# \*GRADIENT\*

ALL-WEATHER 120V™ INSTALLATION,
OPERATION AND MAINTENANCE
MANUAL



# WELCOME TO YOUR GRADIENT ALL-WEATHER 120V WINDOW HEAT PUMP

This manual will guide you through the installation, operation, and maintenance of your new All-Weather 120V unit, ensuring that you get the most out of your system. Please follow each step carefully to ensure a perfect install and an amazing product experience. Additional operating instructions can be find in the separate User Guide.

Cheers, The Gradient Team

# REGISTER YOUR GRADIENT UNDER WARRANTY DURING INSTALLATION

Ensure your Gradient product is fully protected by registering your warranty during installation. Simply scan the QR code or visit https://www.gradientcomfort.com/pages/warranty to complete your registration. If you have any questions, feel free to email us at hello@gradientcomfort.com.



# **TABLE OF CONTENTS**

SAFETY INSTRUCTIONS	4
ABOUT THE ALL-WEATHER UNIT	8
WHAT'S INCLUDED	9
BRACKET CONFIGURATION	10
INSTALL BRACKET SETUP	12
Setting up the Gas Springs	12
Positioning the Sill Tightener	13
Locating the Window Sealing Position	
Positioning the Bracket Feet	15
Attaching the Bracket Arm Assembly	
Attaching the Window-Sealing Frame	
Installing the Bracket	18
INSTALLING THE ALL-WEATHER UNIT	21
Installing the Window Sealing Blocks	26
Attaching the Window Sealing Tape	27
Attaching the Hinge Cover	27
Securing the Indoor Unit to the Install Bracket	27
Installing the Lower Sash Bulb Seals	28
Installing the Intersash Bulb Seal	28
Installing the Air Filter	29
Final Steps	30
NEXT STEPS	30
MAINTENANCE	31
Cleaning the Air Filter	31
Cleaning the Condensate Filter	32
PERIODS WITHOUT POWER	
WIRING DIAGRAM	37
DECLUBED WINDOW CIZING	20



# Carefully read this entire guide to ensure the safe and proper installation of your All-Weather 120V Window Heat Pump.

# General Installation Warnings & Cautions:

Follow all warnings and safety instructions.

To avoid risk of personal injury, property damage, and product damage, pay close attention to the following during installation:

- The All-Weather 120V unit could fall if it is not properly installed, which could result in death or serious injury. Follow this guide closely to ensure the All-Weather 120V unit is secure.
- At least 2 people are required to move and install the unit. To avoid injury, use proper carrying and lifting techniques (lift with your legs).
- Carefully inspect the window where you are installing your All-Weather 120V. Make sure it is in good condition and can support the weight of the unit over a long period of time.
- Only use the screws that are provided by Gradient.
- Save these instructions for future reference or access them at www.gradientcomfort.com.

#### **Electrical Warnings & Cautions:**

- The complete electrical rating of your new room heat pump is stated on the serial plate. Refer to the rating when checking the electrical requirements.
- Be sure the heat pump is properly grounded. To minimize shock and fire hazards, proper grounding is important. The power cord is equipped with a three-prong grounding plug for protection against shock hazards.
- Your heat pump must be used in a properly grounded wall receptacle. If the wall receptacle you intend to use is not adequately grounded or protected by a time delay fuse or circuit breaker, have a qualified electrician install the proper receptacle.
- Observe all local, state, and national electrical codes and only use qualified, licensed, and authorized personnel for electrical assistance.

- To reduce risk of fire, electrical shock, or injury, plug the unit into a grounded 3-prong outlet. Do not remove, cut, or bypass the grounding prong on the plug. Do not use an extension cord, surge protector, or multioutlet adapter with your All-Weather 120V.
- The All-Weather 120V comes with a LCDI (Leakage Current Detection Interrupter) power cord and plug.
- The power cord includes a current interrupter device. The TEST and RESET buttons are used to check if the plug is functioning properly.
- DO NOT press the TEST button while the unit is operating. This can damage the plug.
- DO NOT turn off the All-Weather 120V unit by pulling the electric cord or using the TEST and RESET buttons as ON / OFF switches.
- The cord and plug are intended for indoor use only.
- System shall be installed on a circuit with a 15 A circuit breaker.
- Electrical parts can cause shock or fire.
  Do not open sealed portions of any electrical components, and do not attempt to replace the power cord or repair any electrical components. If the power cord is damaged, contact Gradient at hello@gradientcomfort.

#### Refrigerant Warnings:

# Contact hello@gradientcomfort.com if your unit needs maintenance or repair.

Warning: Risk of fire or explosion.

To avoid risk of personal injury, property damage, and product damage, pay close attention to the below warnings during installation.



# Carefully read this entire guide to ensure the safe and proper installation of your All-Weather 120V Window Heat Pump.

#### Refrigerant Warnings:

This unit contains a newer refrigerant called R32 that has a lower Global Warming Potential than older refrigerants like R410A. It is a flammable refrigerant.

The following precautions must be followed:

- The appliance shall be stored in a room without a continuously operating ignition source (for example: open flames, an operating gas appliance or an operating electric heater).
- The appliance shall be stored so as to prevent mechanical damage from occurring.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer. Do not pierce or burn. Be aware that refrigerants may not have an odor. Keep ventilation openings clear of obstruction.
- Maintenance and repair should only be conducted by trained, licensed technicians certified to work with flammable refrigerants. Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.
- The All-Weather 120V heat pump is a factory-sealed system and is not intended to be field serviced or decommissioned. In the case of either event, customers must contact Gradient to return their units for repair/replacement or proper disposal.
- Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

• Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. Never use potential sources of ignition to search for refrigerant leaks. Never use a halide torch (or any other detector with an open flame.)

The following leak detection methods are deemed acceptable for all refrigerant systems.

- Electronic leak detectors may be used to detect refrigerant leaks; however, in the case of flammable refrigerants, the sensitivity may not be adequate, or may need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.) Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used. Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed, and the appropriate percentage of gas (25% maximum) is confirmed.
- Avoid leak detection fluids unless they are sterile. The use of detergents containing chlorine shall be avoided, as the chlorine may react with the refrigerant and corrode the copper pipe-work.

Examples of leak detection fluids are:

- · Bubble method.
- · Fluorescent method agents.

If a leak is suspected, all naked flames shall be removed/extinguished.

#### **Refrigerant Warnings:**

If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. Removal of refrigerant shall be according to the instructions in this manual.



# Carefully read this entire guide to ensure the safe and proper installation of your All-Weather 120V Window Heat Pump.

#### Refrigerant Warnings:

When breaking into the refrigerant circuit to make repairs – or for any other purpose – conventional procedures shall be used. However, for flammable refrigerants it is important that best practice be followed, since flammability is a consideration. The following procedure shall be adhered to:

- safely remove refrigerant following local and national regulations;
- evacuate:
- purge the circuit with inert gas (optional for A2L);
- evacuate (optional for A2L);
- continuously flush or purge with inert gas when using flame to open circuit; and
- open the circuit.

The refrigerant charge shall be recovered into the correct recovery cylinders if venting is not allowed by local and national codes. For appliances containing flammable refrigerants, the system shall be purged with oxygenfree nitrogen to render the appliance safe for flammable refrigerants. This process might need to be repeated several times. Compressed air or oxygen shall not be used for purging refrigerant systems.

For appliances containing flammable refrigerants, refrigerants purging shall be achieved by breaking the vacuum in the system with oxygen-free nitrogen and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum (optional for A2L). This process shall be repeated until no refrigerant is within the system (optional for A2L). When the final oxygen-free nitrogen charge is used, the system shall be vented down to atmospheric pressure to enable work to take place.

Ensure that the outlet for the vacuum pump is not close to any potential ignition sources and that ventilation is available.

In addition to conventional charging procedures, the following requirements shall be followed.

- Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimize the amount of refrigerant contained in them.
- Cylinders shall be kept in an appropriate position according to the instructions.
- Ensure that the refrigerating system is earthed prior to charging the system with refrigerant.
- Label the system when charging is complete (if not already).
- Extreme care shall be taken not to overfill the refrigerating system.
- Prior to recharging the system, it shall be pressure-tested with the appropriate purging gas. The system shall be leak-tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.
- When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely.
- When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge is available. All cylinders to be used are designated for the recovered refrigerant and labeled for that refrigerant (special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.

#### Refrigerant Warnings:

The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of the flammable refrigerant. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition.



# Carefully read this entire guide to ensure the safe and proper installation of your All-Weather 120V Window Heat Pump.

#### Refrigerant Warnings:

The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant waste transfer note arranged. Do not mix refrigerants in recovery units and especially not in cylinders.

If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. The compressor body shall not be heated by an open flame or other ignition sources to accelerate this process. When oil is drained from a system, it shall be carried out safely.

#### **Operation Warnings & Cautions:**

Do not modify or rewire the controls or display.

Do not insert fingers or any object into the air vents. Doing so can cause serious injury or break the unit.

Unplug your unit before installing, removing, cleaning, or servicing.

Do not climb on the unit (inside or outside).

Always run the unit with the air filter properly in place.

The unit should not be used by children or those with impaired physical, sensory, or mental capabilities, unless supervised by someone responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

The front of the indoor unit must have a minimum of 40" (102cm) of space without obstructions. The front of the outdoor unit must have a minimum of 40" (102cm) of space without obstructions. The sides and back of the outdoor unit must have a minimum of 3.5" (9cm) of space without obstructions.

The maximum elevation at which the unit should operate is 6562' (2000m) above sea level.

Unplug the system before cleaning. Do not clean the device with any cleaning sprays, foams, wipes, powders, or solutions. These cleaning agents pose a fire, electric shock, or injury risk. Only clean the system with a dry cloth or in accordance with the cleaning instructions in this manual.

DANGER: USE OF TAP WATER TO CLEAN UNIT MAY CREATE RISK OF CONTAMINATION. To avoid possible introduction of microbial contaminants, do not allow the unit to come into contact with tap water. Do not use tap water to clean filters or any part of the unit. Use only distilled water or a dilute bleach solution to clean the air filter and condensate filter. Do not use a hose to spray or clean the outside of the unit, or otherwise clean the exterior or interior components of the unit with tap water. If exposure to tap water cannot be avoided (such as a system that is exposed to a sprinkler) then permanently disable the atomizers by opening the outdoor unit drain port.

To avoid potential growth of microbial contaminants, do not unplug the unit for extended periods of time. If the unit is unplugged or does not have access to power for more than 48 hours (for example, due to an extended power outage) flush the unit following the instructions in the section titled PERIODS WITHOUT POWER. Alternatively, empty all water from the outside catch tray by opening the window, removing the rotation quick-release pins, and tilting the outdoor unit upwards.

#### **Safety Symbols:**



Service Indicator: Read Technical Manual



Read Operator's



Protective Earth



Operator's Manual; Operating Instructions



No Contact with Tap Water

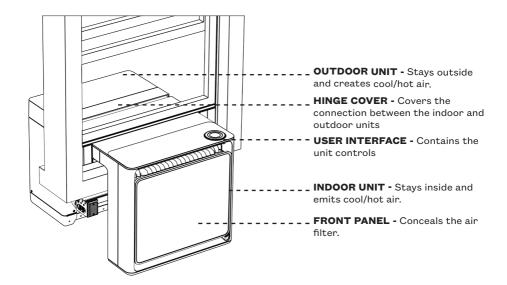


Alternating Current

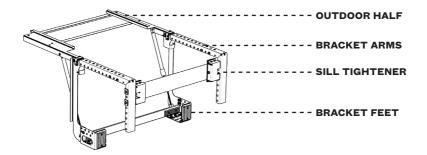


Warning; Flammable Materials

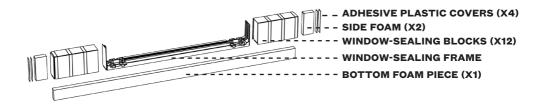
# **ABOUT THE ALL-WEATHER™ UNIT**



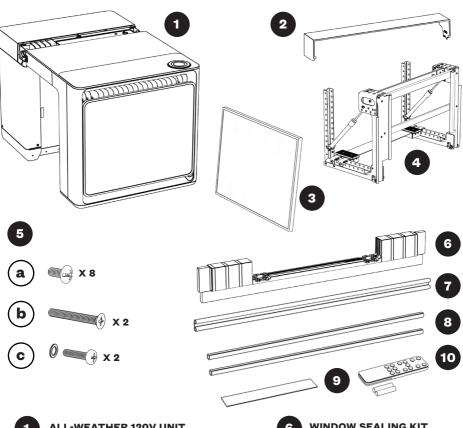
## **INSTALL BRACKET**



# WINDOW SEALING KIT



# **WHAT'S INCLUDED**



- **ALL-WEATHER 120V UNIT**
- **HINGE COVER**
- **ALL-WEATHER AIR FILTER**
- **INSTALL BRACKET (OUTDOOR** HALF) & (BRACKET ARM ASSEMBLY)
- **SCREWS**

- WINDOW SEALING KIT
- **INTERSASH BULB SEAL**
- LOWER SASH BULB SEALS (2)
- WINDOW SEALING TAPE
- REMOTE CONTROL WITH (2) AAA BATTERIES

To complete the installation, you will also need:



Phillips head screwdriver Ph#2



Scissors



Tape measure

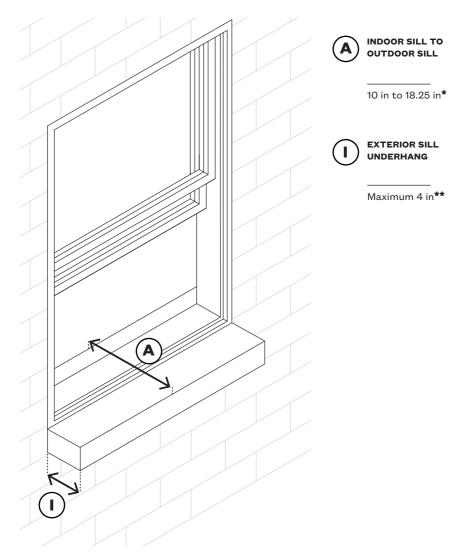


Level or level phone app

## **BRACKET CONFIGURATION**

Measure your windowsill as shown below. Locate and circle the recommended bracket configuration on the chart.

For full window sizing requirements, see page 38.



 $<sup>\</sup>mbox{\scriptsize {\bf *}}$  For sills outside of this range but within 6.25 in - 20 in, contact Gradient for support.

<sup>\*\*</sup> For larger underhangs up to 5.25 in, contact Gradient for support.

# TABLE 1: INSTALL BRACKET ADJUSTMENT GUIDANCE

# Exterior Sill Under-hang (1)

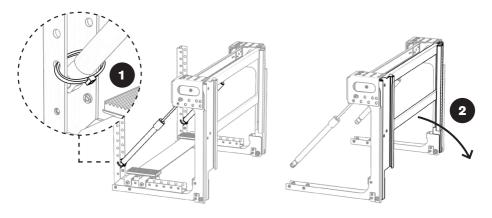
		MIN	0	0.25	0.75	1.25	1.75	2.25	2.75	3.25	3.75	4.25	4.75
Min	MAX	MAX	0.25	0.75	1.25	1.75	2.25	2.75	3.25	3.75	4.25	4.75	5.25
6.25	6.75		A-7	A - 7	A-7	A-7	A - 7	A-7	A-7	A-7	A -7	A -7	A-7
6.75	7.25		A - 6	A - 6	A - 6	A-6	A - 6	A-6	A-6	A - 6	A - 6	A - 6	
7.25	7.75		A-5	A - 5	A - 5	A-5	A - 5	A - 5	A-5	A-5	A - 5	B - 7	B - 7
7.75	8.25		A - 4	A - 4	A - 4	A - 4	A - 4	A - 4	A - 4	A - 4	B - 6	B - 6	
8.25	8.75		A-3	A-3	A-3	A-3	A - 3	A-3	A-3	B - 5	B-5	C - 7	C - 7
8.75	9.25		A-2	A - 2	A-2	A-2	A - 2	A-2	B - 4	B - 4	C - 6	C-6	
9.25	9.75		A - 1	A - 1	A - 1	A - 1	A - 1	B-3	B-3	C-5	C-5	D - 7	D - 7
9.75	10.25		B - 2	B - 2	B-2	B-2	B - 2	B-2	C - 4	C - 4	D-6	D-6	
10.25	10.75		B - 1	B - 1	B - 1	B - 1	B - 1	C-3	C-3	D-5	D-5	E-7	E - 7
10.75	11.25		C-2	C - 2	C - 2	C-2	C - 2	C - 2	D - 4	D - 4	E-6	E-6	
11.25	11.75		C - 1	C - 1	C - 1	C-1	C - 1	D-3	D-3	E-5	E-5	F-7	F-7
11.75	12.25		D-2	D-2	D-2	D-2	D-2	D-2	E-4	E-4	F-6	F-6	
12.25	12.75		D - 1	D - 1	D - 1	D-1	D - 1	E-3	E-3	F-5	F-5	G-7	G - 7
12.75	13.25		E-2	E-2	E-2	E-2	E-2	E-2	F-4	F-4	G-6	G-6	
13.25	13.75		E - 1	E - 1	E - 1	E - 1	E - 1	F-3	F-3	G-5	G-5	H - 7	H - 7
13.75	14.25		F-2	F-2	F - 2	F-2	F-2	F-2	G - 4	G - 4	H-6	H-6	
14.25	14.75		F - 1	F - 1	F - 1	F-1	F - 1	G-3	G-3	H - 5	H-5	I - 7	1-7
14.75	15.25		G-2	G-2	G-2	G-2	G - 2	G-2	H - 4	H - 4	I - 6	I - 6	
15.25	15.75		G - 1	G - 1	G - 1	G-1	G - 1	H-3	H-3	I-5	I - 5		
15.75	16.25		H-2	H-2	H-2	H-2	H-2	H-2	I - 4	I - 4			
16.25	16.75		H - 1	H-1	H-1	H - 1	H - 1	1-3	1-3				
16.75	17.25		1-2	I - 2	I - 2	I - 2	1-2	1-2					
17.25	17.75		l - 1	l - 1	l - 1	l - 1	l - 1						
17.75	18.25		I - O	I - O	I - O	I - O							

Indoor Sill to Outdoor Sill minus Exterior Sill Underhang (A - I)

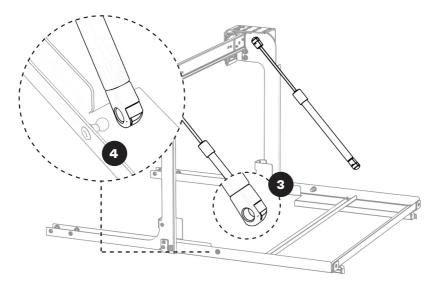
# **INSTALL BRACKET SETUP**

# SETTING UP THE GAS SPRINGS

- 1. Using scissors, cut the zip ties holding the gas springs in place on both sides.
- 2. Set aside the bracket arm assembly and pull the bracket open.



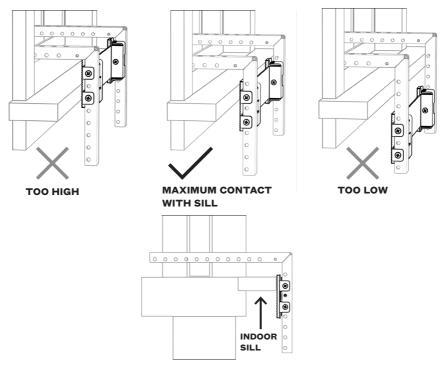
**3.** Make sure the snap features on the ends of both gas springs face out.



4. Snap both gas springs onto the ball joints.

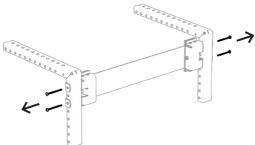
# POSITIONING THE SILL TIGHTENER

- 1. Place the bracket arm assembly on the window sill.
- **2.** Check the sill tightener position. The rubber pads should make contact with as much of the sill as possible.

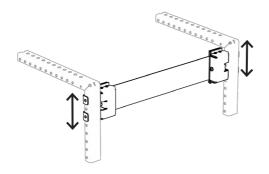


**CAUTION:** The sill tightener must make contact with the front sill surface. If the sill tightener sits below the sill, the bracket may not hold the unit securely.

**3.** To reposition the sill tightener, unscrew the two screws at each end using a Phillips head screwdriver.



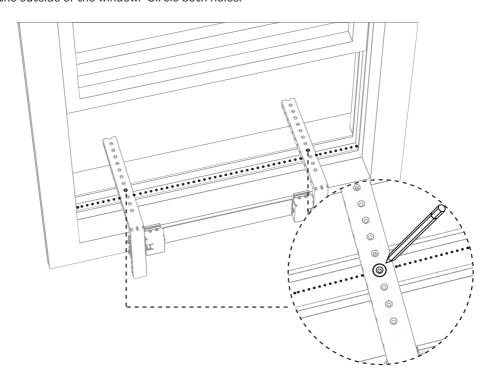
**4.** Move the sill tightener to the new position. Making sure that the holes on the sill tightener line up with holes on the bracket arms, reinstall all four screws.



**5.** Check again to make sure that the sill tightener is making maximum contact with the window sill. Continue to adjust the sill tightener as needed.

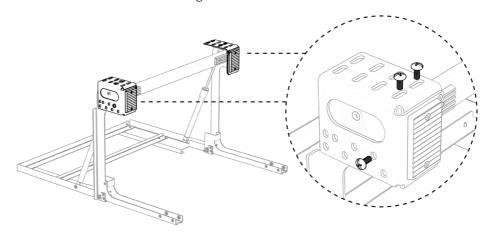
# LOCATING THE WINDOW SEALING POSITION

1. With the bracket arm assembly still sitting in the window, find the pair of screw holes that sits directly over the center of the window frame. If no screw holes are centered over the frame, pick the closest pair between the center of the frame and the outside of the window. Circle both holes.

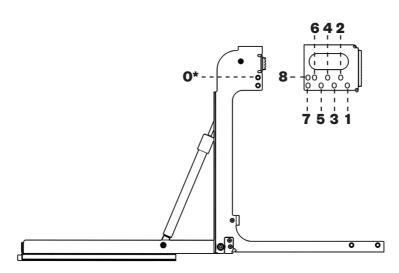


# POSITIONING THE BRACKET FEET

1. Remove the three screws securing the bracket feet to the bracket on each side.



**2.** Move the feet to the position you selected from TABLE 1: INSTALL BRACKET ADJUSTMENT GUIDANCE (shown on page 11)

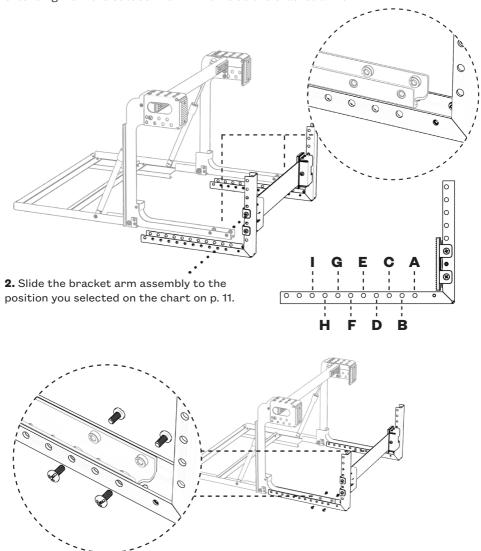


**3.** Reinstall the three screws to secure the foot in its new position, one in the numbered hole and two on the side facing up.

\*The bracket can be installed without the feet, with the '0' position on the chart (page 11) indicating no foot attached. Ensure the rubber foot on the outdoor half of the bracket makes direct contact with the wall.

## ATTACHING THE BRACKET ARM ASSEMBLY

**1.** Add the bracket arm assembly to the outdoor half of the bracket. The arms extending from the outdoor half will fit inside the bracket arms.

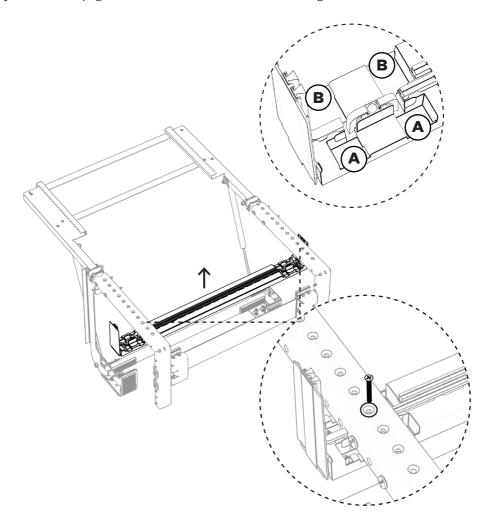


**3.** Use the Phillips head screwdriver and 8 bracket arm screws **(a)** to secure the bracket arm assembly.

**CAUTION:** Double check each step before proceeding. Incorrect adjustments could cause injury.

# ATTACHING THE WINDOW SEALING FRAME

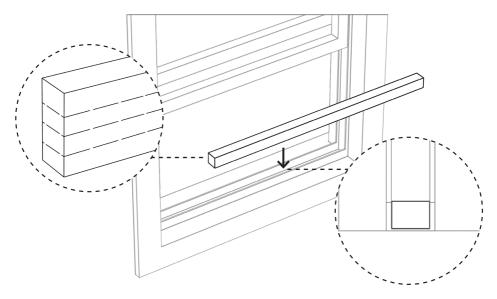
**1.** Turn the bracket over and add the window sealing frame under the bracket arms. Make sure the side labeled **A** is facing the sill tightener. Align the bracket arm holes you circled on page 15 with the holes on the window sealing frame.



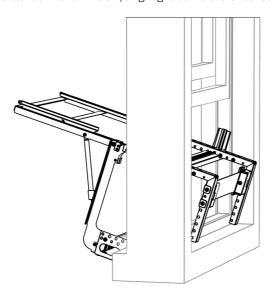
**2.** Add the two window sealing screws **(b)** to secure the window sealing frame to the bracket arms.

# INSTALLING THE BRACKET

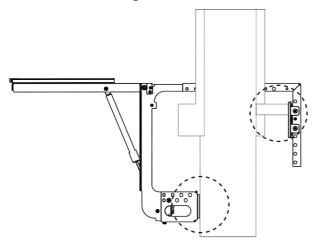
1. Locate the tear-away bottom foam from the window sealing kit. Tear the foam to fit and insert it into the window frame. Make sure the length and width of the foam sit snugly in the frame, and that the height of the foam comes slightly above the frame.



3. Place the bracket in the window, angling it to fit the bracket feet over the outer sill.

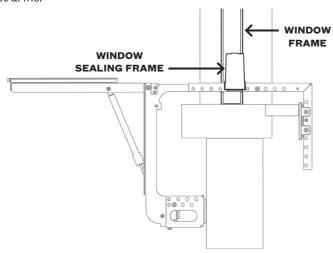


**4.** Once the bracket is resting in the window frame, make sure the bracket feet touch the exterior wall and the sill tightener touches the inside windowsill.



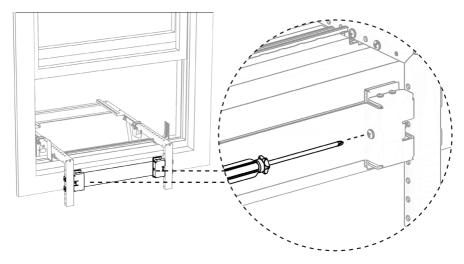
**5.** Lower the window to check the alignment of the sash and window sealing frame. the frame should be slightly indoors of center, as shown below.

**If it is not aligned as shown**, you will need to adjust the window sealing frame. Remove the bracket from the window and remove the window sealing frame from the bracket arms.

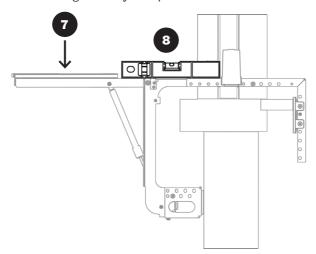


Rotate the window sealing frame 180 degrees, so that the side labeled  $\bf B$  is now closer to the sill tightener. Reattach the window sealing frame to the bracket arms

**6.** Tighten the inner sill tightener screws to ensure that the sill tightener sits firmly against the sill.



- **7.** Push down on the outdoor half of the bracket to ensure that the foot sits firmly against the wall.
- **8.** Set a level or a phone with a level app on one of the bracket arms to ensure that the bracket doesnt significantly tilt up or down.

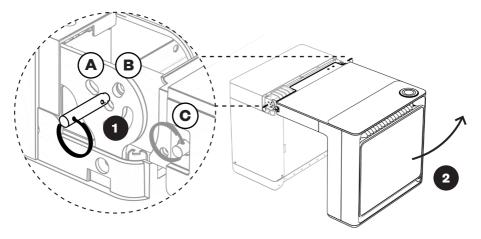


**CAUTION:** Ensure that the bracket fits tightly with **no shifting.** Bracket feet **must touch** the exterior wall and sill tightener **must touch** the interior sill.

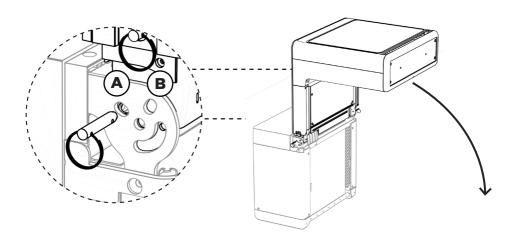
# **INSTALLING THE ALL-WEATHER UNIT**

# **↑** CAUTION: TWO PEOPLE ARE NEEDED FOR INSTALLATION!

**1.** Remove one quick-release pin from hole B on each side of the unit. Set them aside for now. Do not remove the taped pins from hole C.

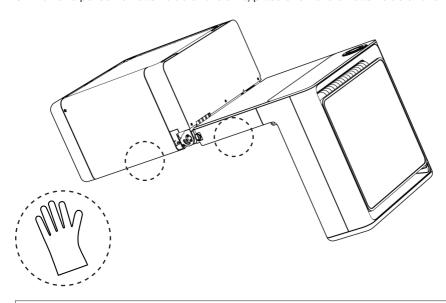


- 2. With one person on each side, lift and rotate the indoor unit to an angle of 90 degrees.
- 3. Holding the indoor unit upright, insert a quick-release pin in hole A on each side.

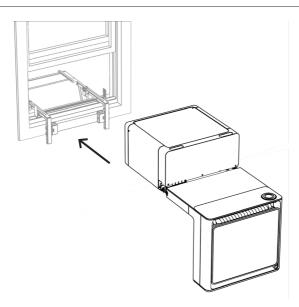


**4.** The indoor unit is now locked in the upright position. Carefully lower the unit so that the corners of the indoor and outdoor units rest on the ground.

5. With one person on each side of the unit, place one hand on each side of the hinge.

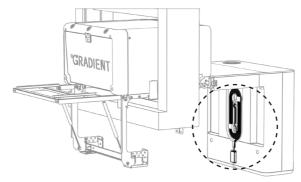


# **△** CAUTION: TWO-PERSON LIFT REQUIRED!



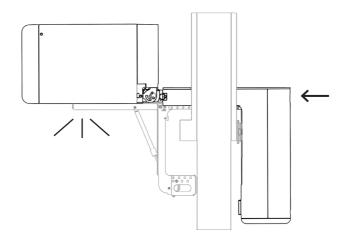
**6.** Lift the unit and fit the outdoor half into the install bracket. The unit should fit between the ends of the window sealing frame. Slide the unit part of the way into the window.

7. The power cord is on the wall side of the indoor unit. Uncoil it.

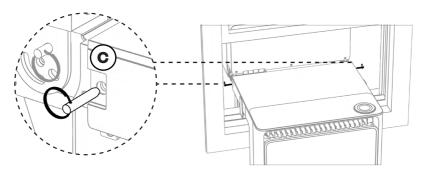


**9.** Push the indoor half of the unit all the way against the wall. It will make a clicking sound when correctly installed.

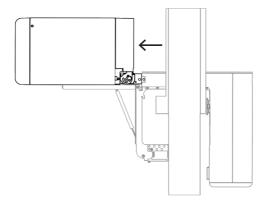
**WARNING:** If you do not hear a click during this step, the unit may not be securely installed. Pull the unit back in and repeat the step.



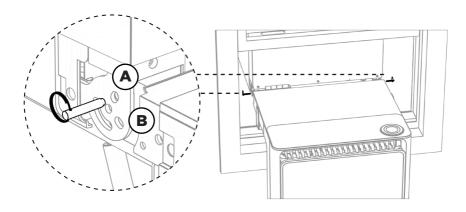
**10.** Remove the taped quick-release pin from hole C on each side of the unit. This allows the unit to extend.



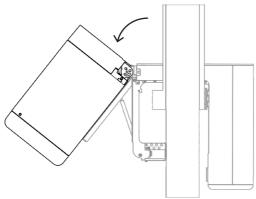
**11.** Fully extend the outdoor unit by pushing it until it stops.



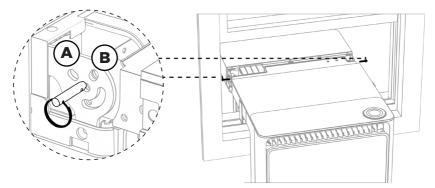
12. Remove a quick-release pin from hole A on each side.



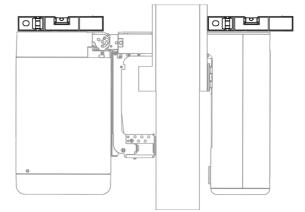
**13.** Push on the outdoor unit. It will start to rotate down. Continue to push until it is parallel with the exterior wall.



14. Return a quick-release pin to hole B on each side.

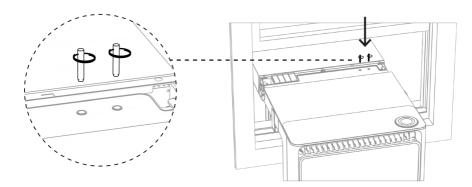


- 15. Using your level or level app, make sure
- Top of the outdoor unit slopes between 3.5° away from the building to 0.5° towards the building (sloping away from the building helps prevent rainwater from flowing towards the window)
- Top of the indoor unit slopes between 1.5° toward the outdoors to 2.5° towards the indoors.
- Top of both units are no more than 1.5° off level in either direction from side to side.



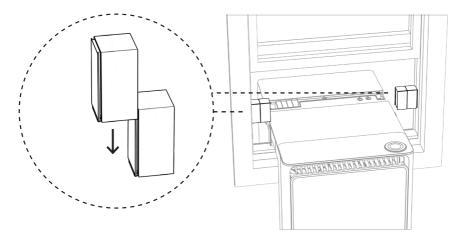
If it's outside of that range, uninstall the outdoor unit and repeat the "Adjusting the Bracket" and "Installing the Bracket" steps.

**16.** Insert the taped pins you removed from hole **C** on p. 24 into the two holes at the top right corner of the unit extension cover.

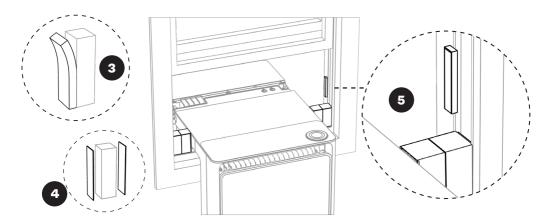


## INSTALLING THE WINDOW SEALING BLOCKS

1. Locate the window sealing blocks. These slide to connect to the window sealing frame and each other. Using these blocks, fill up as much of the space between the unit and the window as possible on each side, leaving a gap of no more than 1/2 inch.



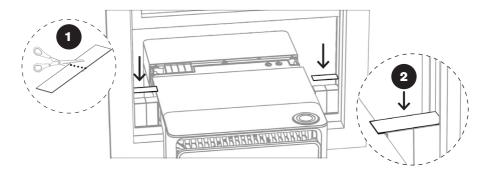
**3.** Tear the side foam pieces to fill any remaining space between the window sealing blocks and the frame. Make sure the foam is compressed. Compression indicates that the gap is completely filled.



- **4.** Once the foam is torn to size, adhere the adhesive plastic covers to both sides of each piece of side foam.
- **5.** Insert the side foam pieces with adhesive plastic covers by sliding them into the window frame.

# ATTACHING THE WINDOW SEALING TAPE

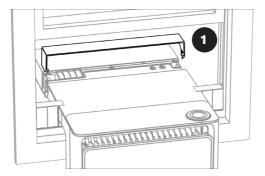
1. Cut the provided tape to match the length of the left and right groups of window sealing blocks



2. Secure the tape to the top surface of the window sealing blocks and the indoor unit.

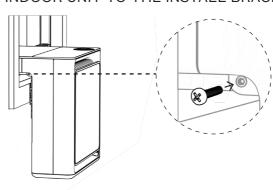
## ATTACHING THE HINGE COVER

1. Snap the hinge cover over the hinge between the indoor and outdoor units.



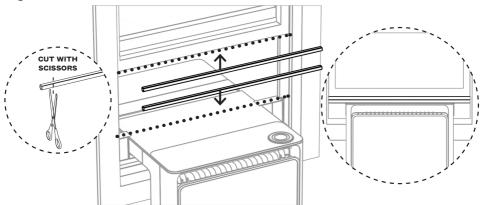
#### SECURING THE INDOOR UNIT TO THE INSTALL BRACKET

1. Ensure the indoor unit is pressed all the way against the interior sill. Screw in one indoor unit lock screw with washer (c) on each side of the indoor unit.



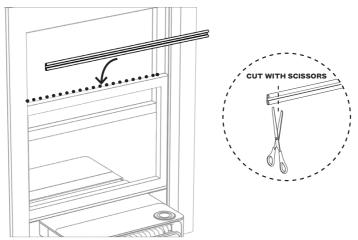
#### INSTALLING THE LOWER SASH BULB SEALS

- 1. Measure the distance between the sides of the window frame and cut both of the lower sash bulb seals to match.
- **2.** Remove the adhesive covers from the two bulb seals. Adhere one to the bottom edge of the sash.



- **3.** Adhere the second bulb seal to the top of the unit, directly under the sash. When the window is closed, the two seals must align and touch.
- **4.** Ensure the foam pieces align with no gaps, forming a tight seal around the window. If air leaks in, adjust the foam and its length.

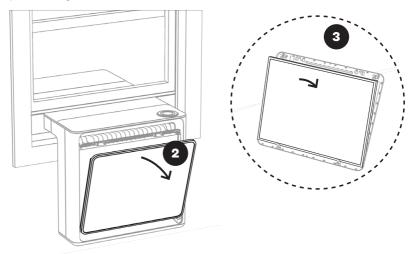




- 1. Close the window.
- **2.** Measure the distance between the sides of the sash and cut the intersash bulb seal to match.
- **3.** Insert the bulb seal securely between the window panes, making a tight seal between them.

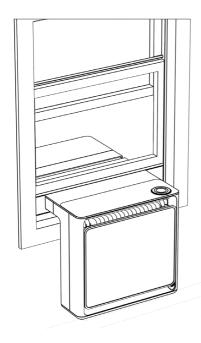
#### INSTALLING THE AIR FILTER

1. Remove the plastic bag from the air filter.



- 2. Remove the front cover from the indoor unit.
- 3. Insert the filter into the front cover.
- 4. Reinstall the front cover.

#### FINAL STEPS



- 1. Wait 30 minutes for fluids to settle before turning on the unit.
- 2. Plug the unit into a 3-prong outlet.
- 3. Press the power button on the user interface.

If you need to uninstall the unit, follow the preceding steps in the reverse order. If the unit gets stuck during the uninstall, don't force it. Push it out slightly, make sure it is centered on the install bracket, and try again.

## CONGRATULATIONS! YOUR INSTALL IS COMPLETE.

The following pages contain instructions on basic maintenance.

See the User Guide for instructions on using the All-Weather™ Unit.

We recommend connecting the unit to WiFi in order to automatically receive important firmware updates that the company may release from time to time.



# **DOWNLOAD THE GRADIENT APP!**

Control the Gradient unit from your phone and get the latest product updates.







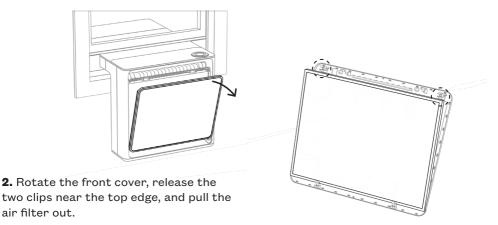


# **MAINTENANCE**

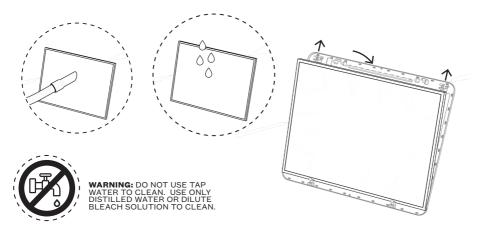
#### CLEANING THE AIR FILTER

Your All-Weather 120V unit will alert you when the air filter needs to be cleaned.

1. Turn the unit off and unplug it. Pull gently on the top edge of the front cover to remove it.



**3.** Vacuum the filter **or** rinse the filter with distilled water or a dilute bleach solution (1 tsp household bleach per gallon of water) only. Do not use tap water alone. Allow the filter to air dry completely before returning it to the unit.

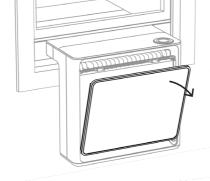


- **4.** Return the clean air filter to the front cover. If you are replacing the air filter with a new filter, make sure to remove the plastic wrapping first.
- 5. Reattach the front cover and plug in the unit.

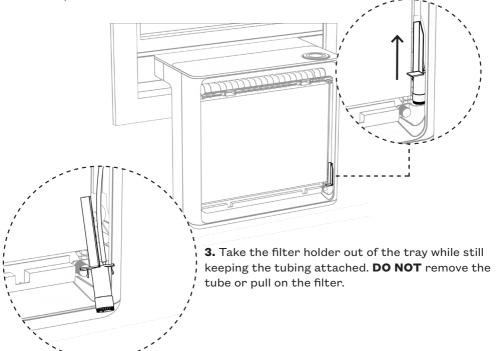
#### CLEANING THE CONDENSATE FILTER

Your All-Weather  $^{\text{TM}}$  unit will alert you when the condensate filter needs to be cleaned.

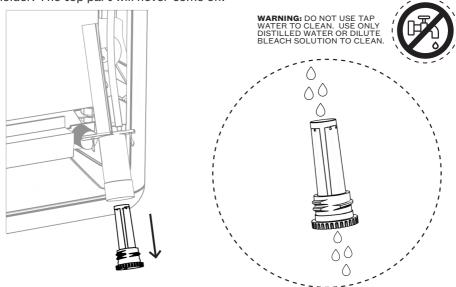
1. Turn the unit off and unplug it. Pull gently on the top edge of the front cover to remove it.



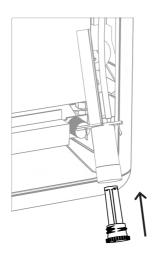
**2.** The condensate filter holder is on the right side of the indoor unit. Pull the filter upward until the bottom is visible.



**4.** Carefully turn the condensate filter counterclockwise to remove it from the holder. The top part will never come off.

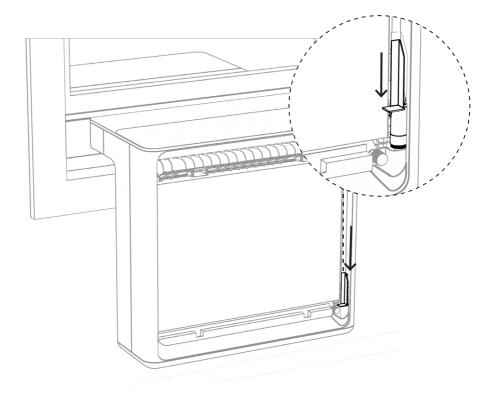


- **5.** Holding the filter upside down, rinse with distilled water or a dilute bleach solution (1 tsp household bleach per gallon of water) to release any trapped sediment.
- 6. After the filter is cleaned, turn it clockwise to reinstall it.

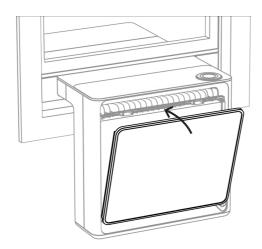




Filter properly reinstalled in plastic housing.



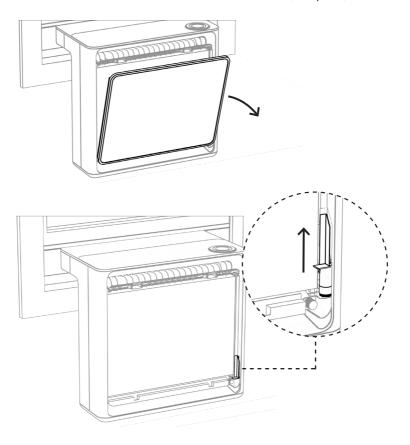
**7.** Lift the filter up and return it to the tray, making sure the tubing does not bend, and is routed back into the side of the unit.



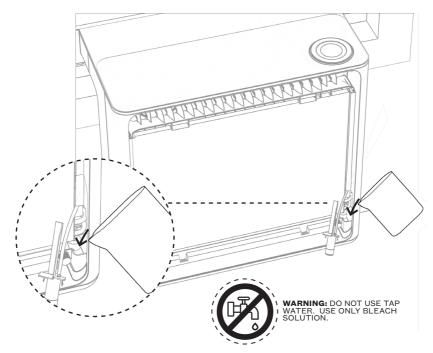
8. Reattach the front cover and plug in the unit.

# **PERIODS WITHOUT POWER**

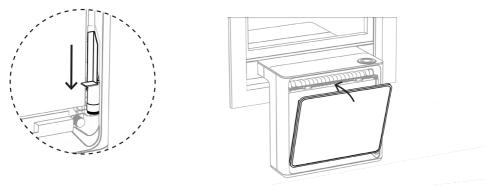
- ↑ To avoid potential growth of microbial contaminants, do not unplug the unit for extended periods of time. If the unit is unplugged or does not have access to power for more than 48 hours (for example, due to an extended power outage) flush the unit following the instructions below. Alternatively, empty all water from the outside catch tray by opening the window, removing the rotation quick-release pins, and tilting the outdoor unit upwards.
- 1. Make a bleach solution by combining 8 teaspoons of household bleach with one gallon of water in a bucket or other container.
- 2. Turn the unit off and unplug it. Pull gently on the top edge of the front cover to remove it. Remove the condensate filter holder (see p. 33).



**4.** Use a pitcher with a spout or similar vessel to pour the bleach solution from step 1 into the indoor condensate tray. Fill until the water level reaches the rim of the tray, but make sure it does not overflow.

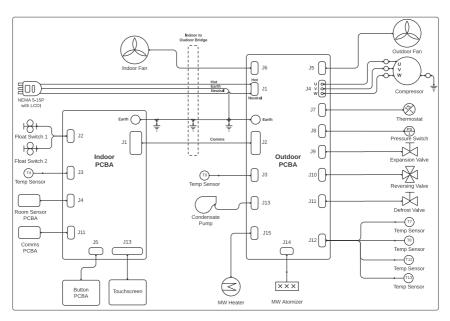


**5.** Reinstall the condensate filter holder, reattach the front cover, and plug in the unit.



**6.** Turn on the unit immediately and operate as normal. The unit may take a few extra minutes to start up as it pumps the liquid out of the condensate tray.

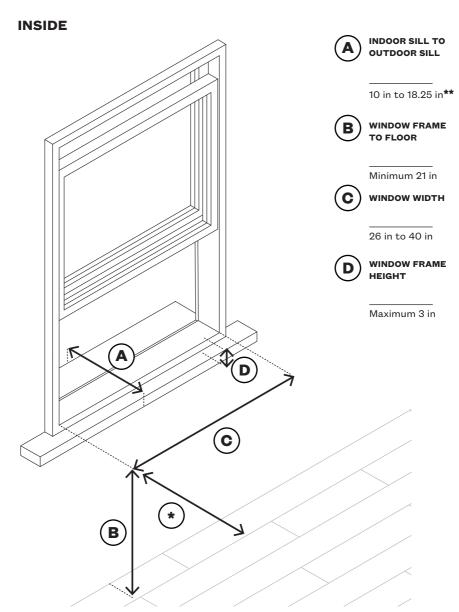
## WIRING DIAGRAM



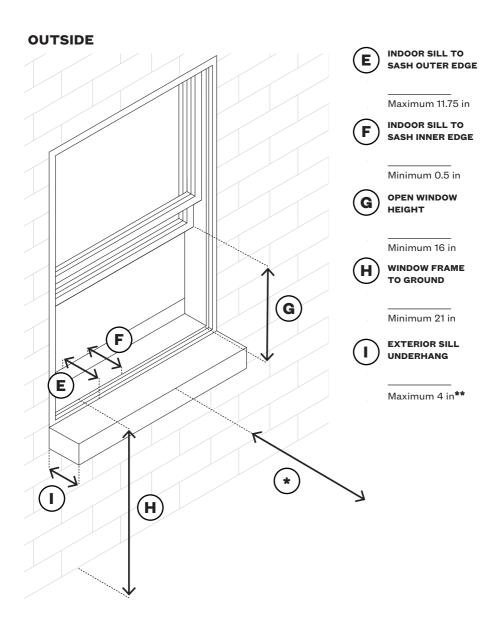
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate 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.
- $\bullet$  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.

# **REQUIRED WINDOW SIZING**



- \* The front of the indoor unit must have a minimum of 40 in (102cm) of space without obstructions.
- $\star\star$  For sills outside of this range but within 6.25 in 20 in, contact Gradient for support.



<sup>\*</sup>The front of the outdoor unit must have a minimum of 40 in (102cm) of space without obstructions. The sides and back of the outdoor unit must have a minimum of 3.5 in (9cm) of space from any obstructions.

<sup>\*\*</sup> For larger underhangs up to 5.25 in, contact Gradient for support.

# **ANY QUESTIONS?**

Our customer experience team is standing by if you get stuck or need help.

Just reach out to hello@gradientcomfort.com, or check out our FAQs at https://faq.gradientcomfort.com

We love seeing Gradient heat pumps out in the wild! Tag us on: #MyGradientComfort











Scan to visit www.gradientcomfort.com/pages/manual and access the latest version of this manual.

All-Weather 120V Installation, Operation, and Maintenance Manual 109-00089-01 REV3