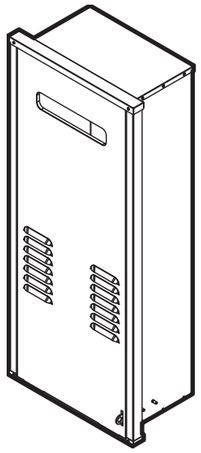


Navien

Non-Condensing Water Heaters

Recess Box Installation Guide

Models (Outdoor Use Only)

NHW700-160AE/180AE/199AE

The Navien Recess Box completely houses and safely deposits the water heater into a wall. It also protects the water heater from harsh weather conditions and maladjustments. You can also use other approved access boxes.

⚠ WARNING

This kit must be installed by a qualified installer in accordance with these instructions and all applicable codes and requirements of the authorities having jurisdiction.
Keep this guide near the water heater for future reference whenever maintenance or service is required. The following safety symbols are used in this guide.

⚠ DANGER

Indicates a hazardous situation that if not avoided will result in death or serious injury.

⚠ WARNING

Indicates a hazardous situation that if not avoided could result in death or serious injury.

⚠ CAUTION

Indicates a potentially hazardous situation that if not avoided could result in minor or moderate injury.

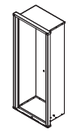
NOTICE

Indicates information considered important but not hazard-related (such as property damage).

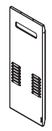
⚠ WARNING

Cancer and Reproductive Harm - www.P65Warnings.ca.gov

Included Items



Recess Box



Recess Box Cover

Locking bracket

Screws (7 EA)

Washer (7EA)

Manual

Choosing an Installation Location

When choosing an installation location, you must ensure that the location provides adequate clearance for the recess box. Position the recess box in an open area and ensure that the clearances meet the requirements as shown in Figure 1.

Check the local authority for minimum allowable clearance requirements. If none exist, maintain the following minimum suggested clearances as shown in Figure 1.

Locate the recess box 4' below, 4' horizontally from, or 1' above any door, operable window, or gravity air inlet into any building. It must also be 3' above any forced air inlet within 10' horizontally.

There should be no obstacles within 1 ft (30 cm) of the recess box. An area of 3 ft (91 cm) should be secured above and beneath the recess box. Ensure that cold winter wind does not penetrate the recess box.

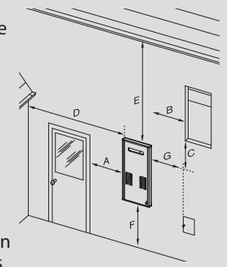
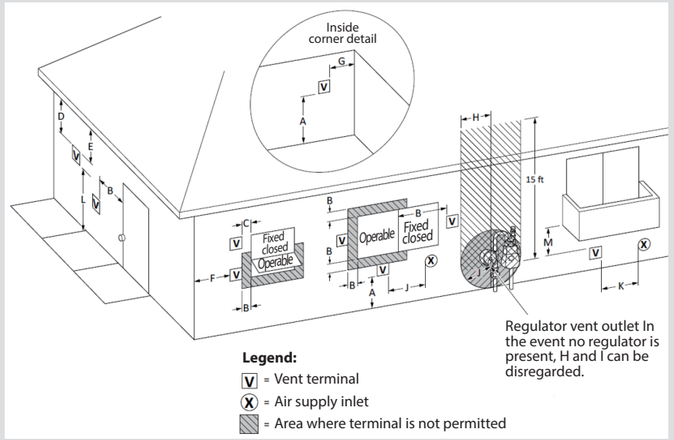


Figure 1

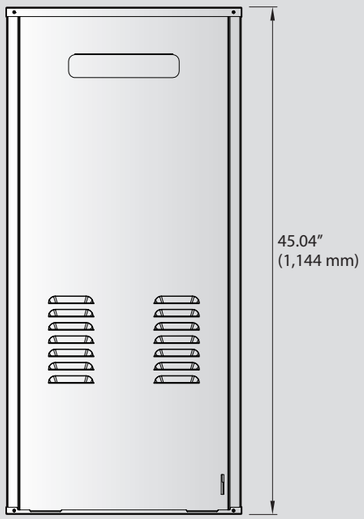
References	Descriptions	Minimum Distances
A	Directly below or adjacent to an opening; operable windows, doors and any fresh air openings	48" (USA)
B		
C		
D	From any adjacent wall	12"
E	Below a gutter, sanitary pipework, eaves or overhang	36"
F	Above ground	12"
G	From a gas meter or gas regulator	36"

Maintaining Clearances

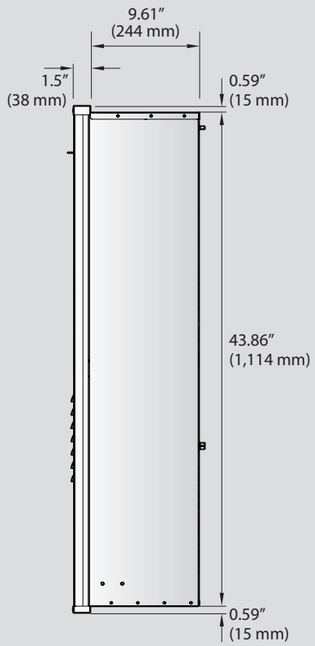
Maintain the following venting clearances, as required by **ANSI Z21.10.3 and the National Fuel Gas Code, ANSI Z223.1/NFPA 54, and CAN/CGA B149.1 Natural Gas and Propane Installation Code**:



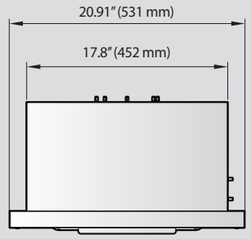
Dimensions for NHW700-AE Series (GXXX002134)



Front View



Side View



Overhead View

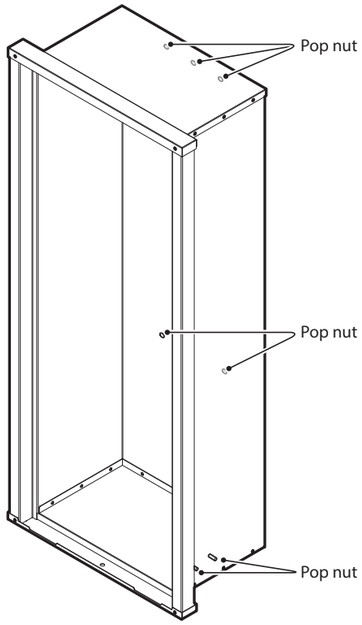
Ref	Description	Non-Direct Vent Installation Clearance[1]
A	Clearance above grade, veranda, porch, deck, or balcony	12 in (30 cm)
B	Clearance to window or door that may be opened	4 ft (1.2 m) below or to side of opening; 1 ft (300 mm) above opening
C	Clearance to permanently closed window	12 in (30 cm)*
D	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 ft (61 cm) from the center line of the terminal	3 ft (91 cm)*
E	Clearance to unventilated soffit	3 ft (91 cm)*
F	Clearance to outside corner	2 ft (61 cm)*
G	Clearance to inside corner	12 in (30 cm)*
H	Clearance to each side of center line extended above meter/ regulator assembly	3 ft (91 cm) within a height of 15 ft (4.6 m)*
I	Clearance to service regulator vent outlet	3 ft (91 cm)*
J	Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliance	4 ft (1.2 m) below or to side of opening; 1 ft (300 mm) above opening
K	Clearance to a mechanical air supply inlet	3 ft (91 cm) above if within 10 ft (3 m) horizontally
L	Clearance above paved sidewalk or paved driveway located on public property	7 ft (2.13 m) for mechanical draft systems (Category I appliances). Vents for Category II and IV appliances cannot be located above public walkways or other areas where condensate or vapor can cause a nuisance or hazard
M	Clearance under veranda, porch deck, or balcony	12 in (30 cm) - open on 3 sides*

*Suggested minimum clearances by the manufacturer. If the clearances required by the local authority or gas supplier are different from those from the table above, the greater clearance should apply.
1) The minimum distance from adjacent public walkways, adjacent buildings, openable windows, and building openings shall not be less than those values specified in the National Fuel Gas Code, ANSI Z223.1/NFPA 54, and/or the Natural Gas and Propane Installation Code, CSA B149.1;
2) Information on preventing blockage by snow; and
3) Information on protecting building materials from degradation by flue gases.
† A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings.
‡ Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.

Note

- In accordance with the current CSA B149.1, Natural Gas and Propane Installation Code
- In accordance with the current ANSI Z223.1/NFPA 54, National Fuel Gas Code.
- If locally adopted installation codes specify clearances different than those illustrated, then the most stringent clearance shall prevail.

Parts Diagram

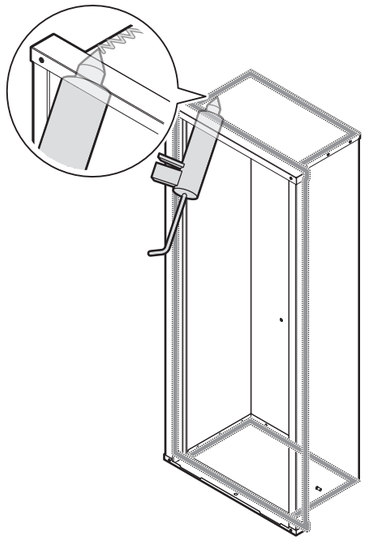


Installing the Recess Box

1. Prepare an opening in the wall based on the overall dimensions of the recess box.

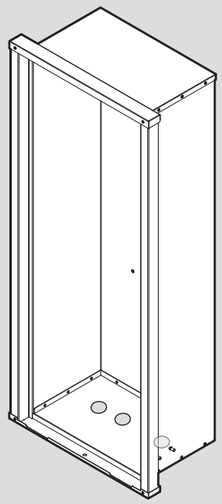
Note Make sure to apply the dimensions from the proper recess box based on the desired NHW700 Series model.

2. Apply a $^{3}/_{8}$" bead of sealant along the upper and lower edges of the box as well as along the back of the flange.



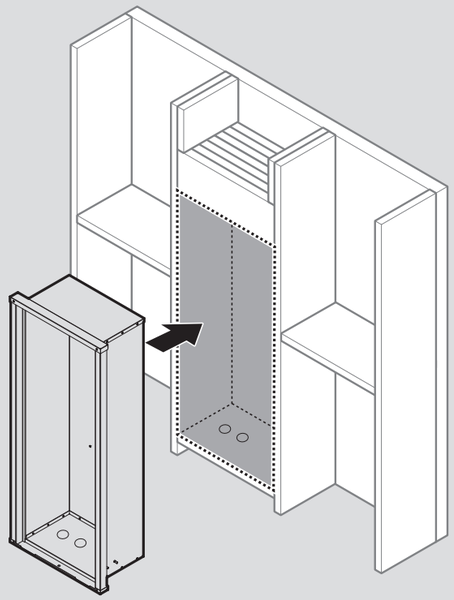
3. Drill 3 holes for the gas inlet, cold water inlet, and hot water outlet at the bottom of the recess box.

   For NHW700-AE models using External Recirculation: Drill 4 holes including the recirculation return inlet.



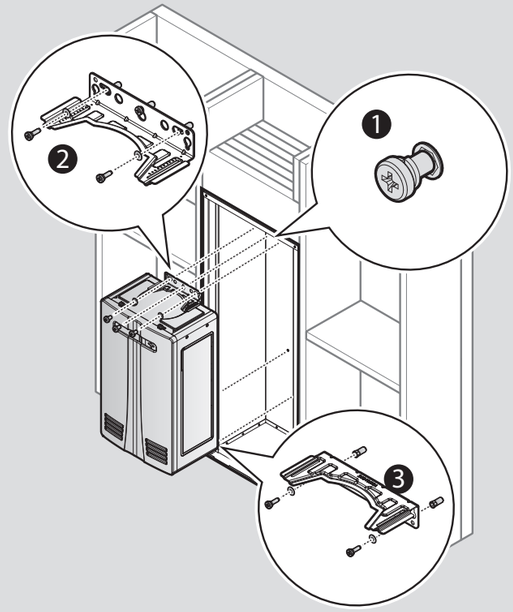
Note Additional holes may be required for electrical wiring and drainage of the pressure relief valve. Place these holes in suitable locations.

4. Position and secure the recess box to the building structure with suitable screws.

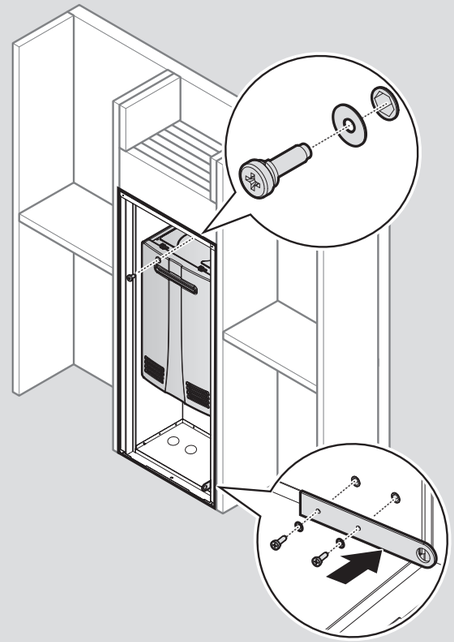


Note Ensure that the recess box is level when positioning it.

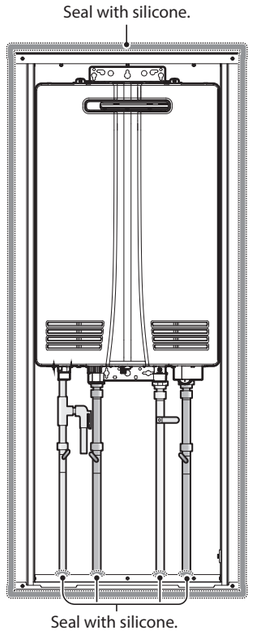
5. Mount the center bolt of the water heater's upper bracket halfway into the wall first (1) and affix the water heater to the bolt by hanging the upper bracket to the bolt. Then, finish mounting the center bolt and mount the 4 remaining bolts with washers (2, 3).



6. Loosen the center bolt of the water heater's upper bracket and mount it with a washer into the wall. Then, affix the locking bracket at the lower right of the recess box.



7. Connect the water lines and gas piping to the water heater.
8. Seal the outer edges of the recess box as well as around the piping at the bottom of the recess box using silicone.



[NHW700-AE]

⚠ CAUTION

- All openings around the piping at the bottom of the recess box as well as around the outer edges must be sealed with silicone to prevent water from entering the wall cavity.
- On completion of work, check for gas and water leaks.

9. Install the front cover by tilting the top end of the cover slightly outward and inserting it along the groove.

⚠ WARNING

Fire and Explosion Hazard

The use of this recess box for storage is prohibited.

Navien, Inc.
20 Goodyear Irvine, CA 92618
TEL 1-800-519-8794 FAX 1-949-420-0430
www.navieninc.com