. This is intended to provide safe and vault door manufacturers with sufficient time to use up their current inventory of Group 2 locks and order new inventory stock of the upgraded 2M locks. Please note that this also includes the time that will be needed by UL to update the files.

These proposals will impact the burglary-resistant safe categories of TL-15, TL-30, TL-15X6, and TL-30X6, and ATM currency containers, Level 1, 24-hour service. No major design changes to the safe lock mechanisms will be necessary to accommodate the new lock since the mounting means and overall dimensions are identical between the new Group 2M designs and the currently Listed Group 2 locks. No other lock requirements are affected by these proposed changes. High-security electronic locks are proposed to be added as an equivalent for lock use in UL 291 and UL 687 products.

In the Standard for Burglary Resistant Vault Doors and Modular Panels, UL 608, where previously one Group 2 lock and one UL Listed timelock were permitted, a minimum of one Group 2M lock and one UL Listed timelock will be required. No other lock requirements are affected by this proposed change.

UL Listed Group 2 locks will continue to be designated as the minimum for use on business-hour service ATM security containers, residential security containers, fire-rated record containers, and other non-rated fire- and burglary-resistant containers.

PROPOSALS**(Automated Teller Systems, UL 291)****(CURRENT)**

~~13.1.2 A security container shall be provided with a lock as follows:~~

- ~~a) For a business hour service security container, a lock complying with the requirements for key locks, UL 437, or combination locks, UL 768 (Group 1, 1R, or 2), or the Standard for Delayed Action Timelocks, UL 887, or the equivalent.~~

(paragraph 13.1.2 continued)

~~b) For a 24-hour service Level 1 security container, a lock complying with the requirements for combination locks, UL 768 (Group 1, 1R, or 2), or the Standard for Delayed Action Timelocks, UL 887, or the equivalent.~~

~~c) For a 24-hour service Level 2 security container, a lock complying with the requirements for combination locks, UL 768 (Group 1 or 1R), or the Standard for Delayed Action Timelocks, UL 887, or the equivalent.~~

(PROPOSED)

13.1.2 A security container shall be provided with a lock as follows:

a) For a business-hour service security container, a lock complying with the Standard for Key Locks, UL 437, or Combination Locks, UL 768 (Group 1, 1R, 2M, or 2), or the Standard for Delayed-Action Timelocks, UL 887, or high-security electronic locks, Type 1 or Type 2, in High-Security Electronic Locks, Subject 2058.

b) For a 24-hour service Level 1 security container, a lock complying with the Standard for Combination Locks, UL 768 (Group 1, 1R, or 2M), or the Standard for Delayed-Action Timelocks, UL 887, or high-security electronic locks, Type 1 or Type 2, in High-Security Electronic Locks, Subject 2058.

c) For a 24-hour service Level 2 security container, a lock complying with the Standard for Combination Locks, UL 768 (Group 1 or 1R), or the Standard for Delayed-Action Timelocks, UL 887.

Revised 13.1.2 effective 6 months after publication

(Burglary Resistant Vault Doors and Modular Panels, UL 608)

(CURRENT)

5 Locks

5.1 Each vault door shall be provided with:

a) A combination lock classified as Group 1 or 1R complying with the requirements for combination locks, UL 768; or

b) A time lock complying with the Standard for Delayed Action Timelocks, UL 887, and a combination lock classified as Group 1, 1R, or 2 complying with the requirements for combination locks, UL 768.

~~Exception: The door need not be shipped with the time lock mounted to it provided that the door is fully prepared for the mounting of the time lock and the time lock is shipped with the door in separate packaging. A prominent marking shall be attached to the door informing the installer of the door that the time lock shall be installed in order to provide the intended locking security. Instructions for the mounting of the time lock shall be shipped with the door and the time lock.~~

(PROPOSED)

5.1 Each vault door shall be provided with:

- a) A combination lock classified as Group 1 or 1R complying with the Standard for Combination Locks, UL 768, or
- b) A timelock complying with the Standard for Delayed-Action Timelocks, UL 887, and a combination lock classified as Group 1, 1R, or 2M, complying with the Standard for Combination Locks, UL 768.

Exception: The door is not required to be shipped with the timelock mounted to it when the door is fully prepared for the mounting of the timelock and the timelock is shipped with the door in separate packaging. A prominent marking shall be attached to the door informing the installer of the door that the timelock shall be installed in order to provide the intended locking security. Instructions for the mounting of the timelock shall be shipped with the door and the timelock.

Revised 5.1 effective 6 months after publication

(Burglary-Resistant Safes, UL 687)**(CURRENT)****5.2 Locks**

~~5.2.1 The safe shall be provided with a combination lock complying with the requirements of the Standard for Combination Locks, UL 768, Group 2, 1, or 1R.~~

(PROPOSED)

5.2.1 The safe shall be provided with a combination lock complying with either Group 1, 1R, or 2M requirements in the Standard for Combination Locks, UL 768, or a high-security electronic lock, Type 1 or Type 2, in High-Security Electronic Locks, Subject 2058.

Revised 5.2.1 effective 6 months after publication

(CURRENT)**6.2 Locks**

~~6.2.1 The safe shall be provided with a combination lock complying with the requirements of the Standard for Combination Locks, UL 768, Group 2, 1, or 1R.~~

(PROPOSED)

6.2.1 The safe shall be provided with a combination lock complying with either Group 1, 1R, or 2M requirements in the Standard for Combination Locks, UL 768, or a high-security electronic lock, Type 1 or Type 2, in High-Security Electronic Locks, Subject 2058.

Revised 6.2.1 effective 6 months after publication

(CURRENT)**7.2 Locks**

~~7.2.1 The safe shall be provided with a combination lock complying with the requirements of the Standard for Combination Locks, UL 768, Group 2, 1, or 1R.~~

(PROPOSED)

7.2.1 The safe shall be provided with a combination lock complying with either Group 1, 1R, or 2M requirements in the Standard for Combination Locks, UL 768, or a high-security electronic lock, Type 1 or Type 2, in High-Security Electronic Locks, Subject 2058.

Revised 7.2.1 effective 6 months after publication

(CURRENT)

8.2 Locks

~~8.2.1 The safe shall be provided with a combination lock complying with the requirements of the Standard for Combination Locks, UL 768, Group 2, 1, or 1R.~~

(PROPOSED)

8.2.1 The safe shall be provided with a combination lock complying with either Group 1, 1R, or 2M requirements in the Standard for Combination Locks, UL 768, or a high-security electronic lock, Type 1 or Type 2, in High-Security Electronic Locks, Subject 2058.

Revised 8.2.1 effective 6 months after publication

APPENDIX B**DESIGNATED RESPONSIBILITY FOR UL
PRODUCT CATEGORIES**

TPEU, SAFES AND CHESTS, AUTOMATED TELLER SYSTEMS
 TPEU2, SAFES AND CHESTS, AUTOMATED TELLER SYSTEMS – COMPONENT
 TPSS2, SAFES AND CHESTS, MATERIALS FOR USE IN BURGLARY-RESISTANT SAFES AND
 CHESTS – COMPONENT
 TQGQ, SAFES AND CHESTS, TOOL RESISTANT, CLASS DEPOSIT SAFE
 TQMZ, SAFES AND CHESTS, TOOL RESISTANT SAFE, CLASS TL-15
 TQQM, SAFES AND CHESTS, TOOL RESISTANT SAFE, CLASS TL-15X6
 TRAX, SAFES AND CHESTS, TOOL RESISTANT SAFE, CLASS TL-30
 TREL, SAFES AND CHESTS, TOOL RESISTANT SAFE, CLASS TL-30X6
 TRHW, SAFES AND CHESTS, TORCH- AND TOOL-RESISTANT SAFE, CLASS TRTL-30
 TRLR, SAFES AND CHESTS, TORCH- AND TOOL-RESISTANT SAFE, CLASS TRTL-15X6
 TROV, SAFES AND CHESTS, TORCH- AND TOOL-RESISTANT SAFE, CLASS TRTL-30X6
 TSLT, SAFES AND CHESTS, TORCH- AND TOOL-RESISTANT SAFE, CLASS TRTL-60X6
 TSQR, SAFES AND CHESTS, TORCH, EXPLOSIVE AND TOOL-RESISTANT SAFE, CLASS TXTL-60X6
 YUSR, VAULT DOORS – BURGLARY RESISTANT
 YUTZ, VAULT PANELS – BURGLARY RESISTANT
 YUTZ2, VAULT PANELS – BURGLARY RESISTANT, COMPONENT

The individual shown in the following table is involved with the investigation of products covered under the subject categories. The Primary Designated Engineer (**shown in UPPERCASE letters**) coordinates the establishment and uniform interpretation of UL requirements applicable to the product categories.

Should you have questions regarding the interpretation of the requirements proposed in this bulletin or any adopted requirements that affect your product, you are encouraged to contact the individual at the office to which you normally submit your products.

The Responsible Department Manager for the subject categories is Isaac Papier at UL's Northbrook office. The Responsible Department Manager oversees the significant interpretations made by the Primary Designated Engineer and arbitrates any differences regarding interpretation of UL requirements.

CCN	Office/Subsidiary	Responsible Engineer	Extension
TPEU, TPEU2, TPSS2, TQGQ, TQMZ, TQQM, TRAX, TREL, TRHW, TRLR, TROV, TSLT, TSQR, YUSR, YUTZ YUTZ2,	Northbrook	R. L. GRAY	42543

DOCUMENT NUMBER: UL 687

ORDER OF DATA

<i>DATA</i>	<i>DATE</i>	<i>NO. OF PAGES</i>
BULLETIN	5-24-96	8
REVISION	3-27-96	2
UL 687	5-26-95	26



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March 27, 1996

Revision pages for

Standard for

Burglary Resistant Safes

UL 687, Twelfth Edition

Attached to this transmittal notice is a reprinted title page for the twelfth edition of UL 687.

Attention is directed to the note on the title page of this standard outlining the procedure to be followed to retain the approved text of ANSI/UL 687-1996.

Attention is directed to the note on the title page of this standard identifying that the Department of Defense has adopted the text of UL 687.

Revised and/or additional pages may be issued from time to time.

With the inclusion of the accompanying material, the standard consists of pages dated as shown in the following checklist:

Page	Date
1	May 26, 1995 (Reprinted March 27, 1996)
2	—
3 – 21	May 26, 1995

MAY 26, 1995
(Title Page Reprinted: March 27, 1996)



1

UL 687

Standard for

Burglary-Resistant Safes

First Edition – June, 1938
Second Edition – June, 1943
Third Edition – January, 1953
Fourth Edition – May, 1955
Fifth Edition – June, 1960
Sixth Edition – August, 1967

Seventh Edition – July, 1972
Eighth Edition – December, 1977
Ninth Edition – January, 1982
Tenth Edition – September, 1987
Eleventh Edition – December, 1991

Twelfth Edition

May 26, 1995

Approval as an American National Standard (ANSI) covers the numbered paragraphs on pages dated May 26, 1995. These pages should not be discarded when revised or additional pages are issued if it is desired to retain the ANSI approved text.

An effective date included as a note immediately following certain requirements is one established by Underwriters Laboratories Inc.

Approved as ANSI SC4.1-1972, July 20, 1972
Approved as ANSI/UL 687-1978, August 17, 1978
Approved as ANSI/UL 687-1981, December 8, 1981
Approved as ANSI/UL 687-1987, May 6, 1987
Approved as ANSI/UL 687-1996, January 12, 1996

The Department of Defense (DoD) has adopted UL 687 on August 10, 1989. The publication of revised pages or a new edition of this standard will not invalidate the DoD adoption.

Revisions of this standard will be made by issuing revised or additional pages bearing their date of issue. A UL Standard is current only if it incorporates the most recently adopted revisions, all of which are itemized on the transmittal notice that accompanies the latest published set of revision pages.

ISBN 1-55989-804-6

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UL 687

ISBN 1-55989-804-6

Burglary-Resistant Safes

