



Facade Tutorials

BISTRO HOME

Option

1

Stand-Alone
Oven

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.



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.

Alternatively, 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.

To ensure a surprise-free facade installation with any model, the following considerations should be addressed early in the oven selection and 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 FAÇADE 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. FAÇADE 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.

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

Option 1 Stand-Alone Oven

WOOD  STONE
FOR THE HOME



bistro home

This tutorial covers facade installations where the Bistro Home oven is freestanding and the facade material is applied directly to the oven.

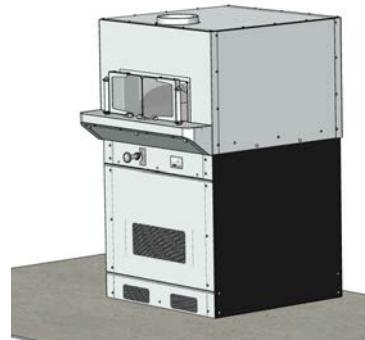
Illustrations are representative of all Bistro Home models, although wood-fired only models do not have a Flame Height Control Knob. Specifically shown is a Bistro Home WS-BH-4343-RFG oven with a full standard stainless steel front, and upper sides, with optional glass doors. A Storage Box option is also available.

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

THE BASE OVEN

The standard Bistro Home oven is mounted on a black powder coat finish steel stand, with stainless steel front components and upper sides standard. A facade-ready option is also available. On facade-ready ovens, non-combustible cement board is installed at the factory, ready for installation of the facade material, such as tile, stone or brick.

An optional set of glass doors is shown in this example. When working on the front of the oven, we recommend removing the glass doors to prevent damage.



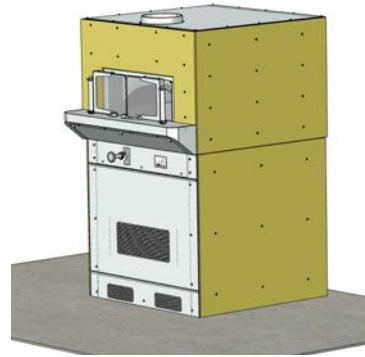
Step 1. NON-COMBUSTIBLE UNDERLAYMENT

To prepare the oven for the installation of non-combustible facade materials, a non-combustible base must first be installed.

This can be accomplished one of two ways:

Option 1: Order it Facade-Ready

With the facade-ready option, non-combustible cement board is installed at the factory, ready for the application of facade materials. An extended stainless steel lip around the doorway creates a clean edge between the oven and facade material. The standard facade-ready configuration is front-only, but facade-ready sides are available as well. Please specify at time of order.



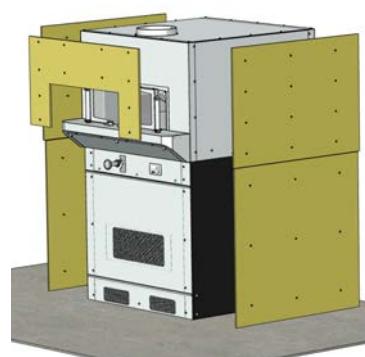
Option 2 Do-It-Yourself

With this option, the oven would be ordered with upper stainless or galvanized steel. Non-combustible cement board underlayment can be installed on this surface.

Before applying cement board, it is often desirable to extend the lip around the doorway to provide a clean finished look to the ends of the facade material. The doorway lip must be stainless steel to meet sanitary requirements. [See Doorway Lip Detail on next page.](#)

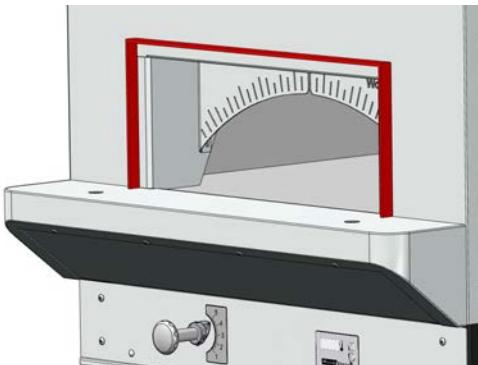
Cement board, cut-to-size (taking care to avoid covering any critical operational or service access areas), must be glued and screwed into the steel underlayment. The adhesive must be appropriate for high-temperature environments; pre-drilling is required for stainless steel ovens; countersinking is required for all screws.

To create an even surface, use 1/4" cement board on the upper oven surface, and 1/2" cement board on the lower stand surface.



DETAIL > DOORWAY LIP

The purpose of the doorway lip is to provide a finished edge where the facade material meets the doorway. It must be installed before application of the cement board. An angled piece of 14 gauge stainless steel slides between the existing doorway trim and oven face. A doorway lip is provided with the facade-ready option.

**Step 2. 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 over 200 °F—select materials and adhesives suitable for that temperature.

The Flame Height Control Knob is required to operate the oven. It must be fully accessible after all finishing is completed.

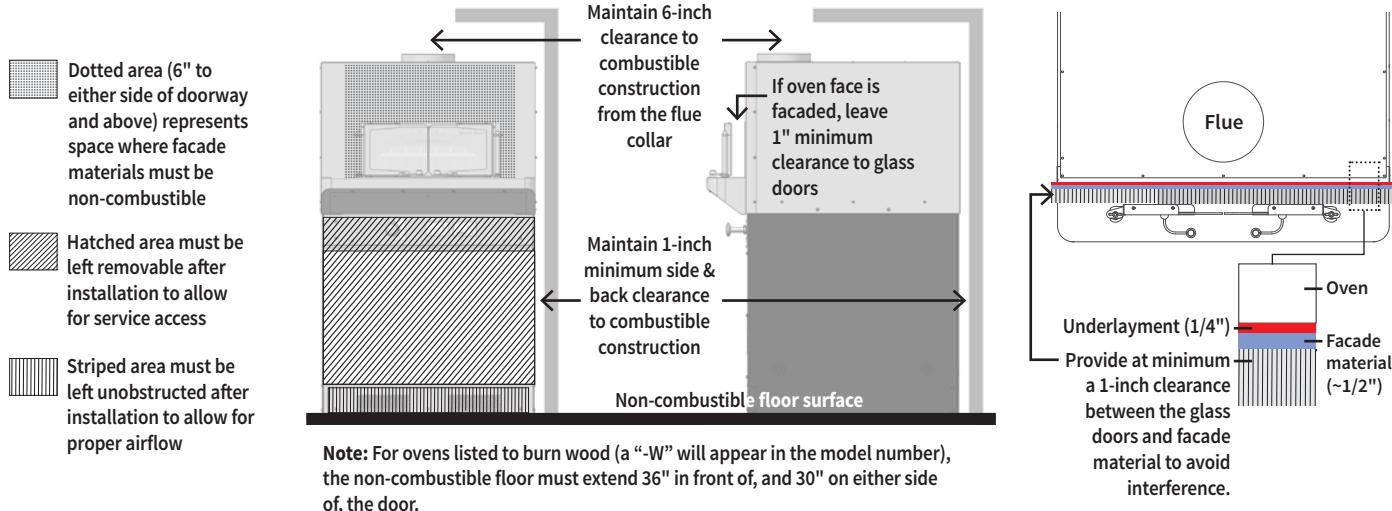
Provide 1-inch clearance between the facade material and the glass doors to avoid interference. When working on the front of the oven, we recommend removing the glass doors to prevent damage. [See Clearances Detail on next page.](#)

If the Service Panel is covered, air intake will occur only through the perforated Toe Kick, which must be left unobstructed for proper performance of the oven. The Service Panel (or optional Storage Box) **must be installed for structural stability and left removable**—all service and maintenance to the oven occurs from beneath the oven, and the front opening below the oven is the ONLY access to the area beneath the oven. [See Airflow Detail on next page.](#)

The rear panel must be installed to ensure the safe and proper operation of the oven.

The Control Box must also be left unobstructed and removable for service and maintenance. [See Clearances Detail on next page.](#)





DETAIL > CLEARANCES

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

- Provide 1-inch side clearance to combustible building materials. Do not pack this airspace with insulation or any other material.
- 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.
- Provide 6" top clearance to combustible building materials.
- 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 > AIRFLOW

Air flows into the space under the oven through the perforated air intake on the front of the Service Panel, through side vents in the case of the optional Storage Box, and the perforations in the Toe Kick.

At least one of these areas 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.

