New Natural Gas Grill for Condo

Pete Matthews Jr – https://3nt.xyz – © June 9, 2021

Massachusetts fire regulations changed after our condominium association was established. This year, many owners were told that their gas grills were not in compliance, and had to be removed. These grills used propane, one of many types of liquefied petroleum gas (LPG). The rules prohibit use of propane on a *balcony*, which has no stairs. Propane is permitted on a *deck*, the same as a balcony, but with stairs.

Possibilities

One approach would have been to add stairs to our balcony, but we did not want ground access to the back of our living room. An electric grill is permitted; the one we tried was fine for cooking a few burgers in good weather, but we wanted better. The condo board has decided that no grills may be used or stored on the ground, and the fire code prohibits using any gas grill under any overhang.

Caution: Never store propane indoors. Propane is heavier than air. If propane leaks, it can form a pool and then explode with a spark.

Natural Gas Requirements

The gas grill installation must meet the requirements of both the condo association and the town plumbing inspector. Our condo association requires submitting a completed approval form. I'm omitting the form because it has a couple of typos and might change. On it, you provide:

- 1. Owner name, address & phone.
- 2. Circle BALCONY, GAS and YES (new gas installation).
- 3. Grill Manufacturer: WEBER
- 4. Model name: [see below]
- 5. Plumber name & gas license number.
- 6. Include a Certificate of Insurance from the plumber:

All contractors and workmen must present a copy of a certificate of insurance Naming both **The Canton Point Condominium Trust** and **The Dartmouth Group** as co-insured and showing that they are insured for:

- a. Worker's compensation
- b. Liability Insurance in the amount of \$1,00,000 [sic]
- c. Property Damage Insurance in the amount of \$500,000
- d. Builder's Risk Insurance
- e. Name of Vendor, Business Address, Phone Number and Vendor Contact Persons' Name
- 7. Steel piping must be used within the building envelope.

Sign and date the form. To save time, either FAX or scan and e-mail the form to condo management, as given on the form.

Do everything by the book. Cut any corners, and you may have to pay to have the work redone, pay any legal costs, and/or insurance may not cover you. Make sure the plumber pulls a permit for the work, so that it will be inspected.

The natural gas grill must be "permanently" installed. The gas inspector told me that either the wheels must be removed or the grill must be tied down so that it cannot move. Do it right, and pass the inspection on the first try!

Recommended Gas Grills

For use on our small decks, the most important single feature of your new gas grill will be the required setback. The setback was two feet for every model of Weber grill that I checked. That means, at least two feet from the firebox to any wall, railing or other combustible. If you get a grill with a five foot setback, it will permanently live smack dab in the middle of your deck. Everybody concerned knows a Weber is acceptable. Get a Weber.

My 11-year-old Weber Genesis II LPG grill looked like it had at least another 11 years left on it. I cleaned it up and gave it to a friend. (Weber does not offer a conversion kit, and I was unwilling to take the risk of a third party conversion.)

Back in March, I got pre-approval from the condo association for a Weber Spirit II E-310 Natural Gas grill. With this model, the drip pan will be fully exposed to squirrels; a better choice would be Weber 47510001 Spirit E310 Natural Gas Grill (no II), with walls, doors and an enclosed storage shelf. The left shelf folds down, reducing the footprint on the end of the grill away from the gas hose. To take advantage of this capability, position the grill to the *right* of the door to the balcony, as you come out the door. This unit claims 424 square inches of main grilling area and 32,000 BTU-per-hour.

After trying an electric grill, I got pre-approved for the Weber 66015001 Genesis II E-315 3-Burner Natural Gas Grill, an updated version of the grill I loved for so many years. This unit claims 513 square inches of main grilling area, 39,000 BTU-per-hour, and has fixed shelves on both sides, at grill level. I had thought to omit the shelf on the left end, but that plan failed: it would have left a hole in the side and provided no barrier at all to the getting burned on the end of the firebox. I installed it for now, but may design a way to mount it hanging down. My grill came with a free upgrade to stainless steel grids, a replacement I would have made, perhaps sooner than later, due to their longevity and low maintenance.

If I had been sure it would meet my needs, the Spirit would have been a better choice. If you go that way, please let me know how it works for you.

Plumbing



Line up your plumber. I called Roscia in Dedham, with whom I have a 25-year relationship. Pat Roscia, the founder, has retired, but his daughter Jill Roscia Salem runs the office. Master plumber Dennis Kruse came by and scoped out the job. He sent Tom and an assistant to do the work.

This view is toward the end of the building with the four gas meters. The large pipe on the left is ours. The large pipe on the right is passing through to the

fourth unit, behind us. Tom turned off the gas at our meter, which was identified by a brass disk with our house number.

The T connection on the left is new. It replaced an elbow that went to the left, to provide gas to the kitchen range. The new pipe goes to the right, toward the back of the building, turns toward us, and follows the same path as the mains. Behind us, it turns toward the back of the building and goes out under the deck. The red handle, shown in the ON position, was OFF when installed.

Tom installed the quick-connect coupling that came on the gas grill hose onto the end of the pipe outdoors. Note the red shutoff outdoors as well. A friend recommended that I insist on the dual shutoffs, which may or may not be required by code. This picture shows the grill installed and connected.



However, Tom left with it shut off and disconnected, until the work could be inspected. A two week delay ensued, as a check was snail mailed from the Roscia office to the office of the plumbing inspector for Canton – very busy, but not working in his office due to COVID – before the inspection.

My Work

The grill requires assembly. Two people would be useful, but I did most of it alone, on the living room rug. Between the manual and the "BILT" online

instructions, it was not difficult for a "handy" person. However, right at the start, it was tricky to get the pieces together without help. I managed it sitting on the floor, using hands, feet and the side of the sofa. (Of course, if I had a picture of that, I would have had help, instead!) During assembly, the grill seems rather flimsy, but gets sturdier with each step. When the sides go on, it becomes rock solid. I left the wheels off, as I was told to do by the condo management company, but I did use the bar for the big wheels to help stabilize the cart during assembly. I completed all steps, except re-attaching the lid.

For the footings, I obtained a nominal $2'' \times 6'' \times 10'$ (actual $1.5 \times 5.5 \times 10$) pressure-treated board for \$18 at COVID-inflated prices. I cut four pieces 25.5'' long from the board. First, I drilled pilot holes in each top board, and then I assembled each footing using two boards and 2.5'' deck screws.

The feet of the grill are 3" x 1.25". The outside depth of the legs on either side is 23"; the outside width of the legs is 28.5". I lined up each footing so that it would provide equal space around each leg when the grill was put into place, with an outside width of just over 31". Using an extended 1/8" drill bit, I made pilot holes all the way through each footing, where they would line up with deck boards. I made slightly wider holes in the top board with a regular bit, to prevent binding there. Then I screwed down each footing using 4" screws.

This process could have been completed with 2.5" screws only, by screwing the bottom half of the footing to the deck, and then the top half to the bottom. However, I initially messed up by 3" on the outer footing. Positioning and repositioning was easier with each footing a completed unit. My neighbor helped me carry out the grill and reattach the lid. Eight stainless steel screws are angled in from on the outer edges, as shown, to block the grill in place.

Inspection and Results



The inspection was quick and perfect. The inspector was particularly impressed that the footings and setbacks were done correctly. He left this orange sticker with an approval on it, to keep with the manual for the grill. It certifies proper permanent setbacks.

The plumbing bill was \$857.86, including labor, materials and the permit.



Tom, the plumber, stayed to connect the grill and test that it worked properly.

The new grill was great for our first meal: chopped sweet onion, red pepper and zucchini grilled in a Weber wok, Amylu garlic & asiago chicken sausage, and corn on the cob microwaved with the husks on. No gas tank to fool with, just turn on a burner, press the button, and repeat. Most of the time, I grill with the knobs in the starting position, at the highest possible heat.



With the required setbacks, the grill takes up a lot of space. We still have room for our small table and four chairs, but not really for more.

Proximity to the grill (and possible bugs) made it undesirable for three of us to eat outside, late on an 80°F evening. It should be fine in somewhat cooler weather, perhaps pushing the table flat against the rail.