# GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

## **CODE AMENDMENT FORM**

ITEM NO:	(DCA USE	ONLY)	PAGE OF			
CODE: IFGC		_	SECTION:	503		
PROPONENT:	Larry Gill		DATE:	January 3,	2019	
EMAIL: L	arry.gill@ipexna.com					
ADDRESS: 14	425 North Service Road E, Unit	3, Oakville, Ontario	o Canada			
TELEPHONE N	UMBER: <u>1800-463-9572</u>		FAX N	UMBER:	Prefer emai	.1
CHECK <u>x</u> ONE:	Revise section to read as follows: Delete section and substitute the follo			w section to re without substit	ad as follows: aution:	
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Approve	Approve as amended	(DCA STAFF ONL	Y) Dis	approve	Withdra	wn
<b>DESCRIPTION:</b>						

Proposed changes to the plastic venting section of the Code.

### 503.4.1 Plastic Piping

Plastic *piping* used for venting appliances *listed* for use with such venting materials shall be *approved*.

### 503.4.1.1 Plastic Vent Joints

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

### 503.4.2 Special Gas Vent

Special gas vent shall be *listed* and installed in accordance with the special gas vent manufacturer's installation instructions.

503.4.1 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 manufacturers' installation instructions shall identify the specific plastic piping material. The plastic pipe venting system shall be listed and labeled in accordance with ANSI/UL 1738, Venting Systems for Gas Burning Appliances, Categories II, III, and IV.

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

503.4.3 Special Gas Vents. Special gas vents shall be listed and labelled in accordance ANSI/UL 1738, Venting Systems for Gas Burning Appliances, Categories II, III, and IV and installed in accordance with the special gas vent manufacturers' installation instructions.

#### **REASON/INTENT:**

The 2018 IFGC includes a reference to UL 1738 for venting materials as well as a reference for appliance manufacturers to specify ASTM and CSA plumbing products for this application. The proposal is intended to mandate UL 1738 as the only option for a certified vent system. UL 1738 is a standard specific for flue gas venting and contains numerous tests for products used in a venting application. The CSA and ASTM plumbing standards do not contain any provisions for flue gas venting. In fact these ASTM and CSA standards warn against using these plumbing products in a flue gas vent application. An information package on UL 1738 as well as IPEX System 1738 Installation instructions are attached to and form part of this Amendment Form. FINANCIAL IMPACT OF PROPOSED AMENDMENT:

The proposed change will increase the safety of a flue gas vent system by mandating a certified product for the application. It is expected that this may increase the cost of a vent system from the current products. The overall cost increase of a heating system installation including furnace and venting will be negligible. For example the average slab below grade vent installation for a condensing tankless water heater would use approximately 20 feet of 2" vent pipe. If the cost for 2" DWV PVC was assumed to be \$0.50/ft. and this cost was doubled as the result of using certified vent, the overall pipe cost would increase from \$10 to \$20. The cost implications is negligible in comparison to the overall cost of the heating appliance.

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CODE: IFGC		SECTION:	503	
PROPONENT:	Larry Gill	DATE:	January 3	, 2019
EMAIL: La	arry.gill@ipexna.com			
ADDRESS: 14	25 North Service Road E, Unit 3, Oakville,	Ontario Canada		
TELEPHONE N	JMBER: 1800-463-9572	FAX N	UMBER:	Prefer email
CHECK ONE:	Revise section to read as follows: Delete section and substitute the following:		w section to r without substi	ead as follows: itution:
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Approve	Approve as amended (DCA STA)	FF ONLY) Dis	approve	Withdrawn
DESCRIPTION:				
Add to Section 10	01.2 Scope			

<u>101.2.3 Personnel Training</u>. Personnel performing installation, operation, and maintenance work shall be properly trained in such functions, and the training shall be documented,

**REASON/INTENT:** 

Requirements for training of personnel for installation of life safety systems is common in many Codes. Examples include ASME and the CSA B149 Gas Code. The training provides protection for building inhabitants and installers. Currently, the IFGC does not contain any requirements for personnel training or requirements for qualified agencies responsible for the personnel. This proposal is intended to introduce training requirements to the Code. This proposal is related to another proposal to mandate the use of a UL 1738 certified vent system. The UL 1738 standard mandates that vent manufacturers have installation instructions certified by the listing agency. This Code proposal, if approved, would mandate that training be provided to installation personnel. An information package on UL 1738 as well as IPEX System 1738 Installation instructions are attached to and form part of this Amendment Form.

There are recorded incidents of venting failures but the details of these failures are lacking. Potential causes include vent material or appliance failures as well as installation errors. This proposal is intended to remove some of the risk related to improper installation. In 2014, the Consumer Product Protection Association

reported 165 unintentional non-fire CO poisoning deaths; an increase of 11% from the average number of reported incidents between 2012–2014. Of these reported incidents, heating system fatalities represented the largest percentage at 39% or 65 deaths.

Informal undocumented training is currently being done for these systems. This proposal is intended to formalize this training to ensure proper installation for a system carrying carbon monoxide gas through a home.

#### FINANCIAL IMPACT OF PROPOSED AMENDMENT:

The proposed change will increase the safety of a flue gas vent system by mandating training. The cost of training will be the responsibility of the vent manufacturer. The trainees will be required to attend at their own cost. It is anticipated that training will be approximately 1 and ½ hours. The overall cost increase of a heating system installation including furnace and venting will be negligible.

# GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

## **CODE AMENDMENT FORM**

ITEM NO:	(DCA USE ONLY)		PAGE		1
CODE: IFGC		SECTION:	Standards	Referenced	
PROPONENT:	Jonathan Sargeant	DATE:	January 4	, 2019	
EMAIL: J	onathan.sargeant@omegaflex.com				
ADDRESS: 2	13 Court Street, Suite 1001, Middletown, CT 0	6457			
TELEPHONE N	IUMBER: (703) 946-5845	FAX N	UMBER:	(860) 704-6	5930
CHECK x	Revise section to read as follows:	Add ne	ew section to r	read as follows:	
ONE:	Delete section and substitute the following:	Delete	without subst	itution:	
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DESCRIPTION	: 	orrugated Stair	nless Steel '	Tubing (CSS	<b>(T</b> )

LC 1/CSA 6.26—201318: Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (CSST) 403.5.5

#### **REASON/INTENT:**

To update the product standard for CSST to make it consistent with the installation requirements of the 2018 IFGC and IRC.

FINANCIAL IMPACT OF PROPOSED AMENDMENT:
No impact. Standard Change only