## **COMMUNITY AFFAIRS**

## **DIVISION OF CODES AND STANDARDS**

**Uniform Construction Code** 

**Administration and Enforcement; Process** 

**Construction Permits – When Required; Construction Permits – Application** 

**Elevator Safety Subcode** 

**Definition of "Elevator" or "Elevator Device"** 

Adopted Amendments: N.J.A.C. 5:23-2.14, 2.15, and 12.1

Proposed: April 4, 2016, at 48 N.J.R. 531(a).

Adopted: August 4, 2016, by Charles A. Richman, Commissioner, Department of Community Affairs.

Filed: August 25, 2016, as R.2016 d.116, with non-substantial changes not requiring additional public notice and comment (see N.J.A.C. 1:30-6.3).

Authority: N.J.S.A. 52:27D-124.

Effective Date: September 19, 2016.

Expiration Date: March 25, 2022.

**Summary** of Public Comments and Agency Responses:

The following comments were received from Kenneth Rogers, CFM, Construction Official, Bedminster Township.

1. COMMENT: One commenter appreciates the clarity being given as to when retaining walls are subject to the Uniform Construction Code and supports the change.

RESPONSE: The Department thanks the commenter for this expression of support.

2. COMMENT: The commenter suggests clarifying how the total height is measured in the interest of uniformity of enforcement. The commenter suggests that wording be added to state that the total height is measured from the bottom of the footing to the top of the wall or from the bottom of the first course of block or concrete to the top of the wall.

RESPONSE: The Department agrees and has added language to clarify. The practice of measuring from the bottom of the footing is generally accepted and acknowledged, but stating this in the rule, as the commenter suggests, will eliminate differing interpretations.

The below comments were sent by a retired employee of the Department of Community Affairs, Mitchell Malec:

3. COMMENT: The commenter expresses disappointment that the Department proposed an amendment to N.J.A.C. 5:23-2.14(g) without addressing other issues of concern with regard to retaining walls. The commenter makes reference to articles that appeared in the Construction Code Communicator, a newsletter published by the Department. Specifically, the commenter mentions an article from 2013 (Volume 25, Number 2) entitled "Retaining Walls in Series, or Not" and another article, which appeared in 2008 (Volume 20, Number 3) entitled "Protection of Adjoining Property," both of which contain what the commenter characterizes as a potentially hazardous 30 degree rule of thumb to determine whether walls are in series. The commenter suggests using instead the concept that when retaining walls are spaced far enough apart they are engineered as independent walls. The commenter posits that the Department should have taken the opportunity to include as part of this rulemaking the adding of a new exception containing clarifying language, such as: "Exception: Retaining walls in series of less than four foot height each measured from the bottom of the footing to the top of the wall, unless supporting a

surcharge, when spaced far enough apart that they are engineered as independent walls, do not require a UCC permit even if the sum of the heights of all retaining walls on the same slope exceeds four feet." The commenter goes on to say that "the above recommended exception clarifies how retaining wall height is to be measured addressing the common misconception that retaining walls of up to four feet in exposed wall height may be constructed without a permit, that no UCC permit is required if all the independent walls are less than four feet in height and conversely multiple permits when the independent walls are four foot or greater, that surcharge needs to be considered, the concept of independent walls, and does not contain a potentially hazardous rule of thumb. It does not address retaining walls impounding Class I, II, or IIIA liquids, explain surcharge loading or the impacts of sloping soil or poor soil conditions or adjacent vehicle loads, etc ... Understanding that tiered walls is a special condition where two or more short walls, horizontally offset from one another, are used in lieu of a single retaining wall. Often seen in landscaping of properties using segmental gravity walls (Dry Stack). Another way to express the retaining wall rule of thumb is: "If the distance between retaining walls is at least twice the height of the second or lower retaining wall, provided that the height of the first retaining wall is equal to or greater than the second retaining wall, then the retaining walls may be considered independent retaining walls. (Or a different approach - If the spacing between the walls is greater than two times the height of the wall at the lower elevation, each wall shall be considered to act independently and will be treated as a separate wall and a separate permit shall be obtained for each wall four foot or greater.) But be aware, the rule of thumb may be okay for some landscaping retaining walls and others, but may not adequately address all situations creating a potential for unsafe conditions if taken as true for all situations. Is the Department's 30 degree angle rule always safe if the second (lower) retaining wall is greater than the first

(upper) retaining wall, or if the soil back slope is excessive and not a level grade, or a surcharge load (driveway/parking) is present or poor soils exist of low friction strength?"

RESPONSE: The subjects addressed in the referenced articles and in the above comments are beyond the scope of the instant rulemaking. Furthermore, the Department is not aware of any problems caused by the referenced articles or the rule as written. The Department will take this matter under advisement and will consider a rulemaking, if it becomes apparent that there is some problem of interpretation that may be addressed through amendment(s) to the rule.

4. COMMENT: The commenter points out that "some municipalities require, by zoning ordinance, review and approval by the municipal engineer for retaining walls used for lot grading. A lot grading and clearing permit. The current exception and the proposed amendment, since the retaining wall is not dedicated to the municipality, does not address this municipal engineer review and approval. It is suggested that the proposed amendment be revised to include an exception for retaining walls subject to review and approval by the municipal engineer of the municipality in which the retaining wall is located, not just ones dedicated. (Eliminating the need for the current exception in its entirety)."

RESPONSE: The suggested amendment cannot be made upon adoption, as it would make an allowance that is beyond the scope of both the current rule and the proposed amendment. The Department will take this under advisement, consult with the New Jersey Society of Municipal Engineers, and propose an amendment if it is determined that an amendment is warranted.

5. COMMENT: The commenter suggests that, "since two more exceptions are being added by the proposed amendment, "Exception" should be changed to "Exceptions" or make a separate listing of Exceptions.

RESPONSE: The rule has been changed, upon adoption, to make "Exception" plural.

6. COMMENT: The commenter states that "a county engineer" should be changed to "the county engineer of the county in which the retaining wall is located" for clarity.

RESPONSE: The Department thinks that "a county engineer" is clear enough. It is difficult to imagine any engineer acting in that capacity in another county.

7. COMMENT: The commenter says, "It's hard for me to believe that the Department required UCC construction code permits for NJDOT retaining walls associated with NJDOT road or bridge projects. It is suggested that the Department determine which other State departments and agencies review and approve retaining walls, and include those state departments and agencies in the exception. What about a retaining wall or bulkhead in a fluvial flood hazard area subject to review and approval by the NJDEP (individual permit pursuant to N.J.A.C. 7:13-11.13)? What about NJ Transit or NJ Turnpike Authority projects? Others? Or can a general statement such as: '... nor shall it apply to any retaining wall subject to review and approval of a State of New Jersey Department or Agency' suffice?"

RESPONSE: The rule changes were proposed in response to a specific instance where the Department of Transportation was reviewing and approving a retaining wall associated with a private project (not an NJDOT road or bridge project, as suggested above) and the local construction official declined to waive the Uniform Construction Code permit requirement. The

Department has made the exception applicable to projects approved by a county engineer or the Department of Transportation. The Department does not anticipate a circumstance where there would be a retaining wall undertaken by a private entity requiring NJTransit or the New Jersey Turnpike Authority review and approval. If it is discovered that a broader exception, one encompassing all State agencies, is needed, the Department will publish a future proposed amendment to the rule.

8. COMMENT: It is the commenter's position that "the proposed amendment to N.J.A.C. 5:23-2.15(a)5 not only provides a cross reference to (f)4.ii.(1), but by being an 'Exception' eliminates, as proposed, the requirement that a statement be provided that all prior approvals have been given. I assume that the Department's intent was to retain the requirement for the statement but obtain it before permit issuance. i.e. Rewrite as: 'i. Exception: In order for plan review to proceed in accordance with (f)4.ii.(1) below, this statement shall be provided prior to permit issuance."

RESPONSE: The Department disagrees with the commenter's interpretation. It is clear that the exception, as written, allows plan review to proceed before all prior approvals are in place.

9. COMMENT: The commenter states that he is "dumbfounded by the Department's proposed amendment to section 12.1 of the UCC. The summary erroneously states that the proposed amendment to N.J.A.C. 5:23-12.1 would make the terminology used in the Uniform Construction Code consistent with the terminology used in ASME A17.1, the standard adopted by reference and containing the technical requirements for elevators. The proposed amendment is only to the elevator safety subcode portion of the UCC not the entire UCC and whether the

terminology is being made consistent is questionable. The State Uniform Construction Code Act (N.J.S.A. 52:27D–126f) is clear that it does not include any conveyor devices that are process equipment. Therefore, conveyor devices that are not process equipment are included in the UCC and may or may not be included in the elevator safety subcode. It is my opinion that those elevator devices (other than process equipment) outside the scope of the elevator safety subcode are still within the scope of the UCC. This has been the position of the Department for decades even though it may have been misinterpreted by Department staff and most recently misrepresented in the Summary statement of proposed regulations.

How the Department decided that a wind turbine tower elevator is to be considered process equipment is beyond my understanding. The elevator device has nothing to do with the 'process.' But it's a great alternative to climbing a 300-foot ladder. (When is the Department going to propose an amendment to add wind turbine tower elevator to the definition of 'manufacturing, production, and process equipment' in N.J.A.C. 5:23-1.4?)

Note that even though the Department amended the reference standard section 3001.2 of the building subcode to delete the wind turbine tower elevator portion (section 5.11) of the ASME A17.1 standard, the scope of 3001.1 of the building subcode was not changed. So what standard should a construction code enforcing agency use for a wind turbine tower elevator? Answer: ASME A17.1-2013. And likewise for the other conveying elevator devices that are being taken out of the scope of the elevator safety subcode by this proposed amendment. The Summary statement does not express the impacts of this amendment. If it is the Department's intent to eliminate these conveying elevator devices from UCC enforcement, possibly in disregard to the provisions of the Act, it is recommended it be clearly expressed in a new proposed amendment.

It is my understanding that wind turbine tower elevators and outside emergency elevators were recently added to the scope of ASME A17.1-2013 and therefore are not 'any other device outside of the scope of ASME A17.1, A18.1 or A90.1' as expressed in the proposed amendment. But I believe personnel hoists, material hoists, conveyors still are. It is my opinion that the Department needs to reevaluate this amendment. These conveying elevator devices need to be regulated by the UCC, even if not retained within the scope of the elevator safety subcode. Why would the Department not retain permanently installed interior wind turbine tower elevators within the scope of the elevator safety subcode while a belt manlift in a wind turbine tower is? Please explain. Similarly, is it the Department's position that a permanently installed outside emergency elevator (a multi-story building exterior evacuation platform rescue system) is to be considered process equipment or is outside the scope of the UCC?

The Department should review elevator device definitions and conveying device requirements in other sections of the UCC (N.J.A.C. 5:23-1.4, 6.8(j), 12A.1, others) and determine if additional substantial changes are needed. In addition, the fee schedules for elevator devices outside the scope of the elevator safety subcode, but within the scope of the UCC (N.J.A.C. 5:23-4.18(g) and 4.20(c)6, 7, and 8), need to be addressed. The reference 'fees for elevator device inspection and tests shall be as set forth in N.J.A.C. 5:23-12' serves little purpose if the device is not within the scope of Subchapter 12."

RESPONSE: The commenter's first point seems to be one of semantics. It is agreed that the proposed amendment is made to Subchapter 12 of the Uniform Construction Code and does not address the treatment of devices under Chapter 30 of the building subcode of the Uniform Construction Code. However, inasmuch as the proposed amendment is made to Subchapter 12 of the Uniform Construction Code, the statement in the Summary, that the proposed amendments

would make the terminology of the Uniform Construction Code consistent with ASME A17.1 of the Uniform Construction Code is not erroneous as the commenter states. There is nothing in the Summary that discusses whether devices that are not process equipment are still within the scope of the Uniform Construction Code when they are scoped out of Subchapter 12 of the Uniform Construction Code, because of more general requirements contained in Chapter 30 of the building subcode. The Department agrees that scoping devices out of Subchapter 12 does not mean that certain devices are outside of the scope of the Uniform Construction Code via Chapter 30 of the building subcode. Subchapter 12 is scoped to include those devices that, based on frequency of use and hazard to the public, warrant periodic inspection and testing after installation.

The commenter also seems concerned about previous amendments that were made to Chapter 30 of the building subcode of the Uniform Construction Code. Those amendments are not part of this rulemaking, and as such, comments on those amendments are not relevant. The Department will examine its treatment of devices under Chapter 30 of building subcode of the Uniform Construction Code and determine whether a subsequent rule change is needed, but those potential amendments have no bearing on the current rulemaking.

Finally, the commenter seems generally confused by what devices are listed as outside the scope of Subchapter 12 of the Uniform Construction Code and seems to suggest that only process equipment should be outside of the scope of Subchapter 12. The Department has chosen to regulate devices under Subchapter 12 of the Uniform Construction Code based on frequency of use and danger to the public. It is the Department's position that wind turbine elevators and exterior evacuation devices, while not process equipment, do not have either the frequency of use or the danger to the public to warrant doing ongoing inspections after installation.

10. COMMENT: The commenter suggests that, "although the Department's efforts in enforcement of the elevator safety subcode have been outstanding, it may be time for changing N.J.A.C. 5:23-12A from 'optional' to 'mandatory.' In other words, the rules should require privately-owned elevator device owners to contract with qualified elevator inspection firms.

This would not include elevator devices in municipal, county or State buildings and structures but would include elevator devices in privately-owned buildings and structures in municipalities where the Department is the local construction code enforcing agency. And no revision should be made to the five year interval inspection and witnessing of tests by the local construction code enforcing agency or the Department. If this is possible through regulation changes, a phase in of one year for new elevator devices and a five year phase in for existing elevator devices seems reasonable."

RESPONSE: The commenter's suggestions regarding N.J.A.C. 5:23-12A are appreciated, but have nothing to do with the proposed amendments.

## **Federal Standards Statement**

No Federal standards analysis is required because the amendments are not being adopted under the authority of, or in order to implement, comply with, or participate in any program established under Federal law or any State statute that incorporates or refers to a Federal law, standards, or requirements.

**Full text** of the adoption follows (additions to proposal indicated in boldface with asterisks \*thus\*):

- 5:23-2.14 Construction permits—when required
- (a) (f) (No change.)
- (g) No person shall construct, enlarge, alter, reconstruct, or demolish a retaining wall or series of retaining walls having a total height four feet or greater, or a retaining wall less than four feet having a negative impact on a foundation, without first obtaining a construction permit. The height of a retaining wall shall be the sum of the heights of all retaining walls on the same slope \*and shall be measured from the bottom of the footing to the top of the wall\*.
- 1. Exception\*s\*: This requirement shall not apply to any retaining wall that is intended to be dedicated to the municipality and is subject to regulation, inspection, and the issuance of bonds under Article 6. Subdivision and Site Plan Review and Approval, of the Municipal Land Use Law, P.L. 1975, c. 291 (N.J.S.A. 40:55D-37 et seq.) nor shall it apply to any retaining wall subject to review and approval by a county engineer or by the State Department of Transportation.