

BARKMAN SIDE BURNER LIQUID PROPANE TO NATURAL GAS CONVERSION INSTRUCTIONS

Understanding Gas Appliance Conversions

Making changes to an appliance so that it can utilize a different fuel is known as appliance conversion. The inner valves and orifices are designed to work with a particular gas that has a specific pressure. Natural gas is a much lower pressure gas than propane and converting the appliance to one or the other gas requires that the differing pressure is compensated for. In other words, connecting a natural gas appliance to a propane piping system will result in appliance malfunction and possible danger. The reason for this is because natural gas orifices are larger than propane orifices strictly because of gas service pressure. In this case, the higher pressure gas flowing through a larger orifice will result in more gas through the burner and likely, more flame...an unnecessarily large flame. Conversely, trying to use a propane appliance with natural gas will likely result in a very small flame or no burner flame at all because of the lower pressure gas and the smaller orifice. This is the underlying purpose of an appliance conversion from propane to natural gas or from natural gas to propane.



To installer or person assembling grill: Leave this manual with grill for future reference.

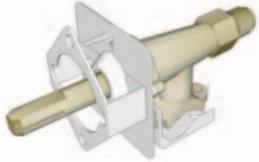
To consumer: Keep this manual for future reference.

Conversions From Propane to Natural Gas

The following illustrated conversion can be used for when converting from Liquid Propane to Natural Gas. This example is shown with the Barkman Harvest Grove Side Burner. For converting gas types, it is extremely important to follow these instructions step by step. We always recommend a Licensed Plumber/Gas Fitter or Installer perform any maintenance or gas conversion on your grill.

This Gas Conversion requires the following Parts

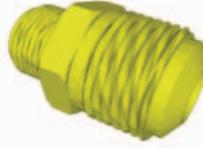
2CSB Gas Valve



#50 Size Drill Bit



1/2" Flare Adapter
(supplied by gas fitter)



Natural Gas Regulator



This Gas Conversion requires the following tools (Not Provided)

Screw Driver



Adjustable Wrench



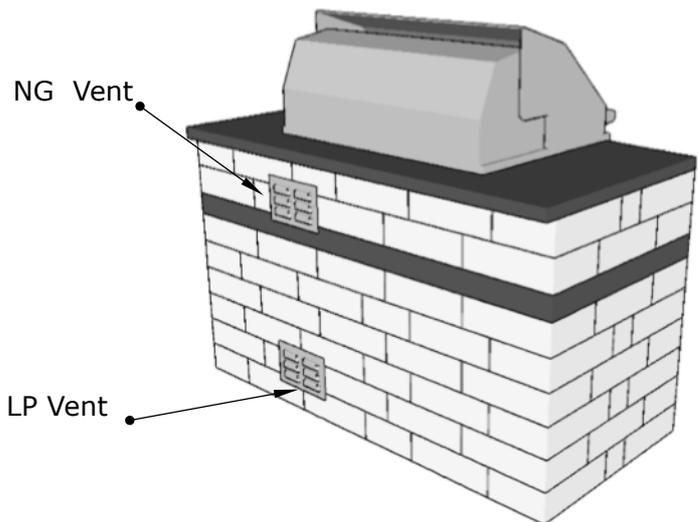
Hand Drill



Island Safety Vent Installation for either Liquid Propane or Natural Gas

For Natural Gas

Natural Gas (NG) is lighter and will raise to upper end of structure upon leak. Outdoor kitchen islands housing Natural Gas appliance will be vented at the approximate level as the Appliance Control Panel, where knobs are located.



For Propane Gas

Liquid Propane Gas (LP) is heavier and will lower to base of structure upon leak. Outdoor kitchen islands housing Propane Gas appliance will be vented within 4" to 6" from ground level.

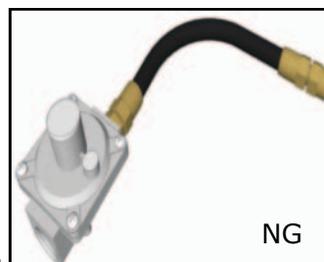
WARNING: The above step should be done during assembly.

IMPORTANT!! - USE CORRECT GAS REGULATOR FOR EACH GAS TYPE



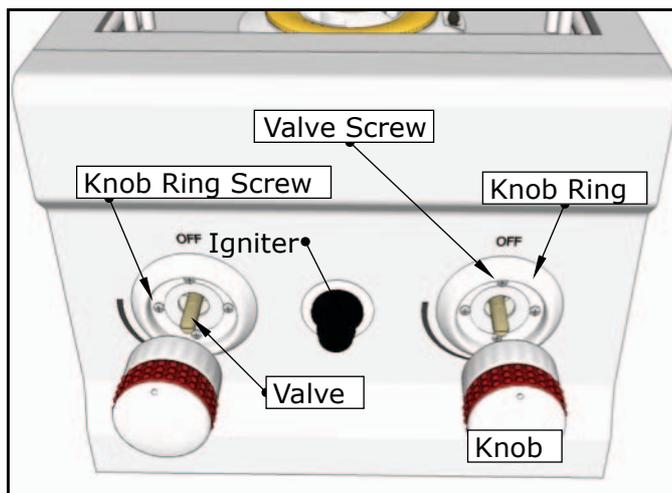
For Liquid Propane

Your new Grill is set as Liquid Propane (LP), which uses the Medium Pressure Regulator supplied by your gas grill appliance, designed for portable tanks.

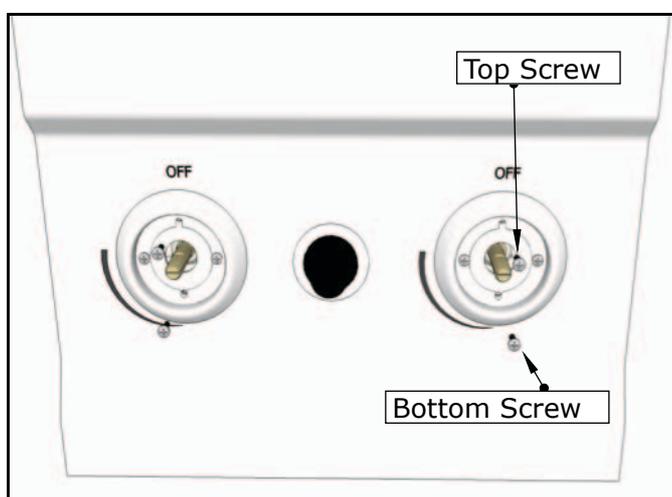


For Natural Gas

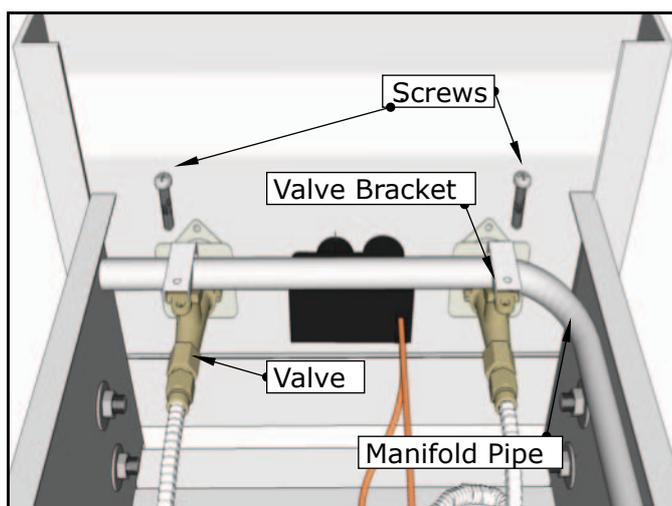
When converting your grill to Natural Gas, be sure to remove the LP Regulator, and install this NG Regulator in its place. We recommend to have a licensed plumber/gas fitter make final gas connections.

IMPORTANT!!! - BEFORE BEGINNING CONVERSION, GAS MUST BE TURNED OFF**1. Remove Both Knobs**

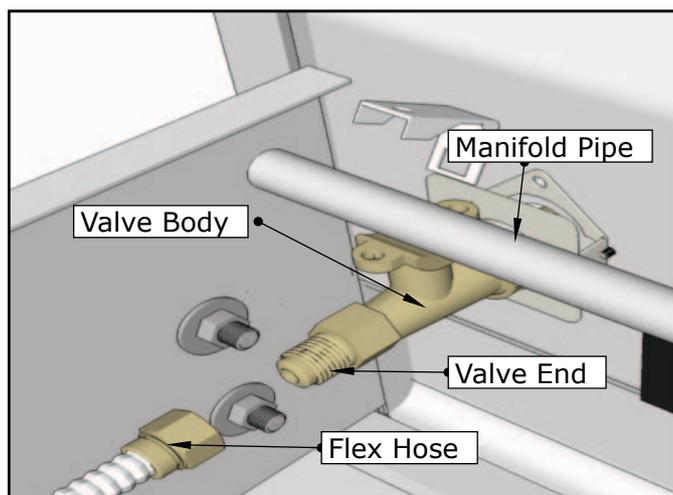
Remove both Left and Right knobs, revealing the four small Screws on the inside of Knob Ring.

**2. Remove Top & Bottom Screws**

Remove the Top and Bottom Screws on both Left & Right Knob positions. Do not remove the screws on the Left or Right of each Knob position.

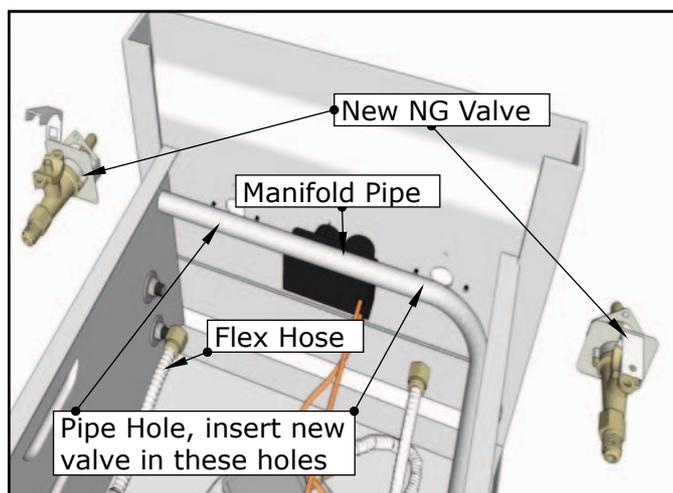
**3. Beneath Burner, Remove Screws**

Remove Both Left and Right Screws from Valve Bracket. Valve will loosen on Manifold Pipe. You may need to rotate burner upside down to do this. Make sure to do this on the brass top side burners, so they do not fall out of position.



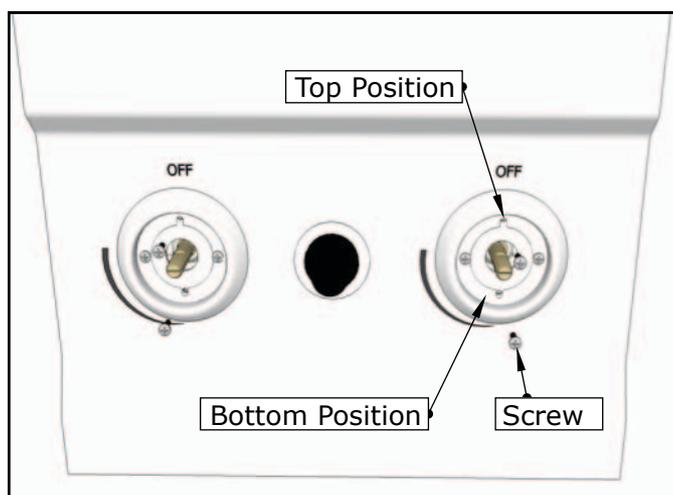
4. Remove Valve Flex Hose

After removing each Valve from Manifold Pipe, use wrench to remove Flex Hose from end of Valve.



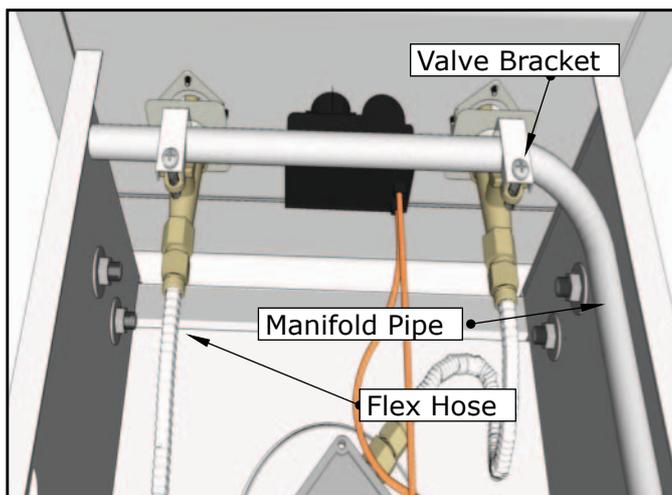
5. Replace with New NG Valves

Now that both left and right Flex Hoses and LP Valves are removed, replace with NG Valves. Fasten them in place following the same steps in reverse, securing in place. **DO NOT TIGHTEN IN PLACE YET.**



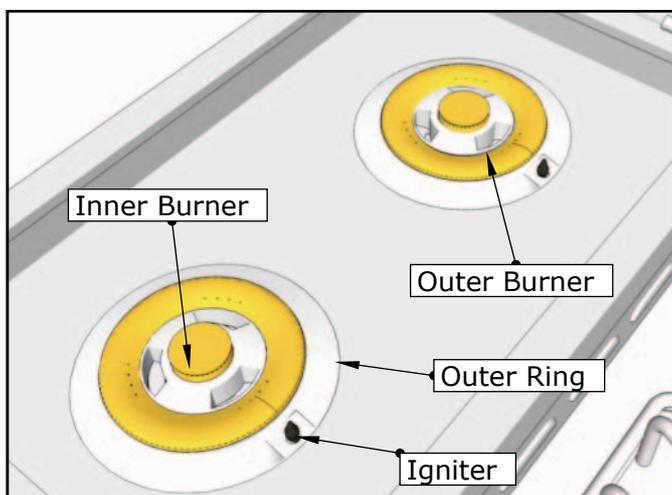
6. Fasten in Top & Bottom Screws

Now that both left and right LP Valves are secured on Manifold Pipe, reinsert the Top and Bottom screws for Left and Right Valve Positions from front face of Control Panel. Tighten these screws in all the way, so Valves are aligned straight, and valve stem is centered.



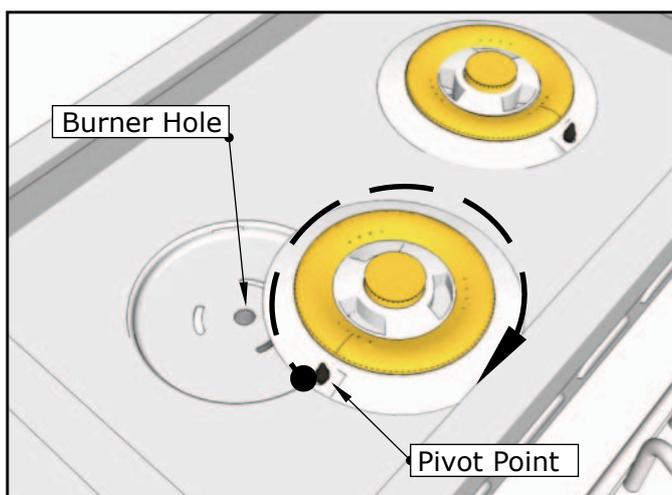
7. Finalize new Valves in place

While making sure that both Flex Hoses are securely fastened, tighten both Left and Right Valve Bracket Screws in place. Valves should now be tight on Manifold Pipe.



8. Locate Burners on top

Remove both Front and Back Cooking Grates, so both burners are fully exposed. Make sure to note the individual components that make up the burners when you put them back in a later step.



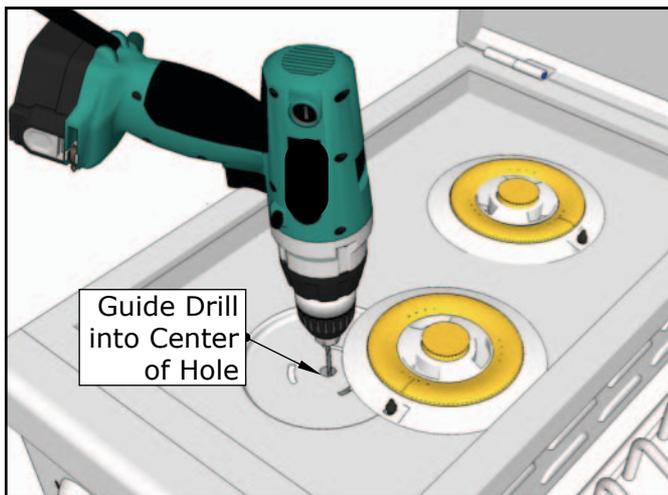
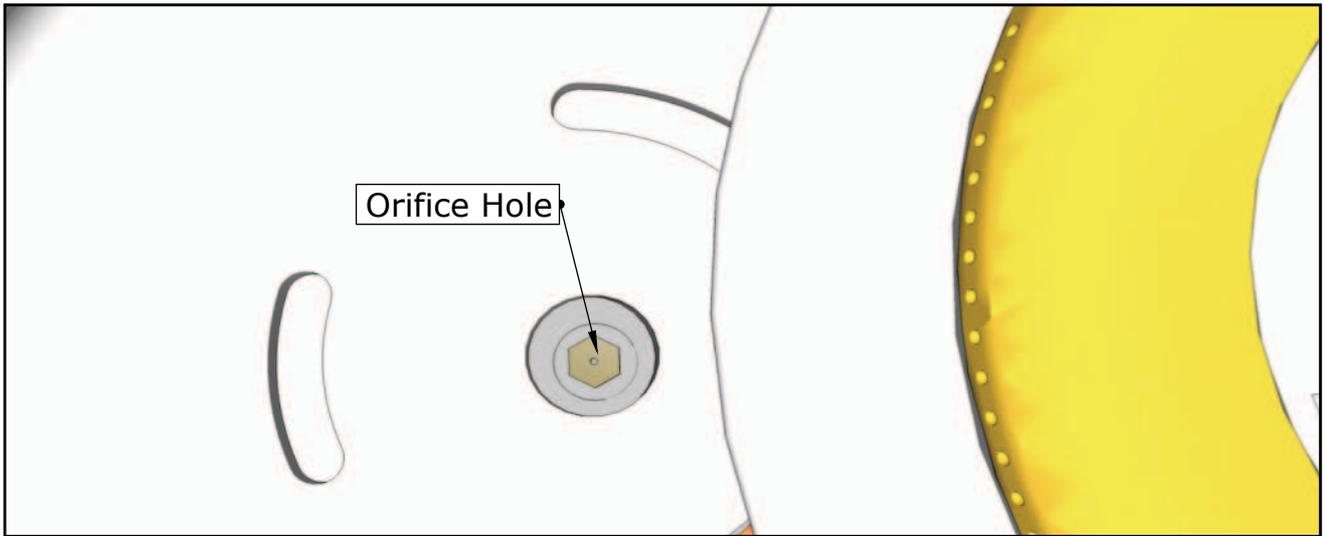
9. Rotate each Burner

Cup hand over entire Burner, gripping from the outer rim of Outer Burner. Lift slightly upward, then rotate clockwise, using the Igniter as the Pivoting Point. Rotate as far as required so that you will see a visible hole below the center of Burner.

Note: While you turn the Burner Body, you will hear a snapping noise. This is normal - it is the small spring and clip holding Igniter in position pivoting in place.

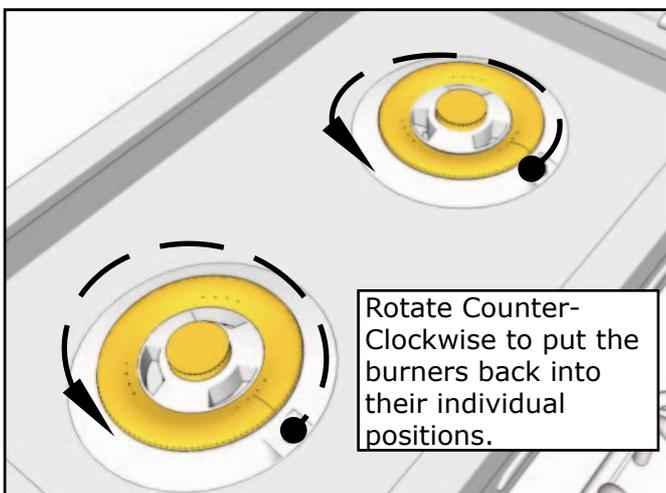
10. Locate the Visible Orifice Hole

In the center Hole below the Burner, there is a Small Hexagon Bolt, with a Small Center Hole on top of its surface. This is the LP Orifice, and we need to drill this out, using your supplied #50 Drill Bit, and your personal power drill.



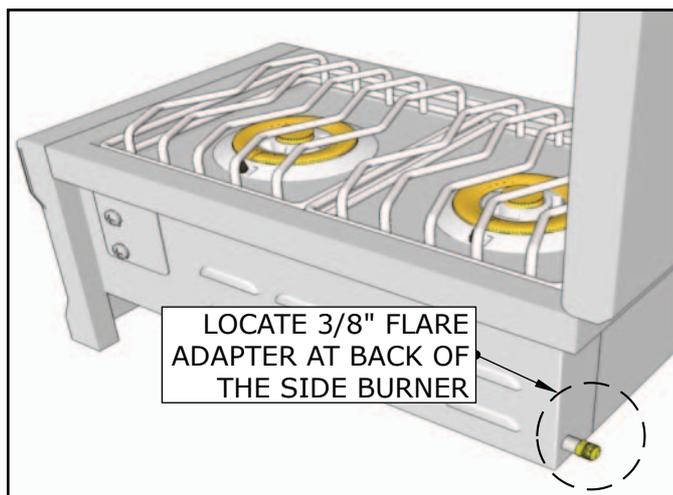
11. Drill Both Orifice Holes

Take special precaution while inserting drill bit into hole. Make sure to align tip of drill bit to the center of the Orifice Hole. Once your drill is properly positioned, only then do you turn it on. Keeping tight hold of Power Drill, press in approx. 1/8" to 1/4" MAX. Only slight pressure is needed to drill Orifice Hole out. Put too much pressure and you may damage the Orifice Bolt.



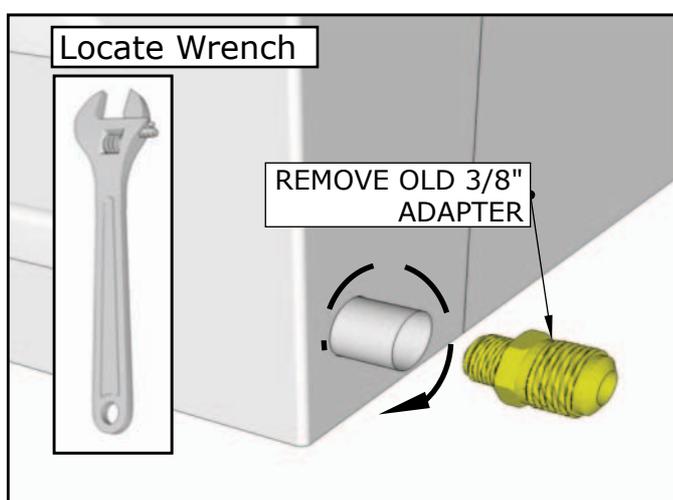
12. Reset Both Burners

Rotate each burner counter-clockwise, so they are aligned back into their correct positions. Be sure that you are lifting just enough to avoid scratching the surface.



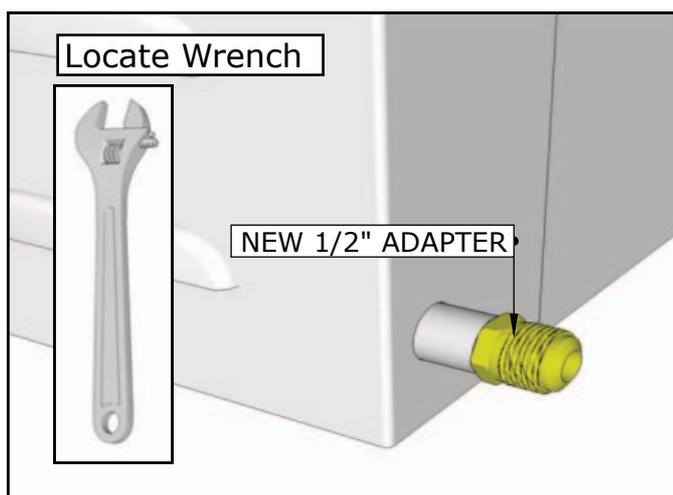
13. Locate Brass Adapter

Turn the Side Burner around to locate the Brass Flare Adapter, where the Gas Line installs to. The current size for Liquid Propane Double Burner is 3/8" inch size, and needs to be changed to 1/2" inch size.



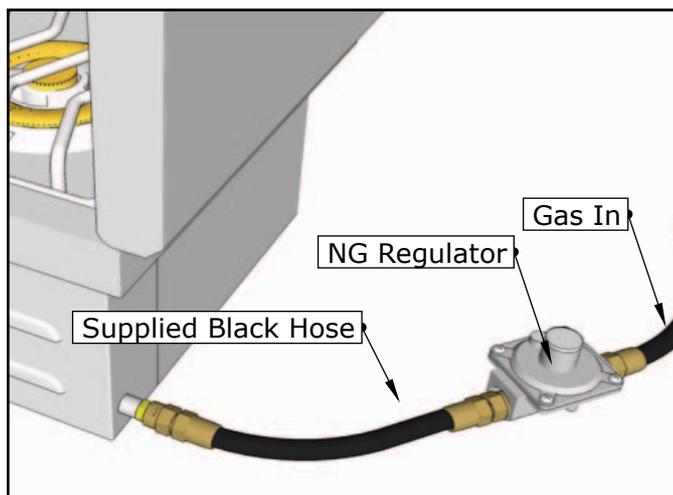
14. Unscrew Brass Adapter

Remove the current 3/8" inch Brass Adapter with adjustable Wrench and locate supplied 1/2" inch Brass Adapter. This part has adhesive in thread, so you will need to apply stronger pressure while removing current 3/8" Adapter.



15. Install new 1/2" Adapter

Again using the adjustable Wrench, install the new 1/2" inch Brass Adapter to Gas Manifold Pipe. Be sure to tighten it as much as possible.



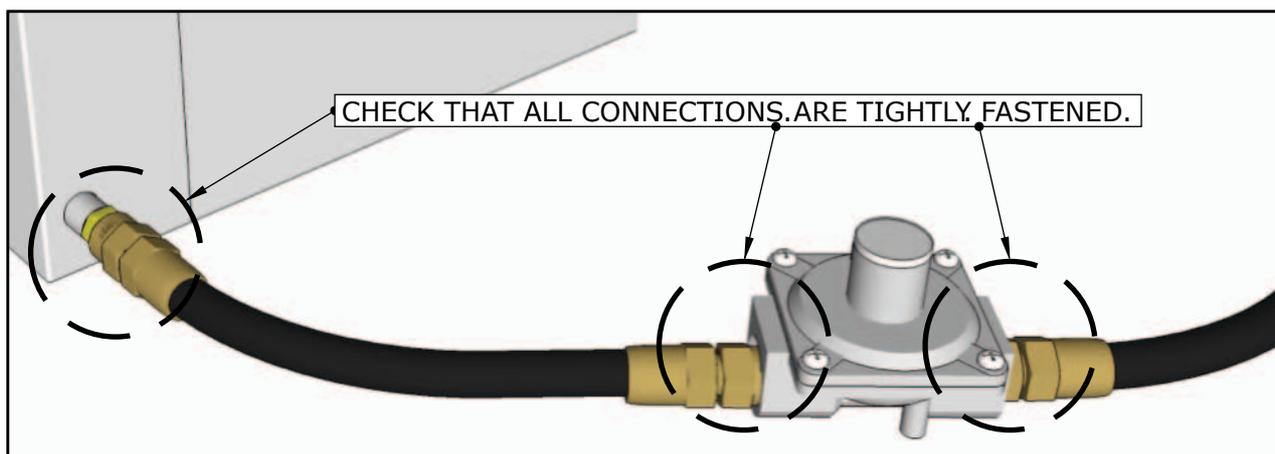
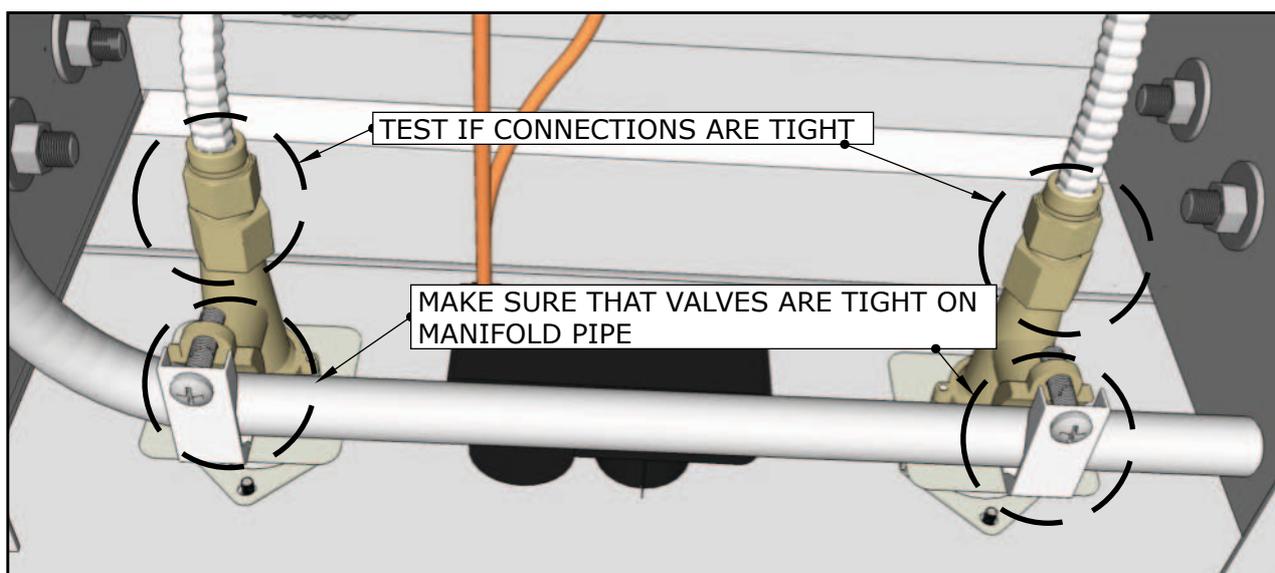
16. Install NG Regulator

Using your new Natural Gas Regulator with attached black hose, fasten black hose on end of new 1/2" Brass Adapter. Connect the other end of the Regulator to Gas Hose that's going to the house connection.

IMPORTANT!!!!

17. Perform Leak Test for all Gas Connections

Mix some soapy water in a bowl. Use a sponge to apply solution to all components you removed. Afterwards, turn gas flow on, and check if you see any bubbling, or smell any gas. Also make sure all valves are turned OFF. If either is the case, tighten down all connections once more and test again until there are zero gas smells or bubbling effects.



For any questions, please call Texas BBQ Wholesalers at 888-934-9449 or email them at service@sunstonemetalproducts.com.

Natural Gas Side Burner Instructions

Refer to these instructions for installing your barkman side burner if you're using a natural gas conversion kit. Materials needed are the same as the propane-based burner.

Materials Included:

12" standard quarry stone - 47 pieces
8" standard quarry stone - 8 pieces
4" standard quarry stone - 18 pieces
4" x 4" x 12" quarry stone - 2 pieces
stainless steel vent box
1-piece ebony accent
1-piece ebony countertop
slide-in double side burner (liquid propane ready)
propane line splitter kit (propane only)
Sunstone manual for side burner
plastic shims
1 tube of landscape glue
gloves
instruction guide
landscape design plan

*This kit has one or two extra pieces of quarry stone.

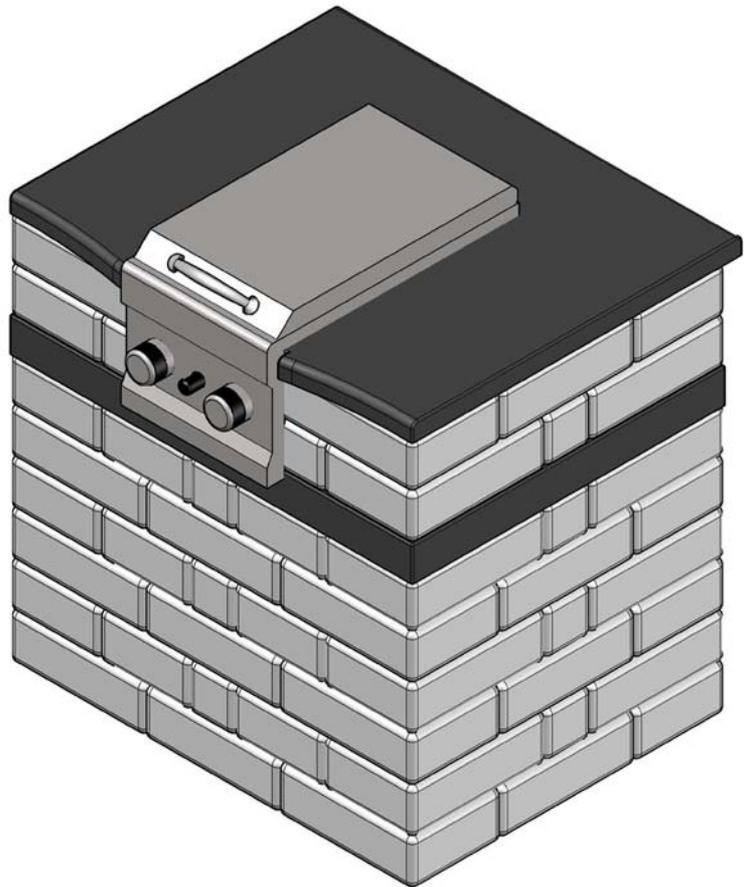
Notes:

If installing your side burner on an unstructured base, please ensure to follow these steps:

- Excavate area approx. 9" below grade
- Excavate approx. 6" larger than your actual kit dimensions to ensure a stable base.
- Fill with ¾" down limestone and compact firmly
- Level out ½" of sand and install kit as per the instruction guide.
- If you are installing on a solid base such as an existing patio and/or base prep is not necessary, then you can proceed to the first step.

These instructions may not refer to all base conditions. Base prep will greatly depend on existing ground conditions and may require alternate techniques.

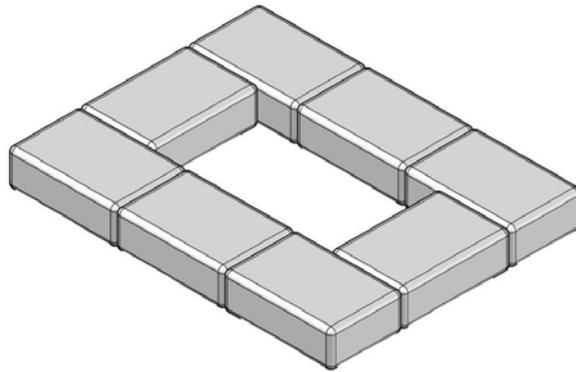
For the use of propane or natural gas with this product, consult your local building code and/or bylaws for regulations. Natural gas conversion kit is available for purchase separately.



Scan our QR code to watch our online instruction videos or go to youtube.com/barkmanconcrete

Note: Certain steps indicate the use of landscape glue. This is for added stability but it's optional and at the discretion of the user.

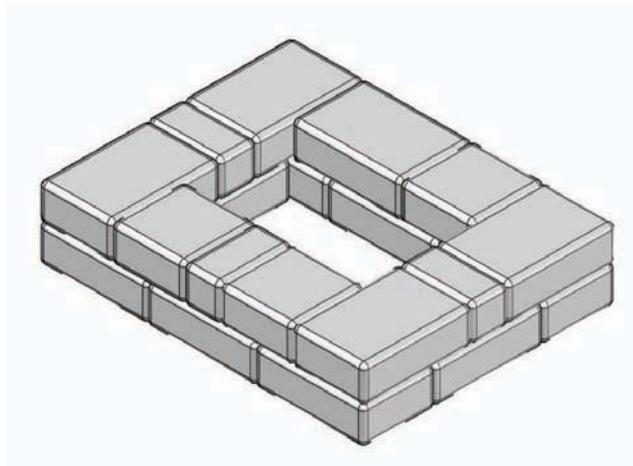
STEP 1



Lay down the stone pattern shown using 12" standard pieces.

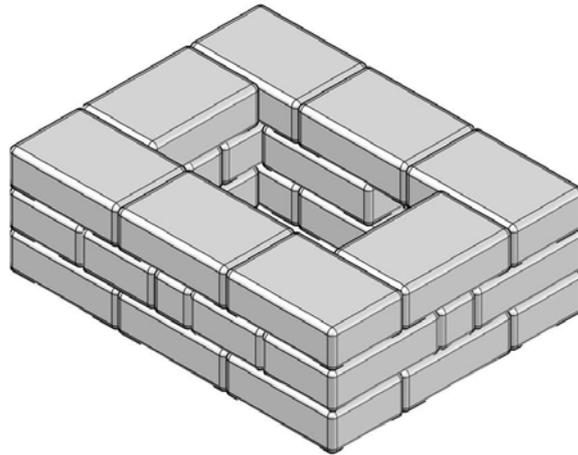
Check that stones are level at every step. Use included shims for adjustments. If installing with the bbq grill, do so on the right-hand side of the bbq. Propane Line Splitter Kit Installation is on page 10.

STEP 2



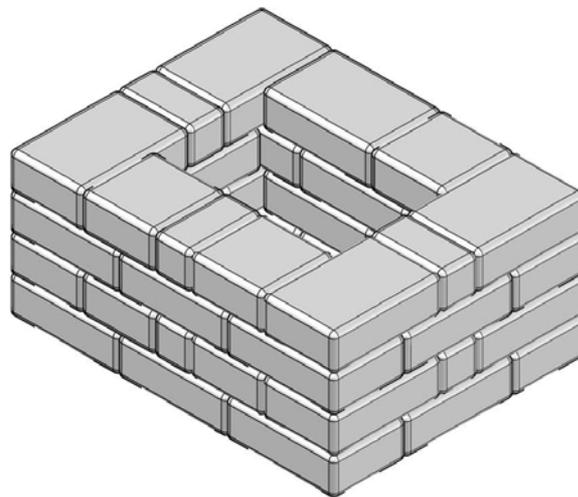
Lay down the stone pattern shown using 12", 8", and 4" standard pieces.

STEP 3



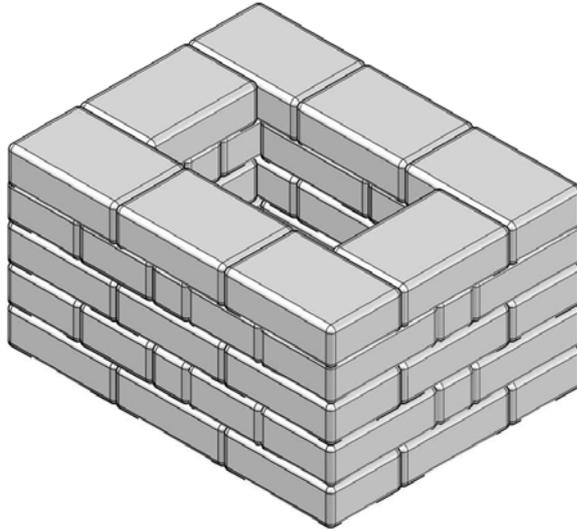
Repeat the pattern from Step 1.

STEP 4



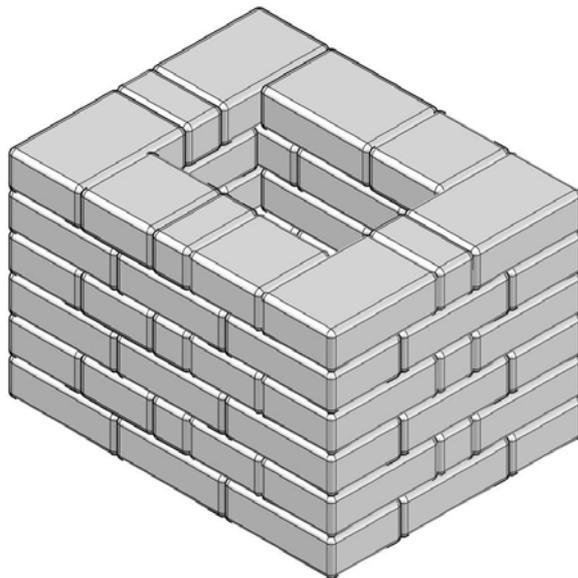
Repeat the pattern from Step 2.

STEP 5



Repeat the pattern from Steps 1 & 3.

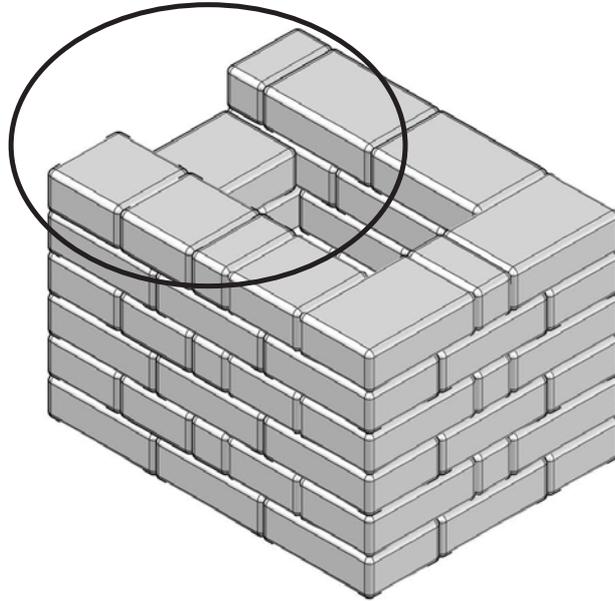
STEP 6a



Repeat the pattern from Step 4.

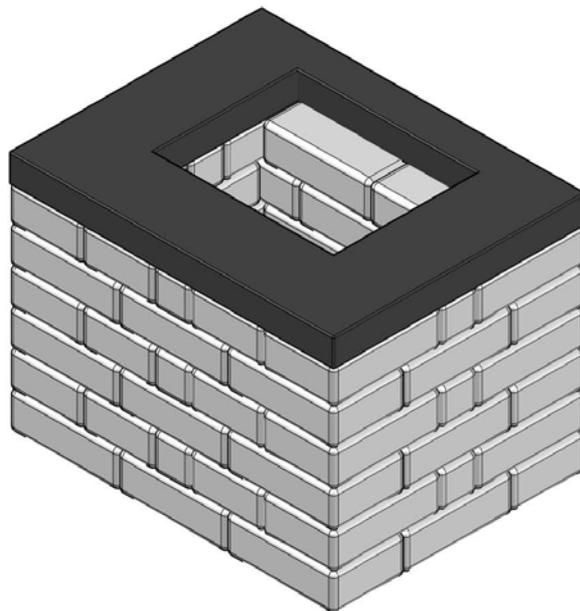
Refer to Step 6b if installing beside the bbq grill.

STEP 6b



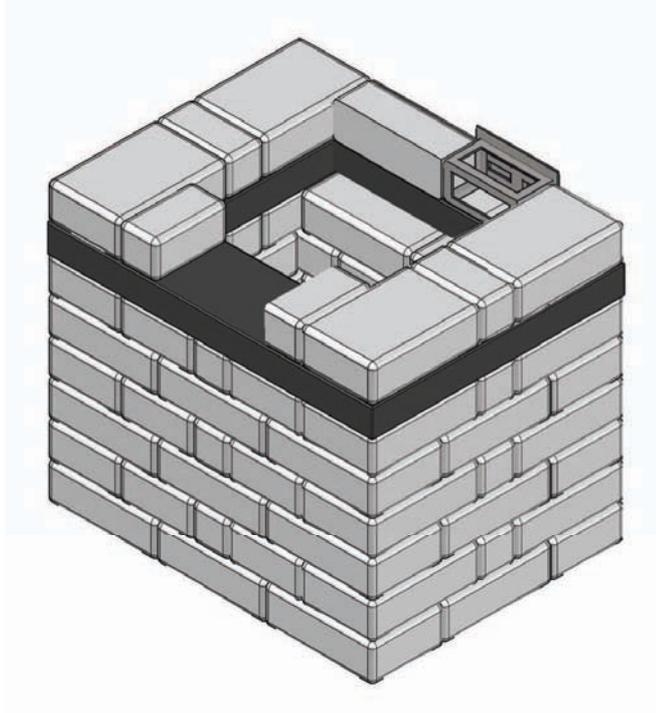
If installing side burner beside the outdoor grill, lay down the stone pattern shown of *12", 8" and 4" standard pieces.*

STEP 7



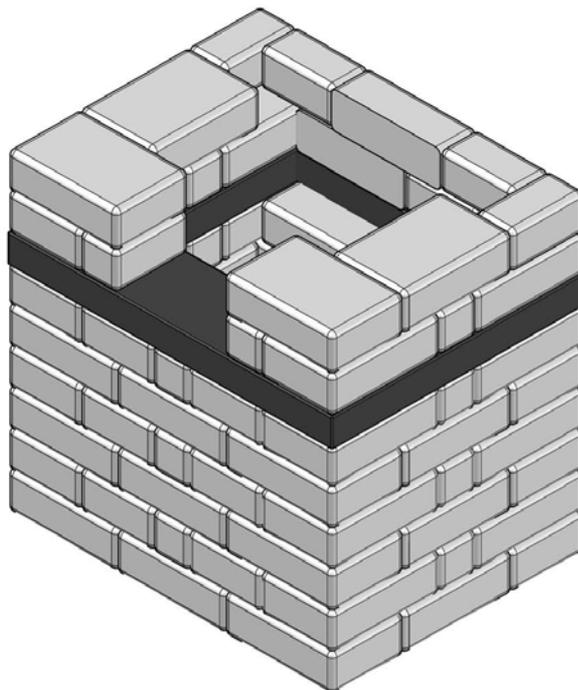
Lay down the *1-piece ebony accent band* as shown, and make sure it is level. Glue this down to the quarry stone below.

STEP 8



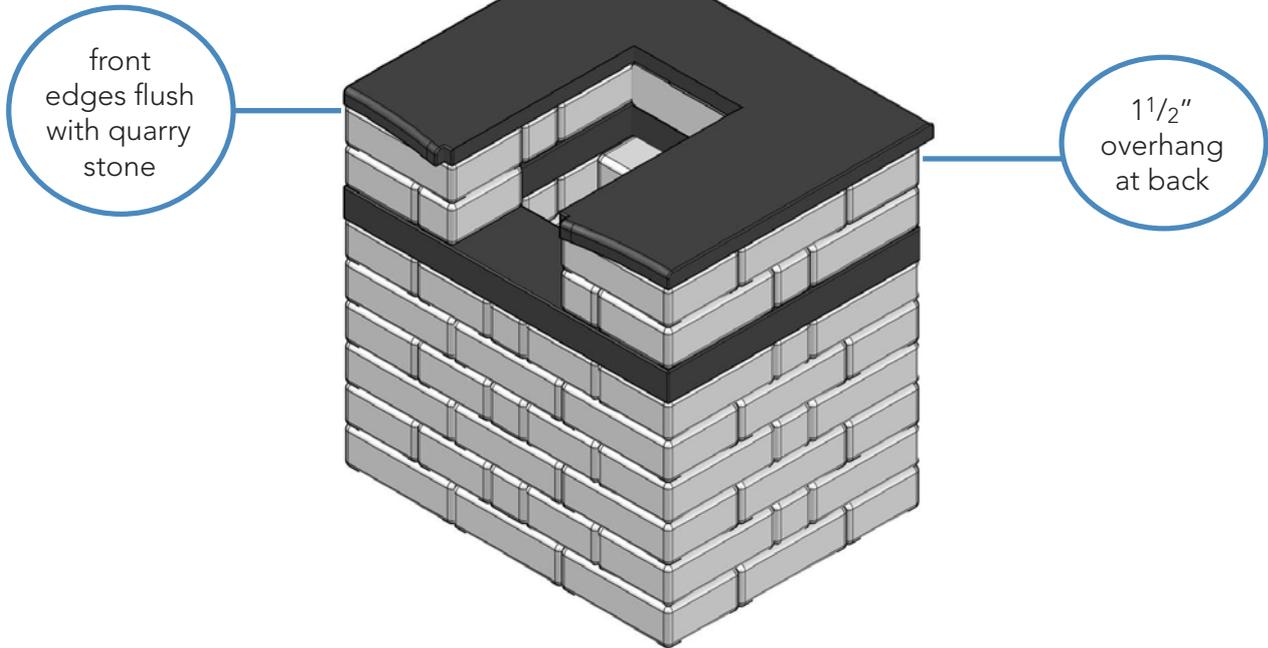
Lay down the stone pattern shown using 12", 8" and 4" pieces along with the vent box. Glue this layer down to the bottom layer.

STEP 9



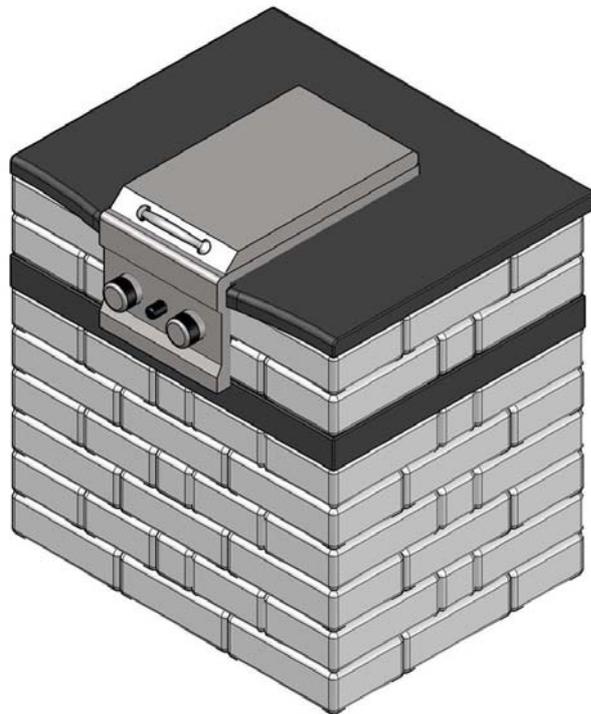
Lay down the stone pattern shown using 12", 4" standard and 4"x4"x12" pieces. Make sure that all pieces on this layer are level to receive the countertop.

STEP 10



Lay down the *1-piece ebony countertop* as shown, and make sure it is level. Glue this down to the quarry stone below.

STEP 11



Place the *slide-in double side burner* into the space provided.

Refer to the Sunstone manual included with the slide-in double burner for proper use and installation.