



Boulder County  
Land Use Department  
Publications

## 2006 Building Code Amendments Summary

Land Use Department  
Courthouse Annex Building  
2045 13th Street  
PO Box 471  
Boulder, CO 80302

Building Safety & Inspection  
Services Division:  
Phone: 303-441-3925  
Fax: 303-441-4856

Email: [building\\_official@bouldercounty.org](mailto:building_official@bouldercounty.org)  
<http://www.bouldercounty.org/lu/>

**Office Hours:**  
Monday – Friday 8:00 AM to 4:30 PM

Building Permits can be applied for  
and issued until 4:00 PM

# 2006 Amendments to Boulder County Building Code Revised March 5, 2009 Summary

The current Building Code Amendments to the 2006 International Codes were approved by the BOCC in the fall of 2007. They became effective on January 1, 2008. The 2006 Amendments involved a comprehensive re-write of the 2003 Amendments. After the staff began enforcing the 2006 amendments they became aware of some omissions and the need to make some minor changes. In addition, after gaining experience enforcing the Contractor Licensing regulations which became effective July 1, 2008, it became clear that some minor changes would make these regulations easier to explain and enforce.

The proposed new and revised Amendments are listed below with a brief explanation of why the staff is proposing each change:

## Chapter 1 Administrative Provisions

1. Add IRC Appendix Chapters F, G, & H to the Chapter 1 Adoptions section.

The staff noticed that the adoption of IRC Appendix Chapter G and H were not included in this section. They were included under the IRC Amendments. The staff feels it belongs in both locations Appendix F is a new appendix section that was not previously adopted.

2. Create a new section 116 and add the Contractor Licensing Resolution to the Amendments. Page 26 - 35.

The Contractor Licensing Code was adopted by resolution in Feb. 2008 and it became effective in July 2008. These regulations should be included in the Amendments rather than remain a separate resolution so a new section 116 was created. The specific changes are noted below.

- a. Added provisions to permit the construction of all accessory structures and Ag buildings under a Class C license Section 116-7 C.

The building community objected to having to pass the Class A licensing test to build barns and other accessory buildings over 3,000 square feet. The staff feels that the code issues associated with these structures do not warrant the passage of the A test.

- b. Added an exception to exempt the ICC test for Ag buildings that are engineered, 1 story, with no habitable space. Sec 116-7 C.

Certain contractors specialize in building Ag buildings which are used for animals or storage. The code issues associated with these types of buildings are minimal. The staff feels that the passage of the ICC test is not warranted for types of buildings.

- c. Add a M Miscellaneous license category and an exemption for taking the ICC test for projects where there is no applicable ICC test. Sec 116-7 G.

It became apparent shortly after the Contractor Licensing Code became effective that there are numerous projects where the ICC test does not apply. An M (miscellaneous) license category was created so that contractors involved in these types of projects can obtain a license without having to pass a test that is non-applicable to their work.

- d. **Added language to clarify that the ICC test can be taken by the person directing the work rather than the principal of the company. Added exceptions to passage of the ICC test. Sec 116-8 B**

Several construction company owners complained that while they own the company, they do not directly supervise the work. They hire lead people to do this. They expressed that it is unfair that they be required to pass the test. This code change permits the person who is directly involved in directing the construction to take the test.

- e. **Section 116-8 was amended.**

To permit acceptance of a test offered by other jurisdictions for licensing purposes rather than requiring passage of the ICC test to obtain a contractor's license. The requirement to take the exam every three years has been deleted. Sec 116-8 B.

## International Building Code Amendment Changes

1. **Add requirement for spark arrester caps to IBC Chapter 7 IBC sec 722.4.1.3.**

This provision has been contained in the Amendments for years. Somehow it got deleted during the re-write of Chapter 7 at the previous adoption.

2. **Add the requirement for deck walking surface to the required elements throughout Wildfire Zone 1. IBC sec 722.4.1.4.**

At the last code cycle Chapter 7 was completely re-written. Exceptions were included to exempt small projects from the requirements for the exterior materials provisions.

Confusion resulted in how to apply these exemptions to decks. The intent was that deck walking surfaces always meet the requirements for ignition-resistant materials and this change is intended to eliminate the confusion.

3. **Add a requirement for gutters on all buildings.**

IBC sec 1807.5 The County has required gutters on buildings for years based on the code provisions for drainage around the foundation. The staff feels a specific requirement will make enforcement easier.

4. **Delete IBC Chapter 30. Page 52.**

In 2007 state legislation was introduced and ultimately approved to place the regulation of mechanical conveyances including elevators, escalators, dumbwaiters, and wheelchair lifts under the State Department of Labor and Employment, Division of Oils and Public Safety.

Individual jurisdictions who have qualified staff may participate in the program and issue permits and conduct inspections. Boulder County does not have qualified staff so IBC Chapter 30 is no longer applicable and it has been deleted.

## International Residential Code

1. **Add IRC Appendix Chapters F to the administrative provisions. Page 53.**

Boulder County has a high incidence of radon. Studies by the County Health Dept. reveal that in more than 50% of the residences tested there are radon levels high enough to require mitigation. Adoption of Appendix F will require the installation of passive radon systems in new dwellings. Additional information on radon has been enclosed. Staff from the Health Dept. will be present to testify in favor adoption of this appendix.

2. **Add anticipated average snow depth in the mountains and plains. Table R301.2(1).**

Several years ago the Building Division established an anticipated snow depth of 12 inches in the plains areas of the County and 18 inches in the mountains. This has been enforced as a policy. The basis for this policy was experience from staff members who have lived in the County for years. The anticipated snow depth is applicable to vent locations for gas-burning appliances. This information belongs in the Code. The BOR recommended the mountain anticipated snow depth be increase to 24 inches.

3. **Add requirement for spark arrester caps. IRC sec R327.4.4.**

This is exactly the same requirement as item 1 under the IBC Amendments so that it is included in the amendments to the IRC.

4. **Add the requirement for deck walking surface to the required elements throughout Wildfire Zone 1. IRC Sec R327.4.5.**

This is exactly the same requirement as item 2 under the IBC Amendments so that it is included in the amendments to the IRC.

5. **Add a requirement for gutters on all buildings. IRC R401.3.1.**

This is exactly the same requirement as item 4 under the IBC Amendments so that it is included in the amendments to the IRC.

6. **Add a requirement to IRC sec R408 to require a vapor barrier on crawlspace grade and beneath basement slabs Sec R408.8.**

Recent tests conducted on dwellings reinforces the need to control moisture entering the building. For many years the Code has mandated crawlspace vents to the exterior. Studies show that the most effective way to mitigate moisture is to keep it out rather than to ventilate.

7. **Add a new IRC Chapter 12 to address residential elevators.**

Add provision that live loads imposed by elevator equipment must be engineered., IRC Chapter 12 As explained in item 5 of the IBC Amendments the authority to regulate and inspect elevators and other conveyance falls to the State of Colorado. Residential conveyances, however, are exempt from the Division of Oils and Public Safety regulations. The staff feels strongly that Boulder County needs assurance that residential elevators are installed and inspected by qualified, knowledgeable people and that the issuance of permits for residential elevators should continue.

8. **Add an exception to IRC sec P2601.2. that permits garage floor drains to drain to daylight at the exterior of the building rather than being connected to the building's sewer. IRC P2601.2.**

The Building Division has been permitting this for years based on a policy. The staff feels it should be in the Code.

9. **Add a requirement for sanitation facilities for all construction projects to IRC Chapter 26. IRC sec P2601.4.**

This provision is in the IPC but not in the IRC. It has been included in the SPR requirements.

The staff feels it should be included in the Building Code Amendments.

10. **Add a provision to IRC Chapter 14 and 28 to require heat traps on water heaters and hot water boilers. Sec P2801.2.1.**

This is an energy conservation measure that is typically required in E Star and other high-performance homes. The purpose is to keep the water heater or boiler from losing heat through the piping that serves the appliance. The assembly of fittings that makes up the heat trap retain the hot water in the appliance.

11. **Add a requirement that yard hydrants must be listed sanitary hydrants or protected in accordance with IRC Sec P2902. P2903.10.1.**

Yard hydrants pose a possible pollution or contamination hazard to potable water. The shut off is located below grade. When opened water flows through the riser to the outlet. When shut off the water in the riser drains and puddles below grade at the base of the riser. It is possible for the water that has drained from the riser to become contaminated or polluted from its contact with earth and be drawn into the riser when the valve is re-opened.

12. **Add sentence to IRC "Installations that do not fall under the scope of this section shall be installed in accordance with the NEC. IRC E3301.2.**

The IRC is published to regulate the construction of 1 and 2 family dwellings. The NEC regulates all other electrical installations. Because of the size and complexity of residences constructed in Boulder County some of the electrical elements are beyond the scope of the IRC. This language clarifies that in these instances the installation must conform to the NEC.

## International Plumbing Code

1. **Add provision for heat traps. IPC 502.1.1.**

This is exactly the same requirement as item 11 under the IRC Amendments so that it is included in the amendments to the IBC.

