

# **NC Building Code Council**

## **Ad-Hoc Committees**

### **Fiscal Statement**

**Submitted to  
the NC Building Code Council on  
December 13, 2016**

**For the 2018 NC State Building Codes:**

**Building, Existing Building, Fire Prevention, Fuel Gas,  
Mechanical, Plumbing, and Residential (except energy)**

**(A separate fiscal note was prepared for the Energy Conservation Code, including  
Residential Code Energy Chapter 11)**

The proposed effective date of this rule is January 1, 2019.

Reason Given – Request by the NC Building Code Council, Ad-Hoc Committees, to adopt the 2018 North Carolina State Building Codes. The Base Documents for the 2018 NC Codes are the 2015 International Codes. This rule is proposed to update the NC State Building Codes to the current International Code edition.

Fiscal Statement – This rule is anticipated to provide equivalent compliance with minimal net decrease/increase in cost. This rule is not expected to either have a substantial economic impact or increase local and state funds. A fiscal note has not been prepared.

	Building Code Number	Section	Cost (-)	Cost (+)	Significant Code Change
1	407.4.4				Provides details for addressing care suites but does not affect construction cost.
2	412.4.7			Minimal	Minimal cost for the signage.
3	424			Minimal	Provides detail requirements for children's play structures when provided in buildings.
4	426			Minimal	Info from referenced standards that have been in place prior to this code edition.
	Table 504.3			Significant	Deletes the allowance for height increase for sprinklered Group I-1 if it is Condition 2. Condition 2 is a new category in this code.
5	Table 602 Footnote g		Minimal		Reduces cost for sprinklered buildings that are 20' or more from a property line.
6	602.4				No cost change but is significant allowance in the code for CLT.
7	704.2.2		Minimal		Allows the membrane to provide protection which reduces installation cost.
8	714.4.1.2		Minimal		Allows penetration to not meet the T-rating which will be slightly less expensive when applied.
9	714.4.2		Moderate		Savings based on quantity of units, but will save construction cost.
10	714.5.1		Minimal		Increases allowance for penetrations from 3 stories to 5 stories.

11	716.3	Removed wired glass allowance, but the industry has already listed wired glass. Does not affect construction cost.	
12	803.13.2.1	Most drop-ceilings are hung with metal wire anyway.	Minimal
13	909.20.6.1	Not very many will be installed as this is a design option.	Minimal
14	1005.7.1, exception 2.2 & 2.3	Allows minimal floor area savings and is a design option.	Minimal
15	TABLE 1006.2.1	Allows additional common path of travel for Groups R-3 and R-4 in mixed use or congregate living facilities which could reduce the quantity of exits required, but is a design option.	Minimal
16		Allows a 125 travel distance with the trade-off of having an emergency escape and rescue window in bedrooms for up to 3 stories.	
17	TABLE 1006.3.2(1)	The quantity of apartments being constructed along with the likley savings of a stair should be a significant saving over a year.	Significant
18			
19	1008.2.1, exception 2	The allowance of self luminous strips will reduce the quantity of light fixtures, but it is a design option.	Minimal
20	1008.3.3	Not all buildings have the spaces that are required to have emergency powered lighting. Such lighting can be provided by battery back up fixtures.	Moderate

21	1009.4	Moderate	Accessible elevators are required in virtually all buildings 4 or more stories tall.
#REF!	1010.1.10, exception 4	Minimal	The quantity of pool gates requiring panic hardware and the relatively low cost of panic hardware does not warrant a major cost savings.
#REF!	1013.2	Minimal	Although required at hotels/motels these signs are relatively inexpensive and are only required at stairway doors.
#REF!	1013.6.3, exception 2	Minimal	Most Group I-2s already require a generator so the additional cost will be wiring only.
#REF!	1016.2	Significant	By allowing egress from corridors to pass through the elevator lobby significant floor space is saved. With the quantity of Group R-2 buildings being constructed this becomes a significant savings.
#REF!	1017.2.2	Minimal	This also eliminates the requirements for smoke and draft control doors at the elevator door which also saves money.
#REF!	TABLE 1029.12.2.1	Minimal	Allows larger F-1 and S-1 facilities to have a longer exit access travel distance which might allow less exit doors. Because this change allows for additional access aisle lengths for seats without backs fewer main aisles are required which allows for more occupants in the same building area.

4

#REF!	1104.3.1	Minimal	Increased the employee work area allowed to be constructed without an accessible common circulation path from 300 to 1,000sf. This change will save a minimal amount of floor space.
#REF!	1107.5.5.1	Minimal	Applies to prisons and large jails; so, the quantity if units affected are minimal. The quantity of sleeping units would have to be more than 33 before this requirement affects the quantity of accessible units provided.
#REF!	1110.2 thru 1110.4		Although this is a significant change to our code it is based on Federal DoJ guidelines that have been in place.
#REF!	1203.1	Minimal	Although the quantity of dwelling units being constructed and the tight Energy Code requirements will probably produce many if not all dwelling units in this category, most units are already mechanically ventilated.
#REF!	1203.3		This section is a design option and provides information on how to safely achieve that option.
#REF!	1204.1, exception 2	Moderate	The size of heating equipment is likely to be reduced in manufacturing plants, auto repair shops and storage facilities.
#REF!	1407.11.3 & 1407.11.4		No additional cost is involved. These sections are catching up with new industry standards and are design options.

#REF!

SECTION 1409

#REF!

1505.8, 1505.9, 1507.17 &  
1510.7

#REF!

#REF!

#REF!

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No additional cost is involved. Addresses a new material and is a design option.

No additional cost is involved as photovoltaic systems are a design option. Information related to these systems are industry standards.

Building Code Section Number	Cost (-)	Cost (+)	Significant Code Change
1604.3	minimum	minimum	Interior Partition included Delectionation limit
Fig 1609.3			Decrease of wind speed in the some eastern counties
1704.5		minimum	Clarification in reporting information
1705.4.1		minimum	Removed empirical design inspections
2109		minimum	Removed empirical design method for high wind zones
2603.7 and 2603.8		minimum	Interior finish in plenum
2902.3	minimum		Removed the requirements for parking decks
3004	minimum		Hostway venting
3006	minimum		Hostway opening protection
3007		minimum	fire service access elevator
3108		minimum	telecommunication and broadcast towers

## 2018 NC Existing Building Code - Fiscal Statement

Section Number	Cost (-)	Cost (+)	Significant Code Change
402.3	Minimal		For additions, section amended by NC to allow design gravity load to be increased by up to 10 percent before the structural element has to be strengthened or replaced.
403.3	Minimal		For alterations, section amended by NC to allow design gravity load to be increased by up to 10 percent before the structural element has to be strengthened or replaced.
807.4	Minimal		For alterations level 2, section amended by NC to allow design gravity load to be increased by up to 10 percent before the structural element has to be strengthened or replaced.
1103.2	Minimal		For additions, section amended by NC to allow design gravity load to be increased by up to 10 percent before the structural element has to be strengthened or replaced.
1401.2	Minimal		Permits I-2 occupancies to now be evaluated using the Performance Compliance method. This may allow for some existing buildings to be code compliant as an I-2 using this analysis that may have previously been required to meet more requirements for new construction.



Fire Code Section Number	Cost (-)	Cost (+)	Significant Code Change
105.6.4		Minimal	New optional permit.
105.7.5		Minimal	New construction permit, responder radio coverage.
105.7.9		Minimal	New construction permit, gates, turnstiles, barricades on fire apparatus access roads.
105.7.14		Minimal	New construction permit, smoke control systems.
105.7.15		Minimal	New construction permit, photovoltaic systems.
503.1.1	Moderate		Allows reduction on road requirements.
510		Significant	Requires responder radio coverage in new buildings that do not have adequate coverage.

903.2.2	Moderate	Allows for sprinkler protection in Group B Ambulatory Health Care occupancies, by fire area instead of floor area
903.2.8.2	Moderate	Allows R-4 Condition 1 to use 13D sprinkler system versus 13R
903.3.1.2.2	Moderate	Allows for removal of sprinkler head from bathrooms under 55 ft2 in all Group R occupancies.
905.3.6	Minimal	Requires standpipes to roof level on buildings with helipads/heliports
905.3.8	Minimal	Requires standpipes to roof level on buildings with landscaped or rooftop gardens.

907.2.3	Significant	Requires Emergency Voice Alarm Systems for Group E occupancies with over 100 occupants.
907.5.2.2.4	Significant	Requires captioning of stadium PA when occupancy exceeds 15,000.
907.5.2.3 Exception 4	Minimal	Allows removal of visual appliances in critical care units of I-2 Condition 2.
914.3.1.2	Very Significant	Only requires two separate water supplies for high rise over 420 feet, versus current language for all high rise.
914.8.2	Minimal	Requires sprinkler for occupied floor when over 35 feet.
5307	Minimal	CO2 detection system when installing tanks larger than 100 lb inside a building.

5704.2.9.7	Minimal	Removed requirement for flame arrestor on protected AST.
3101 (alt)	Moderate	Increased size of membrane structures before permits required.
3406.1(alt)	Minimal	Adds requirements for apparatus access at existing tire storage in excess of 150,000 cubic feet.

## 2018 NC Residential Code - Fiscal Statement

Section Number	Cost (-)	Cost (+)	Significant Code Change
R304.1	40% decrease per habitable room		Decrease in required minimum habitable room area.
R322.3.6	10% decrease per use		Section R322.3.6 exception would not require design, reducing fees and potential material costs.
R403.1.9		\$200/ft per use	The cost of shoring and design fees would increase costs for Section R403.1.9.