

## Smoke Alarm and Carbon Monoxide (CO) Alarm Compliance

This article is intended to assist Construction Officials with the smoke alarm and carbon monoxide alarm requirements when a reconstruction, alteration, renovation, or repair is undertaken.

The Division of Codes and Standards has been receiving calls about code officials requiring verification of the existence of these alarm devices before they will issue a permit to a homeowner or contractor. This is not the intent, nor is it supported by the UCC. Some code officials have even gone as far as modifying the application form from the Division of Fire Safety that is required for resale, rentals and re-occupancy of one-or two-family dwellings. Some officials are requiring that the contractor or homeowner sign a form and, in some cases, have the form notarized, before issuing a permit.

The installation of smoke alarms and carbon monoxide alarms **is not a prerequisite** to the issuance of a construction permit for reconstruction, alteration, renovation or repair work. The Construction Official should simply notify the permit applicant that these alarm devices need to be installed when they were not part of the original construction.

When smoke or CO alarms have been installed as part of the original construction or other rehabilitation project, they must be maintained. The UCC does not hold the contractor responsible for installing these alarm devices, nor does it require an inspection of these devices; it only requires them to be installed and maintained in the dwelling unit or building.

It is the responsibility of the Construction Official to ensure that these code provisions are made known to all permit applicants. A guidance document has been prepared that may be distributed/used as a counter document. This document can be found on the Codes & Standards website "SMOKE ALARM AND CARBON MONOXIDE ALARM COMPLIANCE" and is **published on the following page**.

Source: Michael Whalen, Code Assistance Unit, (609) 984-7609

## Typo in Bulletin 03-5

If you have looked at your Special Inspections bulletin recently, Bulletin 03-5, you will notice one inconsistency with the Uniform Construction Code (N.J.A.C. 5:23) and two inconsistencies with the International Building Code(IBC)/2015.

- On page 1, "Class I" should be "Class 1" to be consistent with N.J.A.C. 5:23-4.3A.
- On page 2, the "Building Permits and Reports" section should state "responsible person in charge of the work" in lieu of "design professional."
- On page 4, the "Special Inspection for Smoke Control" section has an incorrect reference to the IBC/2015; Section 1705.13 should be 1705.18.

So please take the time to update your bulletin physically (e.g. turn the 3 into an 8) or download new pages at <http://www.nj.gov/dca/divisions/codes/resources/bulletins.html>.

Source: Code Assistance, (609) 984-7609

## Seeing Double – Tables R404.1.2(2) and (8) of IRC/2015

The Code Assistance Unit has received multiple questions regarding Tables R404.1.2(2) and R404.1.2(8) of the International Residential Code/2015 regarding reinforcement of basement walls. At first glance, the minimum vertical reinforcement for a 6-inch nominal flat basement wall in both tables seems odd since the numbers do not match up. Keep in mind, a table within the code is only as good as how you got to it...the section reference!

This means that even if you are staring down the tables, you have to go back to the section that referenced it for applicability. In the case of the tables mentioned above, Section R404.1.3.3.7.2, Location of reinforcement in wall, should be your starting point. You will find that:

- The center of vertical reinforcement in basement walls determined from Tables R404.1.2(2) through R404.1.2(7) is at the centerline of the wall.
- Vertical reinforcement in basement walls determined from Table R404.1.2(8) is to provide a maximum cover of 1-1/4 inches measured from the inside face of the wall.

So the subtle difference (but huge impact) between tables is the location of the wall reinforcement.

Source: Rob Austin, Code Assistance Unit, (609) 984-7609

## **SMOKE ALARM AND CARBON MONOXIDE ALARM COMPLIANCE FOR SOME REHABILITATION PROJECTS**

The application for permit that you have submitted requires the installation of smoke alarms and carbon monoxide alarms when they have not been installed as part of the original construction. This information does not contain change of use requirements located at N.J.A.C. 5:23-6.31(i) and (j) or addition requirements located at N.J.A.C. 5:23-6.32(f). Smoke and carbon monoxide alarms must be installed in accordance with the following information.

### **The following are the requirements for Smoke Alarms:**

- Work being performed in accordance with N.J.A.C. 5:23-6.4(f) repair, 6.5(f) renovation and 6.6(f) alteration require smoke alarms to be installed in the dwelling units of Group R-2 and buildings of Groups R-3, R-4 and R-5.
- Smoke alarm(s) must be installed on each level of the dwelling, including the basement, outside of each separate sleeping area in the immediate vicinity of the bedroom. Smoke alarms may be placed on the ceiling or within 12 inches of the ceiling on the wall.
- Smoke alarms are permitted to be battery operated, but shall not replace any required A/C-powered smoke alarms or a household fire alarm system.
- The installation of battery operated smoke alarms does not require a permit.

### **The following are the requirements for Carbon Monoxide Alarms:**

- Work being performed in accordance with N.J.A.C. 5:23-6.4(g) repair, 6.5(g) renovation, 6.6(g) alteration, and 6.7(f) reconstruction require that carbon monoxide alarms be installed in buildings of Groups I-1, R-1, R-2, R-3, R-4, and R-5 that contain a fuel burning appliance or have an attached garage.
- Section 915 of the building subcode and Section R315 of the one- and two-family dwelling subcode require that carbon monoxide alarms be installed in the immediate vicinity of each sleeping area when the building contains a fuel burning appliance or has an attached garage. Carbon monoxide alarms may be placed anywhere on the ceiling or the wall.
- Carbon monoxide alarms are permitted to be battery operated, hard-wired or the plug in type.
  - The installation of battery operated or plug in type carbon monoxide alarms does not require a permit or an inspection.

It is your responsibility to ensure that these provisions have been met.