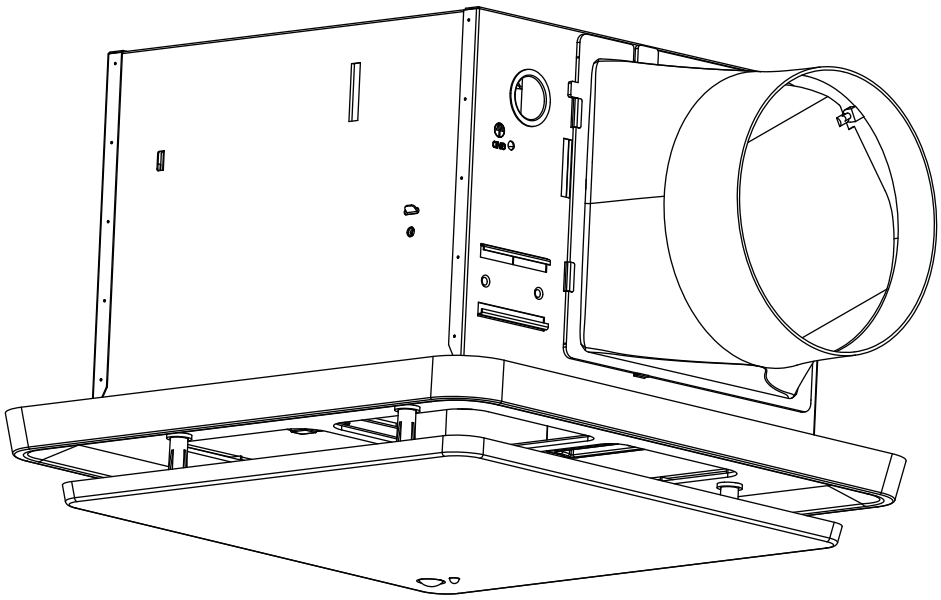
SKU #1009012720
Model #LDS-BF2002

HAMPTON BAY®

USE AND CARE GUIDE

VENTILATION FAN



Questions, problems, missing parts, before returning to the store,
call Hampton Customer Service
8 a.m. – 6 p.m., EST, Monday - Friday

1-855-HD-HAMPTON

HOMEDEPOT.COM

THANK YOU

We appreciate the trust and confidence you have placed in Hampton Bay through the purchase of this ventilating bath fan. We strive to continually create quality products designed to enhance your home. Visit us online to see our full line of products available for your home improvement needs. Thank you for choosing Hampton Bay!

Table of Contents

Safety Information

Please read and understand this entire manual before attempting to assemble, operate or install the product.

1. Always disconnect the power supply prior to servicing the fan, motor or junction box.
2. Follow all local building, safety and electrical codes as well as NEC (National Electrical Code) and OSHA (Occupational Safety and Health Act).
3. Electric Service supply must be 120 volts, 60 hertz.
4. This product must properly connect to the grounding conductor of the supply circuit.
5. Do not bend or kink the power wires.
6. Do not use this fan with any solid state control device, such as a remote control, dimmer switch, or certain timers. Mechanical timers are not solid state devices.
7. Do not install in a ceiling with insulation greater than R50.
8. Duct work should be installed in a straight line with minimal bends.
9. Duct work size must be the same size as the discharge and should not be reduced. Reducing the duct size may increase fan noise.
10. To ensure the performance, please use the recommended dimmers in the list if necessary.

WARNING: To reduce the risk of fire, electric shock, or injury to persons, observe the following:

1. Use this unit in the manner intended by the manufacturer. If you have any questions. Please call customer service.
2. Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
3. Installation work and electrical wiring must be done by a qualified personis) in accordance with all apolicable codes and standards, including fire-rated construction.
4. 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 local code authorities.
5. When cutting or drilling into the wall or ceiling, do not damage electrical wiring and other hidden utilities.
6. Ducted fans must always be vented to the outdoors.
7. If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application and be connected to a GFCI (Ground Fault Circuit Interrupter) – protected branch circuit.
8. FOR USE IN ONE- AND TWO-FAMILY DWELLINGS ONLY.
9. TYPE IC-INHERENTLY PROTECTED
10. FOR USE IN NON FIRE RATED INSTALLATIONS ONLY.
11. SUITABLE FOR DAMP LOCATIONS

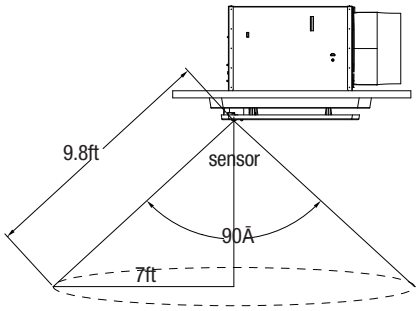
CAUTION: For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.

CAUTION: Not for use in cooking areas.

CAUTION: To reduce the risk of injury to persons, install the fan at least 7 feet (2.1m) above the floor.

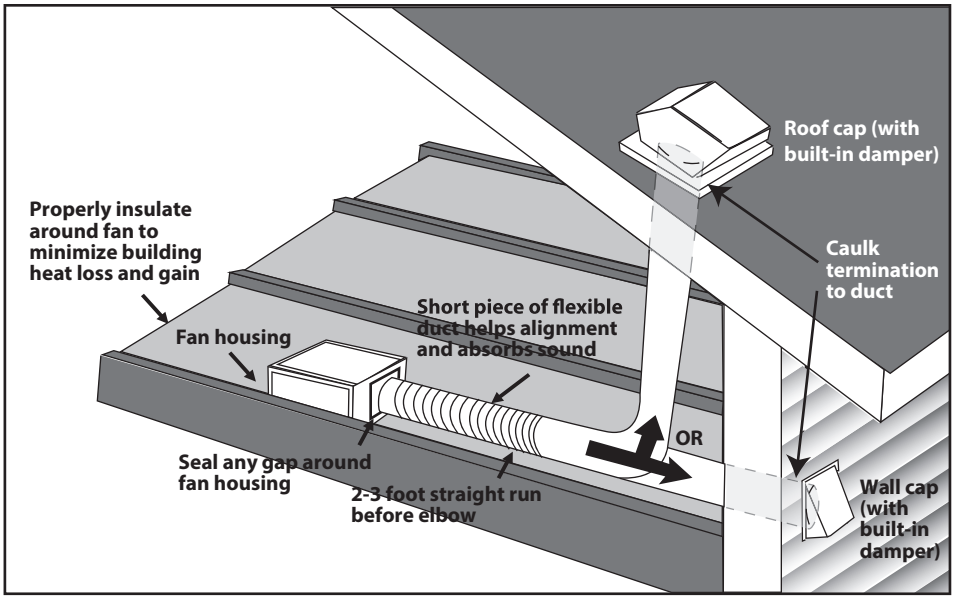
Product Specification

SPECIFICATIONS	
Airflow: 80/110 CFM	Power consumption: 110CFM (35W), 80CFM (30W)
Voltage: 120 V, 60 Hz	Weight: 9.77 lbs.
Duct diameter: 6 in.	Ceiling Opening Dimension Requirements: 10 5/8 in. (L) x 10 5/8 in. (W).
Sound output: 0.6/0.8 Sones	

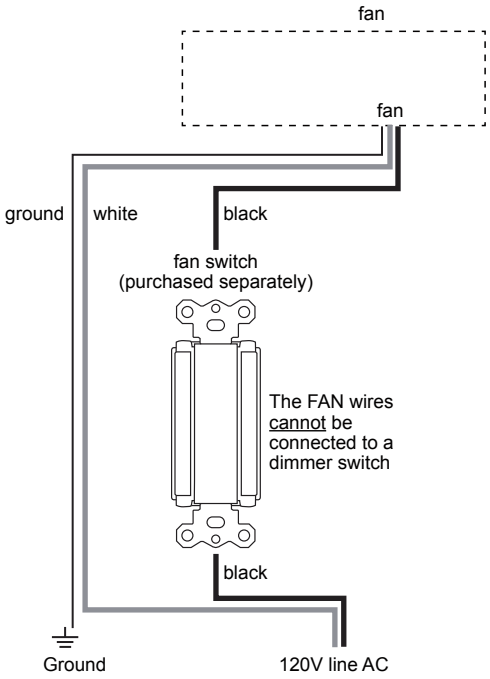


Typical Installation

The ducting from this fan to the outside of the building has a strong effect on the air flow, noise and energy use of the fan. Use the shortest, straightest duct routing possible for best performance, and avoid installing the fan with smaller ducts than recommended. Insulation around the ducts can reduce energy loss and inhibit mold growth. Fans installed with existing ducts may not achieve their rated air flow.



Wiring Diagram



WARNING: Wiring must comply with all applicable electrical codes. Turn OFF power before removing or installing connectors

WARNING: COPPER TO COPPER ONLY. Do not use Aluminum wire.

Warranty

LIMITED LIFETIME WARRANTY

WHAT IS COVERED

If this product fails due to a defect in materials or workmanship at any time during the first THREE years of ownership, the manufacturer will replace it free of charge, postage-paid at their option. This warranty does not cover products that have been abused, altered, damaged, misused, cut or worn. This warranty does not cover use in commercial applications. Use only manufacturer-supplied genuine warranty repair replacement parts to repair this fan. Use of non-genuine repair parts will void your warranty. The manufacturer DISCLAIMS all other implied or express warranties including all warranties of merchant-ability and/or fitness for a particular purpose. As some states do not allow exclusions or limitations on an implied warranty, the above exclusions and limitations may not apply. This warranty gives you specific legal rights, and you may have other rights that vary from state to state.

This warranty is limited to the replacement of defective parts only. Labor charges and/or damage incurred during installation, repair, replacement as well as incidental and consequential damages connected with the above are excluded. Any damage to this product as a result of neglect, misuse, accident, improper installation or use other than the purpose SHALL VOID THIS WARRANTY. Shipping costs for return product as part of a claim on the warranty must be paid for by the customer.

Contact the Customer Service Team at 1-855-HD-HAMPTON or visit www.HOMEDEPOT.COM.

Pre-installation

PLANNING INSTALLATION

Before beginning assembly of the product, make sure all parts are present. Compare parts with the package contents list and hardware contents. If any part is missing or damaged, do not attempt to assemble the product.

WARNING: Turn off electricity at breaker box before beginning installation.

Carefully remove the unit from the carton.

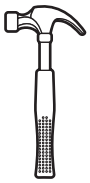
Check area above installation location to be sure that wiring can run to the planned location and that duct work can be run and the area is sufficient for proper ventilation.

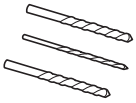
Inspect duct work and wiring before proceeding with installation.

Before installation, provide inspection and future maintenance access at a location that will not interfere with installation work.

NOTE: Installation may vary depending on how the previous bath fan was installed. Supplies necessary for the installation of your bath fan are not all included. However, most are available at your local home improvement or hardware store.

TOOLS REQUIRED (not included)


Claw hammer


Drill bits


Flathead screwdriver


Duct tape


Pliers


Phillips head screwdriver


Utility knife

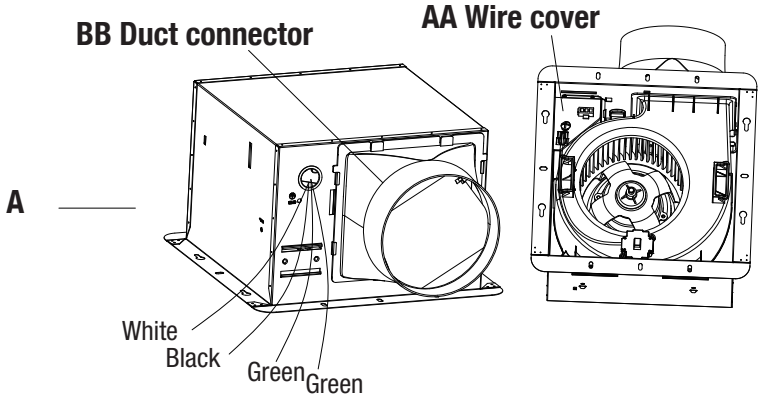

Electric drill

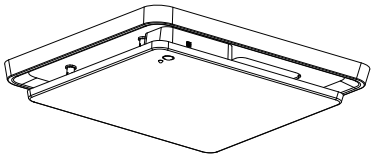

Goggles

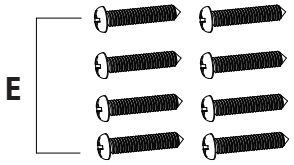

Gloves

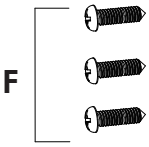
Pre-installation (continued)

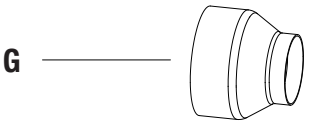
PACKAGE CONTENTS

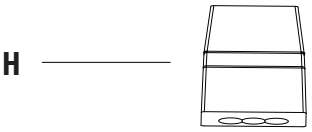


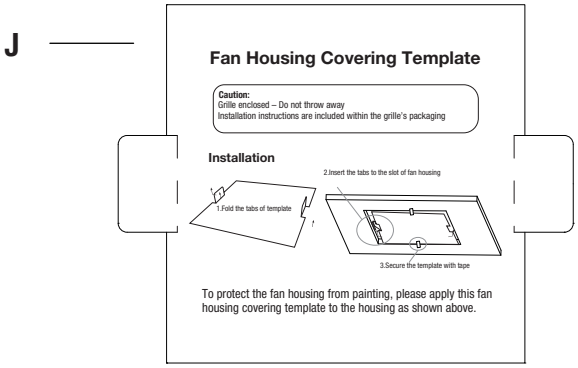


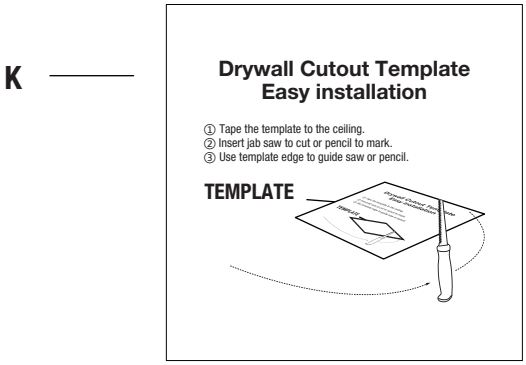












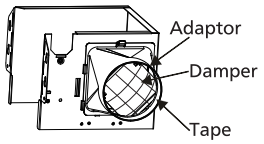
Part	Description	Quantity
A	Fan housing	1
B	Grille	1
C	Short flex bracket	2
D	Long flex bracket	1
E	Long screw (ST4 X 30)	8
F	Short Screw (M4 X 12)	3
G	Duct adaptor	1
H	Quick Connector - 3 pin	1
I	Quick Connector - 2 pin	2
J	Cut-hole template	1
K	Drywall cover board	1
AA	Wire cover	1
BB	Duct connetor	1

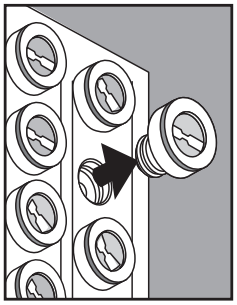
Installation - New Construction with Flex Bracket

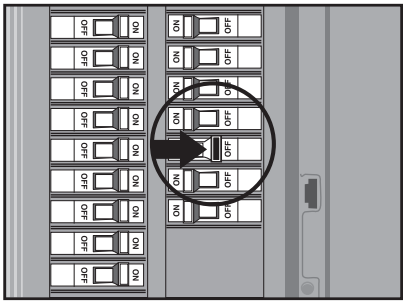
CAUTION: ▫ **Make sure power is switched off at service panel before starting installation.**
▫ **Wear gloves during installing to help protect your hands from injury.**

NOTE: Ceiling mount only.

IMPORTANT:
Please remove the tape, which protects the damper during shipping and installation, from the duct adaptor as shown below.

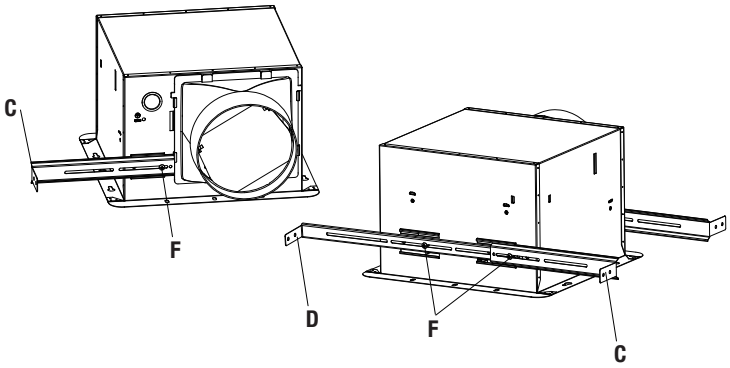






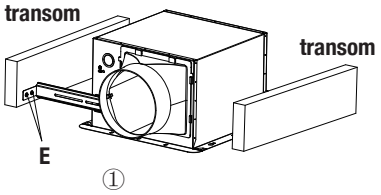
1 Install the flex bracket

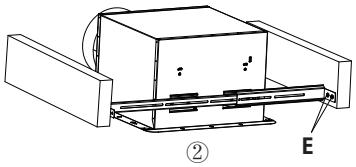
- **Insert short flex bracket (C) to fan housing(A) (air outlet side), then fix short screw(F) onto it.**
- **On the opposite side of the housing, align the long flex bracket (D) and short flex bracket (C) and fix with short screws (F). Extend both brackets.**

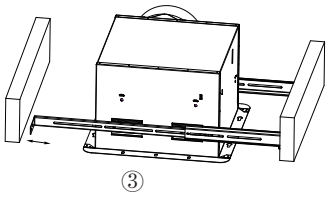


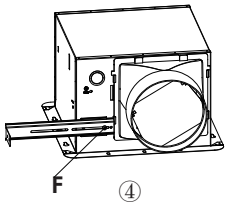
2 Install the fan housing onto transom

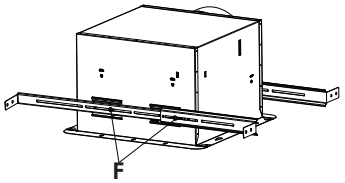
- **Secure short flex bracket (C) on air outlet side to the transom using long screw (E).**
  Then secure short flex bracket (C) on opposite side to transom using long screw (E).
- **Adjust long flex bracket (D) position based on the distance of two transoms, fix long flex bracket(D) onto transom by long screw (E).**
- **Use short screws (F) to lock the flex brackets in place.**









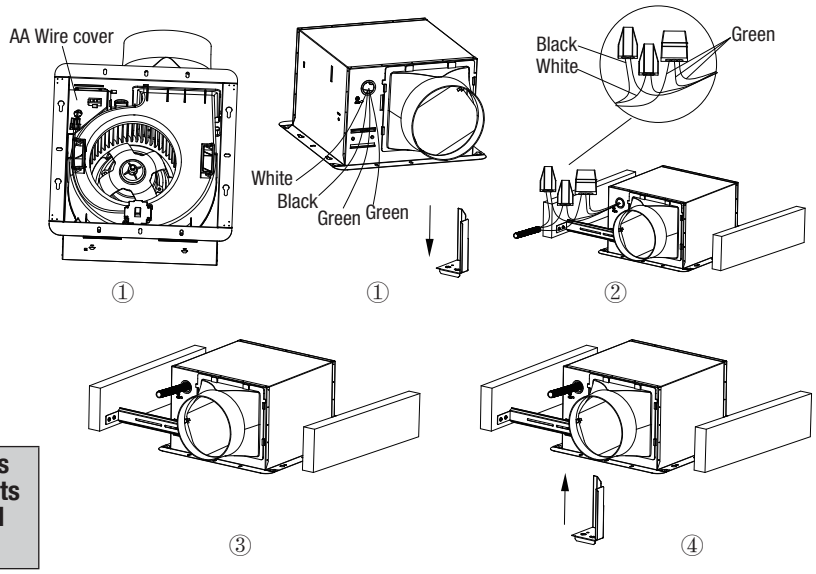


Installation - New Construction (continued)

3 Connecting the house and fan wires.

- **Locate the wire cover inside of the housing. Figure 1.**
- **Loosen the screw to remove the wire cover (AA) Remove the nut from the 120 V AC house wire.**
- **Use the quick connector- 3 pin (H) and quick connector -2 pin (I) to secure the 120V AC house wirings to the fan wires as shown in the wiring diagram on page 3. Figure 2.**
- **Carefully push the connected wires back into the wiring compartment of the fan housing (A). Reattach the nut from the inside of housing(A) and make sure wires and terminals in the wiring compartment of the fan housing (A). Figure 3.**
- **Reattach the wire cover (AA) and secure it in place with the screw. Figure 4.**

CAUTION: If the electrical wires do not match the colors listed, you must determine what each house wire represents before connecting. You may need to consult an electrical contractor to determine safely.

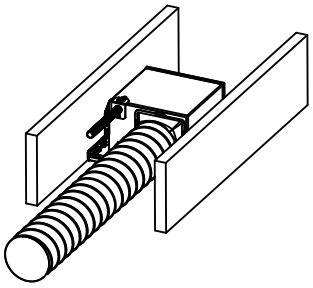


4 Connect the duct

- **Connect a 6 in. circular duct (not supplied) and vent to the duct connector. Secure it with duct tape (not supplied) or a clamp (not supplied) to make the connection secure and air tight.**
- **Turn on the power source. Check the fan for any abnormal sound or vibration.**

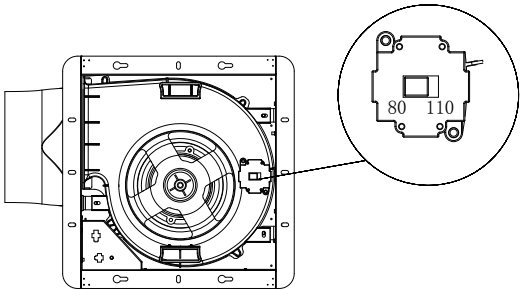
CAUTION: After checking the fan, please remember to turn off the power before next installation step.

NOTE: If you have to connect to 4in. circular duct, please use a 6in. to 4in. duct adapter (G).



5 Select the airflow

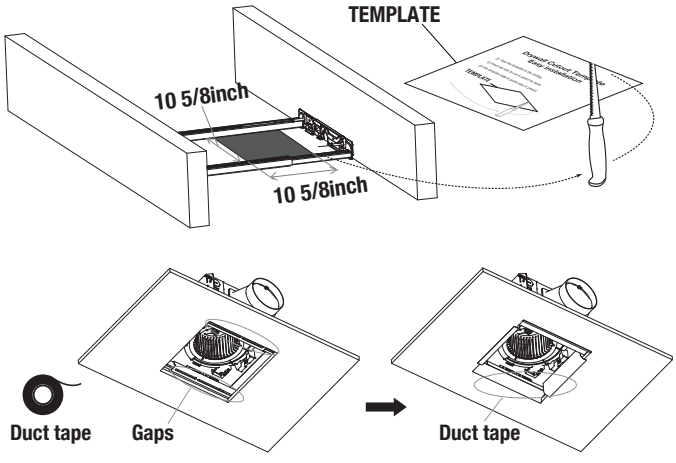
- **Select desired airflow (80 CFM or 110 CFM) by sliding the toggle switch on the bottom of the housing (A).**



6 Finish the ceiling work

- **After the electrical and construction inspection is complete, finish the ceiling work.**
- **Cut the ceiling hole with the cut-hole template (J) or the size 10 5/8inch (270*270mm). Ceiling hole should be aligned with the inside edge of fan housing.**
- **Important: Cover and seal up all gaps with duct tape**

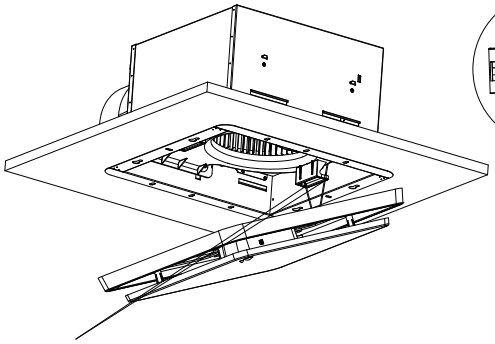
NOTE: That it is common practice in heating and ventilation systems using sheet metal ductwork and fittings or flexible duct work tubing to use duct tape or aluminum tape to ensure air tight seals and improve efficiency.



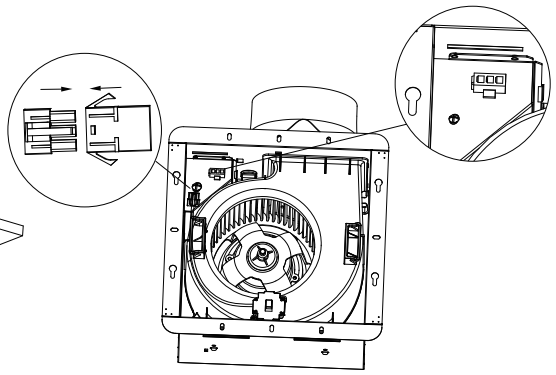
Installation - New Construction (continued)

7 Install the grille

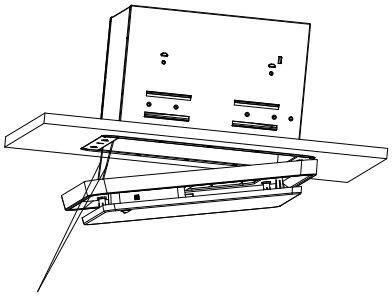
- Attach the grille by squeezing one spring together and inserting the springs into the spring guides in the fan housing (A).
- Connect male and female terminals from the wire cover(AA) and grille(B).
- Then insert the other spring and push the grille (B) up against the ceiling.
- Check that the installation is secure and safe from falling objects.



Step 1- Attach the grille by squeezing one spring together and inserting the springs into the spring guides in the fan housing (A)



Step 2- Connect male and female terminals from wire cover (AA) and grille (B)



Step 3 - Then insert the other spring and push the grille (B) up against the ceiling

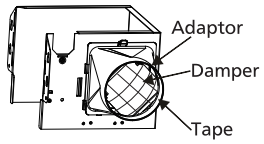
Installation - Existing Construction

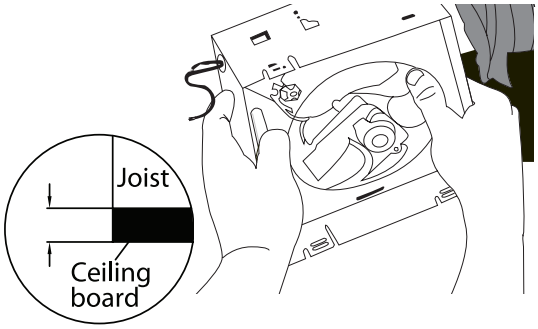
1 Remove the existing fan

CAUTION: ▫ **Make sure power is switched off at service panel before starting installation.**
▫ **Wear gloves during installing to help protect your hands from injury.**

- Remove the old fan from the ceiling.

IMPORTANT:
Please remove the tape, which protects the damper during shipping and installation, from the duct adaptor as shown below.

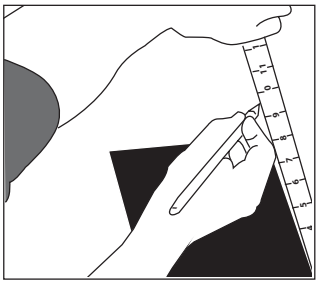


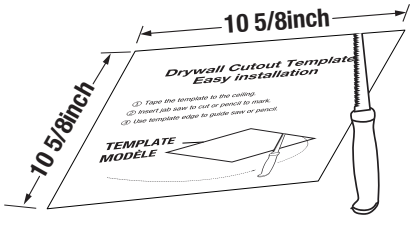


2 Measuring the ceiling opening

- Measure the opening to ensure it is large enough to accommodate the new fan body (A) (10 5/8 in. x 10 5/8 in.).
- If this fan is not replacing an old fan, be sure to cut a 10 5/8 in. x 10 5/8 in. opening for the fan body (A).

NOTE: ▫ **Wear safety goggles to prevent getting dust, falling insulation or other debris into your eyes, nose and mouth.**
▫ **Carefully cut open the ceiling hole with out cutting into electrical or gas or water lines that may not be visible.**

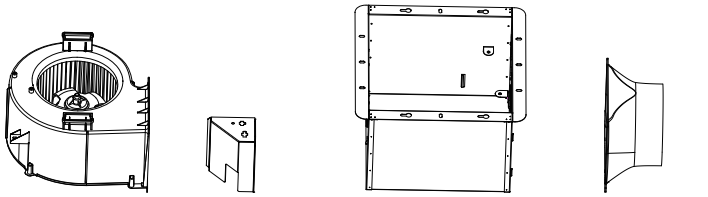




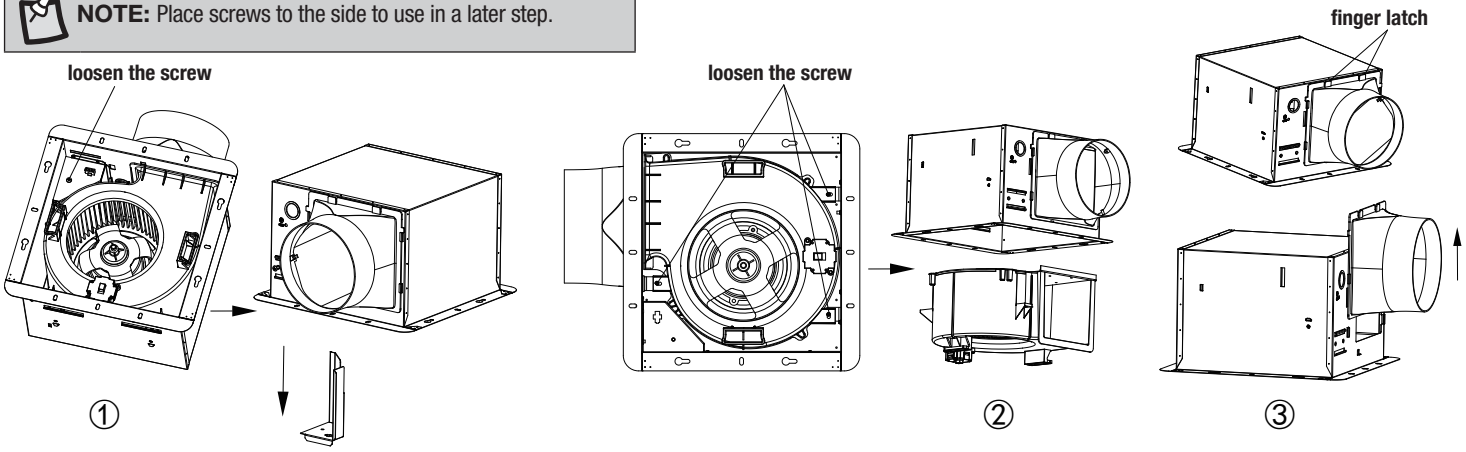
Installation - Existing Construction

3 Remove the duct connector and wire cover

- To remove the wire cover (AA), locate the screw found on the inside of the housing securing the wire cover. Remove the screw. Figure 1.
- To remove the fan motor, locate the two screws on opposite sides of the motor and remove them. Figure 2.
- To remove the duct connector(BB), pull up on the finger latch. Slide the duct connector(BB) up to remove from the fan housing (A).

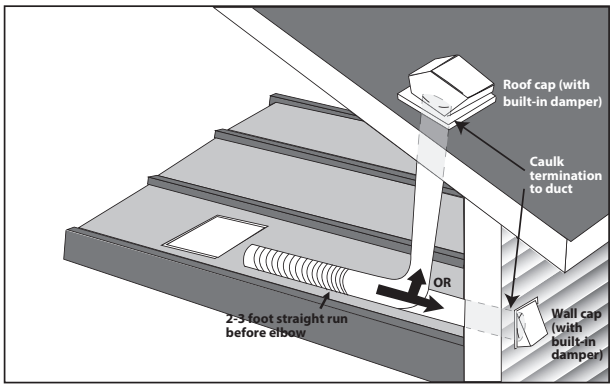


NOTE: Place screws to the side to use in a later step.



4 Installing the fan housing

- Connect a 6 in. circular duct (not supplied) and vent to the duct connector. Secure it with duct tape (not supplied) or a clamp (not supplied) to make the connection secure and air tight.
- Place the connected duct onto the ceiling.
- Place two pieces of wood inside the precut hole on each side. From the room side, secure the two pieces of wood to the ceiling with screws. Figure 3 and 4.
- Place the fan housing (A) inside the ceiling through the hole. Secure the housing (A) to the ceiling with screws from the room side.



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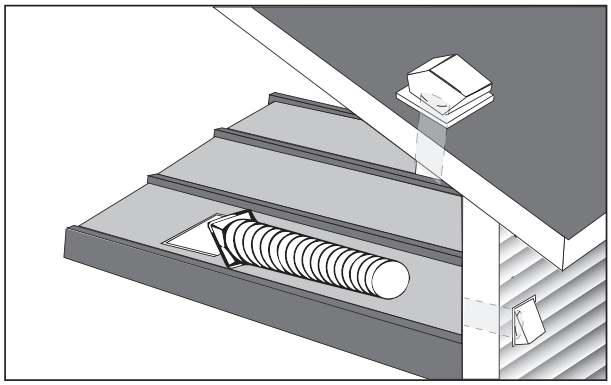

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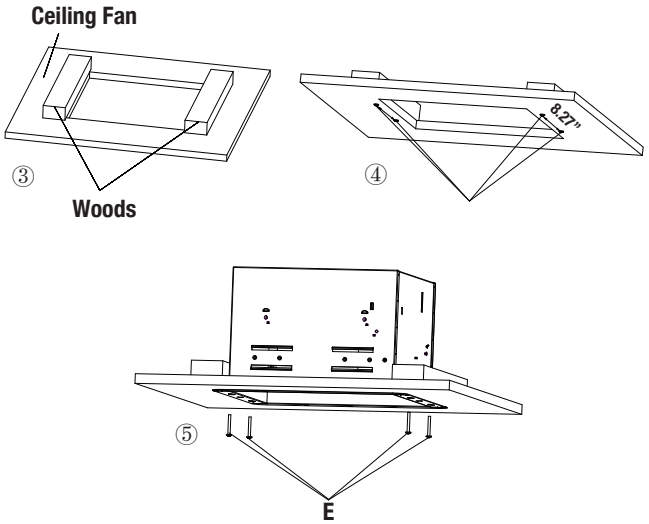
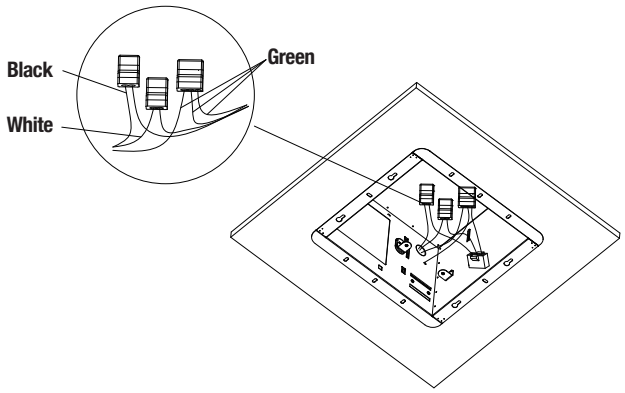


Installation - Existing Construction(continued)

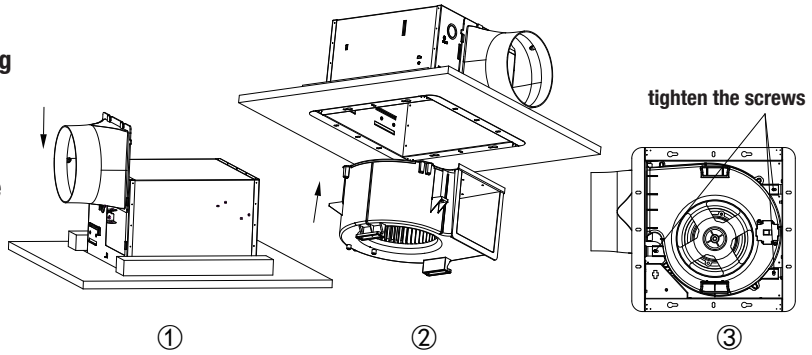
5 Connecting the house and fan wires.

- Remove the nut from the 120 V AC house wire.
- Use the quick connector- 3 pin (H) and quick connector -2 pin (I) to secure the 120V AC house wirings to the fan wires as shown in the wiring diagram on page 3.
- Carefully push the connected wires back into the wiring fan housing (A).
- Reattach the nut from the inside of housing(A) and make sure wires and terminals in the wiring compartment of the fan housing (A).



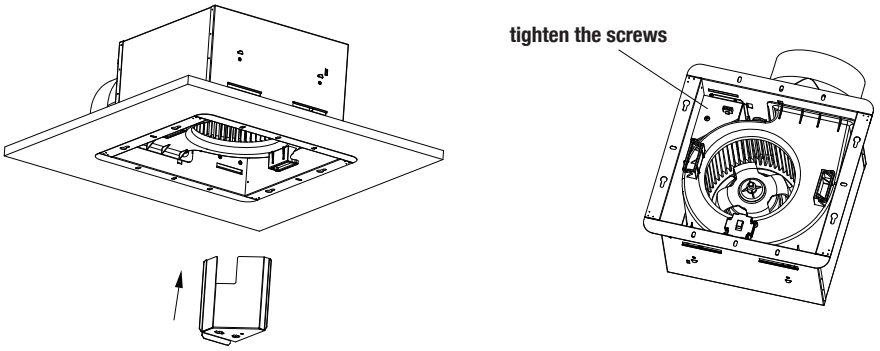
6 Install the air outlet and fan motor part

- From the attic side, install the duct connector to the housing by aligning with the tabs to secure in place. Figure 1.
- From the room side, place the fan motor into the housing in the ceiling. Figure 2.
- Secure the fan motor in place to the screw holes in side the housing. Figure 3.



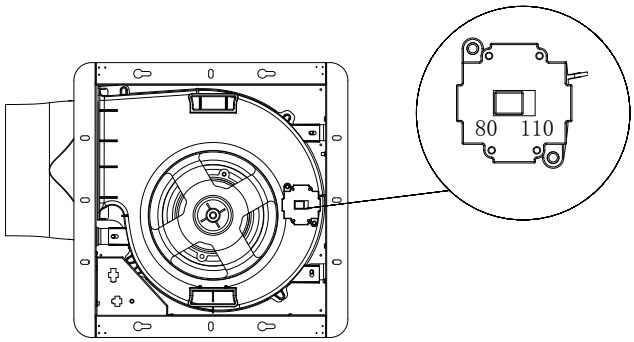
7 Install wiring cover

- Replace the wiring cover into the housing and secure it with a screw.



8 Select the airflow

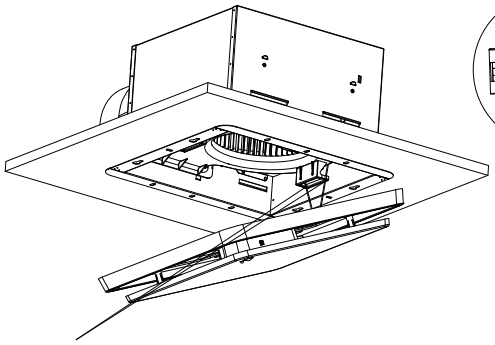
- Select desired airflow (80CFM or 110CFM) by sliding the toggle switch on the bottom of the housing (A).



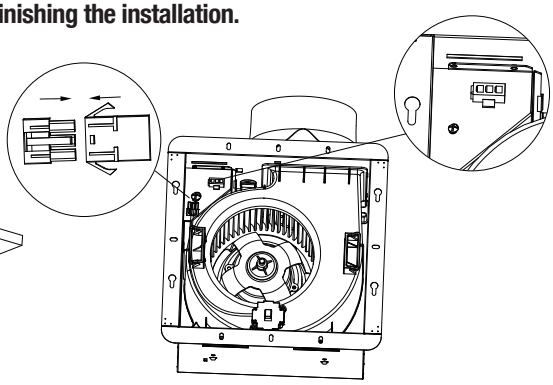
Installation - Existing Construction(continued)

9 Install the grille

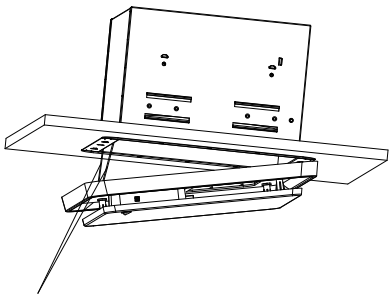
- **Attach the grille by squeezing one spring together and inserting the springs into the spring guides in the fan housing (A).**
- **Connect male and female terminals from the wire cover(AA) and grille(B).**
- **Then insert the other spring and push the grille (B) up against the ceiling.**
- **Check that the installation is secure.**
- **Turn on electricity at the breaker box after finishing the installation.**



Step 1- Attach the grille by squeezing one spring together and inserting the springs into the spring guides in the fan housing (A)



Step 2- Connect male and female terminals from wire cover (AA) and grille (B)

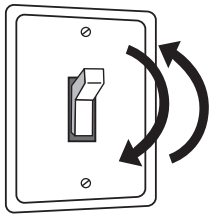


Step 3 - Then insert the other spring and push the grille (B) up against the ceiling

Mode Operation

- **Two modes : Full speed and sensor mode.**
- **Toggle the light switch quickly (within 3 seconds) to switch between the modes.**
- **Sensor mode can be motion sensor or humidity sensor.**

NOTE: Sensor mode is the default mode when starting the fan operation.



Mode	Function	Description	Indicator
Full Speed	80CFM or 110CFM	Select the desired airflow in a prior step with the toggle switch found on the housing.	Red
Sensor Mode	Motion Sensor	When motion is detected, the fan will work on the preset CFM level (80CFM or 110CFM). When motion is not detected, the fan will continue operating at the preset CFM level (80CFM or 110CFM) for 10 minutes and then shutoff. During operation the bath fan will detect the humidity and operate to reduce it.	Green
	Humidity Sensor	1. When motion is detected, the bath fan will change to humidity sensor mode after 10 minutes. 2. When the environment humidity RH<60%,the bath fan will stop working. 3. When the environment humidity RH≥60%, the bath fan will work at preset CFM level (11 0 or 80) for 60minutes. a. Once RH<60% and motion is not detected, the device will stop working. b. If the environment humidity is maintained at an RH equaled to 60%, the bath fan will stop working.	

Care and Maintenance

WARNING: Disconnect power supply before servicing.

- **See SAFETY INFORMATION before proceeding. Routine maintenance should be done at least once a year.**
- **Never use solvents, thinner or harsh chemicals for cleaning the fan.**
- **Do not allow water to enter the motor.**
- **Do not immerse metal parts in water.**

Troubleshooting

Problem	Possible Cause	Solution
The fan seems louder than it should.	The CFM is too great.	Be sure the CFM rating on the fan matches the square footage of your room.
	The damper is damaged or not working properly.	Check the damper to ensure it is opening and closing properly. If the damper has become damaged, please call Customer Service.
	The bend in the duct is too close to the fan discharge.	Be sure you do not have any sharp bends in the duct closer than 18 in. to the fan discharge.
	The fan discharge is reduced to fit a smaller duct	Use the recommended size ducting to reduce fan noise.
	The fan body is not attached securely.	Be sure the fan is securely attached to the ceiling joists.
The fan is not clearing the room.	There is insufficient airflow intake in the room.	Be sure a door or window is slightly ajar or opened to allow adequate air flow. The fan is not able to draw out ot the room without enough airflow to draw front.
	There is insufficient CFM.	Be sure the CFM rating on the fan matches the requirements for your room size.
		NOTE: Using a tissue is not the correct method for determining if the fan is operating properly. If the fan clears steam from the room within approximately 15 minutes of completing your shower, then the fan is operating properly.
Fan does not operate when the switch is on	A fuse may be blown or a circuit tripped.	Replace fuse or reset circuit breaker.
	Connector plug from motor is not plugged in.	turn off power to unit. Remove Grill and plug motor into receptacle in housing. Restore power to unit.
	Wiring is not connected properly.	Turn off power to unit. Check that all wires are connected.
	Motor has stopped operating.	Replace motor.
Fan is operating, but air moves slower than normal.	Obstruction in the exhaust ducting	Check for any obstructions in the ducting. The most common are bird nests in the roof cap or wall cap where the fan exhausts to the outside.
Fan is operating louder than normal	Motor is loose.	Turn off power to unit. Remove grill and check that all screws are fully tightened. Restore power to unit.
	Fan blade is hitting housing of unit.	Call the Customer Service Team at 1-855-HD-HAMPTON or visit www.HomeDepot.com

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC compliance information is listed as below:
Responsible party: Leedarson America, Inc.
Responsible party address: 300 Technology Court SE Suite 100, Smyrna, GA 30082
Telephone number: (678) 293-8382

HAMPTON BAY®

Questions, problems, missing parts, before returning to the store,
call Hampton Customer Service
8 a.m. – 6 p.m., EST, Monday - Friday

1-855-HD-HAMPTON

HOMEDEPOT.COM

Retain this manual for future use.