Flair Puck & Smart Vent

IN-HOME INSTALL GUIDE

FORCED AIR SYSTEMS

questions?

pros@flair.co

★ What you need to know

What you need on the job

1. If installing a thermostat, you'll need one thermostat per HVAC zone*
2. One or more Flair Bridges (a centrally located Bridge covers ~4,000 sq ft homes. Layout and building materials impact range. Additional Bridges can be added to increase range.)
3. One Puck for each room with Smart Vents, plus two Pucks for backup
4. Small phillips head screwdriver
5. Post-it notes and a pen

What you need from the Customer

1. The email address to use for their Flair account
2. Username / password for their smart thermostat account (if it's already set up)*
3. Username / password for their 2.4Ghz network if you're connecting the Bridge via WiFi
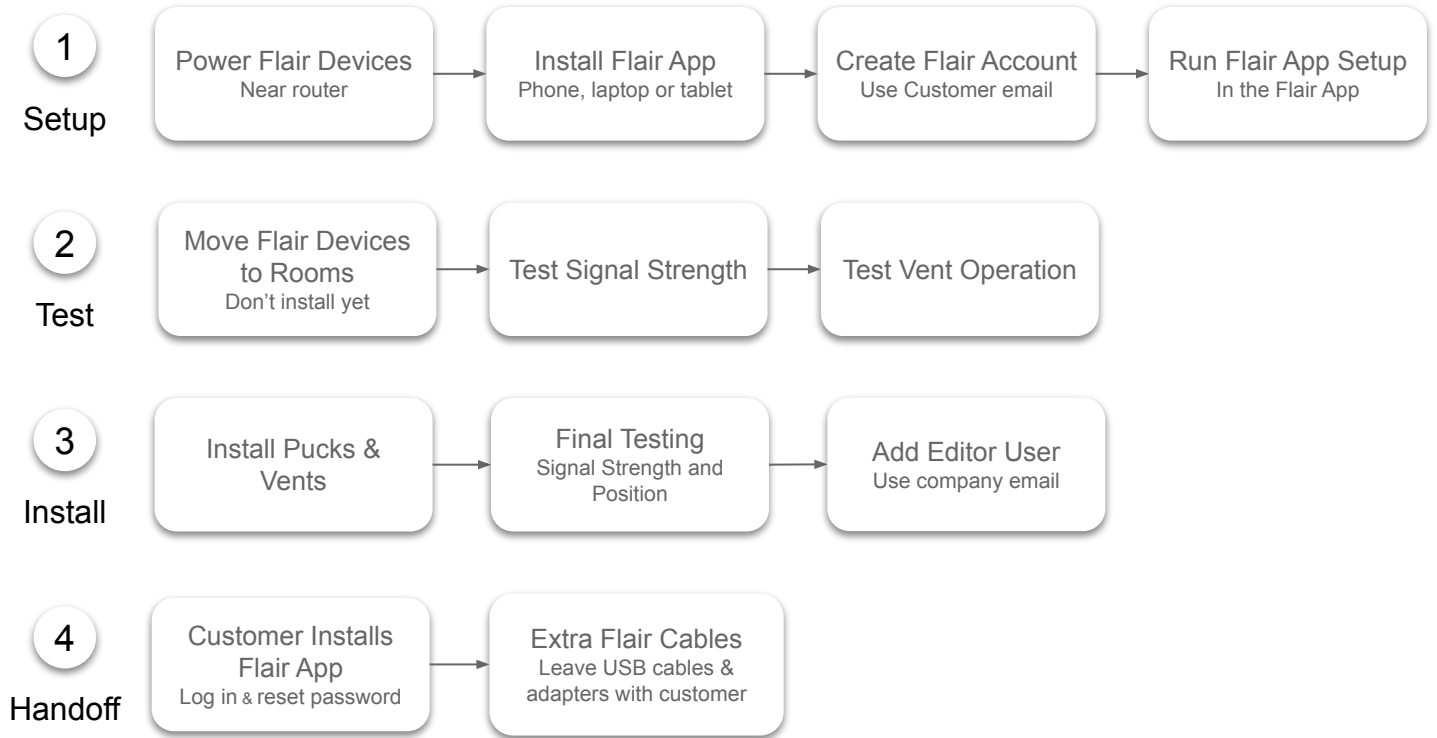
General Setup Flow

1. Power on Flair devices
2. Install the Flair App
3. Run Flair Setup
4. Test System
5. Add users
6. Handoff Flair account to customer

After Setup

Leave extra cables and adapters with the customer. They may need these later.

* Flair integrates with ecobee, Nest, Carrier/Bryant or Honeywell WiFi-connected smart thermostats.

★ Setup, Test and Install Flow

1

Setup

Power Flair Devices	Install Flair App	Create Flair Account	Run Flair App Setup
Near router	Phone, laptop or tablet	Use Customer email	In the Flair App

2

Test

Move Flair Devices to Rooms	Test Signal Strength	Test Vent Operation
Don't install yet		

3

Install

Install Pucks & Vents	Final Testing	Add Editor User
	Signal Strength and Position	Use company email

4

Handoff

Customer Installs Flair App	Extra Flair Cables
Log in & reset password	Leave USB cables & adapters with customer

① Setup

1. **Power on Flair Devices**

   a. Power on Pucks using batteries
   b. Insert batteries into Smart Vents (If wiring, use batteries during Setup and testing, then remove batteries, wire and test again. You'll need a 24VAC transformer.)
   c. Do nothing with the Bridge until asked to do so during Setup

2. **Install the Flair App**

   The Flair app can be downloaded to a smartphone or a tablet.

   - Apple App Store: flair.co/ios
   - Google Play Store: flair.co/android

   If Setup doesn't work using a phone, you can try on a computer browser at: my.flair.co.

3. **Create a Flair Account**

   a. Open the Flair app - or go to my.flair.co on a browser
   b. Sign Up using the customer's email address and a temporary password

4. **Run the Flair App Setup**

   The prompts will lead you through the following steps:

   a. Name the Flair home using the customer's street address
   b. Power on and connect the Bridge to the internet*
   c. Add a thermostat - if adding a smart thermostat, follow the prompts to to log in, grant access, and import it into Flair, if not, select "Other thermostat"
   d. Discover and add Pucks and Smart Vents to rooms
   e. When adding Pucks and Smart Vents to rooms, label each Flair Puck or Smart Vent with a Post-it note and the room name

   *When adding multiple Bridges, these can be added later. Tap the PLUS menu ➕ and select "Add Flair Bridge" and follow the prompts for WiFi setup.

② Test

1. Move Flair Devices to Rooms

   a. Move Pucks and Smart Vents to rooms
   b. Don't install/mount them just yet - we need to test signal strength and position
   c. You can unplug the Gateway Puck, move it and plug it into a different outlet as necessary

2. Test Puck Signal Strength

   a. In the Flair App, go to **Home Statistics**
   b. In the Puck graph, change "Graph Data" to "RSSI (dB)"
   c. Sensor Pucks will show RF signal strength to the Bridge
   d. RSSI is shown in a negative scale - **we want values above -75dB**, values below -75dB may result in signal loss and commands may not get through

3. Test Smart Vent Signal Strength

   a. In the Flair App, go to **Home Statistics**
   b. In the Vent graph, change "Graph Data" to "RSSI (dB)"
   c. Smart Vents will show RF signal strength to the closest Gateway Puck
   d. RSSI is shown in a negative scale - **we want values above -80dB**,, values below -75dB may result in signal loss and commands may not get through

To improve signal strength to Pucks, move the Bridge to a more central location. Ensure Bridge is in a location where it's not blocked by heavy metal objects or impeded by equipment that sends signals.

② Test - Continued

5. Test Smart Vent Open/Close Function

    a. In the Flair app, tap the System button and switch to Manual
    b. For each room, slide the Vent slider to the open and closed position, allowing 30-60 seconds for the Smart Vent to respond
    c. Tap the System button and switch to Auto

If a Smart Vent is not responding to open/close commands, try resetting the Vent.

1. Remove the batteries for 60 seconds and then re-insert.
2. Rediscover the Vent
    a. Tap the Flair menu, go to Home Settings->Flair devices and enable Smart Vent Identification Mode.
    b. In this mode, the Smart Vent light bars will show their light patterns (see below).
3. Turn off Smart Vent Identification Mode.
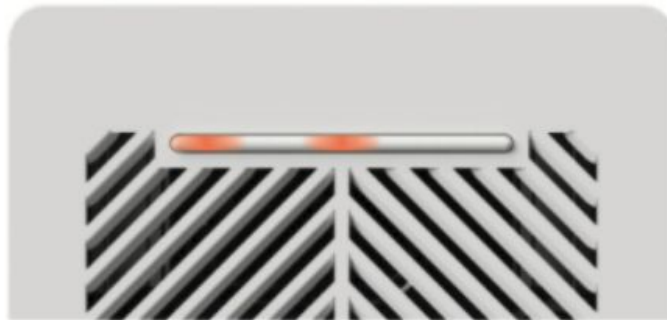
③ Install

1. **Install Pucks**

   Once you're confident that the Pucks have good signal strength and Smart Vents can be controlled, you can install/mount the Pucks by affixing them to the wall using the supplied sticky-back tape, or screwing the backplate into the wall using the supplied screws.

   The Puck can also be placed on a flat surface using the backplate kick stand - however, the customer should not move the Puck as it could affect signal strength.

2. **Wire Smart Vents**

   If wiring Smart Vents, remove batteries now and wire Smart Vents now.

④ Handoff

1. Add Editor User

   a. In the Flair app, tap the Flair menu and go to Home Settings->Users
   b. Enter your email address* in the "Invitation Email"
   c. Select "User can make changes to this home"
   d. Tap the arrow
   e. You'll receive an invitation email to join this home and view it from your Flair account

   * This is the email address you used to create your own, separate Flair account - and will be the account you use to remotely access the customer's Flair home. If you have a large company with many installers, you might want to create your Flair account using a general company email address so that others can use the same Flair account to access your customers' Flair homes.

2. Customer Installs Flair App

   Have the customer do the following:

   a. Install the Flair app on their phone
   b. Log in using their email address and the temporary password
   c. Tap the Flair menu, go to Account Settings and change their password

3. Customer Support

   Give the customer the following:

   a. Homeowner Guide: flair.co/secondary-heat-homeowner-guide-public
   b. Flair Support email: support@flair.co

Appendix A: Troubleshooting Connectivity

## Understanding Communication Protocols

All Smart Vents and Sensor Pucks to connect to the Bridge using RF (radio frequency) signals. If Sensor Pucks are offline, have a weak signal, or go offline frequently, try moving the Bridge to a more central location.

Check Device Online Status

Expand the room tile to see device status and signal strength. More bars equals stronger signal.

Check Device Signal Strength

Tap the Flair menu and go to **Home Statistics**. To see signal strength for devices in a specific room, tap the room's 3-dot menu and select **Stats**. Change "Graph Data" to "RSSI dB". Good signal strength is above -75dB. Flair stores history up to four weeks.
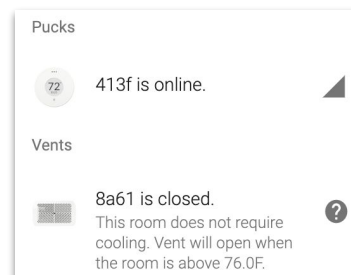
Troubleshooting Signal

During Setup, Flair devices take at least **five minutes*** to be discovered. After five minutes if Sensor Pucks do not appear in the app, go into the Puck's Gear menu and select "Unlink Gateway" and retry discovery.

After Setup, if a Puck goes offline, ensure batteries are properly installed or try using fresh new, batteries.

* During Setup, device discovery is limited to 30 minutes. After 30 minutes of inactivity, Flair will disable device discovery, and the Bridge will stop trying to discover Flair devices. This saves power. If you need enter discovery mode again, tap the Flair menu, go to Home Settings->Flair Devices and enable Smart Vent Identification Mode.

Reset a Smart Vent

1. Remove the batteries for 60 seconds and then re-insert.
2. Rediscover the Vent
   a. Tap the Flair menu, go to Home Settings->Flair devices and enable Smart Vent Identification Mode.
   b. In this mode, the Smart Vent light bars will show their light patterns (see below).
3. Turn off Smart Vent Identification Mode.

Appendix B: Smart Vent Power Options

Each Smart Vent includes 2 c-cell batteries for power. These batteries can last up to four years with regular use. You can also power the Smart Vent using 24 VAC power or 12V DC power.

Flair Setup will guide you through assembling Smart Vents with batteries. Wiring is done after Setup. Instructions on how to wire to AC power are included in the box with each Smart Vent.

Power Options

Batteries
(2 Cs Included)

Best for locations where wired power is unavailable or inconvenient. Typical battery life is 3 to 4 years.

Wired
(Available on all Flair Smart Vents)
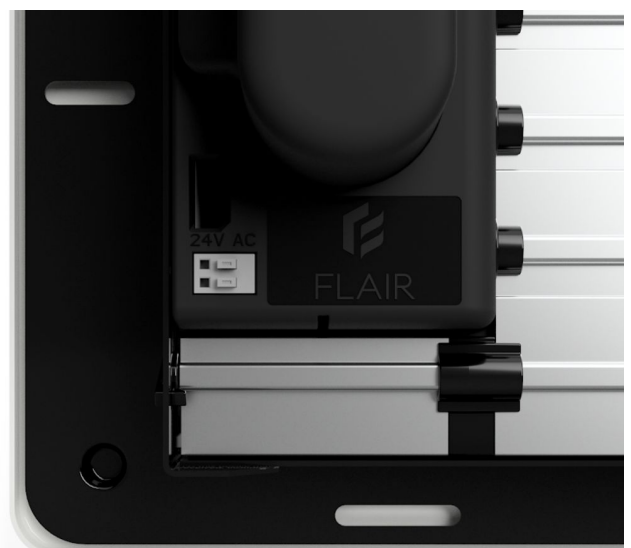
Ideal for new construction and renovations.

Recommended Transformer
Elk TRG2440
(available to Flair Pros on the exclusive store)

For more information on wiring Smart Vents, visit
flair.co/vent-manual

Flair Puck USB Mount

Flair's USB Mount adapter allows for a Puck to fit snugly to walls for an elegant and secure placement. Mount where temperature is accurate and reliable.

USB Outlet PLate

equired!

No Electrician Required!
Cost effective, code compliant, fast and easy to install. Buy at:
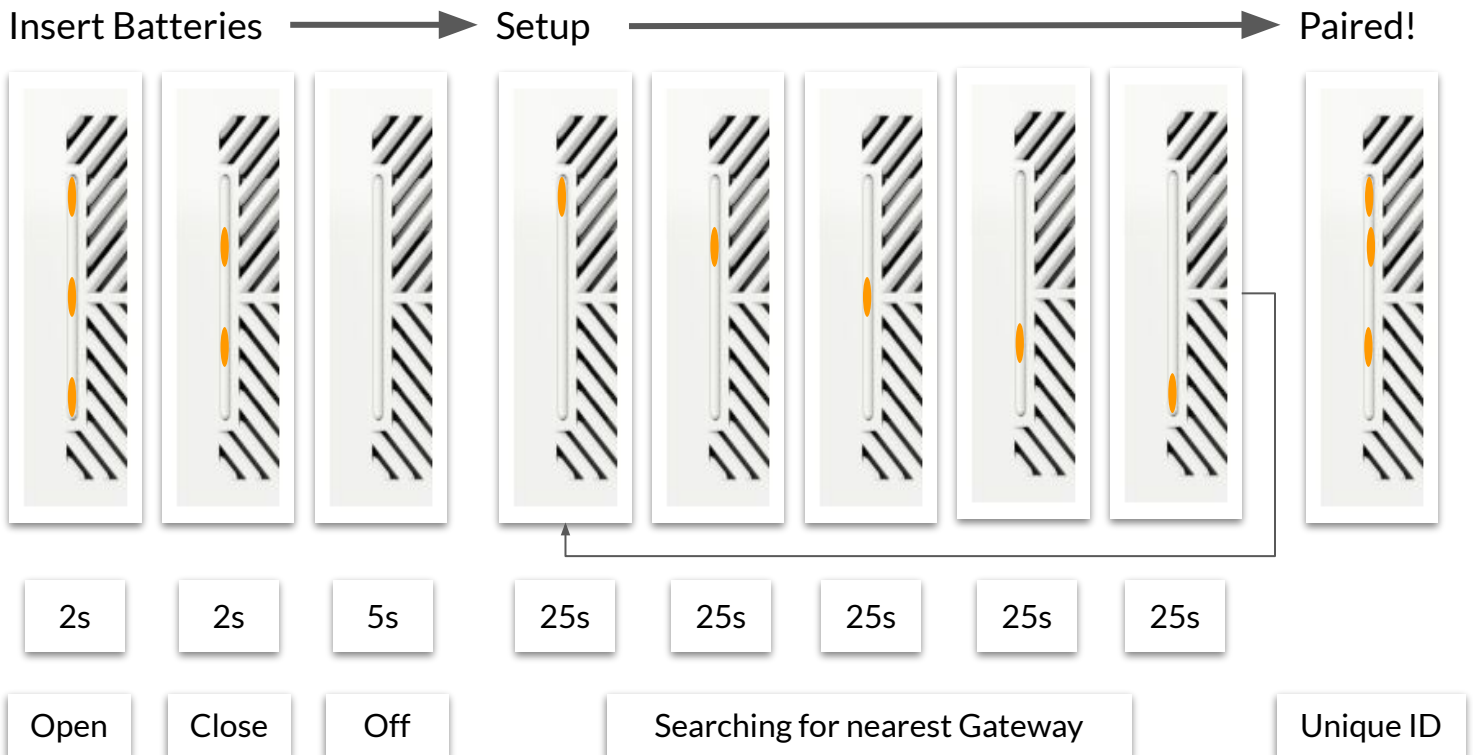flair.co/usb-wall-plate

Wall-Mounted Conduit
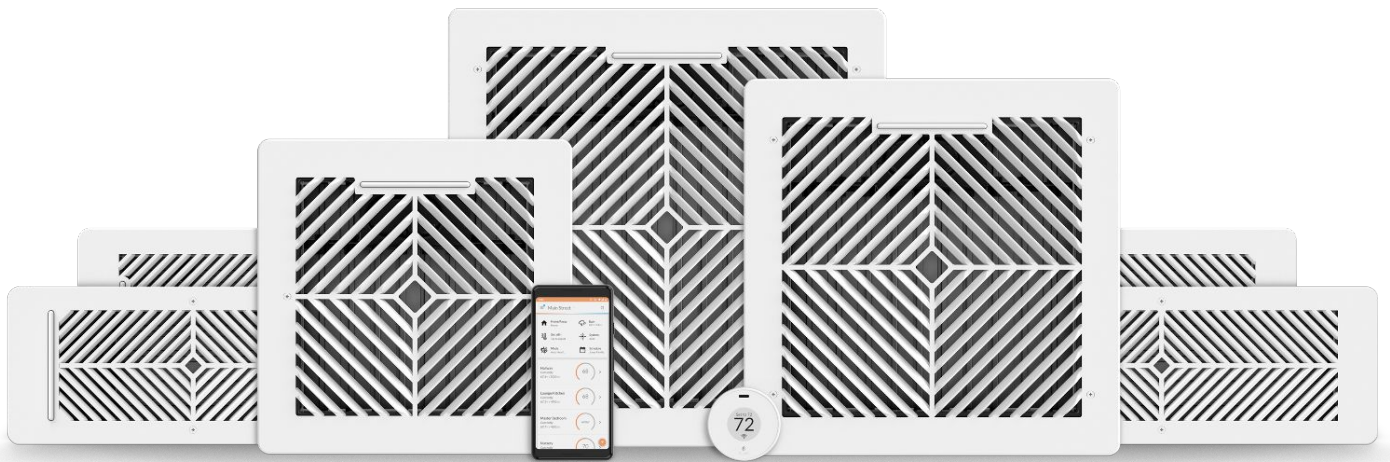

Great for retrofits!

Appendix D: Vent Light Patterns

When batteries are inserted, the Smart Vent will open and close its louvers, displaying a light pattern of 3 illuminated lights, followed by 2. Then, the lights will turn off.

During Setup, lights will cycle in a pattern until the Smart Vent pairs with a Gateway Puck. This can take up to 5 minutes. After 30 minutes with no pairing, lights will turn off to save battery life. To enter discovery mode again, tap the Flair menu, go to Home Settings->Flair Devices and enable Smart Vent Identification Mode.

When paired with a Gateway Puck, the Smart Vent will display its unique light pattern until Setup is exited, or for 30 minutes. Smart Vents will display their light pattern any time Setup is entered, or when batteries are replaced.

Insert Batteries ⟶ **Setup** ⟶ **Paired!**

2s	2s	5s	25s	25s	25s	25s	25s	
Open	Close	Off		Searching for nearest Gateway				Unique ID