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# Facade Tutorials

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## MOUNTAIN HOME

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Option

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Corner with Facade-  
Ready Oven Front

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Incorporating your Wood Stone Home oven into a facade.

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# Initial Considerations



There are a virtually unlimited number of design possibilities available when integrating a Wood Stone Home oven into your kitchen. This booklet covers initial considerations, basic layouts and construction considerations to help you successfully incorporate your Wood Stone Home oven into a facade.



## We recommend the following links for additional installation information:

- [Photo Gallery](#)
- [Wood Stone Facade Extensions](#)
- [Custom Oven Finishes](#)
- [Unloading & Moving](#)
- [Installation Clearances](#)
- [Wood Stone Oven Venting](#)
- [Installation and Operation Manuals](#)



Submit your installation and ventilation plans to your local authority having jurisdiction before proceeding.

The shape of Mountain Home ovens makes them ideal for inclusion into a wide range of structural plans, including flat and curved walls, corners, cylinders and even freeform shapes.

Alternatively, because of its rectangular shape, Bistro Home ovens are often incorporated into a kitchen design by applying facade materials, such as tile, stone or brick, directly onto the oven exterior.

To ensure a surprise-free facade installation with any model, the following considerations should be addressed early in the design process:

### 1. VENTING & CLEARANCES

The oven must be connected directly to a grease-rated duct. Use either a manufactured grease duct listed to UL 1978, or a field built grease duct constructed in accordance with NFPA96 and other applicable codes. Grease duct is specifically designed to safely vent flammable grease-laden vapors from cooking equipment. B-vent or other common residential duct material should not be used. The facade design must allow for proper airflow and adequate clearances. See the [Installation and Operation Manual](#) on the Wood Stone Home website for details.

### 2. THE FACADE SURROUND

Do you want to install a finish wall across the face of the oven or install the oven within an enclosure? Will you fabricate the connection between the oven and facade or, in the case of Mountain Home ovens, use optional Wood Stone facade extensions? An extensive assortment of facade extensions has been designed to substantially reduce on-site fabrication and installation time, taking the guesswork out of the construction process and helping to ensure a durable, safe installation. A wide array of doorway, storage box and service panel facade extensions can be seen on the [Facade Extensions](#) section on the Wood Stone Home website.

### 3. FACADE MATERIAL UNDERLayment

If installing finish materials directly onto the oven, will underlayment be installed on-site, or will the oven be ordered facade-ready? Facade-ready ovens come with the non-combustible cement board underlayment pre-installed and ready for immediate application of the facade materials. Proper allowances are made for combustion air openings, and relevant components are extended to accommodate the depth of applied materials to create a clean finished look. All finish material must be non-combustible.

### 4. STUCCO-READY OVENS

For a traditional look, Mountain Home and Bistro Home ovens are available stucco-ready. The sheet metal oven body exterior is omitted, and instead the fully-insulated oven body is covered with steel mesh, ready for field application of non-combustible stucco (by others). Stucco-ready ovens are connected directly to a grease-rated duct.



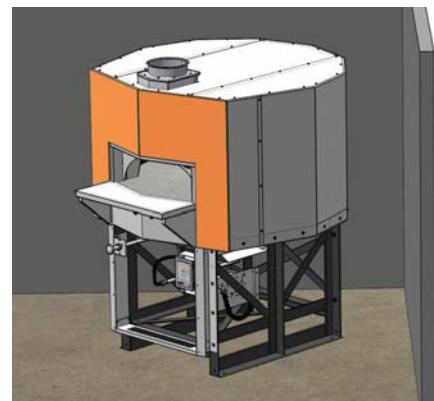
This tutorial covers corner facade installations where the facade walls are built to the sides of the oven, and the oven front is facade-ready. The oven includes an optional Mantle and standard Service Panel. The oven is vented via the direct connect venting method.

Illustrations in this tutorial are representative of all MH models. However, there are some differences between models. Notable specific model differences include the absence of a Flame Height Control Knob on ovens without a radiant flame (WS-MH-W and WS-MH-W-IR models). The WS-MH-4 model has a flat face above the doorway and, if equipped with an IR burner, does not support Storage Box Extensions due to space limitations. The specific configuration will also influence which Controller or Temperature Readout is installed.

### THE BASE OVEN

The graphic to the right shows the WS-MH-5-RFG-IR facade-ready oven as it would arrive. Facade-ready ovens include pre-installed underlayment and an extended lip around the doorway, providing a finished look for the edges of the facade material.

Specification Sheets and CAD (KCL) symbols (\*.dwg) for Mountain Home ovens can be found under the Specs & DWGs tab of the model's product page on the Wood Stone Home website.



### Step 1. INSTALL SUPPLIED OVEN COMPONENTS

Mount the Service Panel, Toe Kick and optional Mantle per the instructions in the [Installation and Operation Manual](#).

Note the location of the perforated air intake on the Service Panel. Combustion air flows into the space under the oven through this area, which must be left free of obstructions. [See Airflow Detail on next page](#).

To avoid common mistakes that affect airflow, see the [Oven Venting](#) section of the Wood Stone website.

Connect the flue to the oven's flue collar. This flue must be a grease-rated duct. Use either a manufactured grease duct listed to UL 1978, or a field built grease duct constructed in accordance with NFPA96 and other applicable codes. Grease duct is specifically designed to safely vent flammable grease-laden vapors from cooking equipment. B-vent or other common residential duct material should not be used.

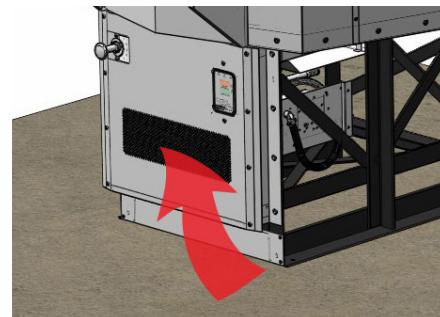
If the oven is being completely enclosed, make certain the duct system has been approved by the authority having jurisdiction before covering. See the [Oven Venting](#) section on the Wood Stone Home website for more details.



**DETAIL > AIRFLOW**

Air flows into the space under the oven through the perforated air intake on the front of the Service Panel.

This area must be free of obstructions to allow proper airflow. The burners in the gas oven will not operate without sufficient combustion air. To avoid common installation mistakes that affect airflow, see the [Oven Venting](#) section on the Wood Stone Home website.

**Step 2. BUILD STUD WALL**

The stud wall is shown in green. Metal studs are required above the oven face because of proximity to the duct. Maintain a 1-inch clearance from the oven to combustible materials. Do not pack this airspace with insulation or any other material. A zero-inch clearance from the oven to non-combustible materials is allowed. However, the respective clearances to combustibles are transferred to those non-combustibles.

Building materials 6 inches to either side and above the doorway must be non-combustible. [See Clearances Detail below](#).

The Service Panel must be left accessible, unobstructed and removable after installation for air intake and routine service of the oven burner. [See Service Panel Detail on next page](#).

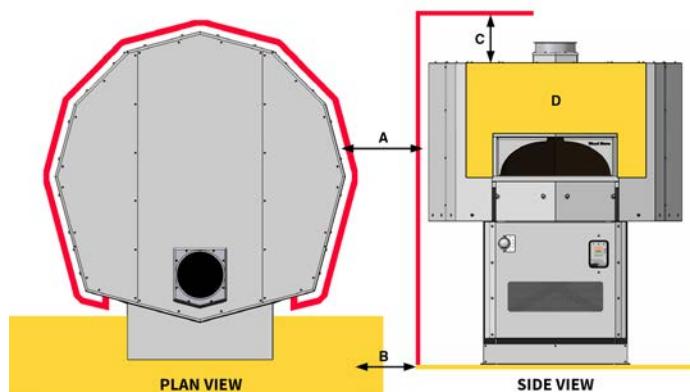
The oven controller is mounted in the Service Panel. The controller can optionally be mounted in a different position, i.e. in the wall next to the oven. When specified at the time of order, the controller is shipped with a longer wire harness to allow for custom placement and the Service Panel doesn't have the knockout for the controller. When mounting in the wall, make sure the front face of the controller protrudes approximately 3/4 inches beyond the finished wall surface to allow the controller box to be opened for service if necessary.

**DETAIL > CLEARANCES**

A major cause of oven-related fires is a failure to maintain required clearances to combustible material. Required clearances for Mountain Home ovens are defined as follows:

- A. Provide 1-inch side clearance to combustible building materials. Do not pack this airspace with insulation or any other material.
- B. Provide a non-combustible floor surface AND for ovens utilizing solid fuel, a non-combustible floor surface covering at least 30" to each side, and 36" in front of the door opening.
- C. Provide 6" top clearance to combustible building materials.
- D. Any facade materials 6 inches to either side of the doorway and above must be of non-combustible construction with no exceptions.

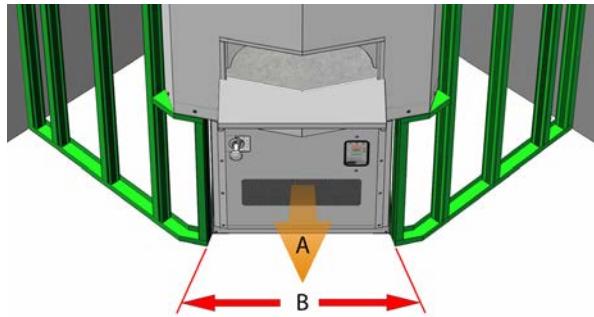
Note: A zero-inch clearance to non-combustible construction is allowed. However, the respective clearances to combustibles are transferred to these non-combustibles.



**DETAIL > SERVICE PANEL**

When the facade is complete, the Service Panel must remain removable. "A" represents the unobstructed path of the Service Panel for removal. "B" represents the width necessary to keep that path clear after the installation of all building and facade materials.

Any facade or enclosure below the mantle of gas-fired or combination ovens must allow for (1) unobstructed access for removal of service/intake panel or storage box, (2) easy access to all controls, and (3) sufficient combustion air for gas burners.

**Step 3. INSTALL NON-COMBUSTIBLE UNDERLayment**

The material (shown in orange) is non-combustible cement board. Non-combustible material is required 6 inches to either side and above the oven doorway.

Non-combustible material is required anywhere the facade touches the doorway or mantle. In this example, non-combustible cement board is used as the underlayment to surround the doorway and mantle. Drywall and Sheetrock are considered a combustible and must not be used.

**Step 4. INSTALL ADDITIONAL UNDERLayment**

Drywall (shown in yellow) is installed on the stud wall. While building materials more than 1 inch away from the oven do not need to be non-combustible, many installers choose to make the entire wall out of the non-combustible cement board to simplify construction and create a consistent facade underlayment.

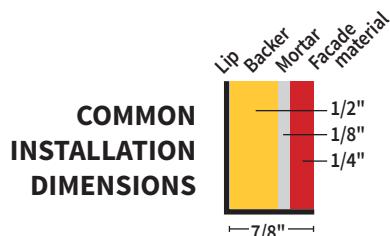


**Step 5. ADD FACADE MATERIAL**

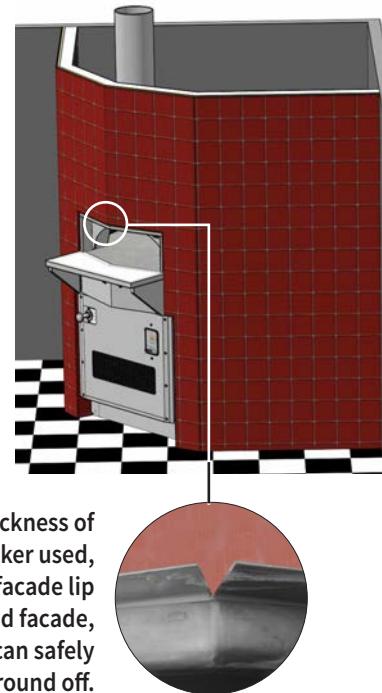
The facade wall can be finished with any non-combustible decorative material that can be affixed to the wall surface, including tile, stone or brick. It is always advisable to consult with the appropriate authority having jurisdiction before proceeding as there may be regulations regarding the suitability of various materials. Temperatures above the oven doorway can reach above 200 °F—select materials and adhesives suitable for this temperature.

It is necessary for the proper operation of our ovens that the Flame Height Control Knob be fully accessible after all finishing is completed. This knob controls temperature in our gas ovens. [See Flame Height Control Knob Detail below.](#)

An optional Flame Height Control Knob Extension Kit is available to extend the length of the shaft in order to accommodate any facade depth.

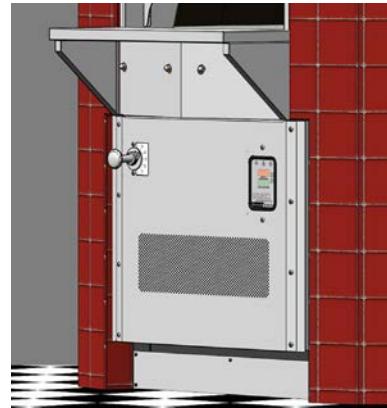


**Note:** Depending on the thickness of facade material, mortar and backer used, there may be a portion of the facade lip that extends beyond the finished facade, exposing sharp corners. This can safely be trimmed or ground off.

**DETAIL > FLAME HEIGHT CONTROL KNOB**

The Flame Height Control Knob adjusts the height of the radiant flame inside the oven. It is required to operate the oven and must be fully accessible after all finishing is completed.

An optional Flame Height Control Knob Extension Kit is available to extend the length of the shaft in order to accommodate any facade depth.

**MORE INFORMATION**

To see innovative design solutions created by other Wood Stone customers, visit the [Photo Gallery](#) on the Wood Stone Home website.

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