

**Thermador**® | *An American Icon™*

# VENTILATION INSTALLATION MANUAL

MODEL: HDDW 36DS



# SAFETY INSTRUCTIONS

Read All Instructions Before Using the Appliance.  
READ AND SAVE THESE INSTRUCTIONS.

## WARNING

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

- A. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-related construction.
- B. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent backdrafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
- C. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- D. Ducted fans must always be vented to the outdoors.
- E. Always unplug or disconnect the appliance from the power supply before servicing.
- F. This unit is designed for indoor use only. Use this unit only in the manner intended by the manufacturer.

## WARNING

CAUTION: For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors:

To reduce risk of fire and to properly exhaust air, be sure to duct air outside. Do not vent exhaust air into spaces within walls, ceilings, attics, crawl spaces or garages.

TO REDUCE THE RISK OF FIRE, USE ONLY METAL DUCT WORK.

To reduce the risk of fire or electric shock, do not use the fan with any solid-state speed control device.

This appliance has been found to be in compliance with UL507 Standard for Electric Fans and CAN/CSA-22.2 No. 113 Canadian Standard for Fans and Ventilators. It is the responsibility of the owner and the installer to determine if additional requirements or standards apply in specific installations.

This unit is manufactured for indoor use only. Do not use this unit outdoors.

### Parts Needed

- Tape Measure
- Phillips Head Screwdriver
- Duct Tape
- Ductwork (configuration varies depending on location; See pages 4-7 for further information)
- Additional Sheetmetal screws (as necessary for ductwork installation)

### Parts Included

- Appliance assembly (1)
- Sheetmetal Screws (2)
- Wood Screws (6)
- Counter Sink Screws (2)
- Hardware for brackets on vent (2)
- Plugs UX6 (8)

## IMPORTANT INFORMATION:

⚠ Old appliances are not worthless rubbish. Valuable raw materials can be reclaimed by recycling old appliances. Before disposing of your old appliance, render it unusable.

⚠ You received your new appliance in a protective shipping carton. All packaging materials are environmentally friendly and recyclable. Please contribute to a better environment by disposing of packaging materials in an environmentally-friendly manner.

⚠ The extractor hood can only be used in exhaust air mode.

⚠ Always mount the extractor hood over the center of the hob.

⚠ Minimum distance between electric hob and bottom edge of extractor hood: **30" mm**, Fig. 1.

⚠ The extractor hood must not be installed over a solid fuel cooker – a potential fire hazard (e.g. flying sparks) – unless the cooker features a **closed, non-removable cover** and all national regulations are observed.

⚠ The smaller the gap between the extractor hood and hotplates, the greater the likelihood that droplets will form on the underside of the extractor hood.

## Additional information concerning gas cookers:

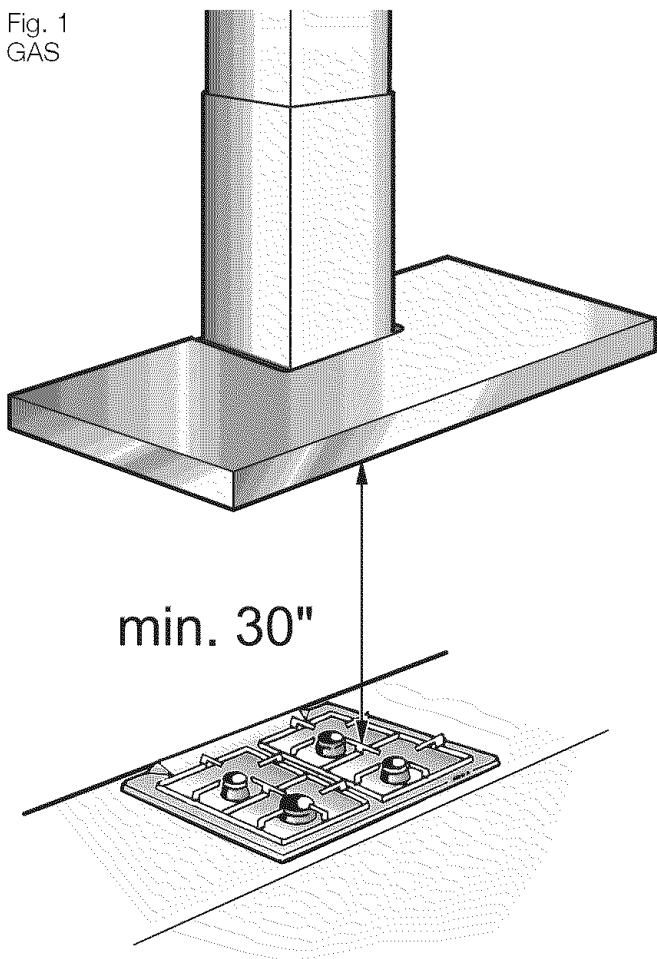
⚠ When installing gas hotplates, comply with the relevant national statutory regulations.

⚠ Always comply with the currently valid regulations and installation instructions supplied by the gas appliance manufacturer.

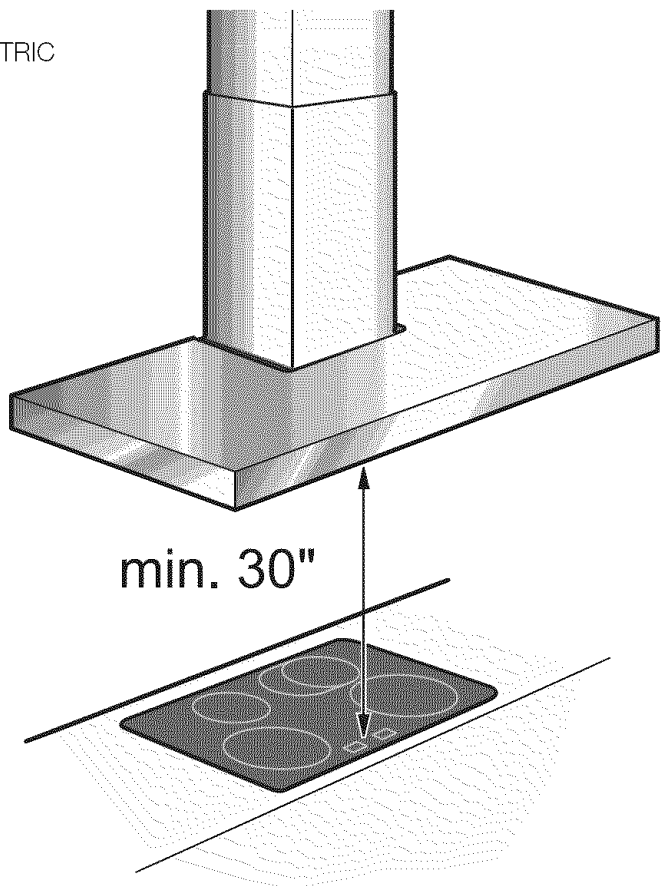
⚠ Only one side of the extractor hood may be installed next to a high-sided unit or high wall. Gap at least 2".

⚠ Minimum distance on gas hotplates between the upper edge of the grate and lower edge of the extractor hood: **30"**, Fig. 1.

Fig. 1  
GAS

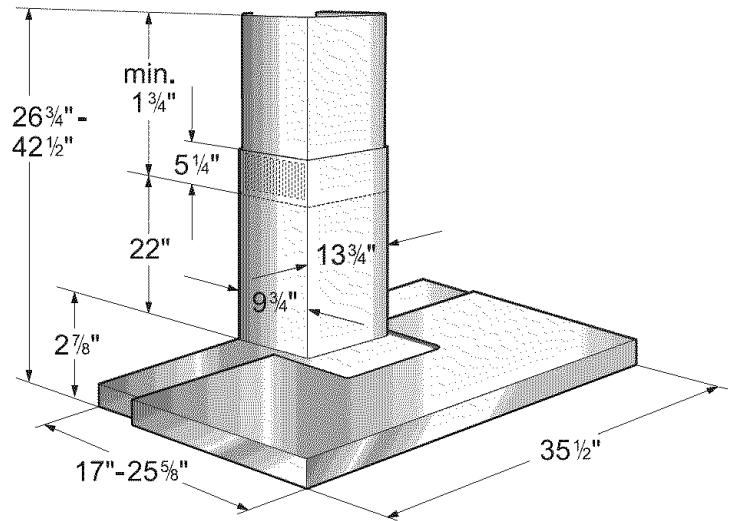
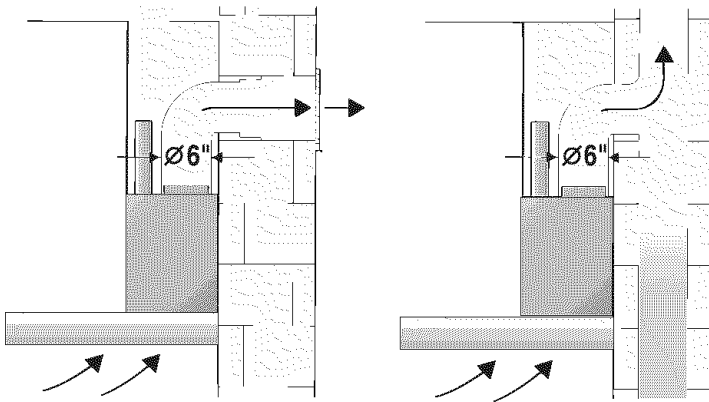


ELECTRIC



# PRIOR TO INSTALLATION

## Step 1: EXHAUST-AIR MODE



The exhaust air is discharged upwards through a duct or directly through the outside wall into the open.

☞ Exhaust air should neither be directed into a smoke or exhaust flue that is currently used for other purposes, nor into a duct that is used for ventilating rooms in which stoves or fireplaces are also located.

**Exhaust air may be discharged in accordance with official and statutory regulations only (e.g. national building regulations).**

Local authority regulations must be observed when discharging air into smoke or exhaust flues that are not otherwise in use.

☞ **When the extractor hood is operated in exhaust-air mode simultaneously with a different burner which also makes use of the same chimney** (such as gas, oil or coal-fired heaters, continuous-flow heaters, hot-water boilers) care must be taken to **ensure that there is an adequate supply of fresh air** which will be needed by the burner for combustion.

Safe operation is possible provided that the underpressure in the room where the burner is installed does not exceed 4 Pa (0.04 mbar).

This can be achieved if combustion air can flow through non-lockable openings, e.g. in doors, windows and via the air-intake/exhaust-air wall box.

**If the air intake is inadequate, there is a risk of poisoning from combustion gases which are drawn back into the room.**

**WARNING** – Avoid risk of poisoning – If the air intake to the room is inadequate, there is a risk of poisoning from combustion gasses which can be drawn back into the room.

Note: When assessing the overall requirement, the combined ventilation system for the entire household must be taken into consideration. This rule does not apply to the use of cooking appliances, such as hobs and ovens.

Unrestricted operation is possible if the extractor hood is used in recirculating mode – with activated carbon filter.

**If the exhaust air is going to be discharged into the open**, a telescopic wall box should be fitted into the outside wall.

# PRIOR TO INSTALLATION

For optimum extractor hood efficiency:

- Short, smooth duct pipe.
- As few bends in the ducting as possible.
- Diameter of ducting to be as large as possible and no tight bends in ducting.

**If long, rough exhaust-air ducting, many ducting bends or smaller pipe diameters are used, the air extraction rate will no longer be at an optimum level and there will be an increase in noise.**

**IMPORTANT: The manufacturer of the extractor hood accepts no liability for complaints which can be attributed to the design and layout of the ductwork.**

- Round pipes:**  
We recommend  
Internal diameter: **6"**.
- Flat ducts** must have an internal cross-section that equates to that of round pipes.  
**There should be no sharp bends.**  
ø 6" approx. 28.3 inches<sup>2</sup>
- If pipes have different diameters:**  
Insert sealing strip.
- For exhaust-air mode,** ensure that there is an adequate supply of fresh air.

## CONNECTING A ø 6" EXHAUST-AIR DUCT:

- Mount the duct directly onto the air outlet on the hood.

## Step 2: PREPARING THE WALL

- The wall must be flat and perpendicular.
- Ensure that the wall is capable of providing a firm hold for mounting screws and plugs.

**Weight in kg: 23.4.**

### Step 3: ELECTRICAL CONNECTION

**⚠ WARNING: THIS APPLIANCE MUST BE GROUNDED**

The **extractor hood** should only be connected to a grounded socket that has been installed according to relevant regulations.

If possible, site the earthed socket directly behind the chimney paneling.

- The grounded socket should be connected via its own circuit.
- If the grounded socket is no longer accessible following installation of the extractor hood, ensure that there is a permanently installed disconnecter.

### Step 4: INSTALL ELECTRICAL SERVICE

Check your local building codes for proper method of installation. In the U.S., if there are no applicable local codes, this unit should be installed in accordance with the National Electric Code ANSI/NFPA No. 70, Current Issue. (In Canada, installation must be in accordance with the CAN 1- B149.1 and .2 - Installation Codes for Gas Burning Appliances and/ or local codes).

The appliance must be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This appliance is equipped with a cord having a grounding wire with a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded.

**⚠ WARNING** – Improper grounding can result in a risk of electric shock.

Consult a qualified electrician if the grounding instructions are not completely understood, or if doubt exists as to whether the appliance is properly grounded.

Do not use an extension cord. If the power supply cord is too short, have a qualified electrician install an outlet near the appliance.

**If it is necessary to wire the extractor hood directly into the mains:**

**⚠ WARNING** – Avoid risk of electrical shock – If the connecting cable for this appliance is damaged, the cable must be replaced by the manufacturer or his customer service or a similarly qualified person in order to prevent serious injury to the user.

### ELECTRICAL DATA:

Are to be found on the name plate inside the appliance after removal of the filter frame.

**⚠ WARNING** – Avoid risk of electrical shock – Before undertaking any repairs, always disconnect the extractor hood from the electricity supply.

**Length of the connecting cable: 51 1/8".**

This extractor hood corresponds to EC regulations concerning RF interference suppression.



## Step 5: INSTALLATION

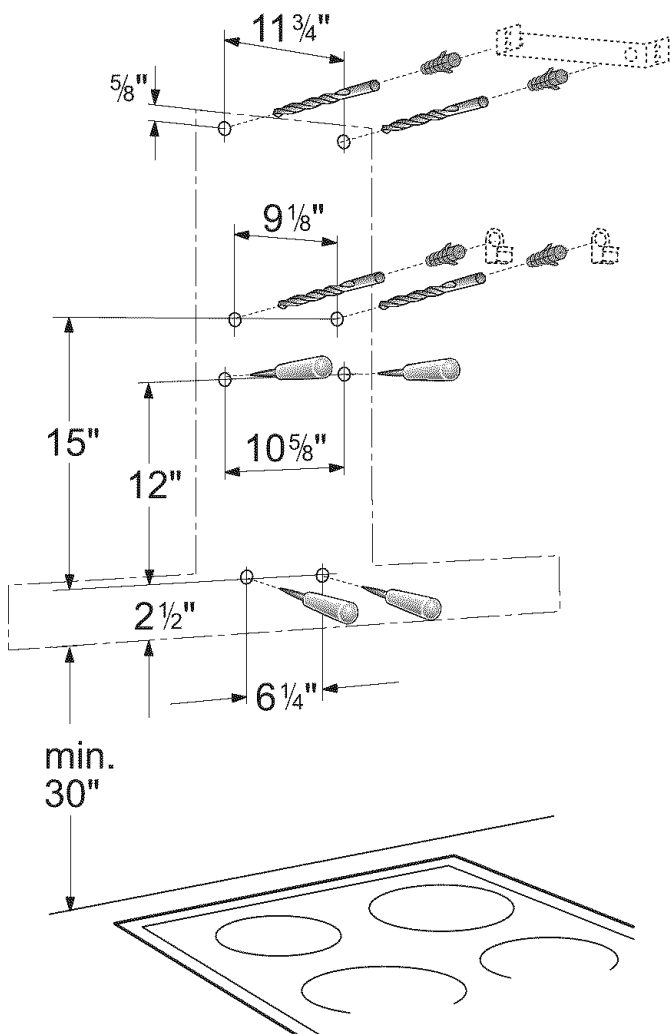
This **extractor hood** is intended to be mounted onto the kitchen wall.

1. Remove the grease filter (refer to Operating Instructions).
2. Draw a line on the wall from the ceiling to the lower edge of the hood at the center of the location where the hood is going to be mounted.
3. Use the template to mark the points on the wall where the screws will be mounted. In order to make it easier to hook the hood onto the screws, draw the outline of the area where the hood will be attached.

**⚠ CAUTION** – Ensure that the minimum distance between the hob and the extractor hood is maintained – 30". The bottom edge of the template equates to the lower edge of the extractor hood.

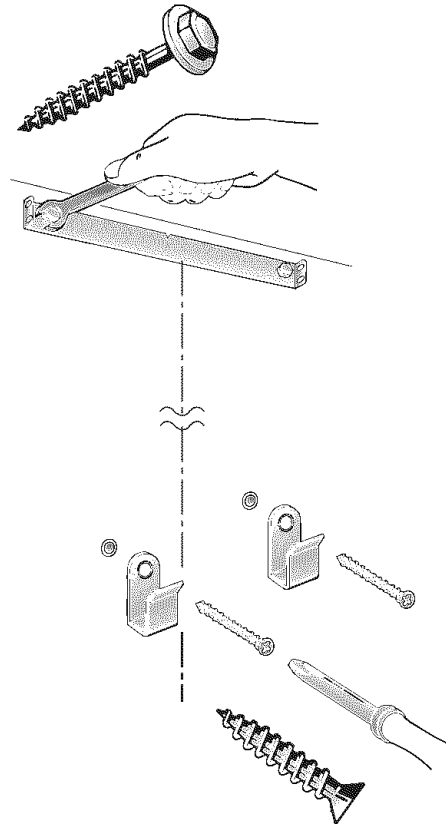
4. Drill 2x  $\frac{1}{4}$ "  $\varnothing$  holes for the upper fixing bracket and 2x  $\frac{1}{4}$ "  $\varnothing$  holes for the lower fixing bracket and press in wall plugs flush with the wall.

**Note:** At least one screw for the mounting must be installed through a stud.



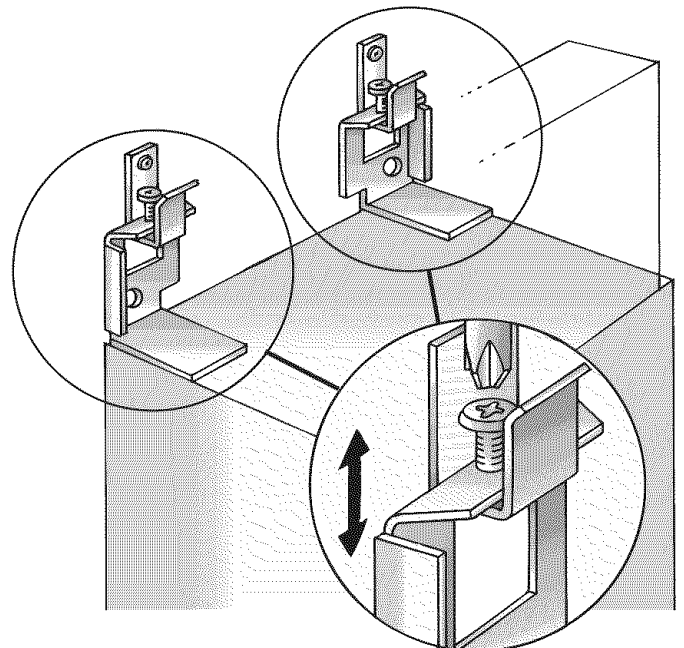
**Note:** Take into account any special accessories that are going to be fitted.

5. Screw on the upper and the two lower mounting brackets.



6. Attach the extractor hood. Adjust the height and align horizontally with the adjusting screws.

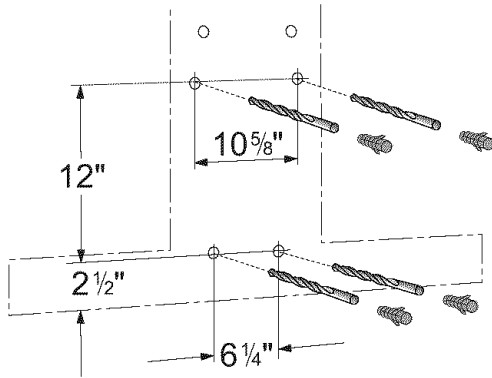
**IMPORTANT:** Check that the 4 lower fixing holes have been correctly marked. If required, mark again.



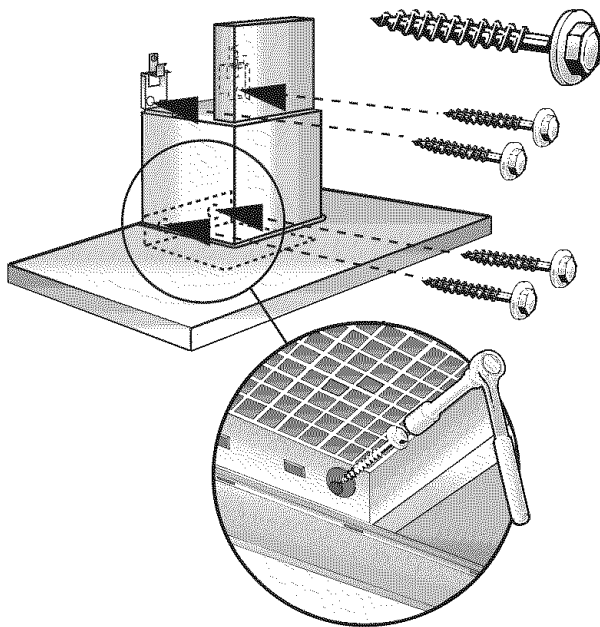


## Step 5: INSTALLATION

7. Remove the extractor hood. Drill the 4 lower  $\frac{1}{4}$ "  $\phi$  fixing holes and press in the wall plugs flush with the wall.



8. Attach the extractor hood and screw into position with the remaining 4 screws.



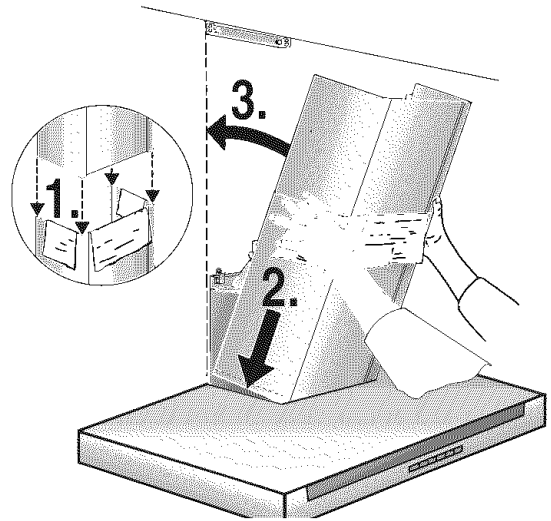
9. Connect up the outlet ducting.  
 10. Connect the hood to the electrical supply.  
 11. Carefully remove the protective foil.

**IMPORTANT:** Avoid damage to the sensitive surface.

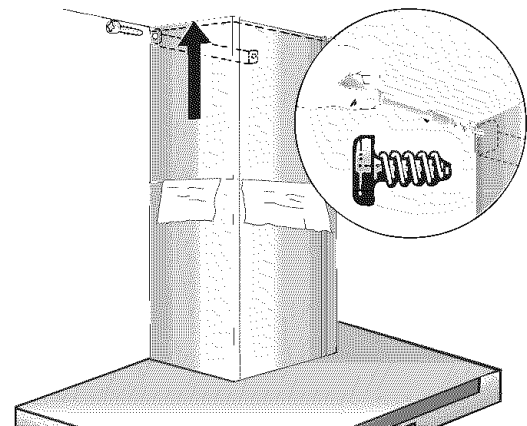
12. Insert the upper duct cover (slots downwards) into the lower duct cover.

**IMPORTANT:** Protect the cover panels from scratches, for example by laying the template used for marking the wall over the top edge of the lower section.

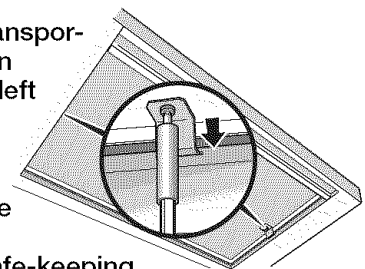
13. Insert the complete duct cover at an angle and swivel to the rear.



14. Carefully pull the upper duct cover upwards and screw the sides to the mounting bracket with 2 screws.



15. Unscrew the transportation protection devices on the left and right. The transportation protection devices must be handed to the customer for safe-keeping.


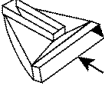
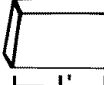
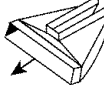

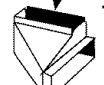

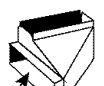
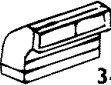

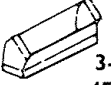

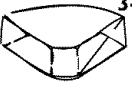
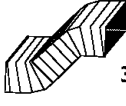

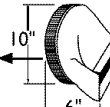


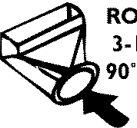
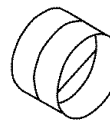

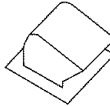


**⚠ CAUTION** – After removing the transportation protection devices, follow the safety instructions and the cleaning and care instructions regarding the **dangers of being crushed**.

16. Insert the grease filter (refer to Operating Instructions).

If the vent system does not operate satisfactorily during any of the above procedures, review all steps in these Installation Instructions to ensure that nothing has been omitted or overlooked. Also, refer to the Care & Use Manual for additional information or call Thermador Customer Support 1-800-735-4328.

**TABLE I. VENTILATOR PERFORMANCE CALCULATION**

DUCT PIECES	SIZE	EQUIVALENT LENGTH	QUANTITY USED	TOTAL EQUIVALENT LENGTH	DUCT PIECES	SIZE	EQUIVALENT LENGTH	QUANTITY USED	TOTAL EQUIVALENT LENGTH
 <b>ROUND STRAIGHT</b>	6"	1.2'			 <b>3-1/4"X 10" CENTER REVERSE ELBOW LEFT</b>	N/A	15'		
	7"	0.95'							
	8"	0.7'							
	10"	0.6'							
	3-1/4" x 10" STRAIGHT	1'			 <b>3-1/4"X 10" CENTER REVERSE ELBOW RIGHT</b>	N/A	25'		
	3-1/4" x 14" STRAIGHT	0.7'							
 <b>90° ELBOW ROUND</b>	6"	12'			 <b>3-1/4"X 10" RIGHT REVERSE ELBOW</b>	N/A	25'		
	7"	8'							
	8"	6'							
 <b>45° ELBOW ROUND</b>	6"	5'			 <b>3-1/4"X 10" LEFT REVERSE ELBOW</b>	N/A	15'		
	7"	4'							
	8"	3'							
 <b>3-1/4"X10" 90° ELBOW</b>	N/A	5'			 <b>ROUND WALL CAP</b> Model #WC8 Model #WC10	6"	2'		
						7"			
						8"			
						10"			
 <b>3-1/4"X10" 45° ELBOW</b>	N/A	15'			 <b>ROUND ROOF CAP</b>	6"	2'		
						7"			
						8"			
 <b>3-1/4"X10" FLAT ELBOW</b>	N/A	20'			 <b>3-1/4"x10" Flex Model #RD 1</b> 2' long	20'			
 <b>ROUND TO 3-1/4"X10"</b>	6"	1'			 <b>3-1/4"x10" to Round Model 310TRI0</b>	1'			
	7"	1'							
 <b>3-1/4"X10" TO ROUND</b>	6"	5'			 <b>3-1/4"x10" Wall Cap Model WC310</b>	2'			
	7"	3'							
 <b>ROUND TO 3-1/4"X10" 90° ELBOW</b>	6"	10'			 <b>7" In-Line Backdraft Damper Model # I 40</b>	5'			
	7"	8'							
 <b>3-1/4"X10" TO ROUND 90° ELBOW</b>	6"	10'			 <b>3-1/4"x10" Roof Jack &amp; Shutter, Model # RJ310</b>	5'			
	7"	5'							

TOTAL (of both columns)=

NOTE: Fittings with model numbers stated are available through your Thermador dealer. All other fittings are available from most major hardware stores.

**Thermador**<sup>®</sup> | *An American Icon*<sup>™</sup>

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