



“Better Connections Through Code Compliance”

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The words “code compliance” are not something that we look forward to hearing because they almost always impose a requirement that’s going to cost money or cause an inconvenience. However, in this case, “Better Connections through Code Compliance” is actually a phrase that might just save you money by making your facility easier to clean, improving ease of equipment maintenance, and allowing your gas cooking appliance connections to become effectively “plug ‘n play” and thus more user friendly.

Health and fire inspectors have long advocated routine cleaning regimens for areas behind and around your cooking equipment, such as ranges, griddles, grills, fryers, ovens, etc. The evolution of today’s modern quick disconnect gas appliance connectors have made it fast, easy and safe to confidently connect and reconnect caster mounted gas appliances. The ease of being able to do this on a frequent basis has allowed operators to move equipment away from the cooking line for cleaning and maintenance. Over the years operators have realized that without quick disconnect gas connectors, food particles and grease can build up, creating potential fire hazards and unhealthful situations like food contamination, which can attract insects and rodents.

As a result, a significant number of operators have made appliance mobility a standard in their kitchens. The increased use of movable gas cooking equipment has addressed the concerns of inspectors who have required that all cooking equipment be accessible for easy and frequent cleaning.

According to health inspectors, equipment service agents and installers, kitchen safety and cleanliness are

based on the following principles:

- Appliances should be cleaned and serviced on a regular basis to optimize performance
- Appliances should be moved for easier maintenance and thorough cleaning.
- Appliances should use flexible connectors that are of proper size to allow for the required volume of gas so they will operate properly. Improper connector sizing will restrict gas flow and reduce equipment performance and efficiency.
- The flexible connector should be durable enough to withstand frequent movement of cooking equipment without compromising the structural integrity of the connector.
- The connector should be NSF (National Sanitation Foundation) certified to ensure that hygienic requirements are met.

What’s Behind This Code Change?

Until 2005, the Product Standards and Model Building Codes did not address the use of residential-type flexible gas connectors in the installation of stationary commercial gas appliances. While these appliances were not “technically” moveable, it was apparent that operators were indeed moving this equipment for cleaning and servicing purposes. These “flexible” residential type connectors were being used to save money, even though they created a series of unintended risks and dangers. Although these residential connectors appeared to be safe due to their corrugated design, repeated movements developed stress cracks in the corrugations which can

eventually lead to gas leaks.

To address these hazards, the standards and codes have been changed. The 2006 edition of the National Fuel Gas Code (ANSI Z223.1 / NFPA 54) now requires a commercial grade, flexible connector on all foodservice installations of gas cooking appliances “that are moved for cleaning and sanitation purposes.”

This change in the National Fuel Gas Code brings it into agreement with the ANSI Z21.69 / CSA 6.16 standard, which details test and examination criteria for flexible tubing connectors supplying gas to appliances mounted on casters or otherwise subject to movement. The standard states that commercial grade moveable gas connectors must be used on all caster mounted gas appliances and for all appliances that may be moved on a regular basis.

The reality is that all appliances, regardless if caster equipped or not, can and should be moved for cleaning and routine maintenance. As a result of this code change, you can bet that inspectors will place more emphasis on ensuring that appliances are connected in accordance with these updated requirements. Manufacturers have developed initiatives to help educate industry participants regarding this code change and the safe, proper ways for more frequent cleaning and maintenance of their gas foodservice equipment.

These updated Product Standards and Model Building Codes address four concerns by government officials, code and fire inspectors, and foodservice industry leaders:

1. Reducing Fire Risk — Grease and food particles often build up on and around cooking appliances, thereby creating fire hazards. The U.S. Fire Administration reports that grease and oil are the materials most likely to ignite first in a commercial kitchen fire. The ability to clean around and on gas-fired commercial cooking equipment greatly diminishes that risk. Residential connectors are not designed to meet the demanding requirements of a commercial kitchen. As a result they can fail from repeated movements. Commercial-grade gas connectors create a safer kitchen environment because they are designed to handle regular and repeated movement. In addition, they reduce the risk of fire because the connector and area around and behind the equipment can be more easily cleaned.

2. Improving Kitchen Efficiency — Hard pipe connections, which are still allowed, make equipment mobility very difficult. The inability to easily move gas appliances that are hard piped makes cleaning extremely difficult, resulting in grease and food buildup. Maintenance and service repairs are time



The ease of quick connectors truly make your gas appliances “plug ‘n play”.

3. Reducing Foodborne Illness — Inspectors require routine cleaning of commercial foodservice equipment and the surrounding area. Residential gas connectors are not NSF certified, which is a requirement in commercial foodservice facilities. Since these residential connectors are corrugated, they cannot be easily cleaned. As a result, the accumulation of grease and food particles is a common problem for operators who use residential connectors.

4. Promoting Equipment Performance — Commercial gas appliances must perform to much higher levels than their residential counterparts. They often require significantly greater gas supply in order to operate to the manufacturer’s specifications. Using a residential gas connector on commercial cooking equipment very often restricts proper gas

flow, thus reducing the performance and cooking efficiency. This can often result in repeated calls for service due to improper equipment performance.

Here's What to Look For...

Not all gas hoses are equal. Here are some of the best practice features to look for in a commercial flexible gas connector:

- NSF certification. This will ensure that the connector can be easily cleaned and complies with sanitation specifications.
- Complies with ANSI Z21.69 / CSA 6.16.
- Has a smooth and durable coating that is easy to clean and resistant to cracking.
- Coating contains an embedded antimicrobial agent to help prevent the growth of bacteria.

So, what do these new changes mean for you? Since these Model Building Codes are adopted by states, provinces and local jurisdictions, it is essential that your local code requirements be monitored to ensure compliance. Generally speaking, the authority having jurisdiction can require that all existing commercial gas appliance installations meet the new product standard.

To learn more about code compliance and gas safety, log on to the Gas Foodservice Equipment Network's website at www.gfen.info, where you will find links to member manufacturers' web sites offering

free compliance training programs to assist you in your foodservice operation. Many of these programs offer industry updates relative to these new code and standard changes, as well as safety and cleaning tips, and installation and maintenance information.



Flexible gas quick connectors enable the operator to move appliances more easily for cleaning behind the cooking line.