Ranein



RV Tankless Water Heater Door

Instruction For Installation And Use

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⚠WARNING

Risk of Poisonous Exhaust Gases Due to Improper Installation!

Make sure that the appliance is installed as described below.
Installation of the water heater on the back of a trailer is not recommended due to the high pollution caused by dirty and wet roads.
-DO NOT vent the water heater using a venting system shared with another appliance.
-DO NOT install the appliance in any location where the vent may be covered or obstructed when any door on the RV is opened, or due to the design of the RV or special features such as slide-outs, pop-ups, etc.
-DO NOT install on a swing door.
-DO NOT install the appliance in such a way that the cover plate is less than 1 foot from each side and top of any window, slide-out, or opening into the RV; 6 feet from any mechanical air supply inlet; or 3 feet from any gas tank connection or ventilation.
-Maintain a minimum clearance from combustible materials: 6" on the sides, 4" at the back, and 4" at the rear.
-When the appliance is installed directly on carpeting, it must be placed on a metal or wood panel extending beyond the full width and depth of the appliance by at least 3" (76.2mm) in any direction. If installed in an alcove or closet, the entire floor must be covered by the panel. The panel must be strong enough to support the weight of the heater when full of water.
-Ensure adequate clearances for servicing and proper operation.
-Provide room for access to the rear.

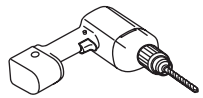
Suffocation Hazard

-Dispose of packaging material or keep it out of reach of small children.
-Failure to follow these instructions could result in serious injury or death.

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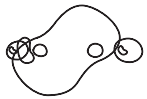
Tools Required (Not Provided)



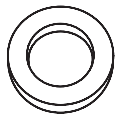
Electric drill
Bit size: 1/16"(3mm)
Note: It is use for holes drilling of exterior sheet metal of RV.



Gloves



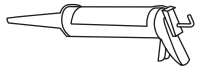
Soapy Water



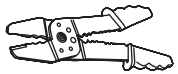
Washers



Butyl tape



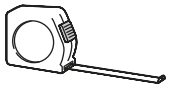
Sealant Gun



Wire Stripper Pliers



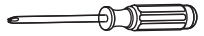
Adjustable Wrench x 2



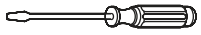
Tape Measure



Pencil



Phillips Screwdriver



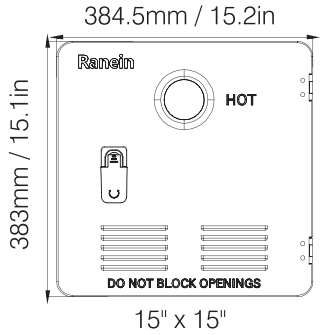
Flat Blade



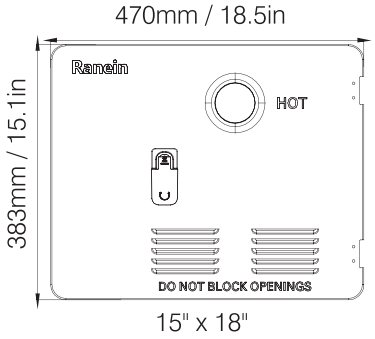
Cutting Knife



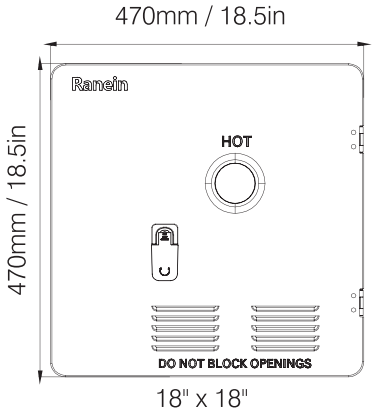
Eye Protection



Brand	CapitalM	odel
Suburban	4 Gallon	SW4D(5135A)
		SW4DE(5136A)
	6 Gallon	SW6D(5138/E)
		SW6DE(5139A/E)
		SW6DEL(5140A/E)
		SW6DEC(5223A/E)
		SW6DELC(5224A/E)



Brand	CapitalM	odel
Suburban	6 Gallon	SAW6D
Atwood		94001BP
		94002BP
Dometic		WH-6GA
		WH-6GEA



Brand	CapitalM	odel
Dometic	9 GallonW	H-9GEA
	10 Gallon	WH-10GEA
Atwood		GC10A-4E-10
Suburban		SW10D(5142A/F)
		SW10DE(5143A/F)
		SW10DEL(5144(A/F)
		SW10DEC(5228A/F)
		SE10DELC(5230A/F)
	12 Gallon	SW12D(5146A/F)
		SW12DE(5147A/F)
		SW12DEL(5148A/F)
		SW12DEC(5229A/F)
		SW12DELC(5231A/F)
	16 Gallon	SW16D(5150A)
		SW16DE(5151A)
		SW16DEL(5152A)
		SW16DEC(5232A)
		SW16DELC(5233A)
		WH-16GEA

Preparing the Installation Site

⚠CAUTION

Sharp Edges Can Cause Cuts and Injury!

Always wear protective gear, such as gloves, to avoid injuries from sharp edges during installation and while handling the appliance.

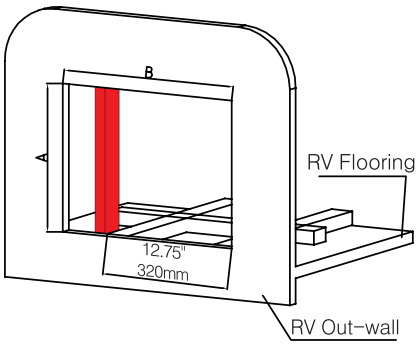
(a) Ensure that the appliance is in contact with the vehicle or a platform with adequate weight-bearing capacity during installation.

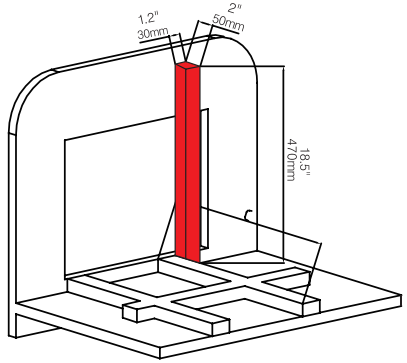
(b) When installing on a carpeted area, place a metal or wood panel under the appliance that extends at least 3" beyond the width and depth of the appliance.

(c) If escaping water could damage components or the vehicle, install a collection pan below the appliance and direct the flow of water from the pan to the outside of the vehicle.

Prepare Cutout Opening

(a) Make sure that the front edge of the opening is surrounded by a solid frame to firmly anchor the appliance. If necessary, build an appropriate frame with the following dimensions: (15x15 in, 15x18 in, 18x18 in door frame).





Hole size diagram

Cutout dimension on the out wall of the RV			
Size	AB		C
15x15"	12.75"/323mm	12.75"/323mmM	in.20"/507mm
15x18"	12,75" /323mm	12.75-16.3"/323-413mmM	in.20"/507mm
18x18"	12.75-15.7"/323-398mm	12,75-16.3"/323-413mmM	in.20"/507mm

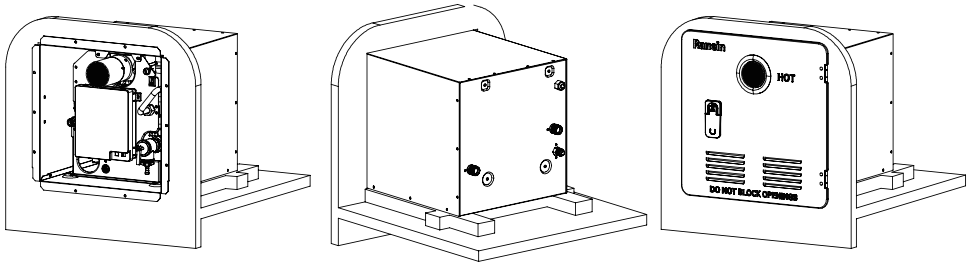
Note:

(a) This cutout size can replace the Atwood 10-gallon and Suburban 10-gallon tank water heaters.

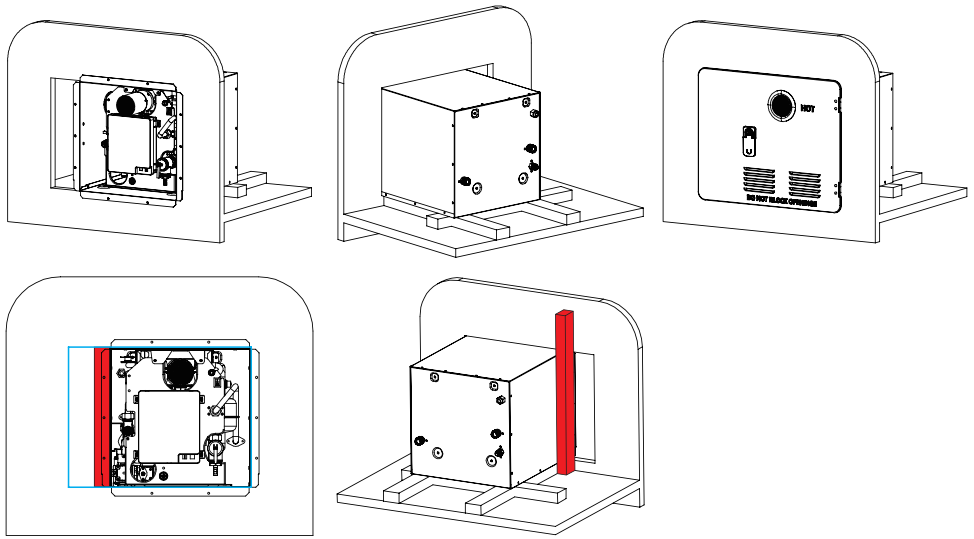
(b) The required depth "C" depends on how the water hoses, electrical connection cable, and gas line are installed. The depth "C" must be determined for the particular situation before installation.

(c) The corners of the rough opening must be at right angles. The exterior wall opening must have the same dimensions with no rounded corners.

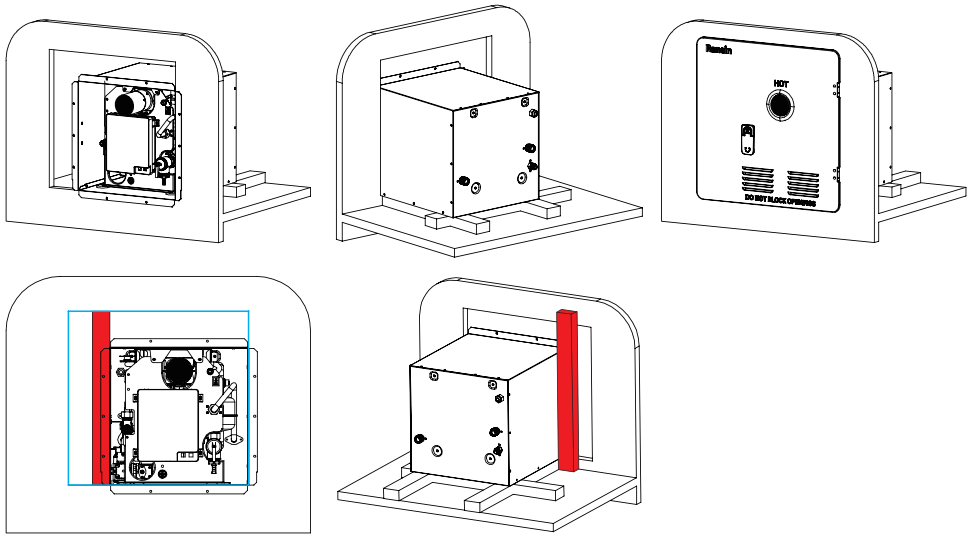
(d) If necessary, create a platform to support the water heater. Below are some common solutions. Ensure the platform is level front to back and side to side after securing it to the RV.



15 x 15 inch door



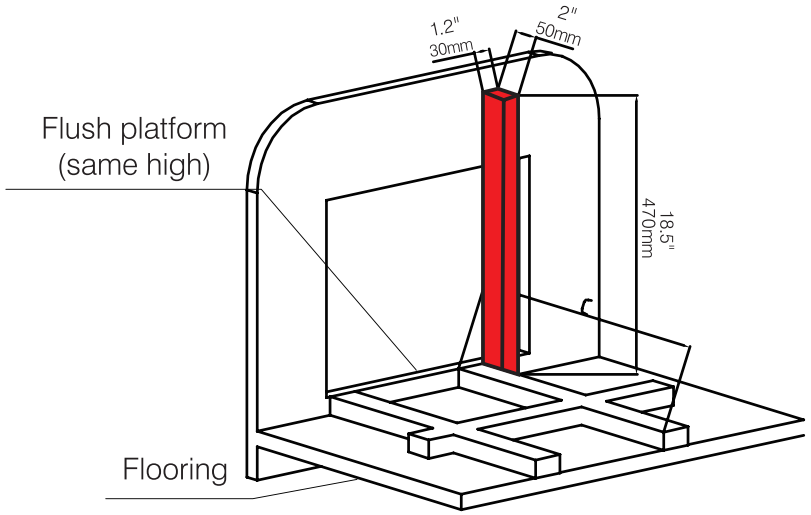
15 x 18 inch door



18 x 18 inch door

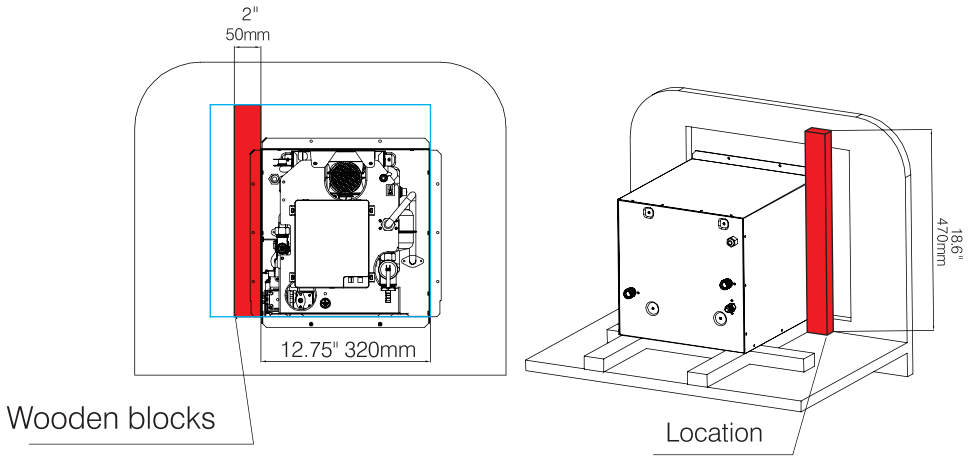
Installation Plan 2

The down edge of the opening should be raised higher than the flooring using one wooden mat. Additionally, add a small wooden block for positioning purposes.



Installation Plan 3

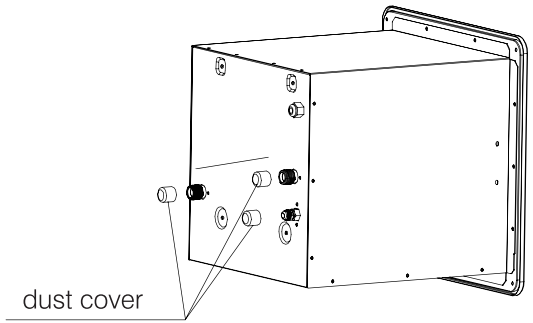
Place the RV water heater in the bottom right corner of the opening, and add a small wooden block for positioning purposes.



Appliance Installation Steps

Step 1: Unpack and Remove Protective Caps from the Joints

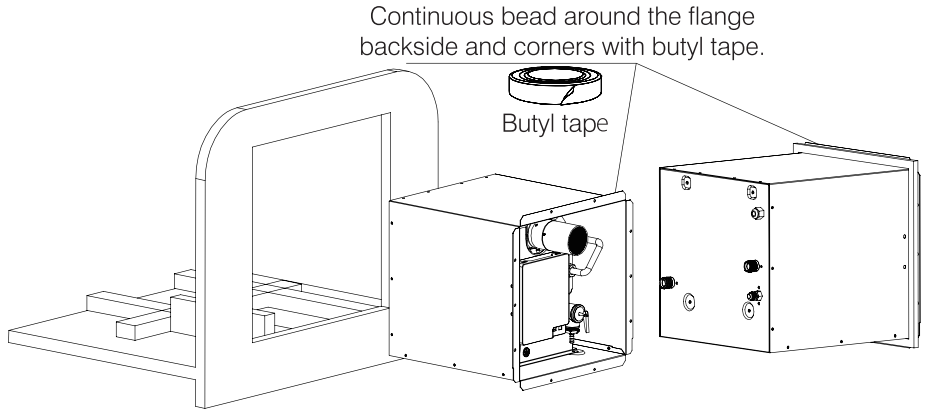
- Unpack the box and lift the appliance upward until it is fully removed.
- Remove the protective caps from the water inlet, water outlet, and gas inlet joints. Refer to the pictures below.



Step 2: Apply Butyl Tape on the Backside of the Flange

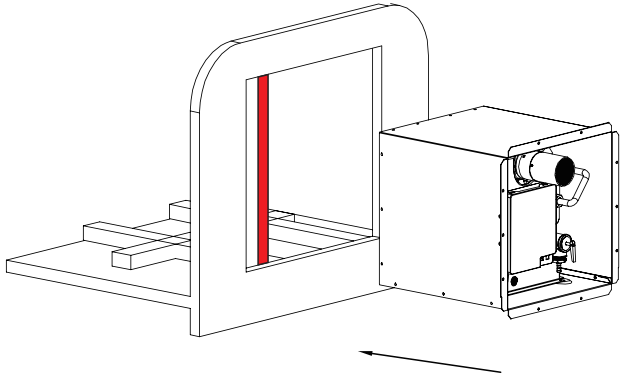
- Apply an adequate amount of water-sealing material, such as butyl tape (recommended width: 1", not provided), around the entire backside of the flange area and holes.

NOTE: Do not use adhesive sealing materials such as silicone for the watertight seal.



Step 3: Slide in the Appliance

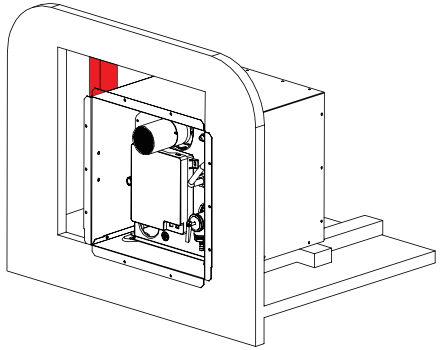
1. Carefully position the water heater and insert it into the frame opening. Ensure the flange is evenly spaced against the exterior wall of the RV.
   NOTE: Ensure the area beneath the appliance is clear to slide it across the floor to prevent damage to the linoleum.
2. After insertion, check the opening size to ensure it is suitable for the appliance.
3. Slide the appliance into the cutout opening. If it does not slide in easily, check the area behind the appliance for debris or obstruction. Make sure the cutout size is correct, and verify that the corners are square—there should be no radius at the corners.



Step 4: Check and Adjust the Position After Sliding the Appliance

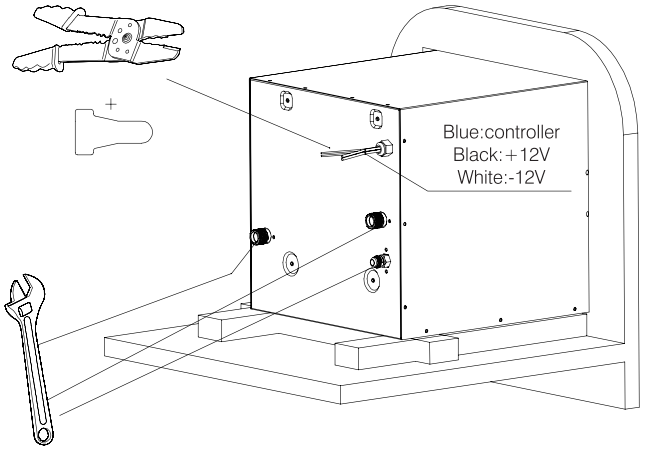
Check the sealing between the backside flange and the outer wall. Ensure the flange is fully touching the RV's outer wall.

NOTE: Gaps between the flange and the outer wall will cause leakage, so make sure the flange is securely in contact with the RV's exterior.

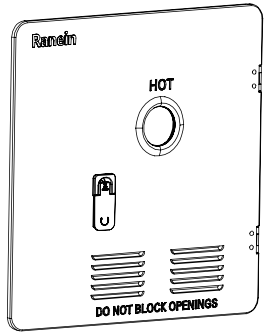


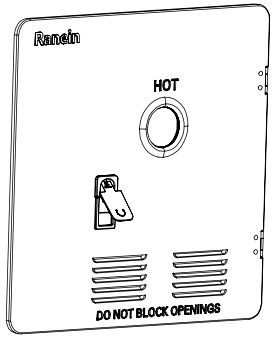
Step 5: Gas Inlet, Water Inlet, and Water Outlet Connection

1. Use a wrench to tighten the gas connectors securely.
2. Use a wrench to tighten the water connectors securely.

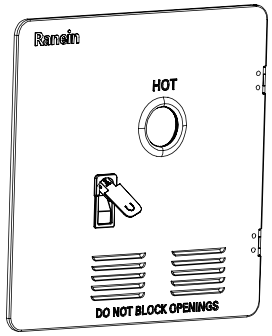


Step 6: Door frame installation

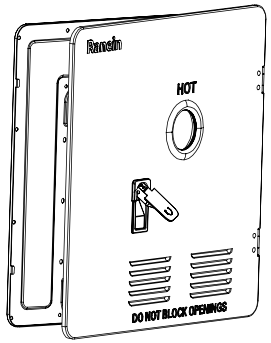




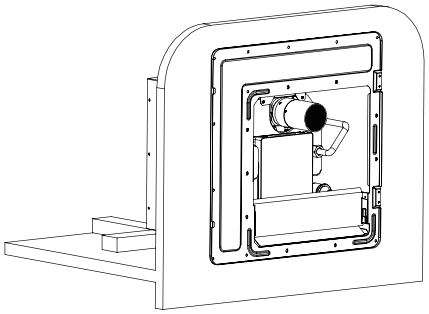
1. Unpack the door assembly from the package.

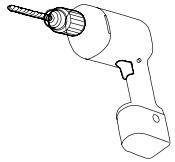


3. Rotate the Handle 90 Degrees.

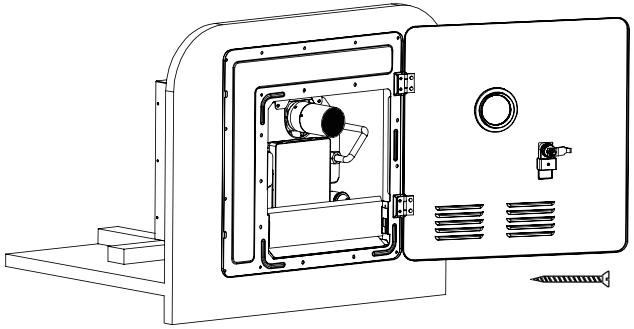


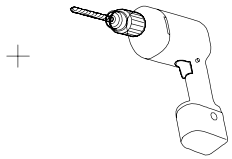
4. Open the door.



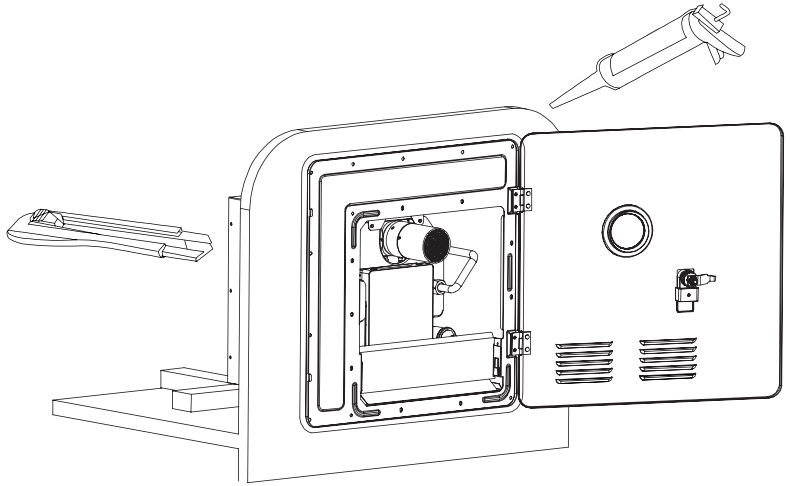


5. Drill 14 Holes in the Metal Board of the RV's Outer Wall. Use a 1/8" (3mm) drill bit. Note: Drill through the metal board only—there is no need to drill into the inner wood or insulation layer.





6. Fix the Door Frame with ST3.9x30 mm Self-Tapping Screws (14 pcs).



7. Apply Sealing Material Around the Edge of the Door Frame (for better waterproofing).Remove any excess sealing material after application.