



TEMPORARY RULE-MAKING FINDINGS OF NEED

[Authority G.S. 150B-21.1]

OAH USE ONLY

VOLUME:

ISSUE:

1. Rule-Making Agency: NC Building Code Council
2. Rule citation & name: 2012 NC Mechanical Code Table 603.4, Duct Construction
3. Action: <input type="checkbox"/> Adoption <input checked="" type="checkbox"/> Amendment <input type="checkbox"/> Repeal
4. Was this an Emergency Rule: <input type="checkbox"/> Yes Effective date: <input checked="" type="checkbox"/> No
5. Provide dates for the following actions as applicable: a. Proposed Temporary Rule submitted to OAH: July 25, 2012 (also submitted 7/11/2012 for NC Register Issue 27:03) b. Proposed Temporary Rule published on the OAH website: August 1, 2012 (published in NC Register August 1, 2012) c. Public Hearing date: August 28, 2012 d. Comment Period: August 10 - 31, 2012 e. Notice pursuant to G.S. 150B-21.1(a3)(2): Notice provided via e-mail list July 25, 2012. f. Adoption by agency on: September 10, 2012 g. Proposed effective date of temporary rule [if other than effective date established by G.S. 150B- 21.1(b) and G.S. 150B-21.3]: October 1, 2012 h. Rule approved by RRC as a permanent rule:
6. Reason for Temporary Action. Attach a copy of any cited law, regulation, or document necessary for the review. <input checked="" type="checkbox"/> A serious and unforeseen threat to the public health, safety or welfare. <input type="checkbox"/> The effective date of a recent act of the General Assembly or of the U.S. Congress. Cite: Effective date: <input type="checkbox"/> A recent change in federal or state budgetary policy. Effective date of change: <input type="checkbox"/> A recent federal regulation. Cite: Effective date: <input type="checkbox"/> A recent court order. Cite order: <input type="checkbox"/> State Medical Facilities Plan. <input type="checkbox"/> Other:
Explain: To address a serious and unforeseen threat to the public welfare. (See Item 7 reasons also.) This proposal reduces the material thickness to match industry standards. This rule is anticipated to provide a decrease in material cost.

7. Why is adherence to notice and hearing requirements contrary to the public interest and the immediate adoption of the rule is required?

The proposed effective date for this rule is October 1, 2012. The permanent rule will follow in approximately 8-months with numerous mechanical permits issued in the interim. Delayed adoption of this rule may result in occupancy delays in a recovering economy.

Following the Temporary rule hearing, the BCC will likely schedule the Permanent rule hearing for its December 2012 meeting. Adoption will likely take place in March 2013 with RRC approval to follow in May 2013.

Why is it serious?

The material cost of the additional duct metal thickness will add to the cost of construction during the 8-months until Permanent Rule adoption. Those costs will be passed on to the public. The US seasonally adjusted annual value of construction was \$834,384,000,000 in July 2012 (NC approximately 5% - \$41,719,000,000). HVAC as the percent of total construction cost ranges from about 5% to 10% in the most affected buildings. Sheet metal material cost change ranges from 10% to 20% for the affected gages.

Why is it unforeseen?

The BCC Mechanical Ad Hoc Committee reviewed and recommended adoption of the 2009 IMC Duct Construction requirements for the 2012 NC Residential Code without recognizing that the duct thicknesses had been increased. The IMC has been subsequently further amended to reduce the thicknesses to the prior requirements.

8. Rule establishes or increases a fee? (See G.S. 12-3.1)

Yes
Agency submitted request for consultation on:
Consultation not required. Cite authority:

No

9. Rule-making Coordinator: Barry Gupton

Phone: 919-661-5880 x 232

E-Mail: barry.gupton@ncdoi.gov

Agency contact, if any: Barry Gupton

Phone: 919-661-5880 x 232

E-Mail: barry.gupton@ncdoi.gov

10. Signature of Agency Head*:

* If this function has been delegated (reassigned) pursuant to G.S. 143B-10(a), submit a copy of the delegation with this form.

Typed Name: Dan Tingen

Title: Chair, NC Building Code Council

RULES REVIEW COMMISSION USE ONLY

Action taken:

Submitted for RRC Review:

Date returned to agency:

**TABLE 603.4
 DUCT CONSTRUCTION MINIMUM SHEET METAL THICKNESS FOR SINGLE
 DWELLING UNITS**

DUCT SIZE	GALVANIZED		ALUMINUM
	Minimum thickness (in.)	Equivalent galvanized gage no.	Brown & Sharpe gage ALUMINUM MINIMUM THICKNESS (in.)
Round ducts and Enclosed rectangular ducts			
14 inches or less	<u>0.013</u> 0.0157	<u>30</u> 28	<u>26</u> 0.0175
Over 14" 16 and 18 inches	<u>0.016</u> 0.0187	<u>28</u> 26	<u>24</u> 0.018
20 inches and over	0.0236	24	0.023
Exposed rectangular ducts			
14 inches or less	<u>0.016</u> 0.0157	28	<u>24</u> 0.0175
Over 14 inches*	<u>0.019</u> 0.0187	26	<u>22</u> 0.018

For SI: 1 inch = 25.4 mm, 1-inch water gage = 249 Pa.

a. ~~For duct gages and reinforcement requirements at static pressure of ½ inch, 1 inch and 2 inch w.g., SMACNA HVAC Duct Construction Standards, Tables 2-1, 2-2, and 2-3, shall apply.~~

The effective date of this Temporary Rule is October 1, 2012.
 The Statutory authority for Rule-making is G. S. 143-136; 143-138.