GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

CODE AMENDMENT FORM

ITEM NO: _____ (DCA USE ONLY) PAGE _____ OF _____

CODE: IFGC SECTION: 404.15 (G2415.15)

PROPONENT: Windell Peters DATE: 12/13/2024

EMAIL: wfpcodes@yahoo.com

ADDRESS: 289 Midway Rd. Williamson, Ga. 30292

TELEPHONE NUMBER: (770)-468-3804 FAX NUMBER: ( ) -

CHECK ONE: _____ Revise section to read as follows: _____ Add new section to read as follows:

_____ Delete section and substitute the following: _____ Delete without substitution:

~~LINE THROUGH MATERIAL TO BE DELETED:~~ UNDERLINE MATERIAL TO BE ADDED

Approve Approve as amended (DCA STAFF ONLY) Disapprove Withdrawn

---

DESCRIPTION:

404.15 (G2415.15) Outlet closures. Gas outlets that do not connect to appliances shall be capped gas tight **and protected from damage.**

REASON/INTENT:

Existing section 409.1.3 (G2420.1.3) requires valves to be protected from Damage. For the most part no one is protecting the valves from damage. Protecting the valve from damage is extremely important and needs to be included in other sections to emphasize the mandatory requirement..

FINANCIAL IMPACT OF PROPOSED AMENDMENT: For those that have been complying with the code no additional cost will be incurred.

GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

CODE AMENDMENT FORM
INSTRUCTION SHEET

1. Do not complete the line entitled "Item No._____".

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6. Under the "Reason" section, provide the reasoning behind the proposed code amendment. The reason should be clear and concise. Test reports, standards or other supporting information and documentation may be submitted with the proposed amendment and must be attached to the amendment form.

7. **A Statement of Financial Impact must accompany all proposed code amendments.** The statement should be clear and concise. Test reports, standards or other supporting information and documentation may be submitted with the proposed amendment and must be attached to the amendment form.

8. **All proposed amendments must be typed and completed in full and the original submitted to the Codes and Industrialized Buildings Section of the Department of Community Affairs NO LATER THAN DECEMBER 15TH.** The proposed code change shall be submitted for review to the State Codes Advisory Committee at their quarterly meeting in January. An incomplete form will be sent back to the proponent for completion. An amendment submitted after the submittal deadline date will be returned to the proponent.

9. The proponent will be notified when the proposed amendment will be considered by the State Codes Advisory Committee.

10. Information concerning submittal of code amendments, including deadline dates for submittal, can be obtained by contacting the Codes and Industrialized Buildings Section at (404) 679-3118. All proposed code amendments should be submitted to:

The Department of Community Affairs
Codes and Industrialized Buildings Section
60 Executive Park South, NE
Atlanta, Georgia 30329-2231

GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

CODE AMENDMENT FORM

ITEM NO: _____ (DCA USE ONLY) PAGE _____ OF _____

CODE: IFGC SECTION: 409.1.3 (G2420.1.3)

PROPONENT: Windell Peters DATE: 12/13/2024

EMAIL: wfpcodes@yahoo.com

ADDRESS: 289 Midway Rd. Williamson, Ga. 30292

TELEPHONE NUMBER: (770)-468-3804 FAX NUMBER: ( ) -

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Approve Approve as amended (DCA STAFF ONLY) Disapprove Withdrawn

DESCRIPTION:

409.1.3 (G2420.1.3) Access to shutoff valves. Shutoff valves shall be located in places to provide access for operation and shall be installed so as to be protected from damage **and accidental activation.**

REASON/INTENT:

This section requires that the appliance valves shall be protected from damage. If properly protected from damage it will be protected from accidental activation.

FINANCIAL IMPACT OF PROPOSED AMENDMENT:

The provision to protect the valve from damage is a mandatory requirement of the code as written.

GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

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GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

CODE AMENDMENT FORM

ITEM NO: _____ **(DCA USE ONLY)** **PAGE** _____ **OF** _____

CODE: IFGC **SECTION:** 409.5.4 (G2420.5.4)

PROPONENT: Windell Peters **DATE:** 12/13/2024

EMAIL: wfpcodes@yahoo.com

ADDRESS: 289 Midway Rd. Williamson, Ga. 30292

TELEPHONE NUMBER: (770)-468-3804 **FAX NUMBER:** ( ) -

CHECK ONE: _____ **Revise section to read as follows:** _____ **Add new section to read as follows:**

_____ **Delete section and substitute the following:** _____ **Delete without substitution:**

~~**LINE THROUGH MATERIAL TO BE DELETED:**~~ **UNDERLINE MATERIAL TO BE ADDED**

Approve **Approve as amended** **(DCA STAFF ONLY)** **Disapprove** **Withdrawn**

DESCRIPTION: Add new Section 409.5.4 (G2420.5.4) as Georgia amendment to read as follows:

409.5.4 (G2420.5.4) Appliance valves. Shutoff valves located behind appliances such as range/ovens and clothes dryers shall be considered accessible and shall be protected from damage and accidental activation. Valves located behind clothes dryers shall be at least 15 inches above finish floor. Recessed in the wall or protected with a physical barrier.

REASON/INTENT:
Failure to protect appliance valves from damage as currently required by Section 409.1.3 has resulted in several catastrophe explosions in the last 5 years.

FINANCIAL IMPACT OF PROPOSED AMENDMENT: The requirement to protect the valve from damage is a mandatory provision in the code as written.

GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

CODE AMENDMENT FORM
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GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

CODE AMENDMENT FORM

ITEM NO: _____ (DCA USE ONLY) PAGE 1 OF 4

CODE: 2024 International Fuel Gas Code SECTION: 502.1

PROPONENT: Isaac Favata DATE: 2/20/2025

EMAIL: ifavata@centrotherm.us.com

ADDRESS: 428 Hudson River Rd, Waterford, NY 12188

TELEPHONE NUMBER: (786)537-5152 FAX NUMBER: ( ) -

CHECK ONE:
☒ Revise section to read as follows:
☐ Add new section to read as follows:
☐ Delete section and substitute the following:
☐ Delete without substitution:

~~LINE THROUGH MATERIAL TO BE DELETED:~~ UNDERLINE MATERIAL TO BE ADDED

☐ Approve ☐ Approve as amended (DCA STAFF ONLY) ☐ Disapprove ☐ Withdrawn

DESCRIPTION:
Vents, except as provided in Section 503.7, shall be *listed* and *labeled*. Type B and BW vents shall be tested in accordance with UL 441. Type L vents shall be tested in accordance with UL 641. Vents for Category II, ~~and~~ III, and IV appliances shall be tested in accordance with UL 1738. ~~Plastic vents for Category IV appliances shall not be required to be *listed* and *labeled* where such vents are as specified by the *appliance* manufacturer and are installed in accordance with the *appliance* manufacturer's instructions.~~

REASON/INTENT:
The standard practice of using ASTM D1785 listed PVC in venting applications for Category IV appliances is unsafe. Currently, the code leaves the decision to do so up to the appliance manufacturers, but there is an oversight in that the ASTM D1785 standard explicitly states that it is not to be used in combustion gas venting. The standard goes further and refers to the UL 1738 standard as the gas venting standard in the United States. Misapplication of standard and material results in venting failures which can have fatal consequences.

FINANCIAL IMPACT OF PROPOSED AMENDMENT:
The total cost of construction will not be impacted and can possibly result in net savings. Submitted with this form is a cost analysis regarding this.

Statewide Installation Data				
	Installations	Percentages	New Construction	Replacement
Condensing Boilers	128	0.12%	38	90
Condensing Tankless	23,071	20.76%	6,921	16,150
Storage WH	31,918	28.72%	9,575	22,342
Condensing Furnaces	56,019	50.41%	16,806	39,213
Total	**111,136**	**100.00%**	33,341	77,795
Total Vent Rep.	**83,352**			

Assumption Values		
Labor Rate ($/hr)	% Tanked Affected	
$175.00	30.00%	
% New Construction	% Replacement	% Vent Rep. of Rep.
50.00%	50.00%	50.00%

This data is derived from state level reporting in the year 2023. All of the condensing applications were added up to produce the total number of applications where a code consideration would need to be made. One assumption that had to be made was what portion of storage water heaters were going to be affected, which was put at 30%, based on national industry averages accounted for by Centrotherm Eco Systems, LLC (a manufacturer) and Harry Warren of Georgia, LLC (a manufacturer's representative).

The other assumption was that to determine how many of these installations would involve the replacement of the vent system. From speaking to industry experts within the state (citied a manufacturer's representative Harry Warren of Georgia, LLC) and based on national averages, it was determined that these values can be estimated around 50% new construction and 50% replacement. The replacement number was then pared down by 50%, based on the industry experience of vent manufacturer Centrotherm Eco Systems, LLC in conjunction with national averages, as equipment replacements involve vent replacements at a rate of about 50%. These assumptions produced a final number of **83,352** installations affected by code change.

Cost Data by Type of Job & Weighted Average Costs Based on Prevalence				
Configuration	Job Prevalence (%)	Material Cost (PP)	Material Cost (PVC)	Delta
"Up and Out"	70%	$183.21	$130.76	$52.45
"Attic"	20%	$127.07	$82.74	$44.33
"Central Furnace"	10%	$311.98	$187.90	$124.08
Weighted Average		**$184.86**	**$126.87**	**$57.99**

This data involves deriving the average material cost of a vent installation in the state. The three overwhelmingly most common installation configurations were considered, those being an "Up and Out", "Attic", and "Central Furnace", which reflect a short venting run coming off of an appliance and going directly out the wall, an appliance in an attic space where the vent goes up and penetrates the roof, and an appliance towards the center of a house with a longer horizontal venting run penetrating the wall, respectively. The prevalences of each configuration were determined from talking to a range of industry experts in the state, including manufacturer's representatives, wholesalers, and contractors. One of the representatives that corroborated this data in market was Harry Warren of Georgia, LLC, who also surveyed distributors that they work with.

The material costs of a UL-1738 listed product, PP, were calculated by an engineer who designed a standard system for each configuration, which produced a bill of materials (BOM). A typical wholesale price was applied to these BOMs, and a weighted average considering these costs and configuration prevalences was calculated, with an average material cost of PP being **$184.86**. The costs of the unlisted PVC option was calculated by matching the PP BOMs with equivalent PVC parts sourced from local wholesalers, in this case a Home Depot located in the Atlanta metro area. The weighted average calculated in this case was **$126.87**, providing a delta of **$57.99** between the two material costs.

Time Data by Type of Job & Weighted Averages		
	Hours to Install (PP)	Hours to Install (PVC)
"Up and Out"	0.166	0.5
"Attic"	0.166	0.5
"Central Furnace"	1	1.75
Weighted Average	**0.2494**	**0.625**

Average time of installation, to account for labor costs, was also considered. The same breakdown of installation configurations were used as in material costs to calculate the weighted time averages. The installation times were determined by speaking with installers, plumbing and HVAC contractors, who have experience working with both materials. One of the principal contractors who has extensive experience with both PVC and listed PP who can be cited for this data is John Sadler Plumbing & Heating. the calculated weighted average was **0.2494** hours for UL listed PP and **0.625** hours for unlisted PVC.

Total Material & Labor Costs		
	Material Cost	Labor Cost
PP	$15,408,500.42	$3,637,887.73
PVC	$10,574,838.28	$9,116,599.17
Delta	**$4,833,662.14**	**-$5,478,711.44**

Based on the previously calculated information, the total material and labor costs for the state could be calculated. Material costs were calculated by multiplying the total number of affected installations by the weighted average cost of an installation in the state, per material. The calculated material cost impact was an increase of **$4,833,662.14** going from unlisted PVC to a UL listed product.

Labor costs were calculated by applying an assumed average labor rate of $175.00 per hour. This rate was derived from speaking with local contractors, sales representatives, and wholesalers on typical rates charged in the state. The representative organization, based out of Doraville, GA, which corroborated these exact figures is Harry Warren of Georgia, LLC. There was a provided range of $125.00 to $250.00 per hour for smaller residential contractors, so a middle rate of $175.00 was selected. This rate was then multiplied by the weighted average times to install and the number of installations in the state to produce the average labor costs. The calculated labor cost impact reflects a savings of **$5,478,711.44** going from unlisted PVC to a UL listed product.

Total Cost of Construction Impact			
Sensitivity	**0%**	**-10%**	**10%**
Total Diff	**-$645,049.30**	-$580,544.37	-$709,554.23
Delta/Job	**-$7.74**	-$6.96	-$8.51
Delta/Person	**-$0.06**	-$0.05	-$0.06

The final total cost of construction impact reflects an annual savings of **$645,049.30**. This can be reinterpreted also as a savings of **$7.74** per installation or **$0.06** per person in the state, using population data of 11.03MM people. Also included are some sensitivity considerations assuming 10% error in either the positive or negative direction.

GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

CODE AMENDMENT FORM

ITEM NO: _____ (DCA USE ONLY) PAGE 1 OF 4

CODE: 2024 International Fuel Gas Code SECTION: 503.4.1

PROPONENT: Isaac Favata DATE: 2/20/2025

EMAIL: ifavata@centrotherm.us.com

ADDRESS: 428 Hudson River Rd, Waterford, NY 12188

TELEPHONE NUMBER: (786)537-5152 FAX NUMBER: ( ) -

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DESCRIPTION:
Where plastic *piping* is used to vent an *appliance,* the *appliance* shall be *listed* for use with such venting materials and the *appliance* manufacturer's installation instructions shall identify the specific plastic *piping* material. The plastic pipe venting materials shall be *labeled* in accordance with the product standards specified by the *appliance* manufacturer ~~or~~and shall be *listed* and *labeled* in accordance with UL 1738.

REASON/INTENT:
The standard practice of using ASTM D1785 listed PVC in venting applications for Category IV appliances is unsafe. Currently, the code leaves the decision to do so up to the appliance manufacturers, but there is an oversight in that the ASTM D1785 standard explicitly states that it is not to be used in combustion gas venting. The standard goes further and refers to the UL 1738 standard as the gas venting standard in the United States. Misapplication of standard and material results in venting failures which can have fatal consequences.

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FACT SHEET

SELECTION OF PLASTIC VENT MATERIALS REV. 12-16-19

American Gas Association

This fact sheet provides an overview of the requirements for the selection of plastic vent materials based on ANSI Z223.1/NFPA 54, National Fuel Gas Code - 2018 (NFGC). The vent requirements in previous code editions, in local jurisdictions, or in specific situations, may differ.

The fact sheet is not intended to replace knowledge of applicable local and national codes or address specific situations. The user should consult a competent professional and be thoroughly familiar with all applicable local codes, and the specific manufacturer's installation instructions.

NFGC REQUIREMENTS[1]

The NFGC allows the use of plastic vent materials for specific appliance types. The relevant requirements in the 2018 NFGC are contained in Section 12.5 as follows:

12.5 Type of Venting System to Be Used.

12.5.1 The type of venting system to be used shall be in accordance with Table 12.5.1.

Table 12.5.1 Type of Venting System to Be Used.

Appliances	Type of Venting System	Location of Requirements
Category II, Category III, and Category IV appliances	Specified or furnished by manufacturers of listed appliances	12.5.2, 12.5.4

12.5.2 Plastic Piping. Where plastic piping is used to vent an appliance, the appliance shall be listed for use with such venting materials and the appliance manufacturer's installation instructions shall identify the specific plastic piping material. The plastic pipe venting materials shall be labeled in accordance with the product standards specified by the appliance manufacturer or shall be listed and labeled in accordance with ANSI/UL 1738, *Venting Systems for Gas-Burning Appliances, Categories II, III, and IV.*

12.5.3 Plastic Vent Joints. Plastic pipe and fittings used to vent appliances shall be installed in accordance with the appliance manufacturer's installation instructions. Plastic pipe venting materials listed and labeled in accordance with ANSI/UL 1738, *Venting Systems for Gas-Burning Appliances, Categories II, III, and IV,* shall be installed in accordance with the vent manufacturer's installation instructions. Where primer is required, it shall be of a contrasting color.

12.5.4 Special Gas Vent. Special gas vent shall be listed and and labeled in accordance with ANSI/UL 1738, *Venting Systems for Gas-Burning Appliances, Categories II, III, and IV,* and installed in accordance with the special gas vent manufacturer's installation instructions.

[1] The 2018 Edition of the International Fuel Gas Code contain extracts of the same venting requirements.

USE OF PLASTIC VENTS

Plastic venting systems are commonly used with condensing boilers, furnaces, tankless water heaters, and mechanically vented tanked water heaters. These appliances are listed as Category II, III, and IV appliances. The NFGC allows the use of plastic piping and special vent as the vent where the appliance is listed for use with the plastic piping or special vent and it is installed in accordance with the listed appliance manufacturer installation instructions. Some listed special vents can also be made of plastic materials. The appliance instructions will include the allowed type of plastic pipe material or special vent and will specify the specific standards for that pipe or special vent. The instructions will also contain sizing criteria and provide vent system construction requirements for plastic pipe. Where a plastic special vent is specified by the appliance manufacturer, the vent manufacturers installation instructions must be followed.

The NFGC requires that the selected plastic pipe and fittings be either labeled in accordance with the appropriate ASTM standard, or where the manufacturer specifies a UL 1738 plastic venting system, the venting system must be listed and labeled in accordance with UL 1738. The labeling requirement is designed for inspection purposes to help ensure that the correct plastic pipe material or plastic venting system has been installed.

The plastic pipe or special vent are specified by the appliance manufacturer to ensure that the pipe or vent can perform under the appliance's vent temperature and pressure conditions. To pass the appliance certifying standard the appliance manufacture is required to have the appliance and the pipe or vent tested together. The listed appliance's installation instructions are required to provide a list of the vent materials that have been certified for use with the appliance.

THE USE OF PVC, CPVC, and ABS

Many appliance manufacturers permit the use of PVC (Poly-Vinyl Chloride), CPVC (Chlorinated Poly-Vinyl Chloride) and ABS (Acrylonitrile-Butadiene-Styrene) plastic pipe, depending on the appliance's designed exhaust gas temperature. The appropriate service temperatures for these plastics are: PVC – 150° F; CPVC – 190° F; and ABS – 180° F.

While PVC, CPVC, and ABS are not listed as vent materials, their use in vent systems has been proven to be acceptable and durable. All plastics that are to be specified for use with the appliance being certified are tested with the appliance in accordance with the appropriate ANSI appliance standards.

Common pipe standards specified for these plastics include[2]:

PVC:

ASTM D2241 – SDR Series

ASTM D1785 – Schedule 40

ASTM D2665 – DWV

CPVC:

ASTM F441 – Schedule 40

ASTM F442 – SDR Series

ABS:

ASTM D1527 – Schedule 40

ASTM D2661 – Schedule 40 DWV

The pipe material standards specify the fittings and the pipe cement to be used. Vent systems are constructed using one of the specified pipe, matching fittings, and the appropriate cement.

UL 1738 PLASTIC VENTS

UL 1738 is a complete venting system standard containing requirements that cover venting systems intended for venting Category II, III, or IV gas-burning appliances. UL 1738 specifically addresses the construction requirements, test performance criteria, marking requirements, and installation and maintenance instructions of the vent system. Vent systems listed to UL 1738 can be plastic or metallic, flexible or rigid, and can be single wall or concentric vent systems.

For use in U.S. installations, a UL 1738 vent system may be used only where the appliance manufacturer's installation instructions allow the use of such a vent system. For Canadian installations, a UL 1738 listed vent system must be used. For both countries, the appliance instructions will specify the type of system (plastic, metal, flexible, rigid, etc.)

Polypropylene is a common plastic material used in plastic vent systems listed to UL 1738. The maximum heat service temperature of polypropylene is appropriately 230° F for gas-fired appliances. The listed vent system includes all pipe, fittings, and connecting means. The NFGC requires that where UL 1738 vent systems are installed that they be labeled and installed in accordance with the vent manufacturer's installation instructions.

[2] The list of standards is not meant to be exhaustive and other plastic pipe standards may be allowed in a manufacturer's installation instructions.

Committee Input No. 70-NFPA 54-2015 [Section No. 12.5]

This was a First Revision that failed ballot.

12.5 Type of Venting System to Be Used.

12.5.1

The type of venting system to be used shall be in accordance with Table 12.5.1.

Table 12.5.1 Type of Venting System to Be Used

Appliances	Type of Venting System	Location of Requirements	
Listed Category I appliances	Type B gas vent	12.7	
Listed appliances equipped with draft hood	Chimney	12.6	
Appliances listed for use with Type B gas vent	Single-wall metal pipe	12.8	
	Listed chimney lining system for gas venting	12.6.1.3	
	Special gas vent listed for these appliances	12.5.4	
Listed vented wall furnaces	Type B-W gas vent	12.7, 10.27	
Category II ~~appliances Category~~ , III, and IV appliances ~~Category IV appliances~~	~~As specified or furnished by manufacturers of listed appliances~~	-	12.5.2, 12.5.4
Incinerators	-	In accordance with NFPA 82	
Appliances that can be converted to use solid fuel	Chimney	12.6	
Unlisted combination gas- and oil-burning appliances		-	
Combination gas- and solid fuel–burning appliances		-	
Appliances listed for use with chimneys only		-	
Unlisted appliances		-	
Listed combination gas- and oil-burning appliances	Type L vent	12.7	
	Chimney	12.6	
Decorative appliance in vented fireplace	Chimney	10.6.2	
Gas-fired toilets	Single-wall metal pipe	12.8, 10.25.3	
Direct vent appliances	-	12.3.5, 12.5.2	
Appliances with integral vents	-	12.3.6	

12.5.2 Plastic Piping.

Where plastic piping is used to vent an appliance~~, the~~

(1) Such piping shall be listed and labeled in accordance with UL 1738.

(2) The piping shall be installed in accordance with the piping manufacturer's instructions and the conditions of its listing.

(3) The appliance shall be listed for use with such venting materials~~ and the~~ .

(4) The appliance manufacturer's installation instructions shall identify the specific type of plastic piping material to be used .

12.5.3 ~~Plastic Vent~~ Solvent Cemented Joints.

~~Plastic pipe and fittings used to vent appliances shall be installed in accordance with the appliance manufacturer's installation instructions. Where~~ Where a primer is required ~~, it~~ for solvent cemented joints, the primer shall be of a contrasting color.

12.5.4 Special Gas Vents.

Special gas vents shall be listed and labeled in accordance with UL 1738 and installed in accordance with the special gas vent manufacturer's installation instructions.

Submitter Information Verification

Submitter Full Name: Laura Montville
Organization: [Not Specified]
Street Address:
City:
State:
Zip:
Submittal Date: Wed Oct 14 16:52:13 EDT 2015

Committee Statement and Meeting Notes

Committee Statement: The code is revised to require all venting products to be listed. The thorough evaluation required by UL 1738 will ensure that the products used as venting materials are intended by the manufacturers for that purpose.

Response Message:

Committee Notes:

Date	Submitted By	
Oct 30, 2015	Laura Montville	Revisions to "category II, III and IV" row, and to "direct-vent appliances" row. Revisions to sections underneath table as well.

Public Input No. 82-NFPA 54-2015 [Section No. 12.5.4]

Public Input No. 135-NFPA 54-2015 [Section No. 12.5.2]

Ballot Results

✖ **This item has failed ballot**

26 Eligible Voters
1 Not Returned
10 Negative with Comments
15 Affirmative All
0 Affirmative with Comments

0 Abstention

Not Returned

Fossa, Alberto Jose

Negative with Comment

Berning, David

The revision would require all plastic materials used to vent Category II, III, and IV appliances to meet UL 1738. This change would place the code in direct conflict with several ANSI safety standards for gas appliances, such as for water heaters (ANSI Z21.10.1 and Z21.10.3), boilers (ANSI Z21.13), and central furnaces (ANSI Z21.47). These standards for years have allowed for the use of PVC and CPVC materials for use in venting condensing gas appliances, when certain testing and performance conditions are met. This ensures that the safe performance of such materials is met when certifying a specific appliance design for use with plastic materials. In addition, the water heater and boiler standards have updated their coverage to prohibit the use of cellular core PVC and CPVC. This code proposal would not only require manufacturers of certified appliances to search for UL 1738 listed plastic venting systems, but it would place in doubt those plastic venting systems that have been certified as part of a listed appliance with proven safe performance in the field for many years. It is not known if any PVC or CPVC plastic venting systems exist on the market that are listed to UL 1738. Testing a plastic venting system separate from the appliance does not ensure that the vent system will be appropriate for a specific appliance. The UL 1738 standard makes assumptions about the volume and flow of flue gas for the test that in some cases are lower than the actual appliance would produce. The amount of volume and velocity of flue gas will impact the vent pipe wall temperatures that the vent standard does not replicate for a specific appliance design. There have been efforts made in the past to correlate the vent standard performance test to that of the appliance standard tests for plastic venting systems but this work has not resulted in adequate coverage for the venting standard. Until this is demonstrated and proven to be at least equal to the appliance standards' coverage it would be premature to require such a change to the NFGC.

Coates, Sharon E.

The proposal would require a retrofit of all venting systems currently in use and compliance with codes as installed and this proposal would create an unnecessary hardship to retro-fit all systems and maybe not be the safest solution. I feel sufficient evidence to require this change was not present.

Corcoran, Shannon M.

The revision would require all plastic piping used to vent Category II, III, and IV appliances to meet the UL 1738. PVC venting materials are currently permitted by the NFGC and the applicable appliance standards. The appliance is tested and certified with the venting systems. The proposed revision to require all plastic venting systems to be listed to UL 1783 would create a conflict between the code and appliance standards and manufacturer's instructions. The public input did not provide evidence that a widespread safety issue exists. Nor was any evidence provided that documents a deficiency in the ANSI appliance standards, which require the plastic pipe chosen by the appliance manufacture be tested and listed for use with that appliance.

Davis, Gerald G.

This revision would cause a conflict with the current appliance listing for condensing furnaces. The appliance listing allows PVC piping to be used to vent the equipment.

Deegan, Mike

Specifically reviewing the proposal requirement that the use of PVC for venting of category II, III and IV appliances be listed to the UL 1738 standard. Currently the manufacturers of these condensing appliances allow the use of PVC for the venting of these appliances. This requirement would conflict the manufacturer's design and installation instructions. Additionally no substantiation has been provided that a deficiency exists in the current ANSI standards which require the plastic pipe chosen by the appliance manufacture be tested and listed for use with that appliance.

Gorham, Mike

The public input did not establish that any significant safety problem exists. Appliance manufacturers have recommended non-listed PVC for years and are apparently content to continue to do so. This is a non-problem.

Lemoff, Theodore C.

1. The committee statement that the revision will require all venting products to be listed is not correct. Single Wall Metal Pipe is not required to be listed. 2. The format of Table 12.5.1 is changed by deleting "As specified or furnished

by manufacturers of listed appliances" with no replacement. A statement should be provided to guide the user, rather than have this table serve as an index. 3. No substantiation is provided by the committee to support the new requirement that plastic gas vents be listed. These product have been in use for at least 20 years. If failures have occurred they should have been reported to the committee. In PI 135 the substantiation points to the advantages of listing plastic venting products to UL 1738, but does not provide any reason that the existing products are not adequate, rather it states that the testing in UL 1738 is more thorough than the current ASTM standards. If listing of plastic vent products is to be made mandatory, it should be based on technical substantiation that unlisted products are not working, not that one standard is better than another.

Osterhaus, James T.

Agree with the comments made by those voting in the initial ballot against the proposed revision.

Papageorge, Andrea Lanier

The proposed amendments would require that plastic pipe meet UL 1738 when used to vent category II, III, and IV appliances. PVC, which is currently permitted for use by manufacturers for venting of condensing appliances, is not listed by UL 1738. There was not sufficient evidence presented to require this change.

Swim, Peter C.

The proposed revision would create a conflict between the code and appliance standards and manufacturer’s instructions. The public input did not indicate that a safety issue exists.

Affirmative All

Aguilar, Hugo

Antonov, Dmitry

Brania, Jonathan

Brewer, James P.

Crane, Thomas R.

Edgar, Glen A.

Feehan, Pennie L.

Gress, Gregg A.

Hagensen, Steen

Himes, Patricio J.

Holmes, Peter T.

Kulik, Marek

Mortimer, Frank J.

Ribbs, Phillip H.

Switzer, Jr., Franklin R.

Editorial Comment

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