

The 2015 IFGC What Are The Changes?



Industry Services Division
Dept. of Safety & Professional Services

- The following discussion addresses changes to various topics as contained in the 2015 IFGC & WI amendments as contained in SPS Chapter 365



Where does the IFGC apply?

- Gas piping up to and including the meter/regulator is addressed by the utility. From there, it is the owner's/contractors responsibility.
- If an LP tank is involved, then NFPA 58 is applicable from the tank to the regulator. Note that due to what could be a lengthy distribution line, high pressures may be required for proper distribution & multiple regulators may be required for pressure reduction purposes.

Where does the IFGC apply?

- The regulator closest to the building and all gas piping extending back to the tank would be tank installer's responsibility, while all piping after the closest regulator/meter would be the owner's/contractors.
 - Once in the building NFPA 54-2015 is applicable to the gas piping.

Electrical Bonding of Corrugated Stainless Steel Tubing (CSST)

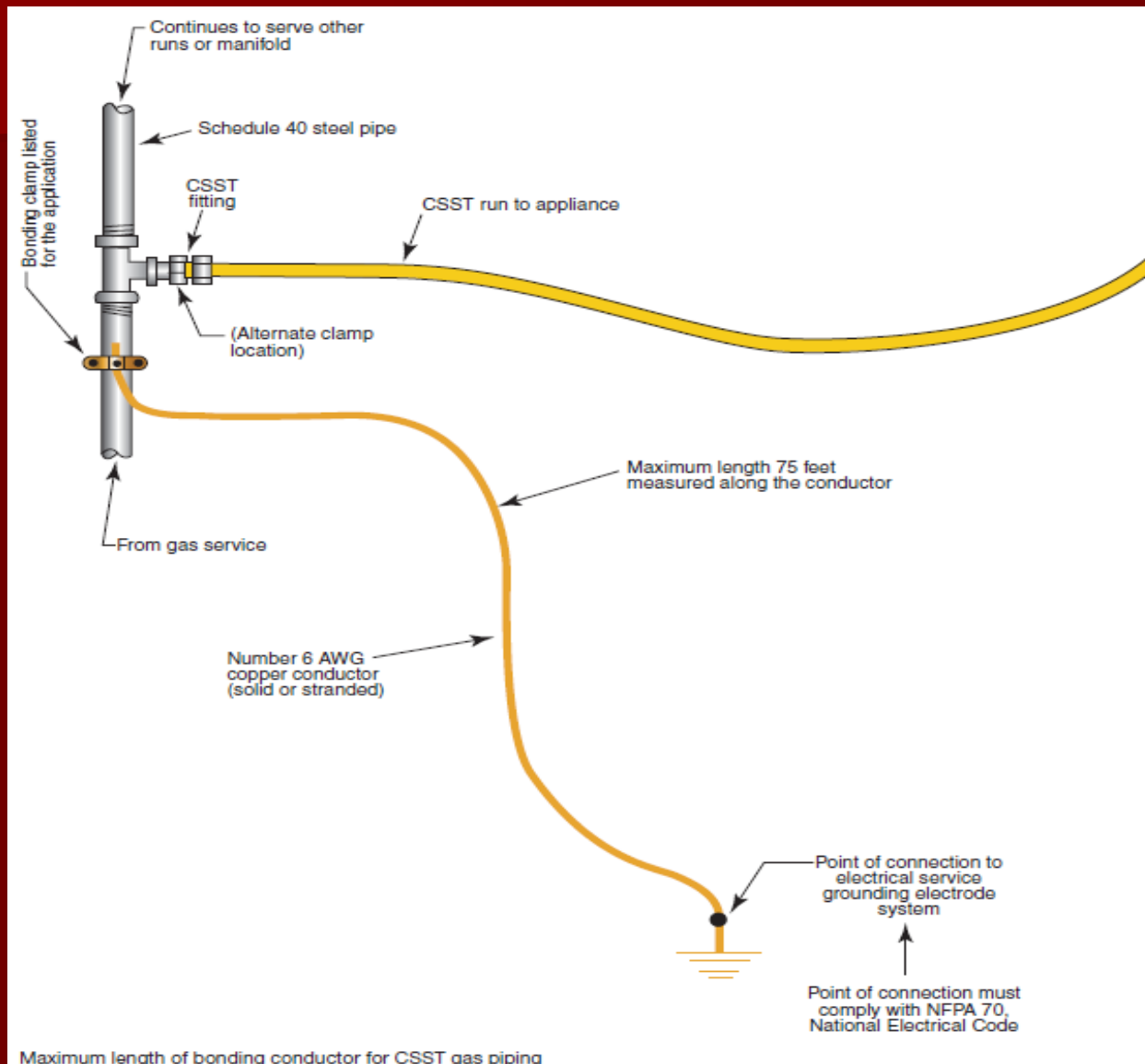
IFGC 310.1.1

- Maximum length of bonding jumper between the gas piping system and connection to grounding electrode system must be ≤ 75 ft
- Connections to be per SPS 316 & NEC
- Devices used for bonding connections to be listed w/UL 467.



Bonding of CSST gas piping

Electrical Bonding of Corrugated Stainless Steel Tubing IFGC 310.1.1



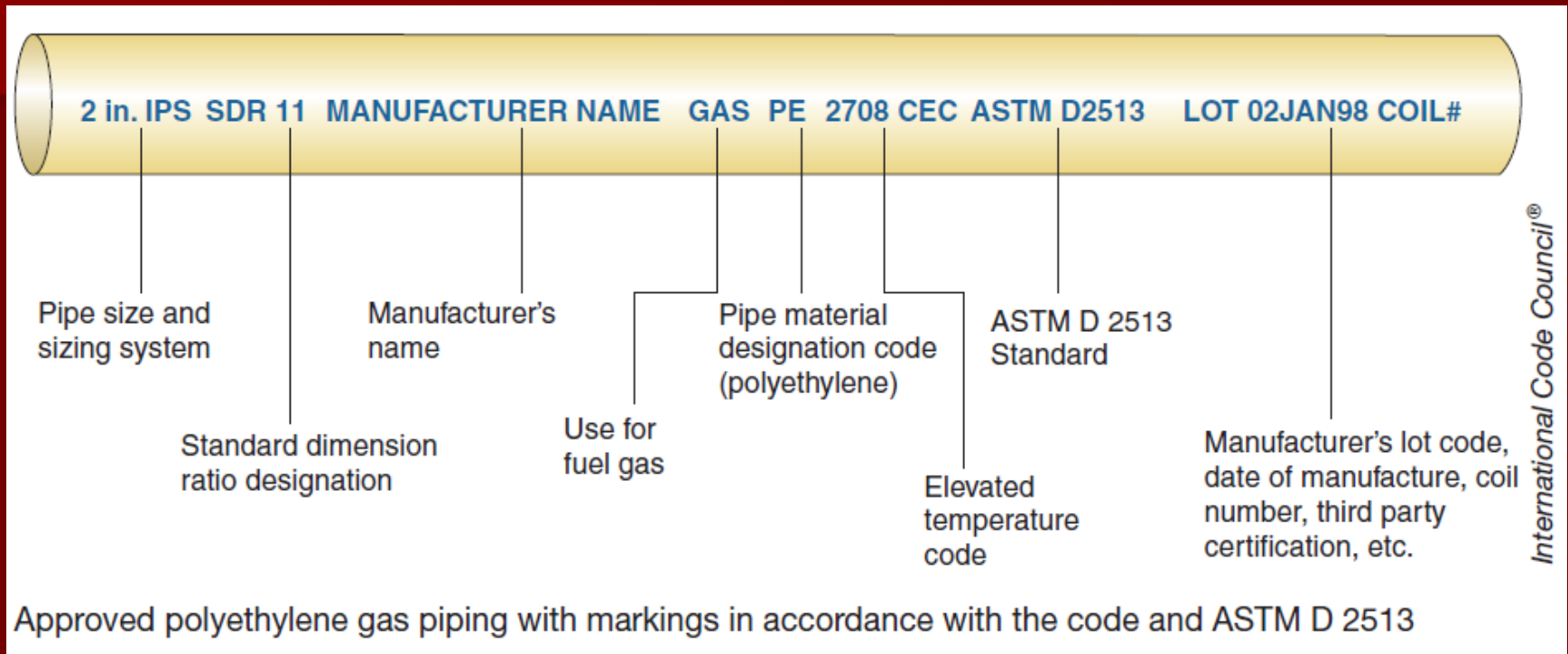
NFPA 54-2015 Adoption

SPS 365.0400

- Substitute the following wording for the requirements and exceptions in IFGC Chapter 4:
 - All gas piping and gas piping installation shall comply with NFPA 54 (2015), National Fuel Gas Code.
 - *This now matches the requirements of the Wisconsin UDC. SPS Chapter 340, Gas Systems Code, will also be updated to reflect the 2015 edition of NFPA 54*

Plastic Pipe, Tubing & Fittings

NFPA 54-5.6.4.1.1 & 5.6.2.1.2



Polyethylene plastic pipe, tubing and fittings used to supply fuel gas shall conform to ASTM D2513

Plastic Pipe, Tubing & Fittings

SPS 365.0400, NFPA 54-5.6.4.1.3

- Polyvinyl Chloride (PVC) & Chlorinated Polyvinyl Chloride (CPVC) plastic pipe, tubing and fittings shall not be used in supply fuel gas.
- *Polyamide pipe is used for fuel gas, but PVC & CPVC are not. These plastic materials are brittle at low temperatures, and thus not suitable*

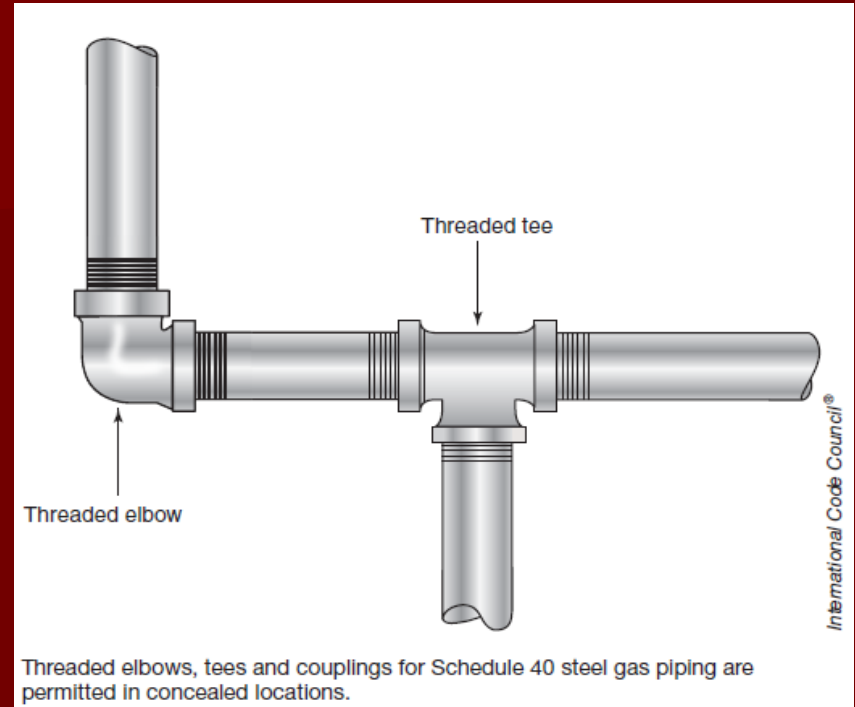
Drilled & Tapped Metallic Pipe Fittings

NFPA 54-5.6.8.4(9)

- Where pipe fittings are drilled & tapped in the field, all of the following shall be met:
 - Operations to occur on system \leq 5 psi
 - Operation to occur by gas supplier or their representative
 - Operation to be performed w/written procedures prepared by gas supplier
 - Fittings to be outdoors
 - Fitting to be inspected & leak free

Fittings in Concealed Locations

NFPA 54-7.3.2



■ Allows use of:

- Threaded elbows, tees & couplings
- Brazed fittings
- Welded fittings

– Fittings listed to ANSI LC-1/CSA 6.26 or ANSI LC-4

Appliance & Manufactured Home Connections

NFPA 54-9.6.1

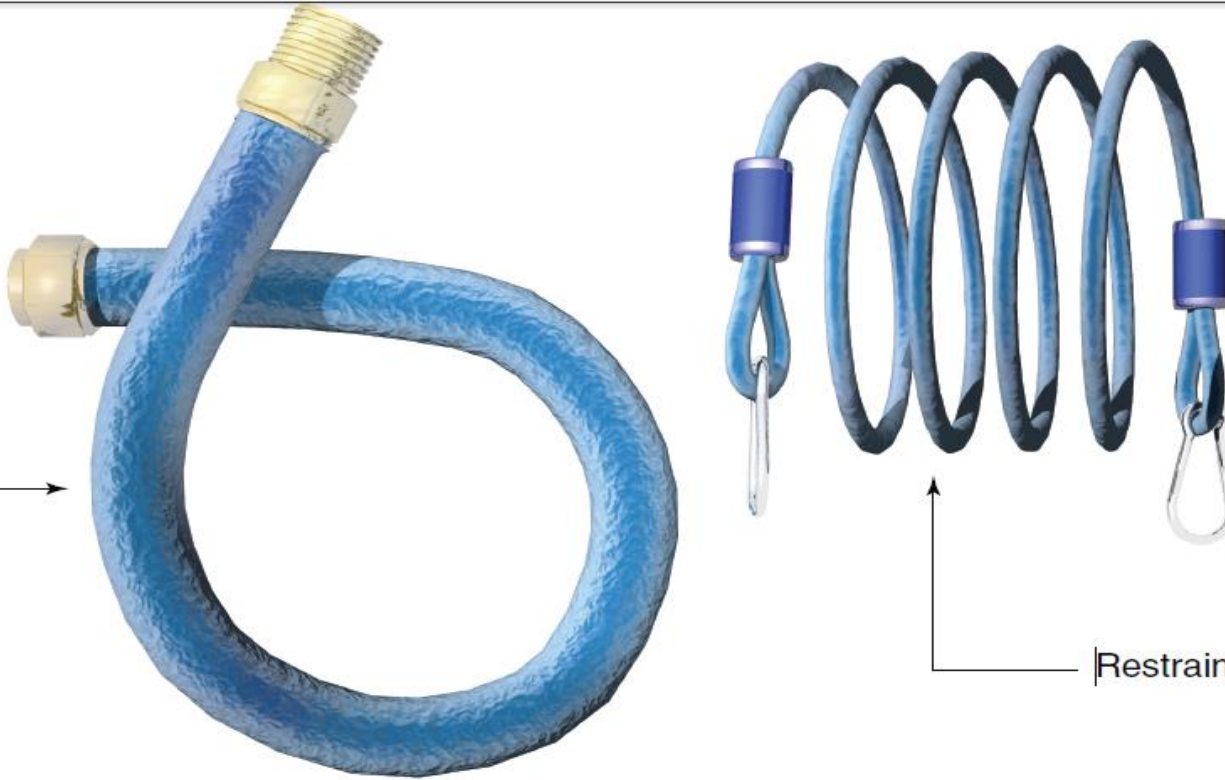
- Except for commercial cooking appliances, appliance connections shall consist of:
 - Rigid metallic pipe & fittings
 - Semirigid metallic tubing & metallic fittings. Aluminum alloy tubing shall not be used in exterior locations
 - A single listed connector in compliance with Z21.75/CSA 6.27
 - CSST installed per listing
 - Hoses must comply with ANSI Z21.54

Connectors for Commercial Cooking Appliance NFPA 54-9.6.1.3

- Specific installation requirements have been added for the safe installation of ANSI Z21.69/CSA 6.16 connectors for commercial cooking appliances which are moved for cleaning & sanitation purposes.
- *Options to connect with semirigid tubing or rigid pipe have been removed.*

Connectors for Commercial Cooking Appliance (on casters or moved)

NFPA 54-9.6.1.3



ANSI Z21.69 connector for commercial cooking appliances

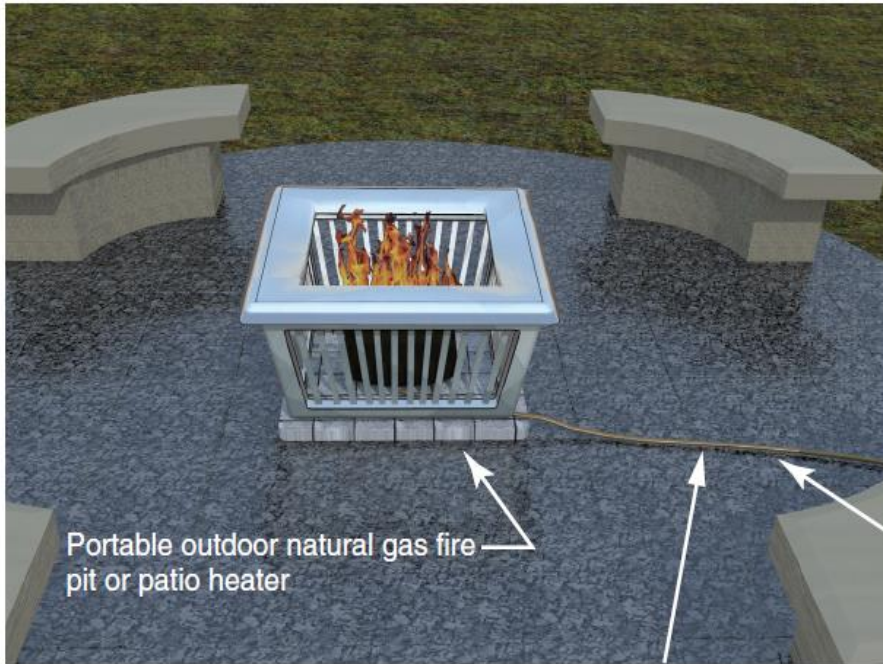
Restraint cable

Commercial cooking appliances with casters require an ANSI Z21.69 appliance connector with a restraining device installed in accordance with the manufacturer's instructions.

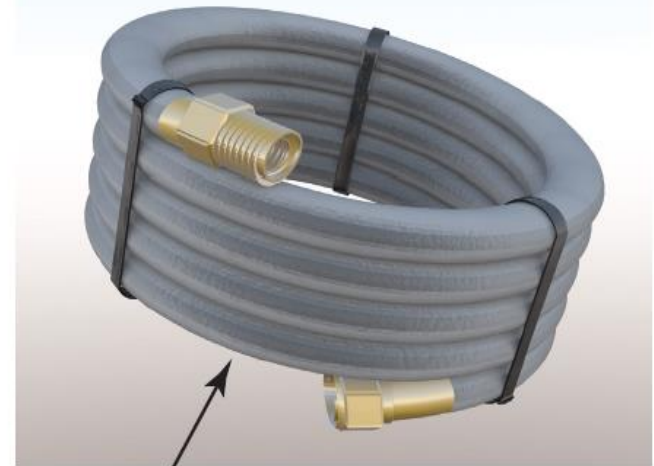
International Code Council®

Connecting Portable Outdoor Appliances

NFPA 54-9.6.2 (2)



Portable outdoor natural gas fire pit or patio heater



Outdoor gas hose connector listed to ANSI Z21.54

Connects to natural gas supply at an appliance shutoff valve, a listed quick-disconnect device, or listed gas convenience outlet.

Natural gas hose and connector for portable outdoor gas appliance

Door Clearance to Vent Terminals

IFGC 502.7.1/SPS 365.0502

- The requirements in IFGC 502.7.1 are not included as part of chs. SPS 361 to 366.
- *The need for vent terminals from appliances and equipment to be located such that doors cannot swing within 12" horizontally of the vent terminal has been removed.*

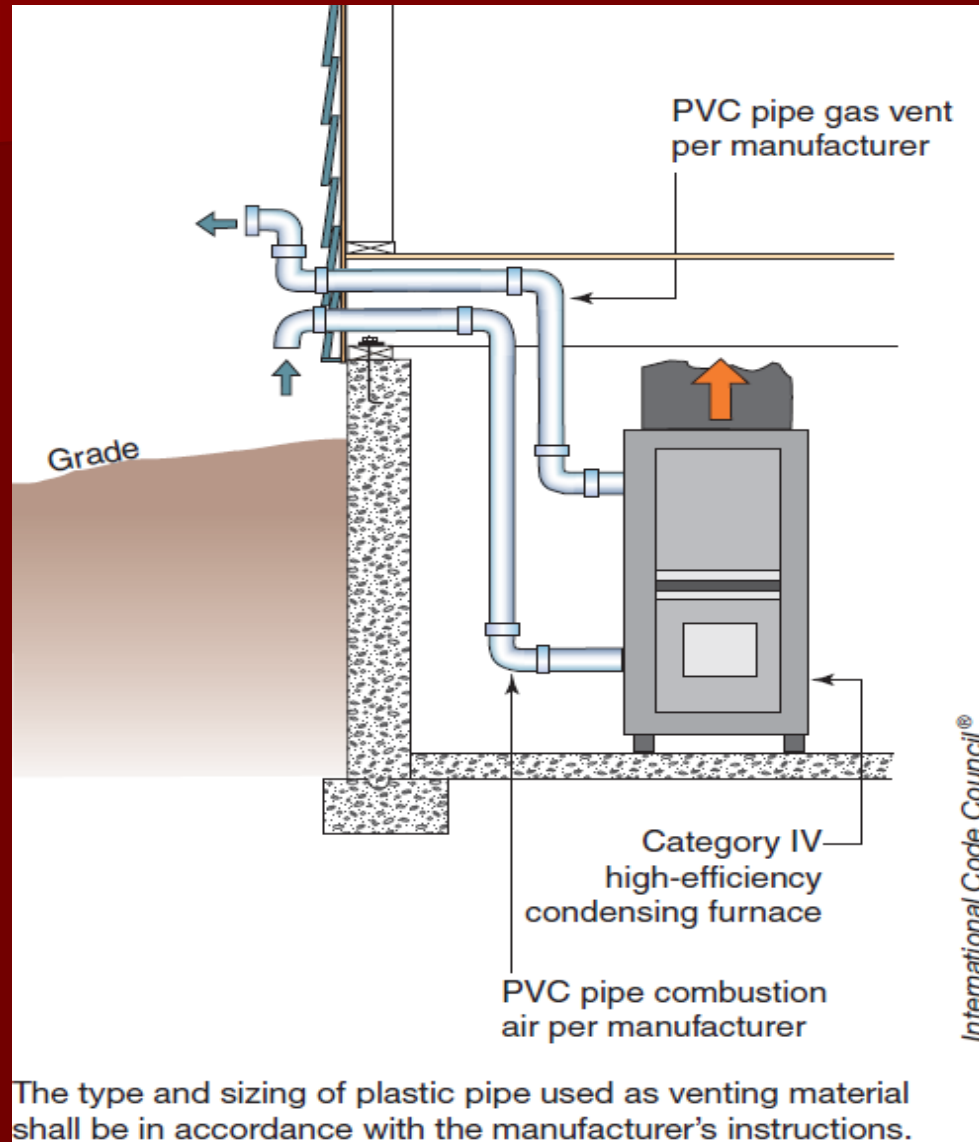
Plastic Piping for Appliance Vents

IFGC 503.4.1

- The approval of plastic pipe for venting appliance is no longer a responsibility of the code official; instead, that responsibility rests with the appliance manufacturer.

Plastic Piping for Appliance Vents

IFGC 503.4.1



The type and sizing of plastic pipe used as venting material shall be in accordance with the manufacturer's instructions.

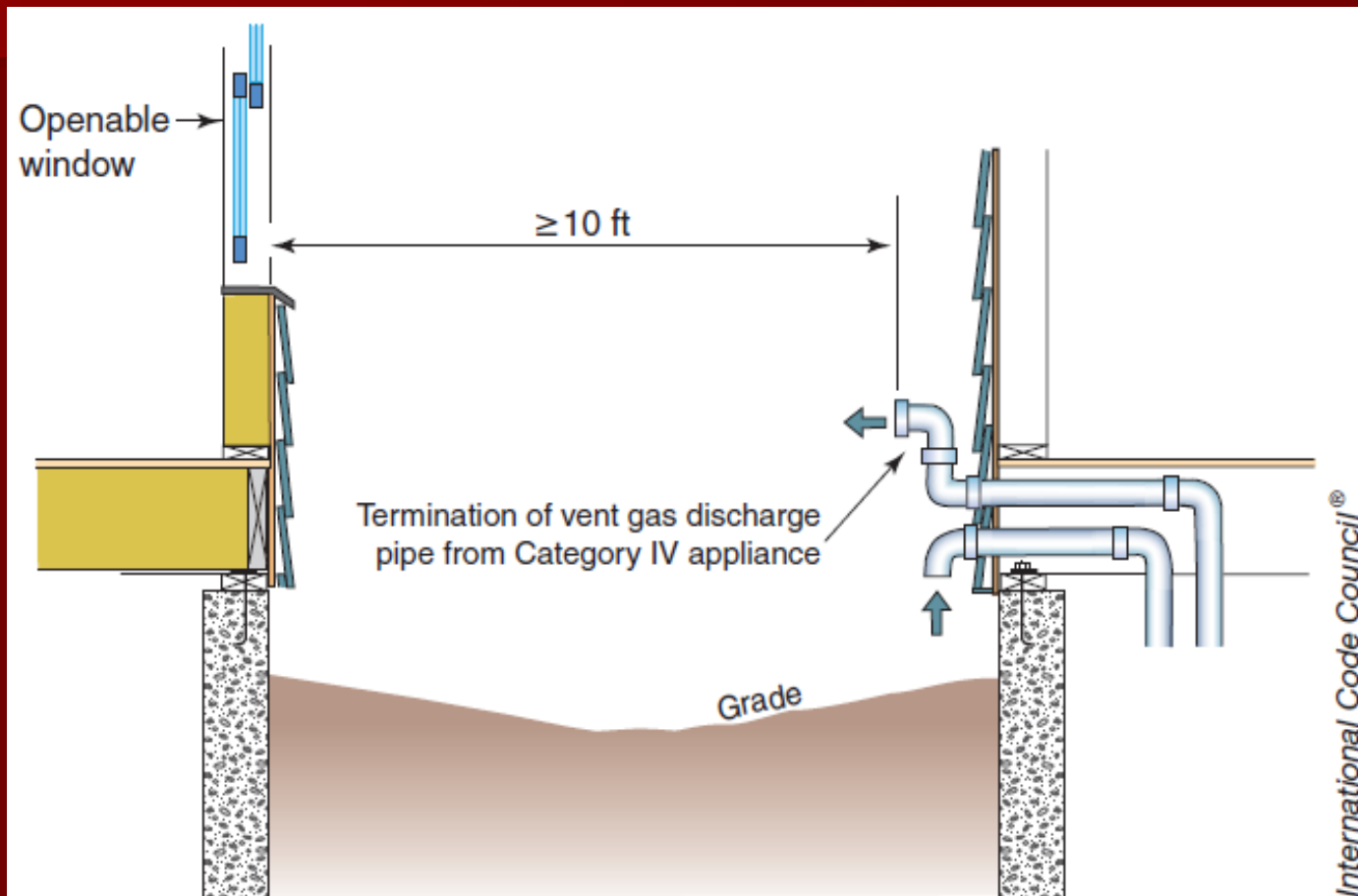
Venting System Termination Location

IFGC 503.8

- Vent systems for Category IV appliance that vent through an outside wall... to be located \geq 10 ft horizontally from an operable openings in an adjacent building
- Does not apply to vent terminals :
 - \geq 2 ft above or
 - \geq 25 ft below operable openings

Venting System Termination Location

IFGC 503.8



Minimum 10-foot horizontal separation required between vent terminal and opening of adjacent building

Prohibited Location of Commercial Cooking Appliances IFGC 623.2

- The code has been clarified so that it would not inadvertently prohibit the installation of cooking appliances that are listed as both commercial & domestic appliances for use in a dwelling unit



Range for domestic use

Review ICC Codes & Standards Online

- To review the 2009 & 2012 ICC codes – Go to:
 - <http://codes.iccsafe.org/I-Codes.html#2009>
 - <http://codes.iccsafe.org/I-Codes.html#2012>
- To review the 2015 ICC codes & Standards – Go to:
 - <http://codes.iccsafe.org/I-Codes.html#2015>

Review Archived WI Commercial Building Codes Online

- <http://dsps.wi.gov/Programs/Industry-Services/Industry-Services-Programs/Commercial-Buildings/Commercial-Buildings-Admin-Code/Commercial-Building-Code-Archive/>

Questions?

Thanks for Listening!

