



## Promulgation Details for 1 RCNY 403-01

This rule became effective on September, 2, 2008.

Since such date, one or more amendments have been made to this rule. Each rule amendment has its own effective date and Statement of Basis and Purpose.

Below you will find one or more rule amendments (the most recent appearing at the top), followed by the original rule.

The effective date of each amendment and the original rule can be found at the top of each "NOTICE OF ADOPTION OF RULE."

**NOTICE OF ADOPTION OF RULE**

**NOTICE IS HEREBY GIVEN**, pursuant to the authority vested in the Commissioner of Buildings by Section 643 of the New York City Charter and in accordance with Section 1043 of the Charter, that the Department of Buildings hereby amends Section 403-01 of Chapter 400 of Title 1 of the Official Compilation of the Rules of the City of New York, relating to impact resistant stair and elevator shaft enclosures.

This rule was first published on June 18, 2009 and a public hearing thereon was held on July 23, 2009.

Dated: JUNE 29, 2009  
New York, New York

  
Robert D. LiMandri  
Commissioner

Clause (A) of Subparagraph (i) of Paragraph (1) of Subdivision (d) of Section 403-01 of Chapter 400 of Title 1 of the Rules of the City of New York is amended to read as follows:

(A) **Materials.** Impact resistant wall board sheathed on the impact face of the stair or elevator enclosure wall assembly shall be tested by an approved testing agency. The impact face shall be considered the outer surface of the stair or elevator enclosure, on all occupied sides of the building, and shall be comprised of two (2) layers of wall boards. The wall board used as the base layer on the impact face of the enclosure shall be listed by an approved agency to ASTM C1629-06, *Standard Classification for Abuse-Resistant Nondecorated Interior Gypsum Panel Products and Fiber-Reinforced Cement Panels, Hard Body* Impact Classification Level 2, and the wall board used as the finish layer shall be a minimum 5/8 inch (16 mm) gypsum wall board (see Figure 1).

## **STATEMENT OF BASIS AND PURPOSE**

The foregoing rule amendment is promulgated pursuant to the authority of the Commissioner of Buildings under Sections 643 and 1043(a) of the New York City Charter.

This rule established technical standards for the installation of impact resistant stair and elevator shaft enclosures.

This amendment makes an administrative correction to the rule by further specifying the testing criteria of national reference standard ASTM C1629-06 that an approved testing agency must conform to when testing/listing wall boards.

This rule has an effective date of 09-02-08.



NYC Department of Buildings  
280 Broadway, New York, NY 10007

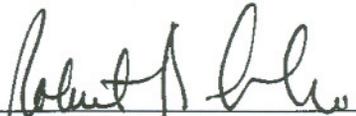
**Robert D. LiMandri**  
**Acting Commissioner**

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Statement of Substantial Need for Earlier Implementation

I hereby find, pursuant to §1043, subdivision e, paragraph 1(c) of the New York City Charter, and hereby represent to the Mayor, that there is substantial need for the implementation of new Section §403-01 of Title 1 of the Rules of the City of New York, governing the construction of impact resistant stair and elevator enclosures, upon the publication in the City Record of its Notice of Adoption.

This is one of the Rules needed to implement the City's new Construction Codes, including the Building Code, which became effective on July 1, 2008. This rule promotes public safety and efficiency by continuing under the new construction codes the practice under Chapter 32 of Title 1 of the Rules of the City of New York with respect to impact resistant stair and elevator enclosures. By maintaining current standards, the rule benefits the public by continuing a proven safety practice. The new codes are in effect already and thus this rule is needed as soon as possible.

  
\_\_\_\_\_  
Robert D. LiMandri  
Acting Commissioner  
Department of Buildings

APPROVED:   
\_\_\_\_\_  
Michael R. Bloomberg  
Mayor

DATE: 8/21/08

**NOTICE OF ADOPTION OF RULE**

**NOTICE IS HEREBY GIVEN**, pursuant to the authority vested in the Commissioner of the Department of Buildings by Section 643 of the New York City Charter and in accordance with Section 1043 of the Charter, that the Department of Buildings hereby adopts the addition of Section 403-01 of Title 1 of the Official Compilation of the Rules of the City of New York, regarding the construction of impact resistant stair and elevator enclosures.

This rule was published on June 20, 2008 and had a public hearing on July 22, 2008.

Dated: 8/13, 2008  
New York, New York

  
Robert D. LiMandri  
Acting Commissioner  
Department of Buildings

Section 1. Section 32-05 of Chapter 32 of Title 1 of the Rules of the City of New York is REPEALED.

§ 2. Title 1 of the Rules of the City of New York is amended by adding a new chapter 400 and a new section 403-01 to read as follows:

Chapter 400  
Special Detailed Requirements Based on Use and Occupancy

§403-01 Impact Resistant Stair and Elevator Shaft Enclosures.

(a) Scope. This rule provides the construction requirements for impact resistant wall enclosures of exit stair and elevator shafts in high-rise buildings.

(b) Definitions. For the purposes of this section, all terms used herein shall have the same meanings as set forth in the building code.

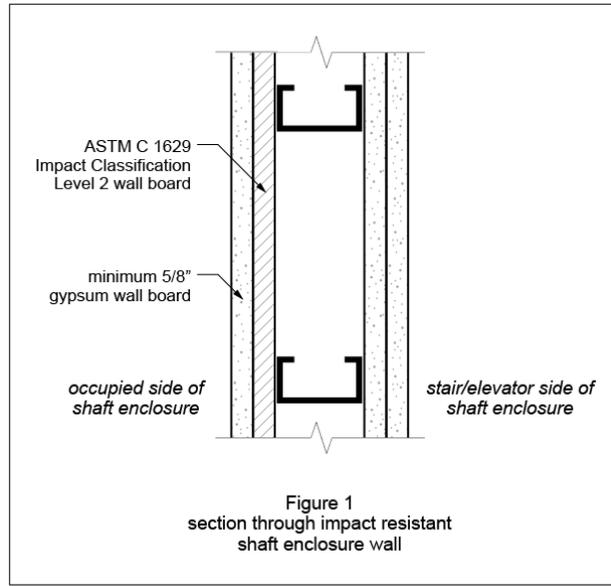
(c) References. See sections 403.9.2 (Impact resistant elevator shafts) and 403.15 (Impact resistant stair enclosures) of the building code.

(d) Construction requirements. A compliant wall assembly shall provide an impact resistance equivalent to or exceeding the performance of a wall assembly described in paragraph (1), (2), or (3) below:

(1) Prescriptive stud and wall board assembly. An impact resistant shaft enclosure constructed as a stud and wall board assembly shall satisfy the following requirements:

(i) Materials and assemblies shall comply with the following:

(A) Materials. Impact resistant wall board sheathed on the impact face of the stair or elevator enclosure wall assembly shall be tested by an approved testing agency. The impact face shall be considered the outer surface of the stair or elevator enclosure, on all occupied sides of the building, and shall be comprised of two (2) layers of wall boards. The wall board used as the base layer on the impact face of the enclosure shall be listed by an approved agency to ASTM C1629-06, *Standard Classification for Abuse-Resistant Nondecorated Interior Gypsum Panel Products and Fiber-Reinforced Cement Panels*, Impact Classification Level 2, and the wall board used as the finish layer shall be a minimum  $\frac{5}{8}$  inch (16 mm) gypsum wall board (see Figure 1).



(B) Assembly. The wall assembly shall be at least two-hour fire resistance rated.

(ii) Installation shall comply with the following:

(A) Studs shall be minimum 3-½ inch (89 mm) depth cold-formed steel framing, at least 33 mils thick (20 gauge).

(B) Vertical studs shall be spaced at a maximum distance of 24 inches (610 mm), on center.

(C) Runners shall be securely attached at the floor and ceiling to structural element members and shall comply with the structural requirements of the building code. The installation of top and bottom runner tracks shall be subject to special inspection.

(D) Wall boards shall be attached with No. 8 self-drilling bugle-head screws, 12 inches (305 mm), on center maximum, with a minimum depth of 5/8 inch (16 mm) penetration into the wall cavity.

(E) Joints between adjoining sheets of wall board shall be staggered from the base layer with the face panel layer.

(2) Concrete or masonry walls. Concrete or masonry walls shall satisfy the impact resistance requirements of this rule provided that the shaft enclosure walls are anchored to structural members that provide lateral support as may be required by chapter 16 of the building code. The wall shall be at least two-hour fire resistance rated.

(3) Performance-based requirements. Wall assemblies not classified in paragraphs (1) or (2) of this subdivision shall comply with the following criteria:

(i) Impact face. The impact face shall be considered as the outer side of the stair or elevator enclosure, on all occupied sides of the building. Materials constituting the impact face of the stair or elevator enclosure assembly shall be tested by an approved testing agency to ASTM C1629, Hard Body Impact Classification Level 3. When more than one (1) layer of material is required to satisfy the impact resistance requirement, such layers shall be tested together.

(ii) Assembly. The wall assembly shall have a minimum two-hour fire resistance rating. The wall assembly shall be tested by an approved testing agency to ASTM C1629, Soft Body Impact Classification Level 2.

(iii) Installation. Wall assemblies shall be anchored to structural members and shall comply with the structural requirements of the building code. The installation shall be subject to special inspection.

## **STATEMENT OF BASIS AND PURPOSE**

Local Law 33 of 2007 mandates that high rise buildings be built with impact resistant stair and elevator enclosures, and requires that the Commissioner of Buildings adopt a rule establishing the technical standards for their installation. Pursuant to Local Law 33 of 2007, as codified in Sections 403.9.2 and 403.15 of the Building Code, this rule establishes the technical standards for the installation of impact resistant stair and elevator shaft enclosures in compliance with that mandate. The rule supersedes Section 32-05 of Chapter 32 of Title 1 of the Rules of the City of New York, which was promulgated in response to the findings and recommendations of the World Trade Center Buildings Task Force in February 2003.

This rule promotes public safety and efficiency by continuing under the new construction codes the practice under Chapter 32 of Title 1 of the Rules of the City of New York with respect to impact resistant stair and elevator enclosures. By maintaining current standards, the adopted rule benefits the public by continuing a proven safety practice.