

DEPARTMENT OF CODE ADMINISTRATION

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MOD # 2014 – 01

DATE: APRIL 1, 2014

TO: ALL CODE ADMINISTRATION STAFF AND CUSTOMERS

- **FROM:** JOHN CATLETT, DIRECTOR
- **SUBJECT:** BUILDING OFFICIAL'S MODIFICATION RESOLUTION 2009 VIRGINIA RESIDENTIAL CODE TABLE M1601.1.1(2)

Subject – Single Family Dwelling Minimum Galvanized Duct Wall Thickness

Applicable Code Section -2009 Virginia Residential Code (VRC), Table M1601.1.1(2)2015 International Residential Code, Table M1601.1.1(2)

This code modification resolution or "standing modification" addresses the eminent changes to the 2015 International Residential Code (IRC) Table M1601.1.1(2) for minimum sheet metal duct thicknesses applicable for single family dwelling units and allows applicants to apply the 2015 VRC Table M1601.1.1(2) provisions to current submitted projects without a separate code modification request and approval. Refer to the following excerpts below for reference.

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Excerpt from 2009 Virginia Residential Code

TABLE M1601.1.1(2) GAGES OF METAL DUCTS AND PLENUMS USED FOR HEATING OR COOLING					
	GALV	ALUMINUM Minimum Thickness (inches)			
DUCT SIZE	Minimum Thickness Equivalent Galvanize (inches) Sheet No.				
Round ducts and enclosed rectangular ducts					
14 inches or less	0.0157	28	0.0175		
16 and 18 inches	0.0187	26	0.018		
20 inches and over	0.0236	24	0.023		
Exposed rectangular ducts					
14 inches or	0.0157	28	0.0175		
Over 14 ^a inches	0.0187	26	0.018		
For SI: 1 inch = 25.4 mm. a. For duct gages and reinforcement requirements at stat 2-3 shall apply.	ic pressures of ¹ / ₂ inch, 1 inch and	2 inches w.g., SMACNA Duct Constr	uction Standard, Tables 2-1; 2-2 an		
2009 VIRGINIA RESIDENTIAL CODE			16-1		

Excerpt from ICC 2013 Proposed Changes to the International Mechanical/plumbing Code (<u>http://www.iccsafe.org/cs/codes/Documents/2012-2014Cycle/Proposed-B/07-IRC-M.pdf</u>)

Table M1601.1.1(2)						
Proponent: David Hall CFM, Georgetown Texas representing the ICC PMG Code Action Committee (dave.hall@georgetown.org)						
Delete table and substitute as follows:						
TABLE M1601.1.1(2)						
	GALV	ALUMINUM MINIMUM				
	Minimum thickness	THICKNESS (in.)				
DUCT SIZE	(in.)	gauge gage no.				
Round ducts and		<u> </u>				
enclosed rectangular						
ducts						
-14 inches or less	0.0157	-28	0.0145			
16 and 18 inches	0.0187	26	0.018			
20 inches and over	0.0236	2 4	0.023			
Exposed rectangular						
ducts						
-14 inches or less	0.0157	-28	0.0145			
-Over 14 ^ª inches	0.0187	-26	0.018			
For SI: 1 inch = 25.4 mm, 1 inch water gage = 249 Pa.						

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This proposed change seeks to return to the requirements of 2006 and previous IRC editions which have accognized 30 gauge sheet metal as being appropriate for round ducts 14 inches or less diameter in "Single I The changes to M1601.1.1(2) in the 2009 IRC (and carried forward to the 2012 IRC):	accordance with S ason: This revised to ward to the 2012 IRC This proposed cha cognized 30 gauge sh The changes to M	MACNA HVAC Duct Construct ble was approved for the 2019) unnecessarily increased the rge seeks to return to the requ eet metal as being appropriate 601.1.1(2) in the 2009 IRC (a	tion Standards Metal and Fil 5 IMC. The change that was material thickness required uirements of 2006 and previous e for round ducts 14 inches of nd carried forward to the 20	lexible. s previously made in the 20 for round sheet metal duct ious IRC editions which hav or less diameter in "Single I 112 IRC):	09 IRC (and carrie s. re historically Dwelling Units".	
Increased cost for round sheet metal ducts Did not improve safety Did not improve energy performance Immact: This code change proposal will not increase the cost of construction		or round sheet metal ducts				
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Excerpt from ICC Code Development Cycle, 2013 Final Action on Prpopsed Code Changes Group B- (<u>http://www.iccsafe.org/cs/codes/Documents/2012-2014Cycle/2013FAA/results/Summary-</u> <u>FinalActionGroupB.pdf</u>)

ICC CODE DEVELOPMENT CYCLE 2013 FINAL ACTION ON PROPOSED CODE CHANGES GROUP B ATLANTIC CITY, NJ OCTOBER 2-10, 2013						
	October 18, 2013					
The following is a comprehensive list of final actions on the 2013 Proposed Changes to the ICC International Codes [®] considered at the Final Action Hearings in Atlantic City, NJ, October 2-10, 2013. Approved changes from the 2013 Code Change Cycle will be published in the 2015 Editions of the International Codes. LEGEND: AS Approved as Submitted D Disapproved AM Approved as Modified by the Code Committee AMPC Approved as Modified by a Public Comment WP Withdrawn by Proponent NU Number Not Used						
CODE CHA	CODE CHANGE CODE CHANGE CODE CHANGE CODE CHANGE COMMITTEE/ NUMBER ASSEMBLY ACTION NUMBER ASSEMBLY ACTION NUMBER ASSEMBLY ACTION					
RB418-13 RB419-13 RB420-13		AS D	RB473-13 RB474-13 RB475-13	AS WP AM	RM47-13 RM48-13 RM49-13	AS AS WP

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