aeroseal® ENVELOPE

2024

# AeroSuite for AeroBarrier Select

aeroseal ENVELOPE

# 2024 Process Change Overview

# Seal Options

As we refine our process to provide the most accurate data to our installer partners, we are making some changes to the software platform which we feel will be beneficial.

There are now three pathways to complete a seal:

1. Current process with Leakage Assumption
2. Identifying Prep Leakage
3. Dealer defined leakage
4. Current Process without Leakage Assumption

The gold and silver lines are going away.  We are moving to one target line which will be your inputted target.  The progress on the graph will add in your prep leakage.

# 1 – Current Process with Leakage Assumption

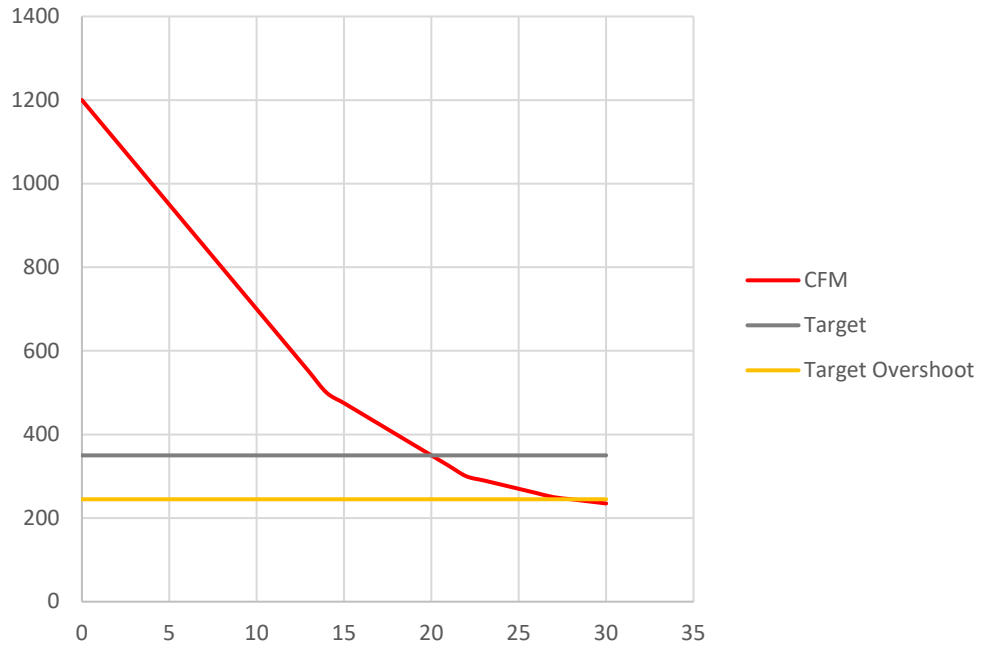
The process to seal remains the same.

1. Prep the space
2. Pre-seal test (pressurization)
3. Seal
4. Post-seal test (pressurization)
5. Optional depressurization with pipe prep only

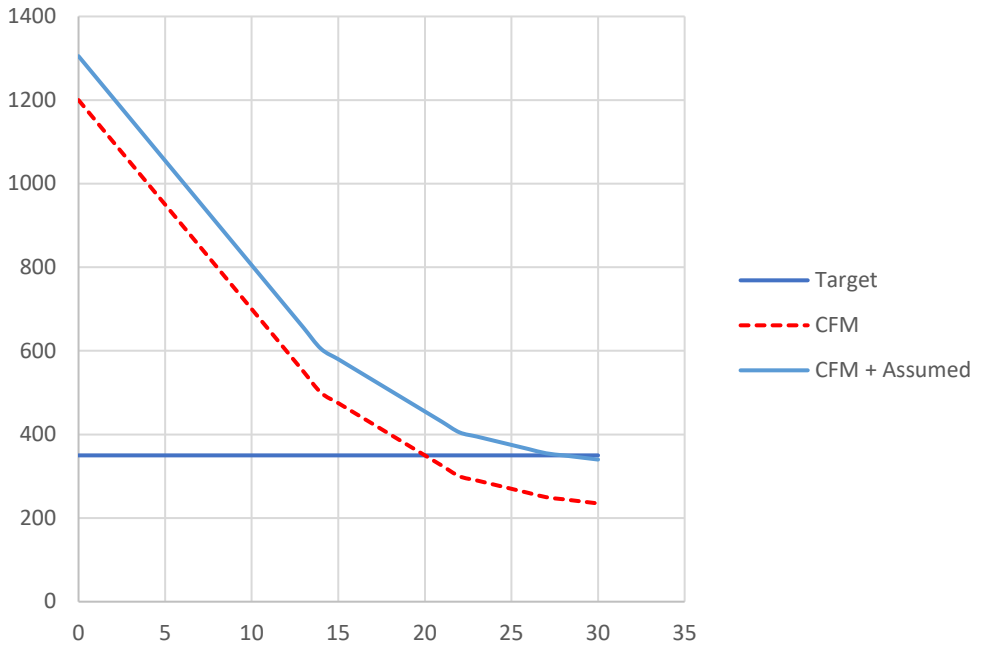
**On Screen Progress = Recorded leakage / 70%**

# 1 – Current Process with Leakage Assumption

SmartSeal Plot




AeroSuite Plot




Assumed Operational Leakage = 105 CFM50 (30% of Target)

# 2 – Identifying Prep Leakage

Understanding how much leakage we are covering with prep work is key to achieving our target air tightness.  This new process involves an adjustment but should leave you more confident in what the house has achieved.

A Rater/verifier is going to test the house without any of our prep work being installed.  Moving to test in an a more apples-to-apples environment will give us better alignment with the 3rd party testing results.

**On Screen Progress = Recorded leakage + $CFM_{50}$ Delta**

# 2 – Identifying Prep Leakage

1. Pre-seal test 1 with simulated prep only (pressurization)
2. Prep the space
3. Pre-seal test 2 with full prep (pressurization)
   - The system will calculate how many $CFM_{50}$ are covered by our prep, this delta will be used to set your target line. A warning will appear if the target is not achievable due to prep leakage exceeding the seal target.
4. Seal
5. Post seal test with full prep (pressurization)
6. Optional depressurization with pipe prep only

# 2 – Identifying Prep Leakage

- **Plumbing pipes**
  - Supply lines
  - Drains

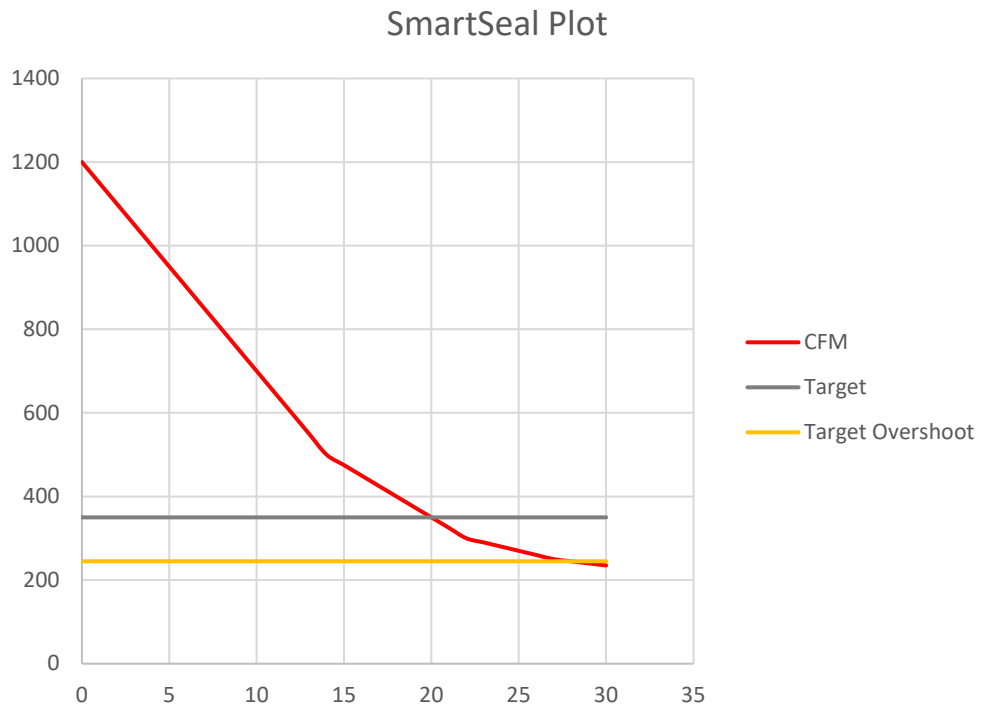
Supply pipes are to be filled with pressurized water and drainpipes are to have P-traps filled with water per RESNET standards.  We can simulate this by covering the pipe opening.

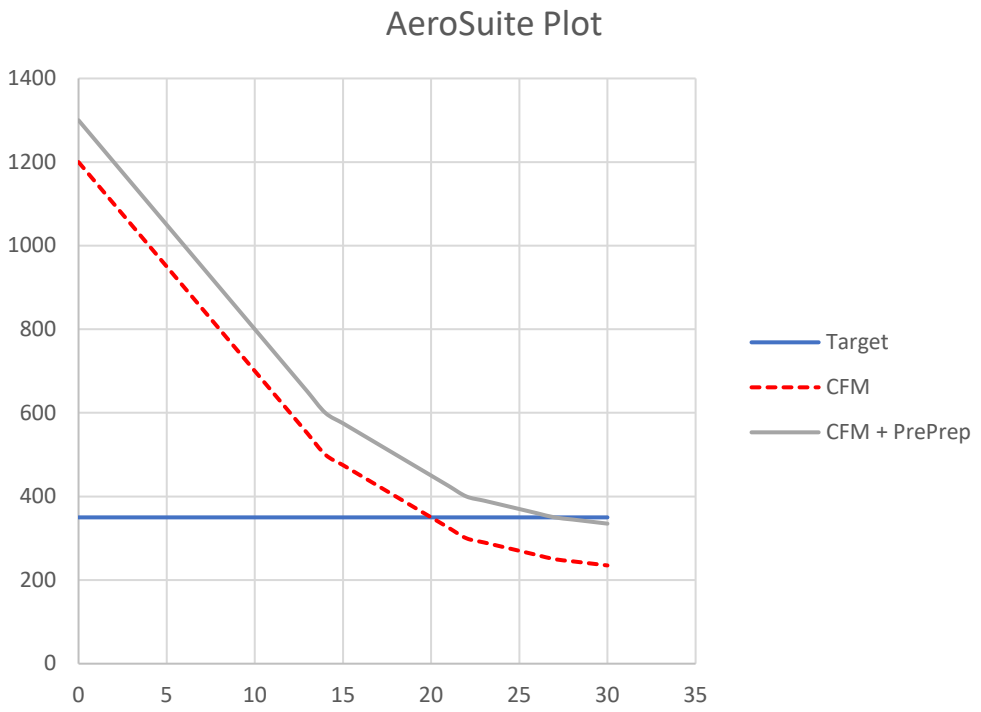
- **Exhaust openings**
  - Bath fans
  - Dryer vents
  - Range hoods
  - ERV/HRVs

Exhaust fan dampers would be blown open during pressurization.  Leaving them uncovered during the test would introduce leakage which is not present under depressurization.

**It is important to have the dampers installed so that a depressurization test will be successful.

# 2 – Identifying Prep Leakage




| | | |
|---|---|---|
| PrePrep Test | 1300 | CFM50 |
| Preseal Test | 1200 | CFM560 |
| Operational Leakage | 100 | CFM50 |

# 3 – Dealer Defined Prep CFM

In a multifamily seal where a dealer will prep multiple units at once to speed the install process.  In this situation, testing the prep leakage of each unit will slow the installation.

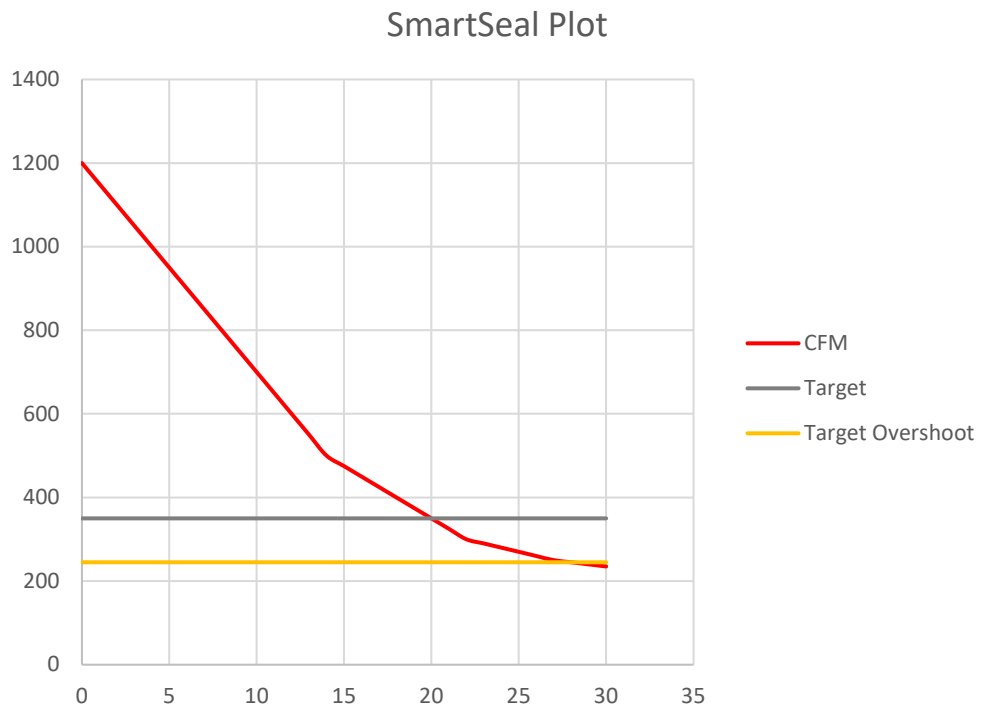
Once you know the prep leakage for one unit type, it is reasonable to assume a similar prep leakage for other units of the same type.  You can enter a numeric value for $CFM_{50}$ of prep leakage and that will set the target line on the screen.

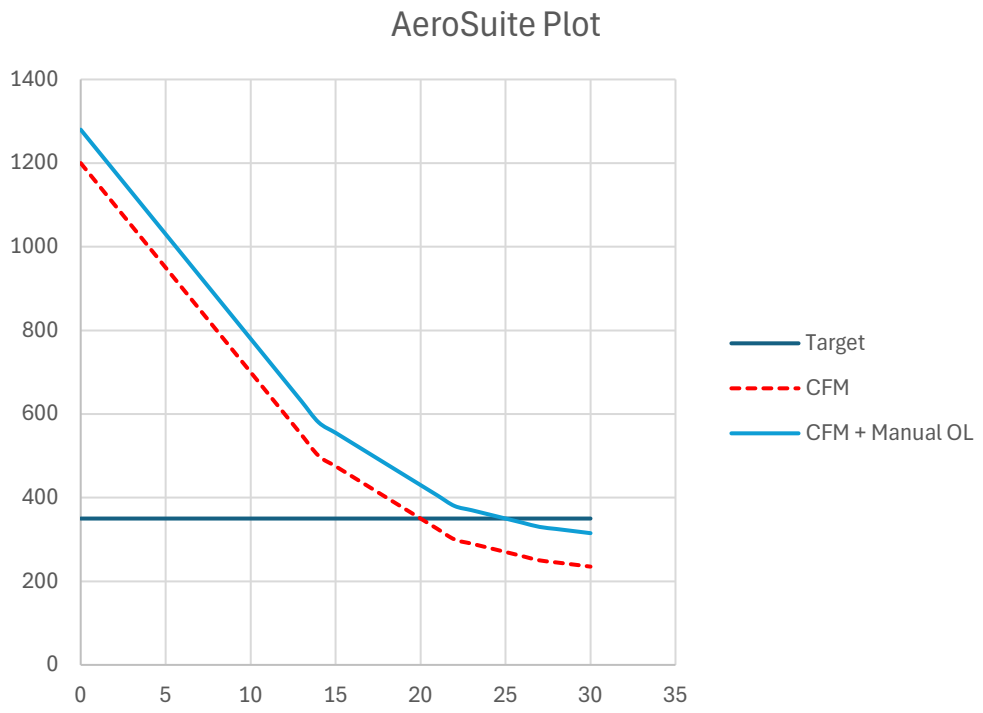
# 3 – Dealer defined prep CFM

1. Prep the space
2. Enter Operational Leakage
3. Pre-seal test (pressurization)
4. Seal
5. Post-seal test (pressurization)
6. Optional depressurization with pipe prep only

**On Screen Progress = Recorded leakage + $CFM_{50}$ Entered**

# 2 – Identifying Prep Leakage



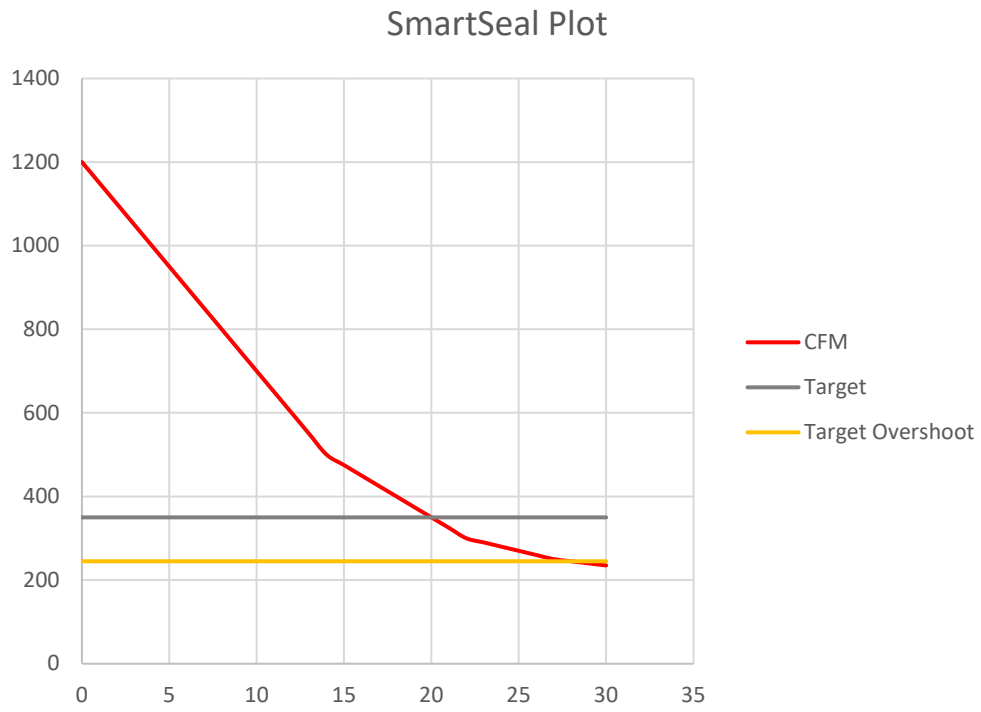

Entered Operational Leakage = 80 CFM50

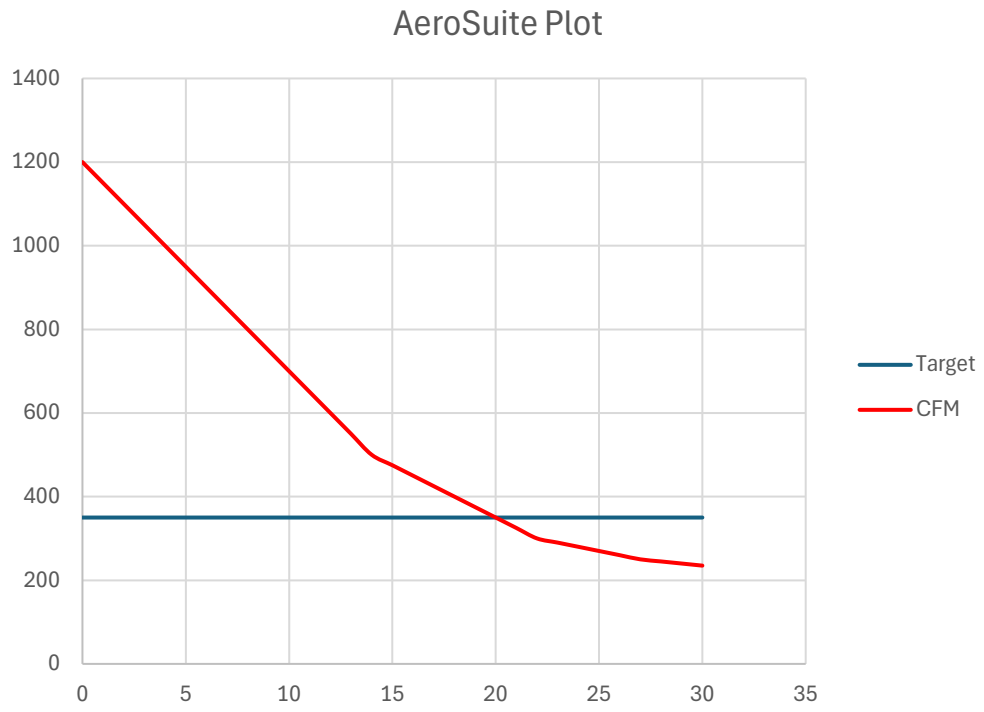
# 4 – Current Process w/o Leakage Assumption

The process to seal remains the same.

1. Prep the space
2. Enter 0 Operational Leakage
3. Pre-seal test (pressurization)
4. Seal
5. Post-seal test (pressurization)
6. Optional depressurization with pipe prep only

# 2 – Identifying Prep Leakage




0 Operational Leakage Considered

# Depressurization Test Out

This is the most accurate representation of what a 3rd party Rater/Verifier is going to test. We have all explained to a dealer why our numbers are lower than a 3rd party, it is a reasonable explanation.  However, it leaves room for a builder to assume that any difference between our tests is our fault, they don't know how much the delta should be.

1. Move the fan and MCU inside – blowing out
2. Remove all prep except pipe prep
3. Run the depressurized post-seal test

# Seal Report

The seal report will show the improvement during the seal but the final test out number will be:

1. Current process with Leakage Assumption

   **Ending $CFM_{50}$ + 30% of target**

2. Identifying Prep Leakage

   **Ending $CFM_{50}$ + measured prep delta**

3. Dealer defined leakage

   **Ending $CFM_{50}$ + Dealer entered prep number**

4. Current process without Leakage Assumption

   **Ending $CFM_{50}$**

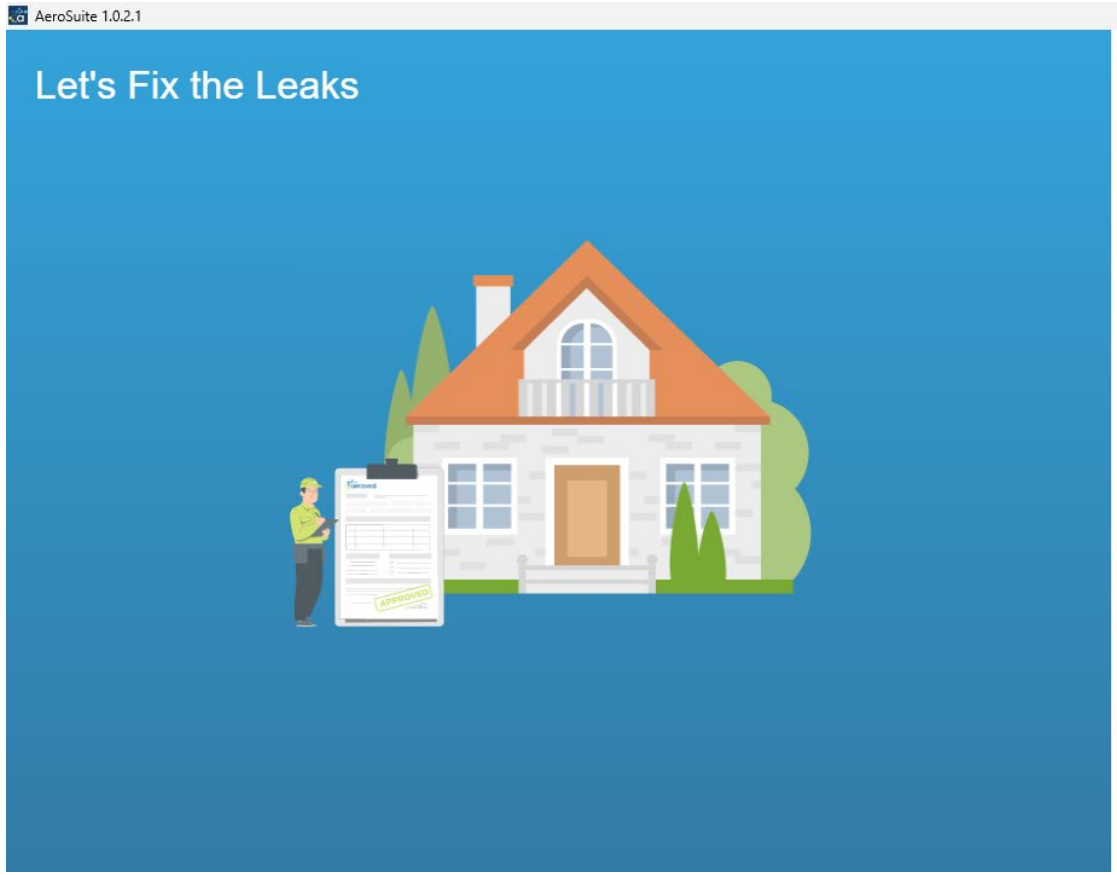
# Examples

SmartSeal

aeroseal ENVELOPE

# 2024
# AeroSuite Software

# Starting the Aerosuite





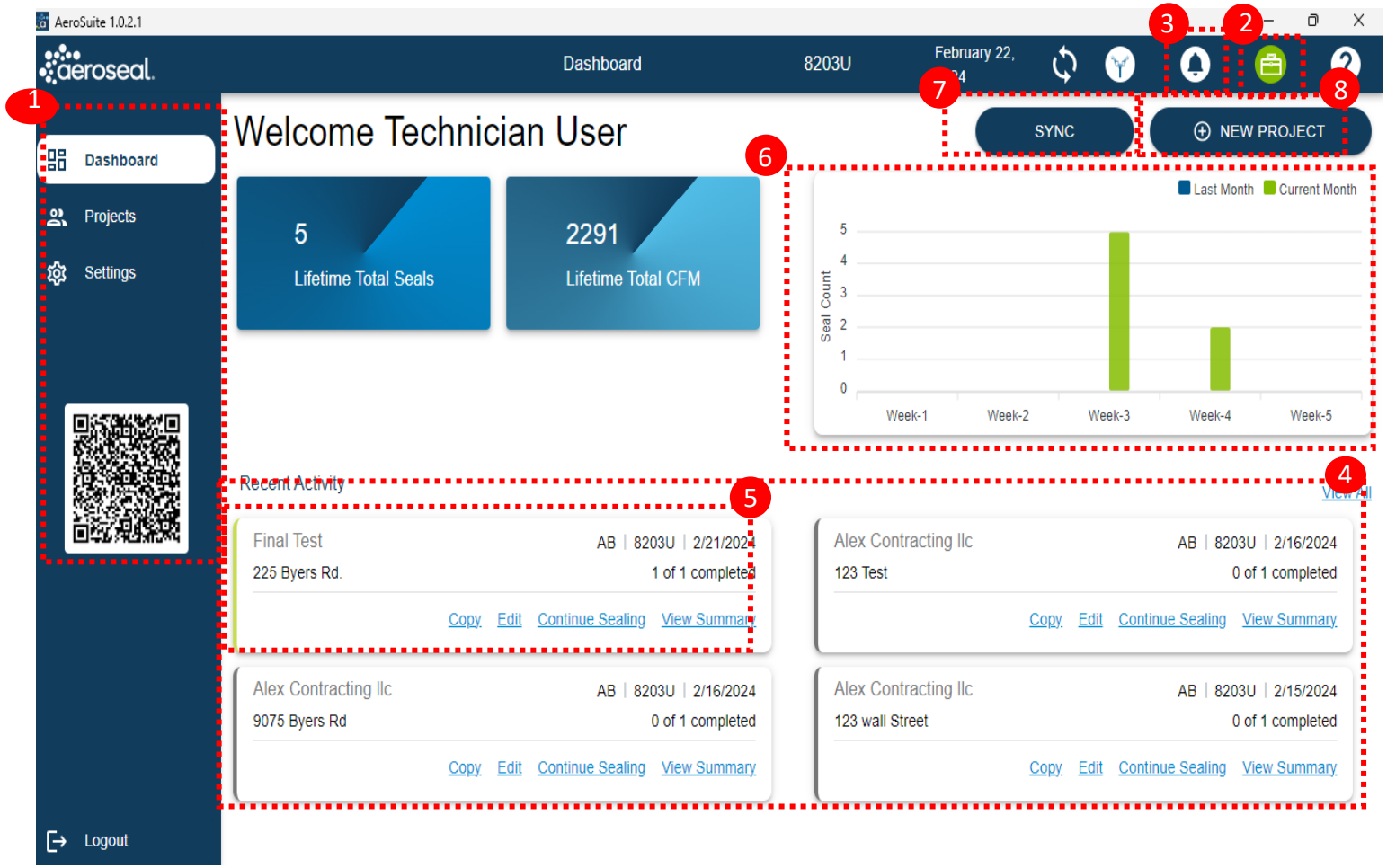
Enter username and password to Login

*Username: CASE ID*

*Password: CASE ID*

**Make sure that you do not have any pending Windows Updates on your laptop**

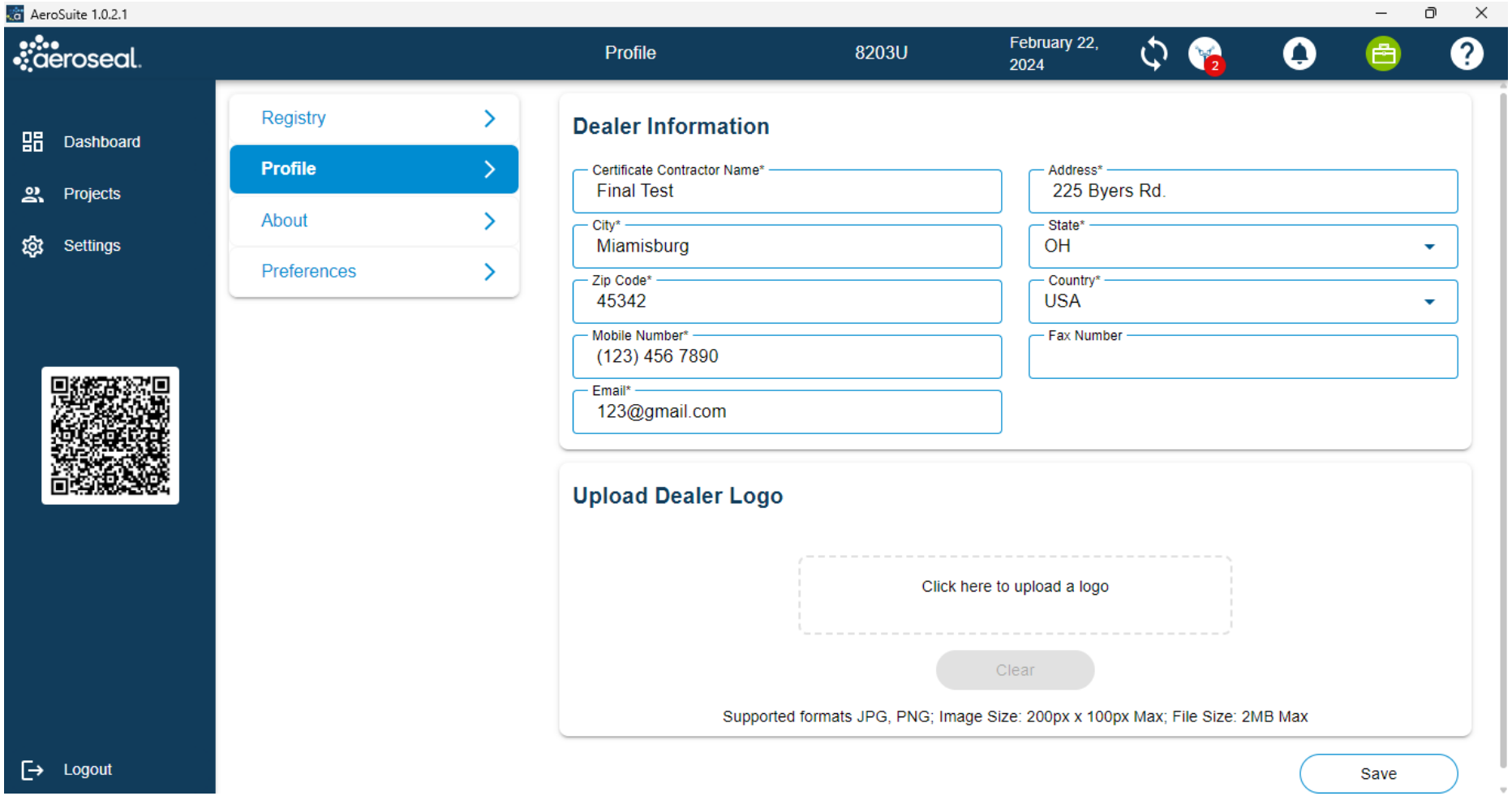
# Dashboard




1. Main Menu
2. MCU connection status (Green=connected/Red=disconnected)
3. Notification Bell.
4. Recent seal layout.
5. Project cards with color indication of the job status and seal preview.
6. Weekly count of seals
7. Upload/Sync data to Aeroseal
8. New Project button

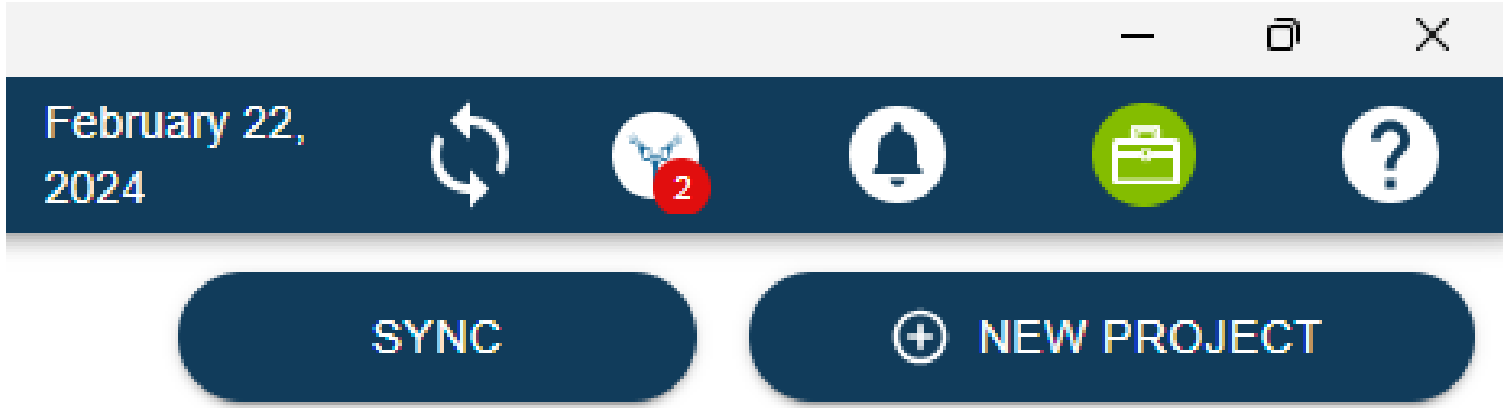
Project cards: All seals completed| All seals not completed | No seals started

# Initial Setup-Enter Your Company Information

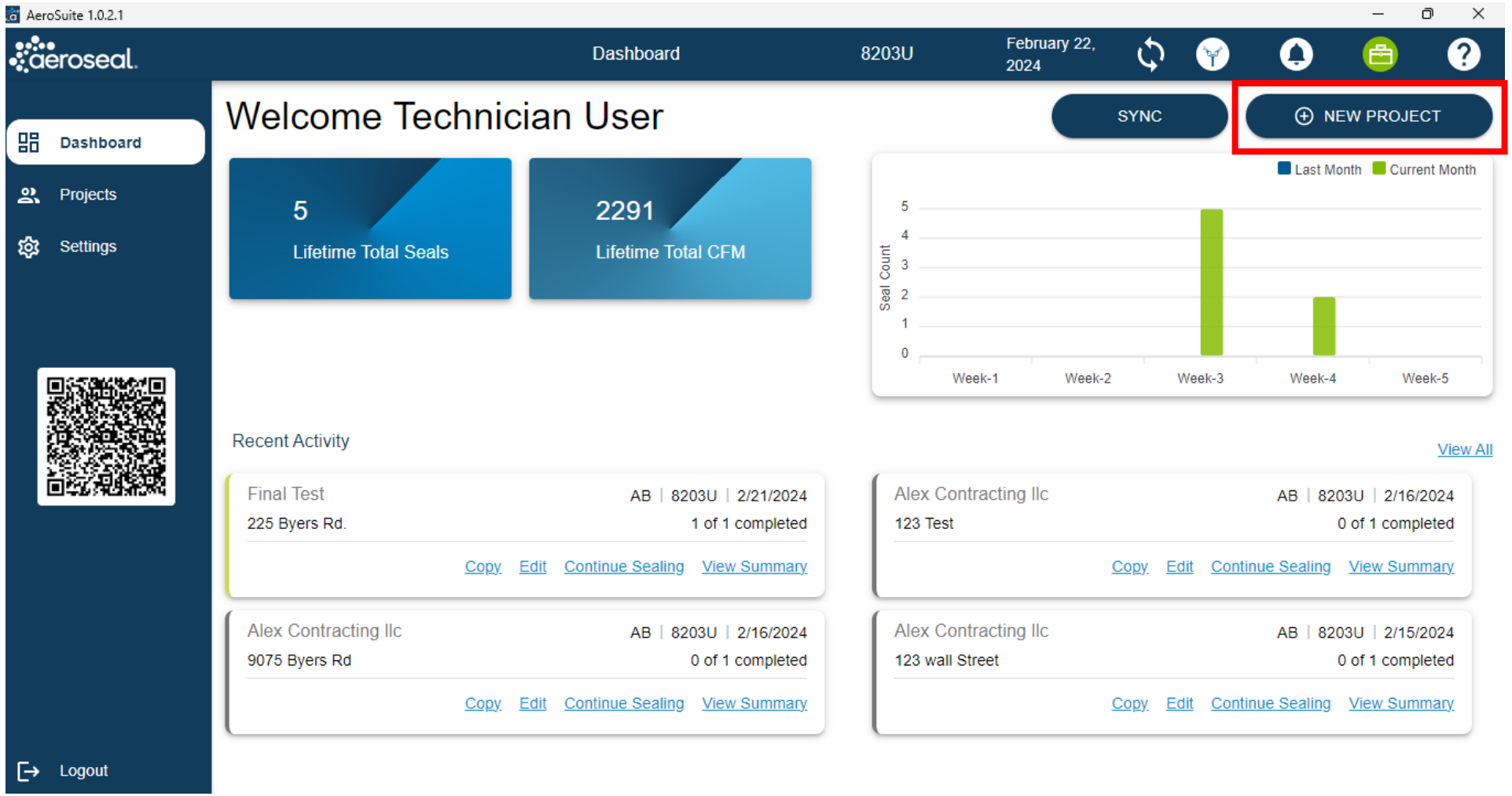


# System Checks-WiFi

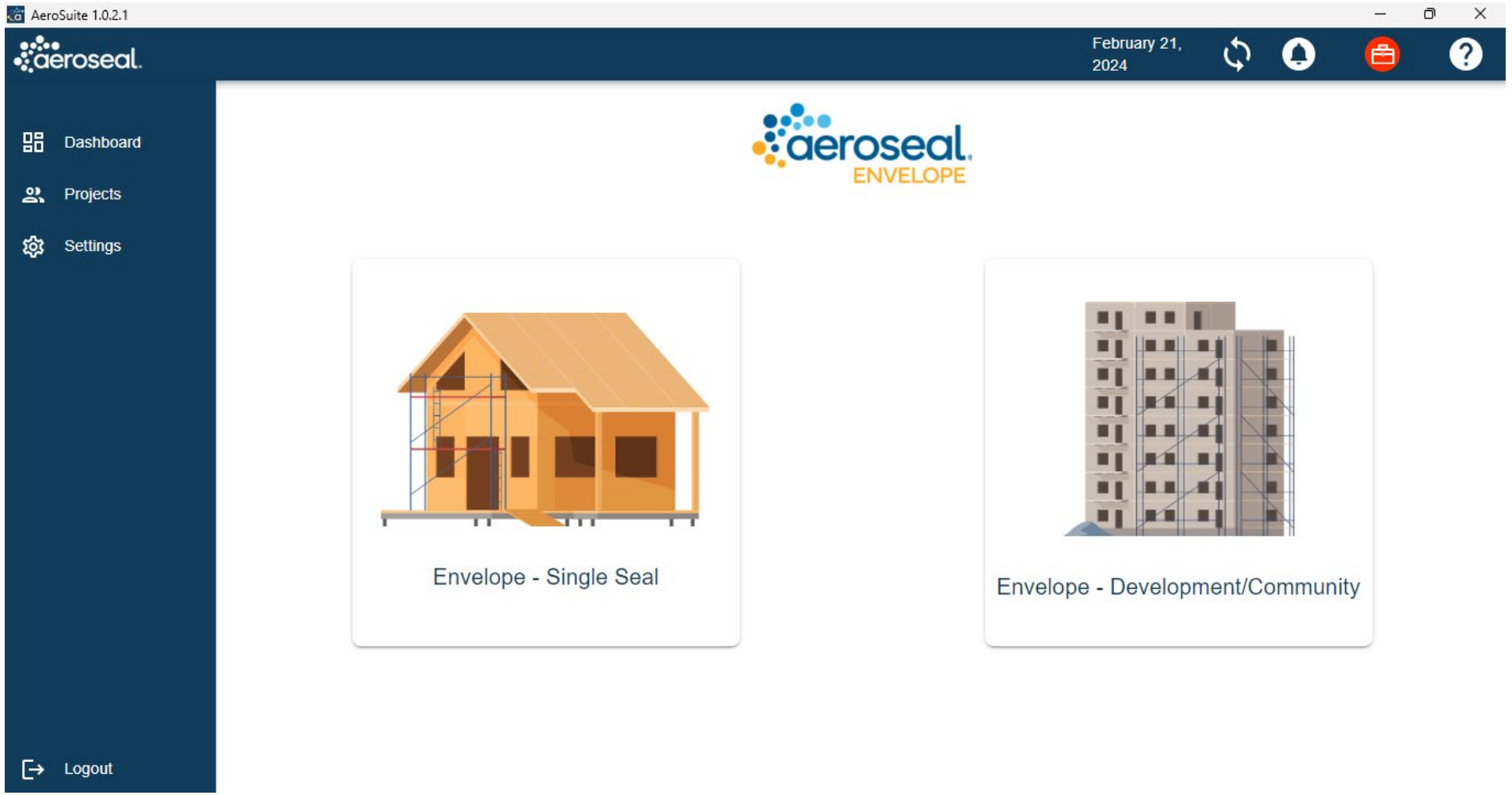
- Ensure the Briefcase is green. If not connect to the MCU WiFi
- Sprayer Icon Will show how many Sealing stations are connected.
- If needed, Sync your software with Aeroseal



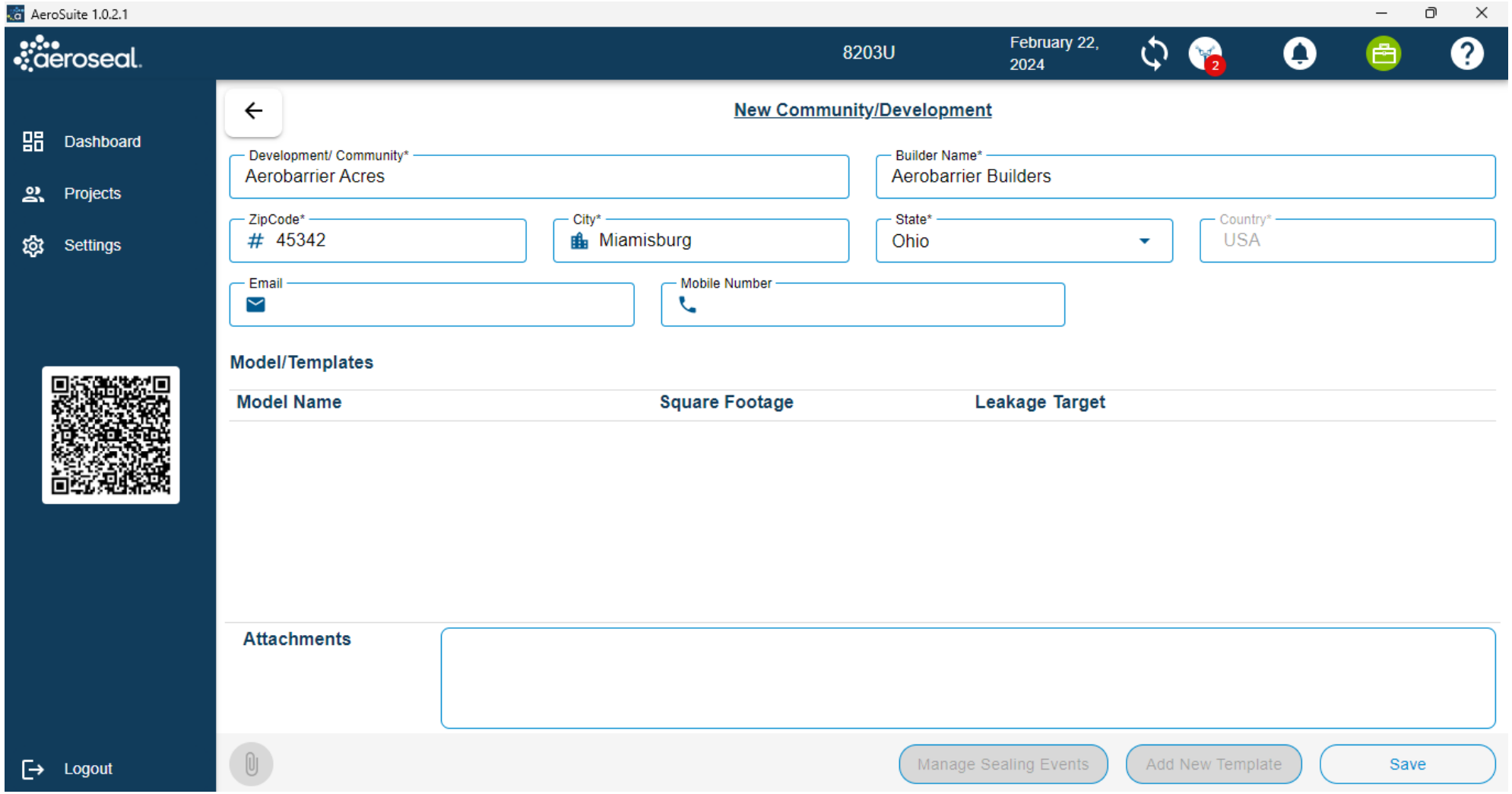
# New Project


AeroSuite 1.0.2.1
aeroseal
Dashboard
8203U
February 22, 2024
Dashboard
Projects
Settings
Logout
Welcome Technician User
SYNC
NEW PROJECT
5
Lifetime Total Seals
2291
Lifetime Total CFM
Last Month
Current Month
Seal Count
0
1
2
3
4
5
Week-1
Week-2
Week-3
Week-4
Week-5
Recent Activity
View All
Final Test
AB | 8203U | 2/21/2024
225 Byers Rd.
1 of 1 completed
Copy Edit Continue Sealing View Summary
Alex Contracting llc
AB | 8203U | 2/16/2024
123 Test
0 of 1 completed
Copy Edit Continue Sealing View Summary
Alex Contracting llc
AB | 8203U | 2/16/2024
9075 Byers Rd
0 of 1 completed
Copy Edit Continue Sealing View Summary
Alex Contracting llc
AB | 8203U | 2/15/2024
123 wall Street
0 of 1 completed
Copy Edit Continue Sealing View Summary

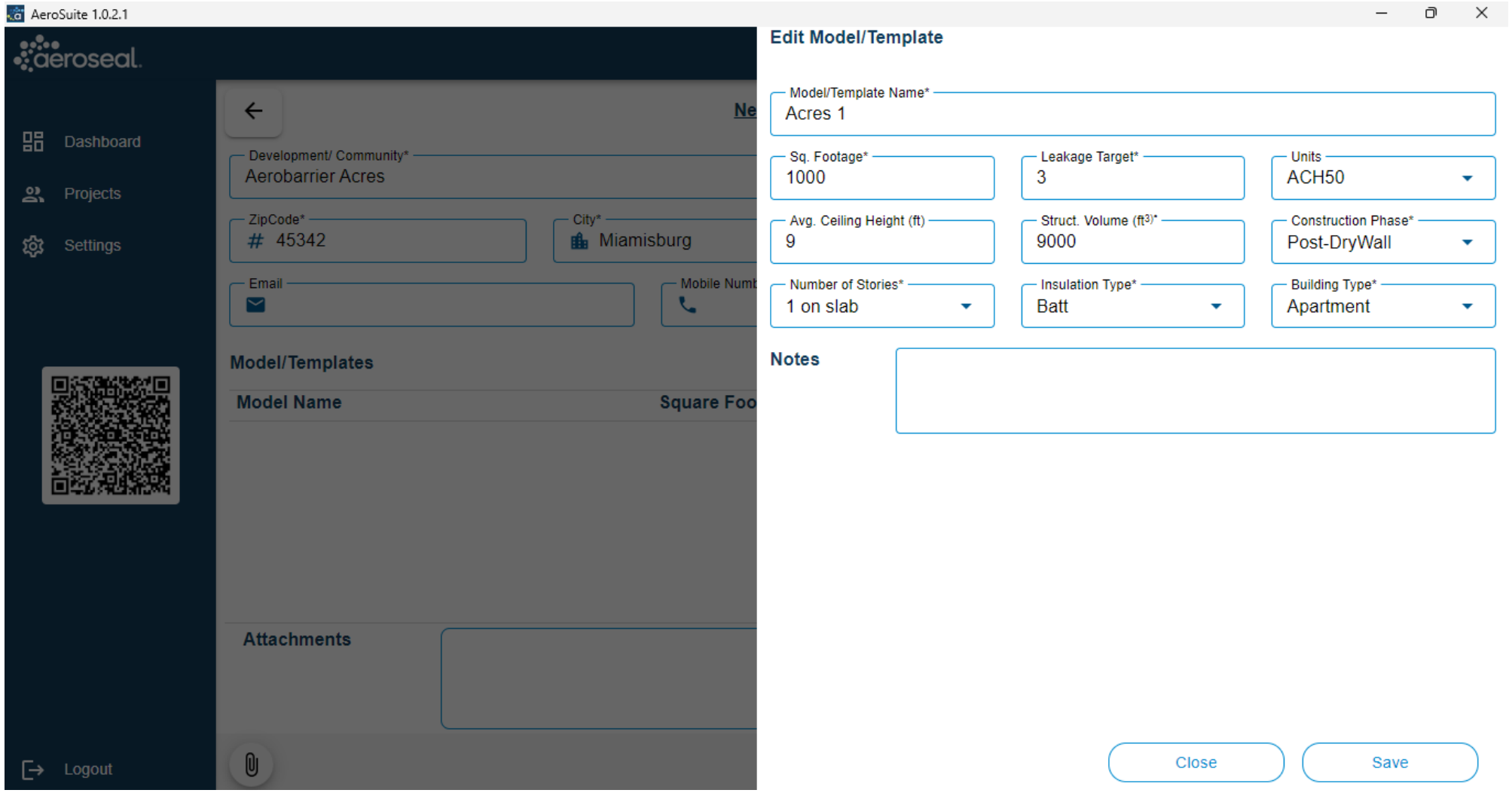
# Select Job Type



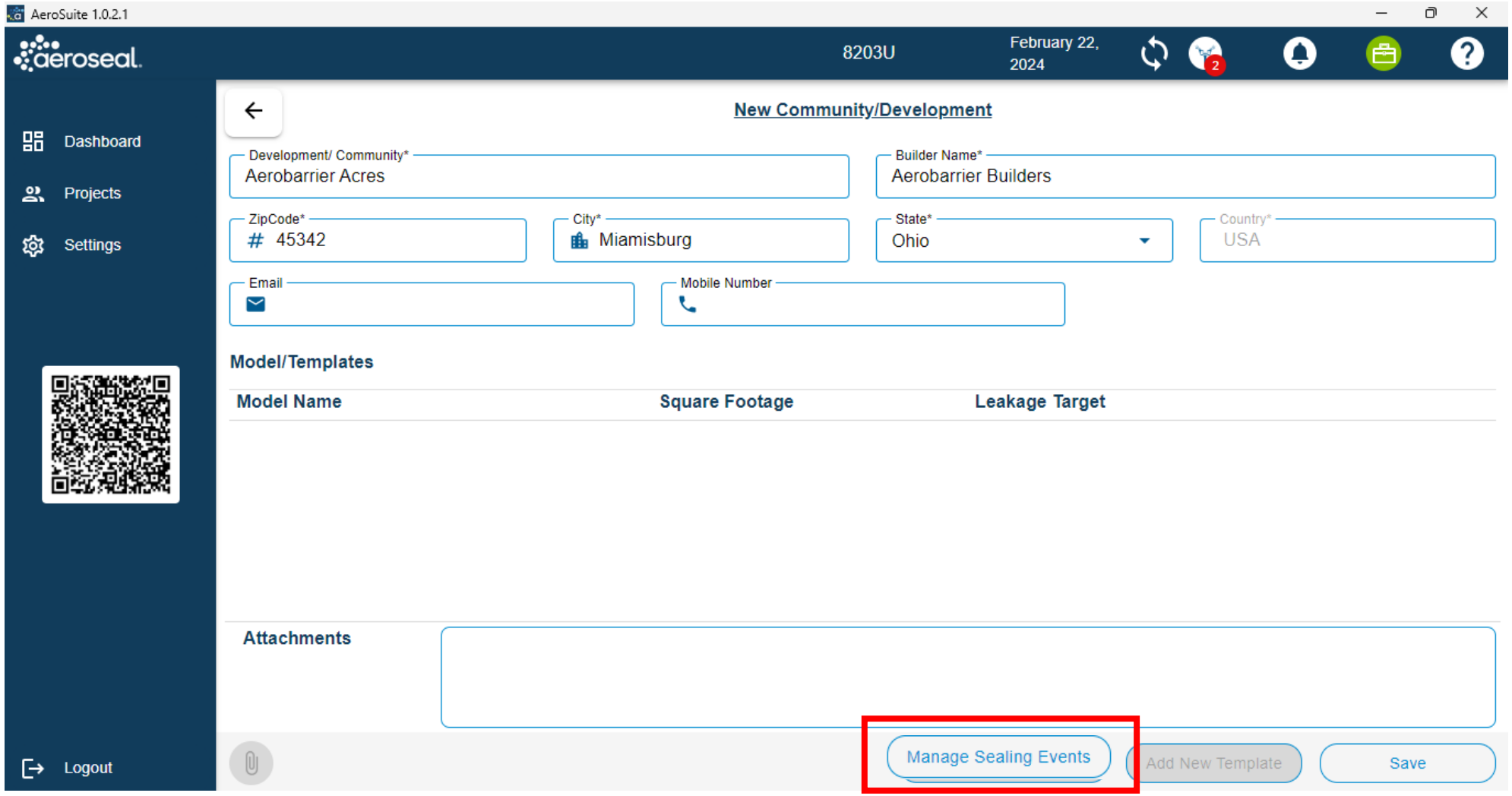
# Development Option



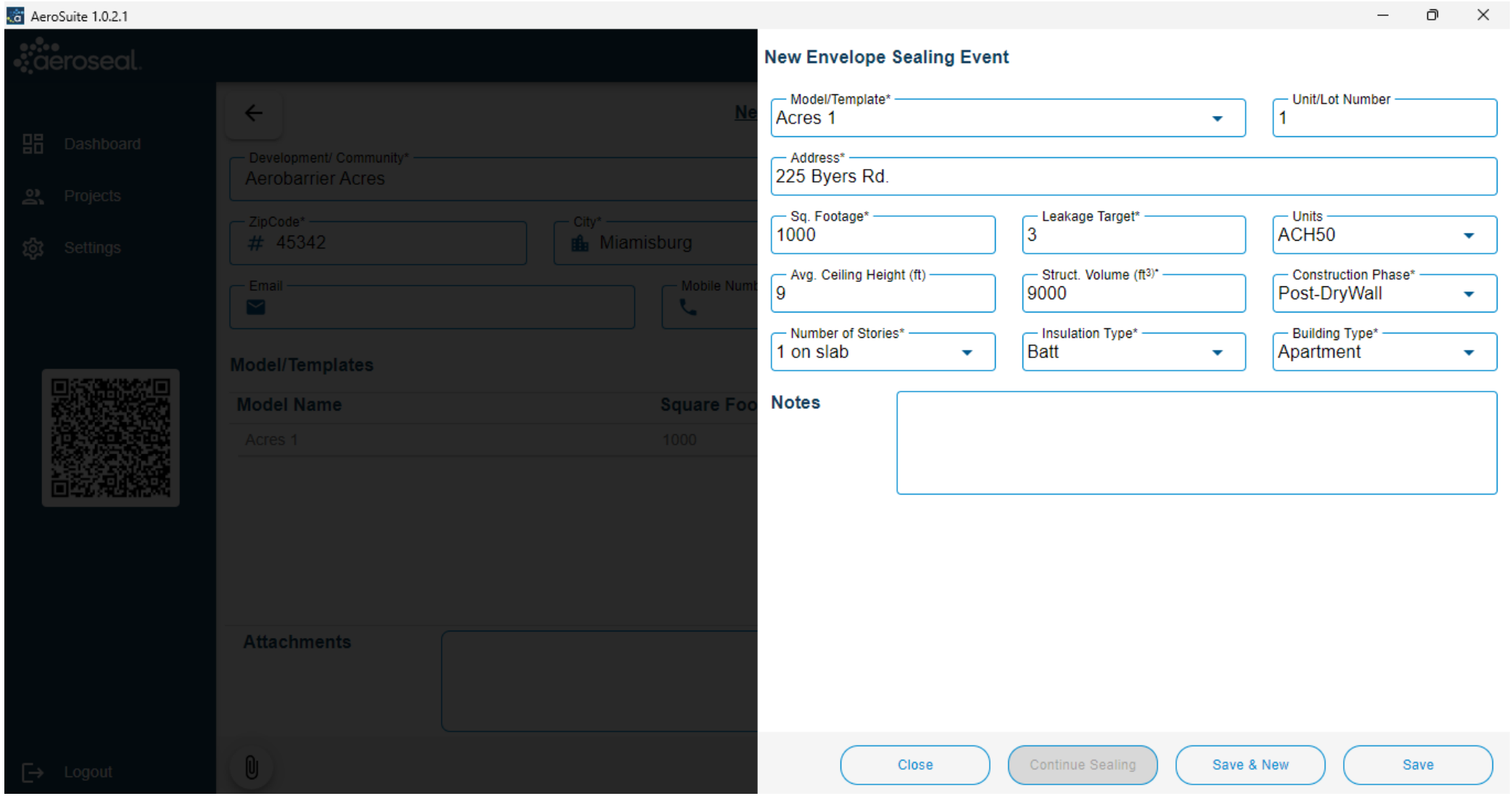
# Development Template



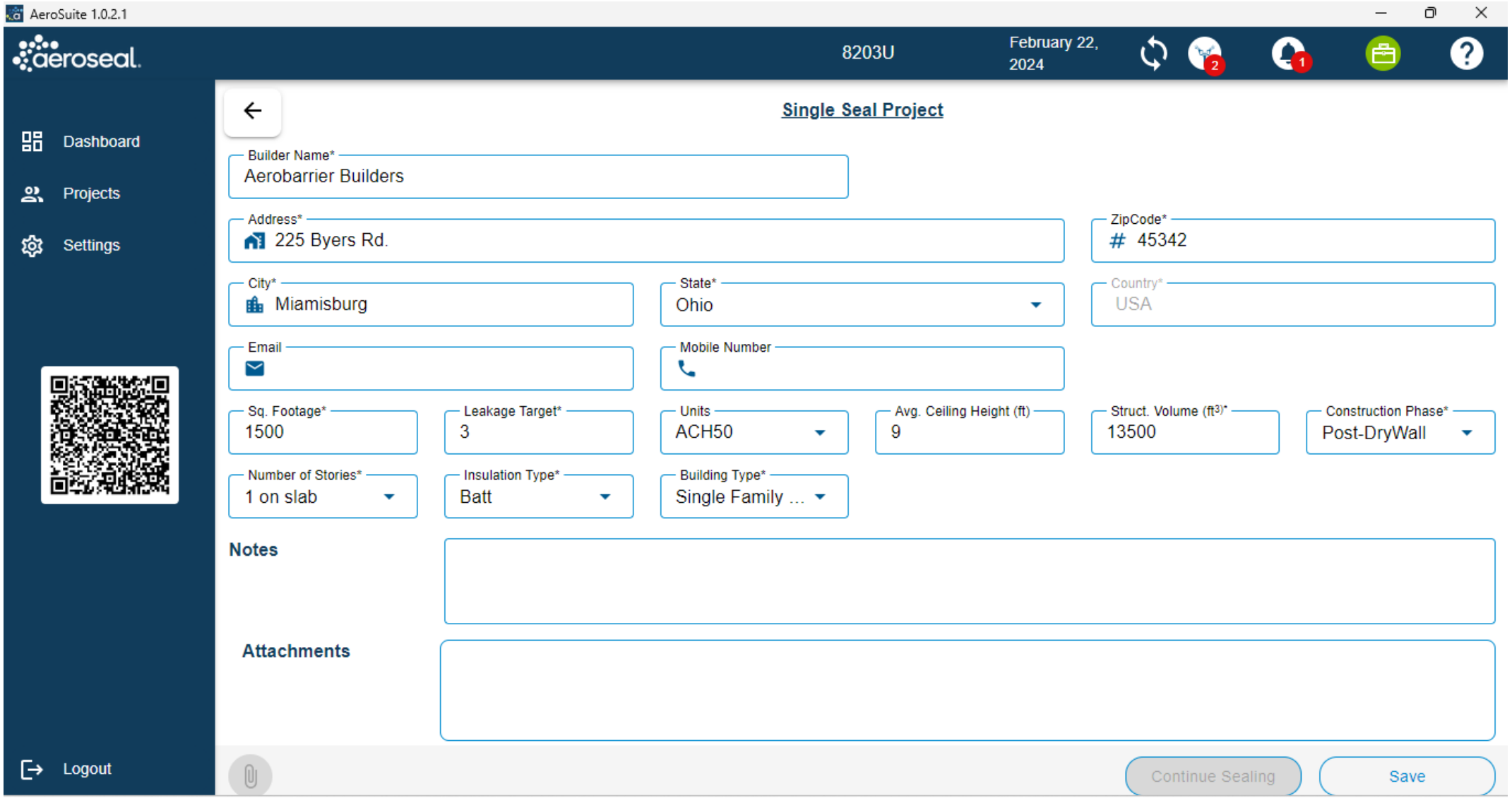
# Creating a Seal Event



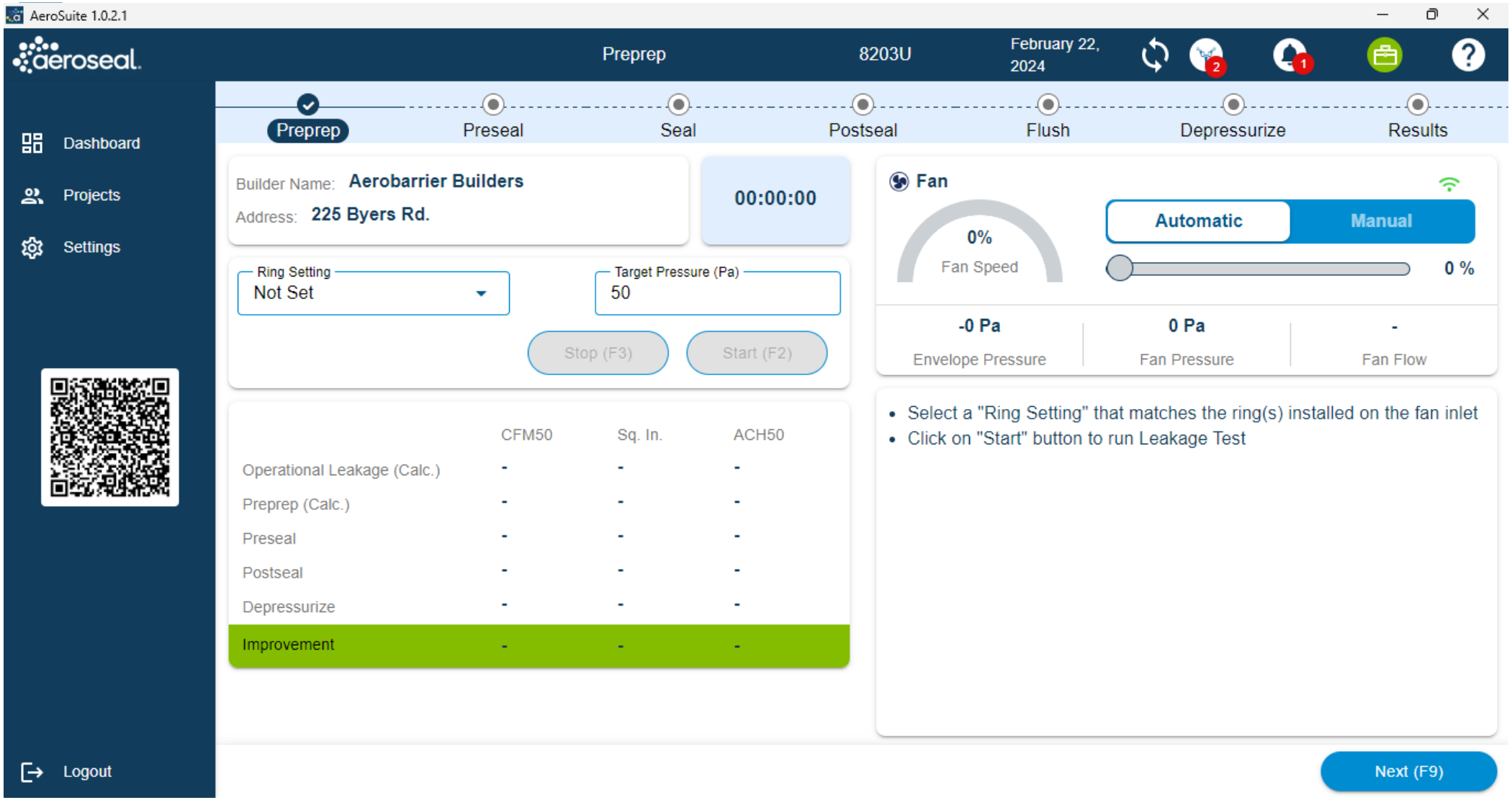
# Template Selection



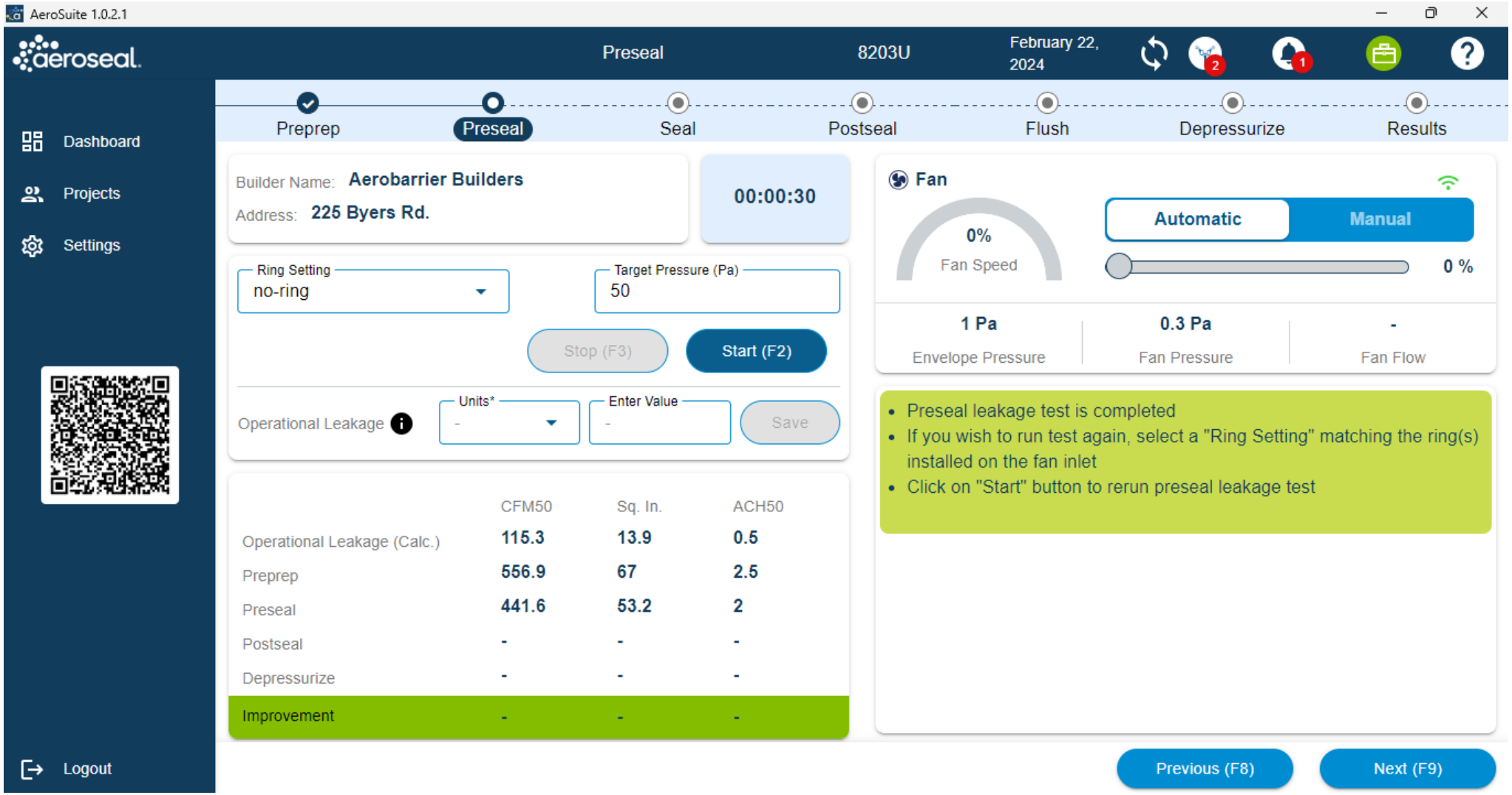
# Single Seal Option



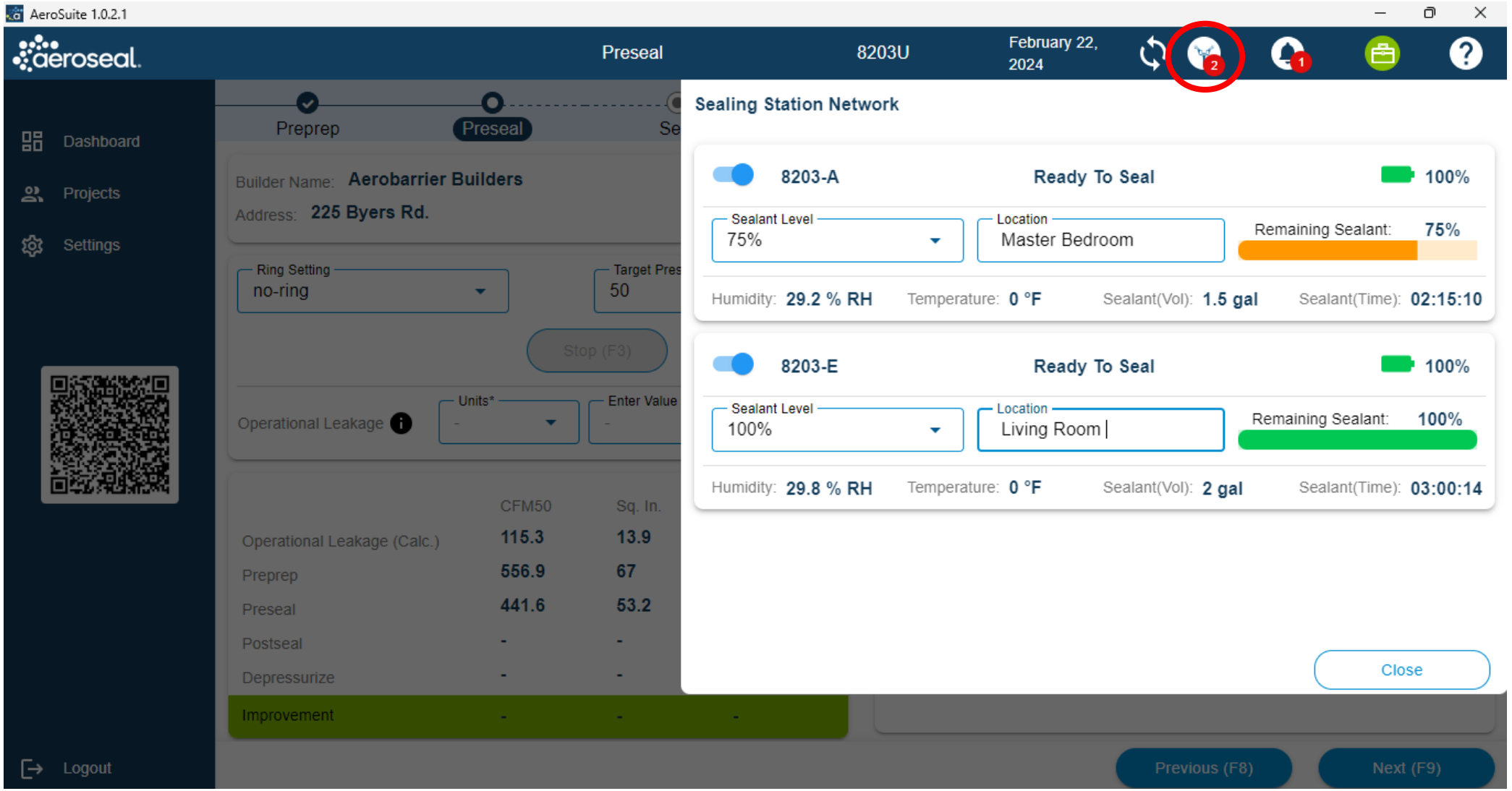
# Pre-Prep/Simulated Prep



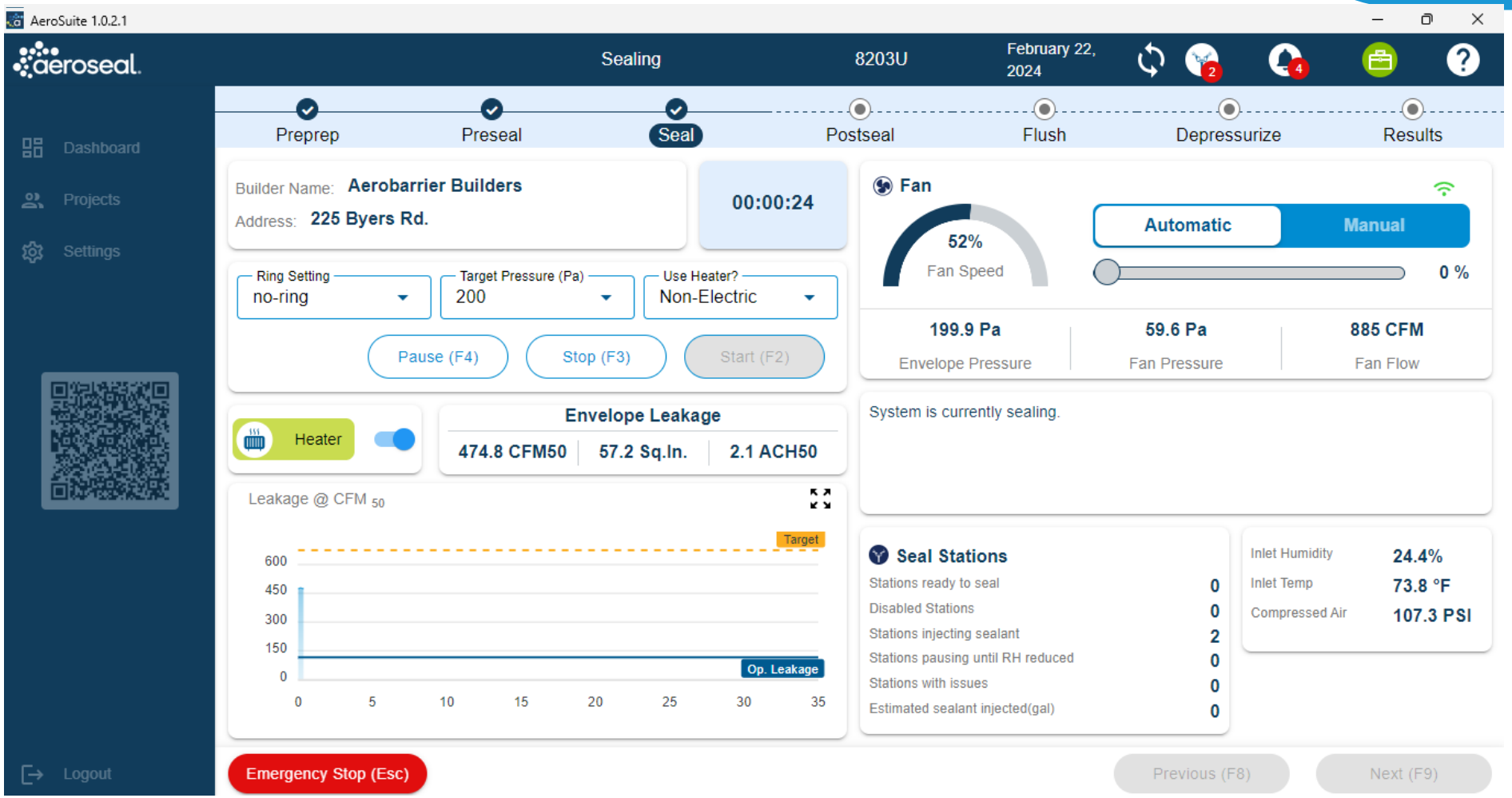
# Pre-Seal Test



# Sealing Station Setup



# Starting the Seal

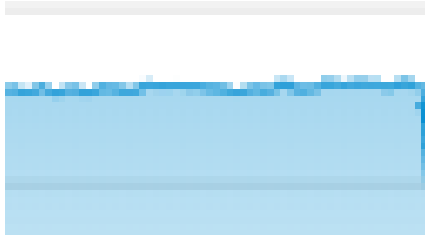


# Sealing – What to Watch For

The sealing cannot commence until compressed air pressure is at least 90PSI at the MCU. Make sure the trailer gauge is set to at minimum **100PSI** to achieve 90PSI at the MCU and manifold.  If you do not get pressure, then it is either due to:

- Air leaks
- Water in compressor tank
- Leaks in incoming air hose or compressed air dryer assembly


- If the graph starts to Flat-line, it could mean:
  - you are out of sealant
  - you have large penetrations that cannot be sealed
  - your sealant is not flowing out of the nozzles



# Sealing-What to watch for Cont'd

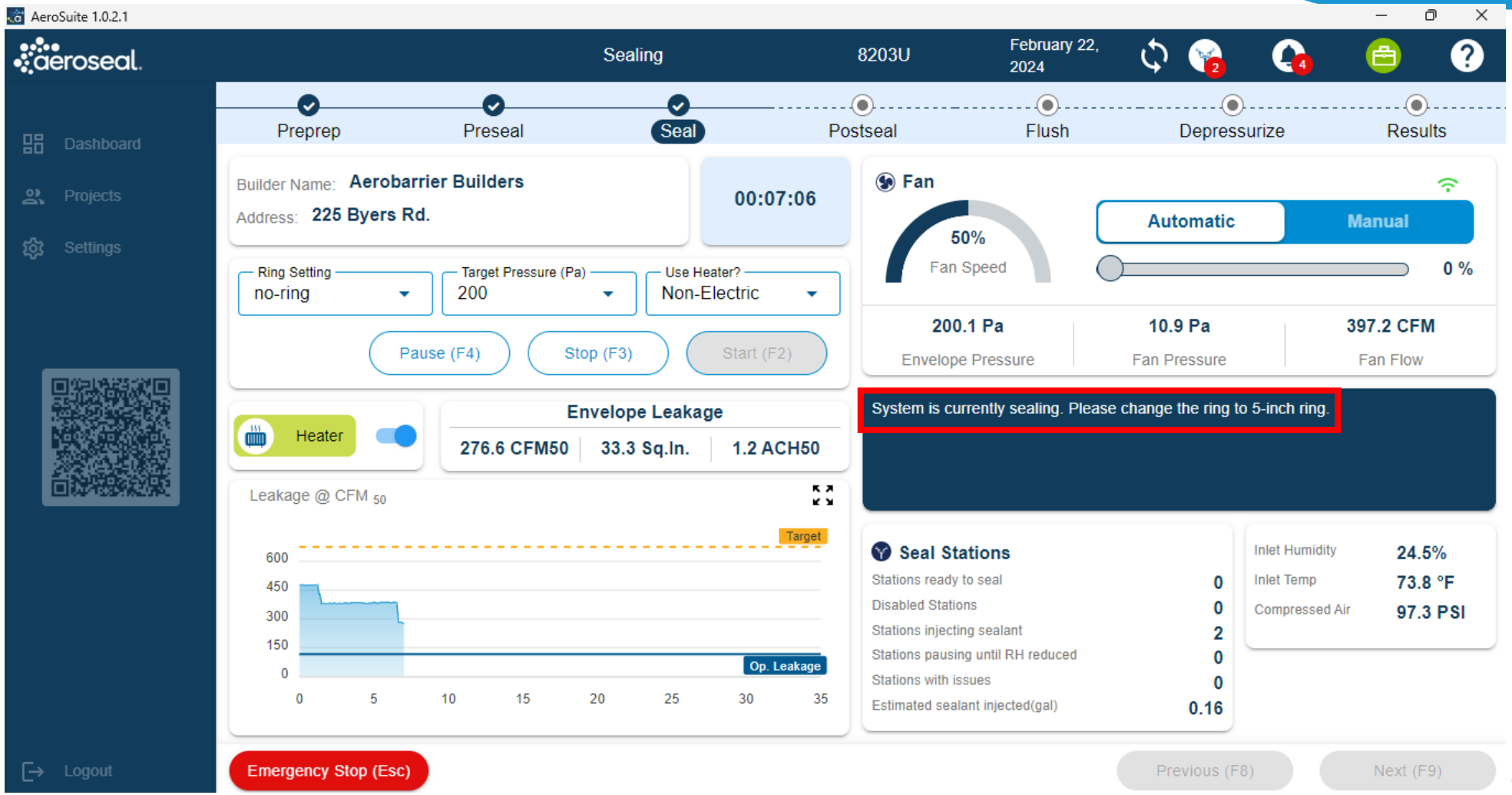
Sealing also cannot commence if the envelope pressure is below **10pa.** If you are unable to build 10pa of pressure on the envelope it could be due to:

- Ring setting too low
- Blue tube disconnected
- Huge leaks in the envelope

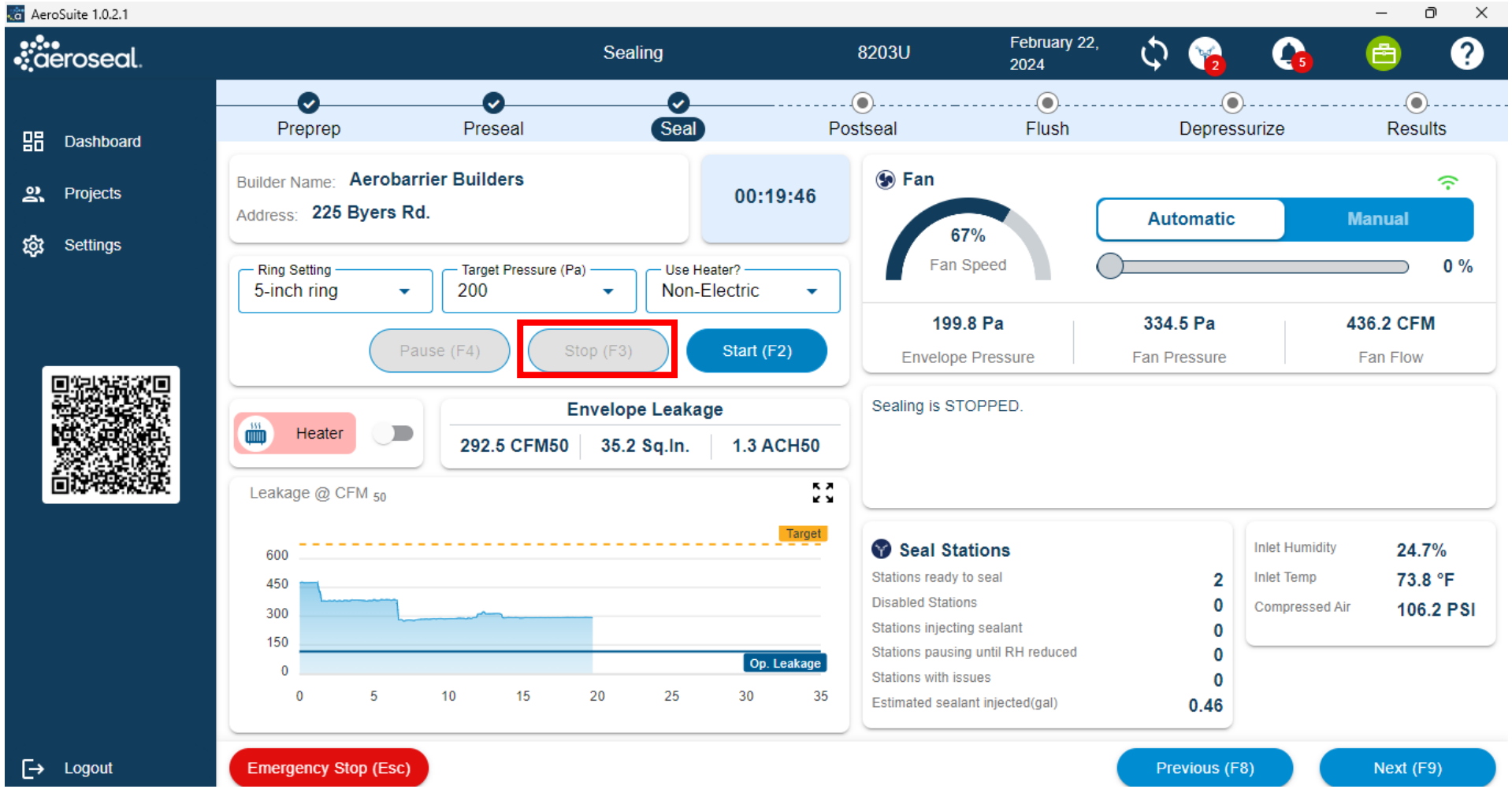

Be sure you know where to seal down to based on the operational leakage


Also check the notifications bell for any alarms/issues

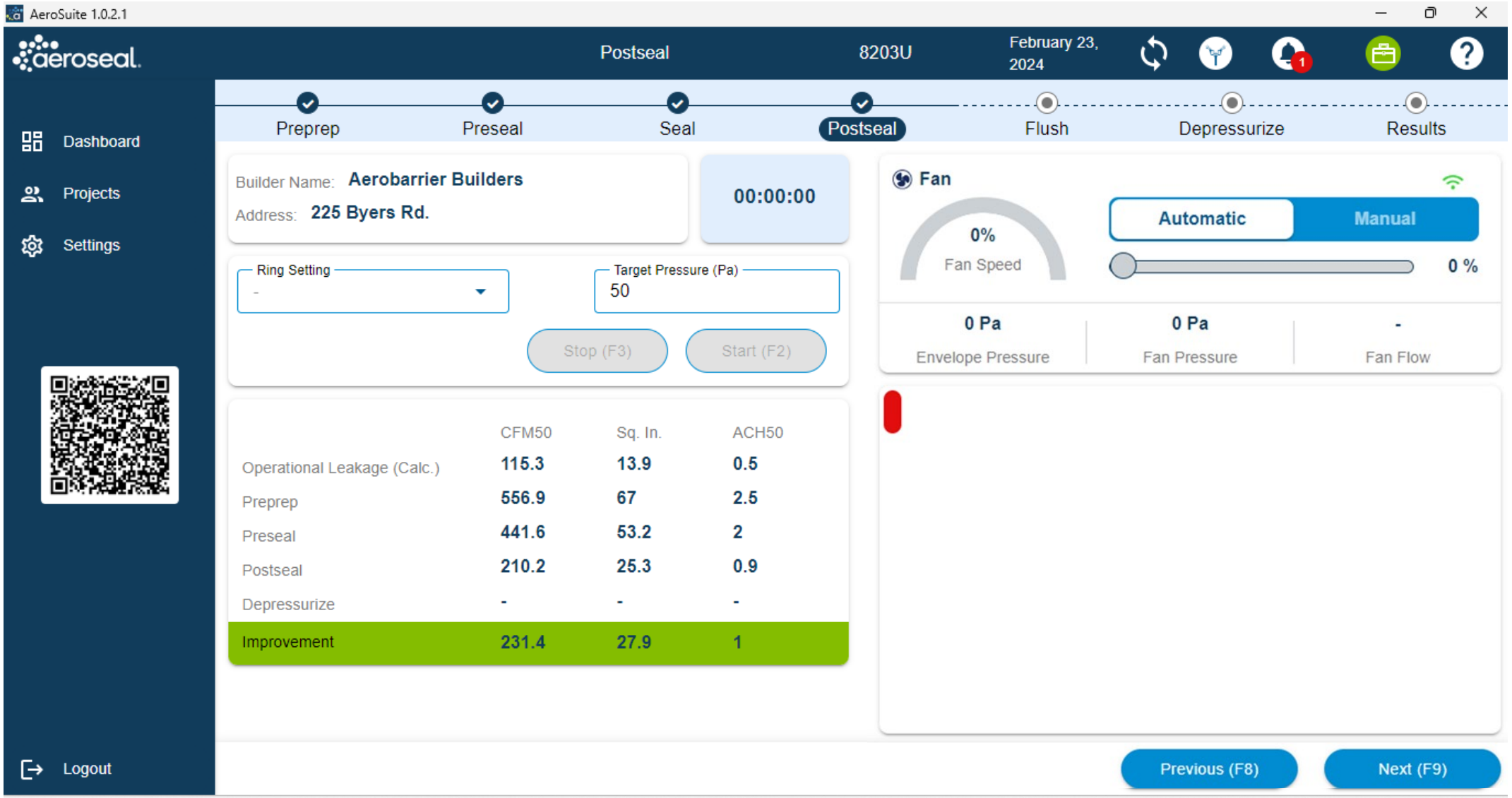
# Changing Rings



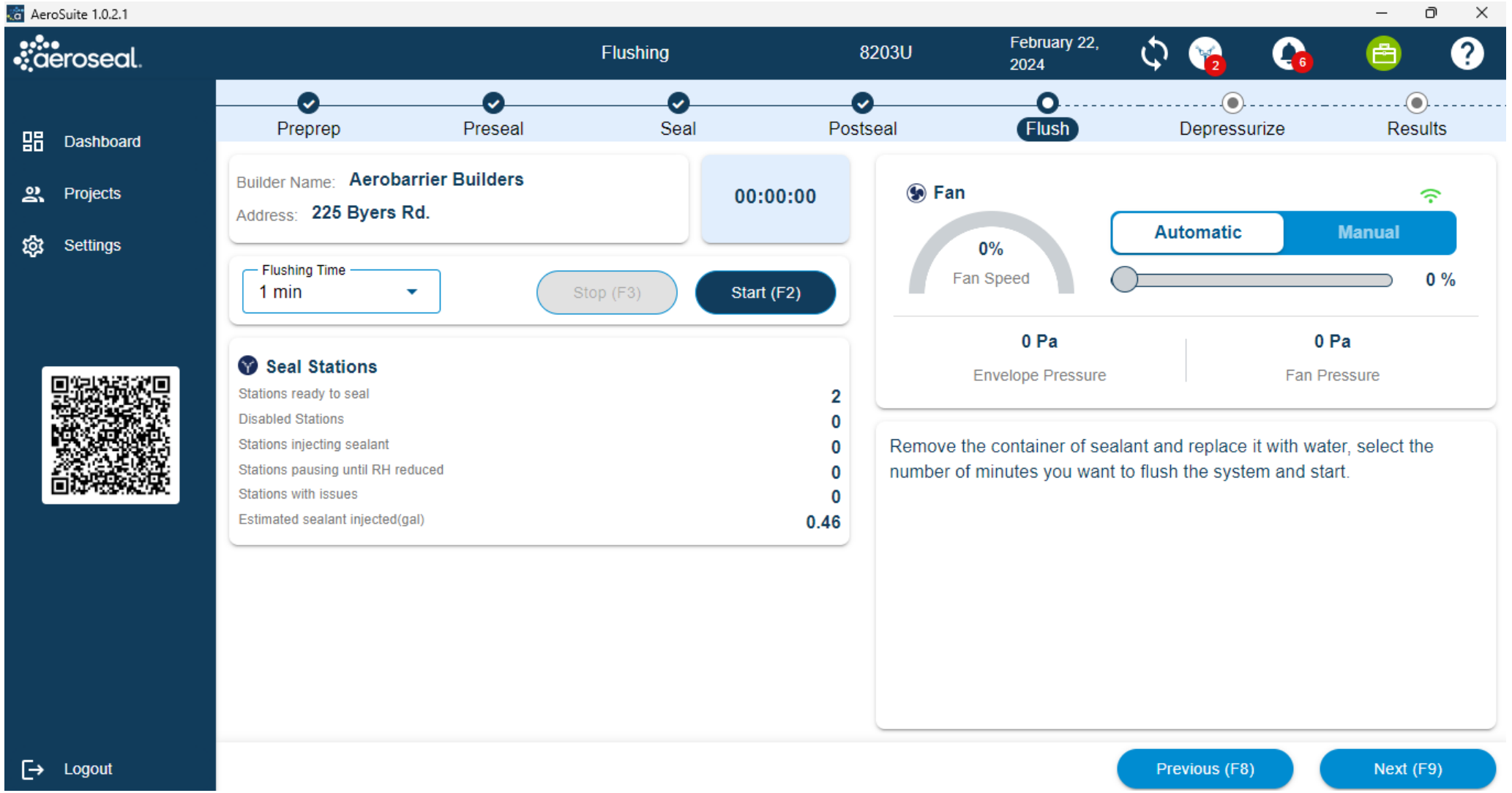
# Stopping the Seal



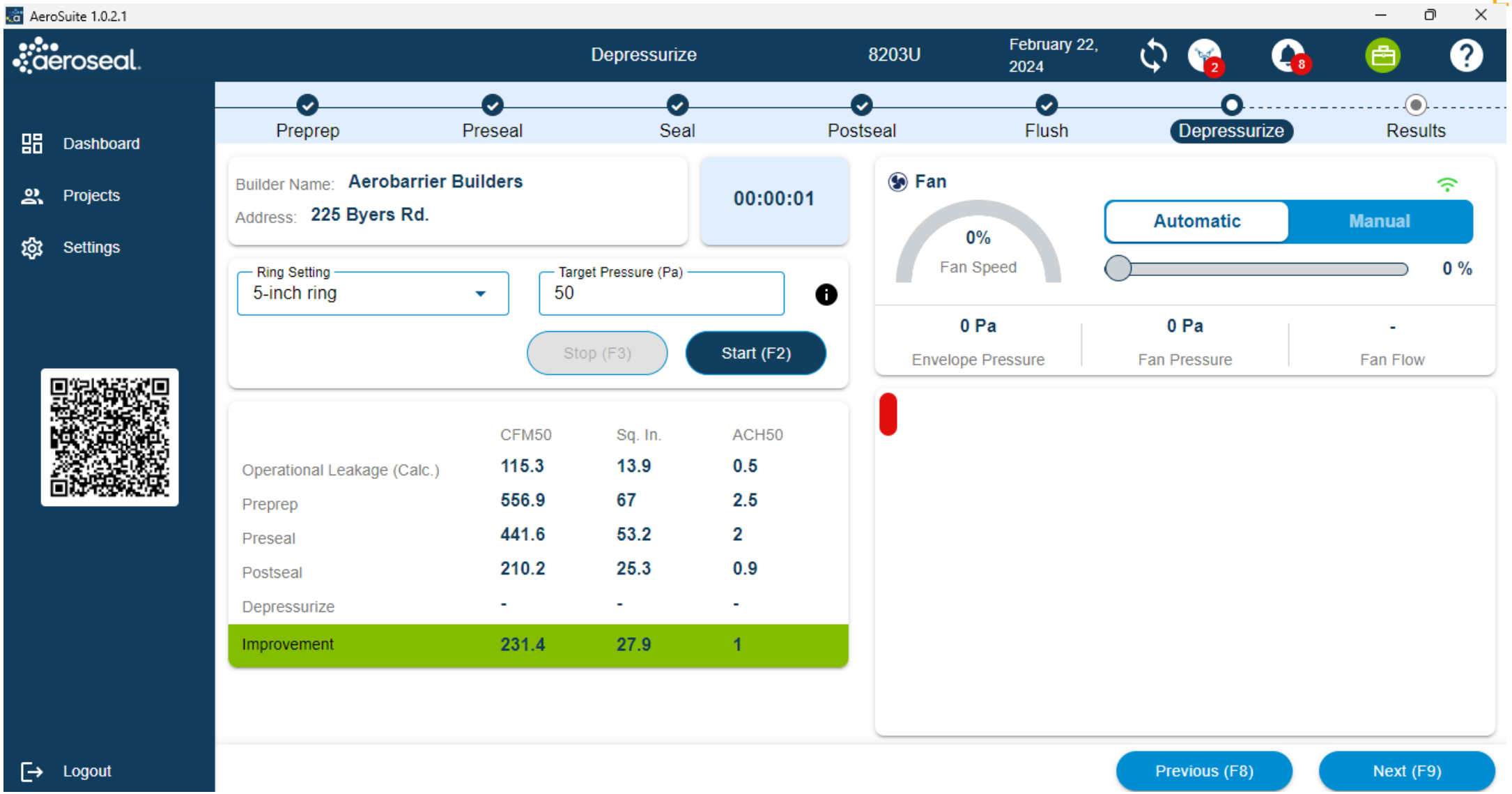
# Post Seal


AeroSuite 1.0.2.1
aeroseal
Postseal
8203U
February 23, 2024
Preprep
Preseal
Seal
Postseal
Flush
Depressurize
Results
Dashboard
Projects
Settings
Logout
Builder Name: Aerobarrier Builders
Address: 225 Byers Rd.
00:00:00
Ring Setting
-
Target Pressure (Pa)
50
Stop (F3)
Start (F2)
Fan
0%
Fan Speed
Automatic
Manual
0 %
0 Pa
Envelope Pressure
0 Pa
Fan Pressure
-
Fan Flow
CFM50
Sq. In.
ACH50
Operational Leakage (Calc.) 115.3 13.9 0.5
Preprep 556.9 67 2.5
Preseal 441.6 53.2 2
Postseal 210.2 25.3 0.9
Depressurize - - -
Improvement 231.4 27.9 1
Previous (F8)
Next (F9)

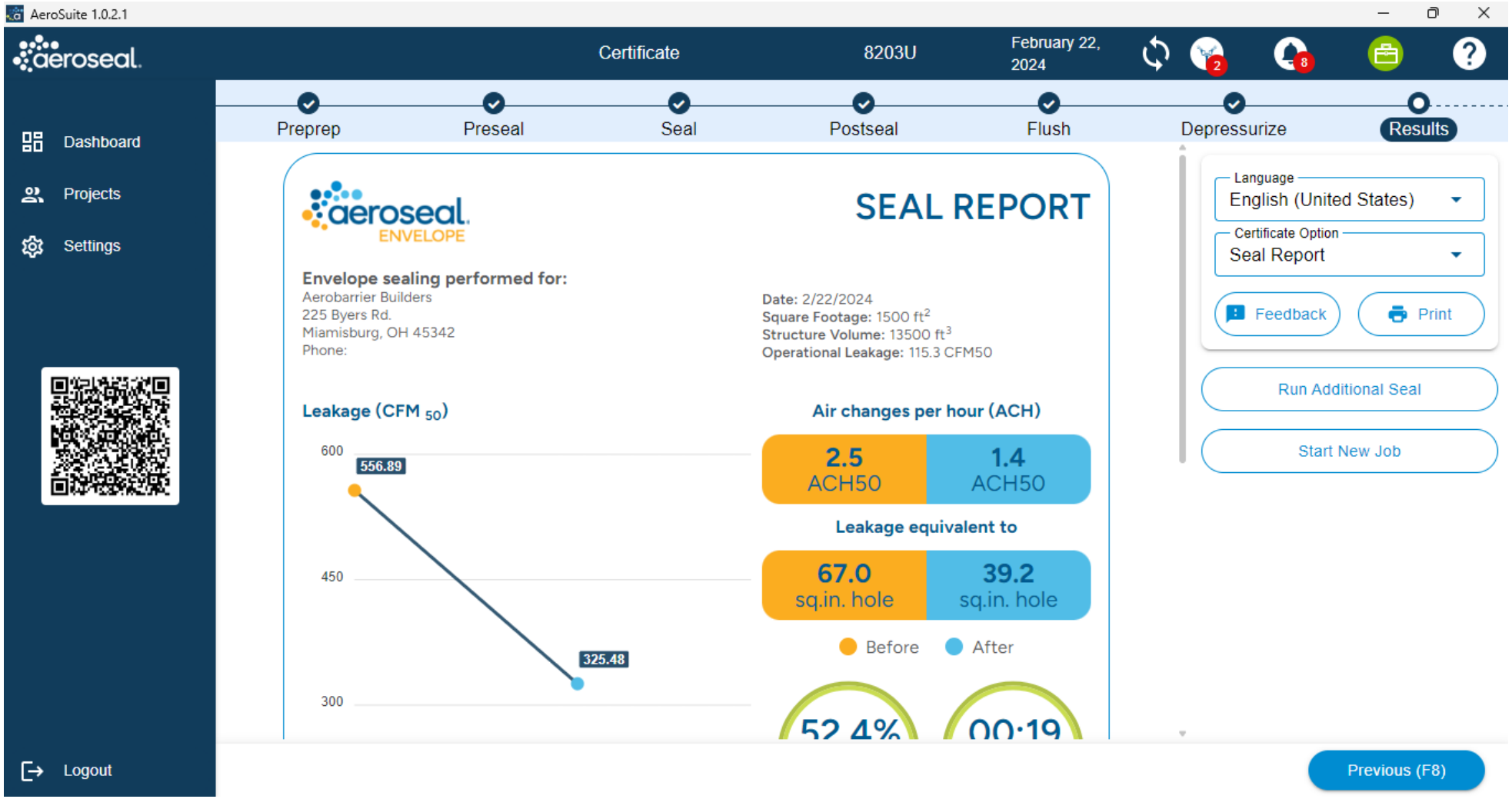
# Flush


AeroSuite 1.0.2.1
aeroseal
Flushing
8203U
February 22, 2024
Dashboard
Projects
Settings
Logout
Preprep
Preseal
Seal
Postseal
Flush
Depressurize
Results
Builder Name: Aerobarrier Builders
Address: 225 Byers Rd.
00:00:00
Flushing Time
1 min
Stop (F3)
Start (F2)
Seal Stations
Stations ready to seal 2
Disabled Stations 0
Stations injecting sealant 0
Stations pausing until RH reduced 0
Stations with issues 0
Estimated sealant injected(gal) 0.46
Fan
0%
Fan Speed
Automatic
Manual
0 %
0 Pa
Envelope Pressure
0 Pa
Fan Pressure
Remove the container of sealant and replace it with water, select the number of minutes you want to flush the system and start.
Previous (F8)
Next (F9)

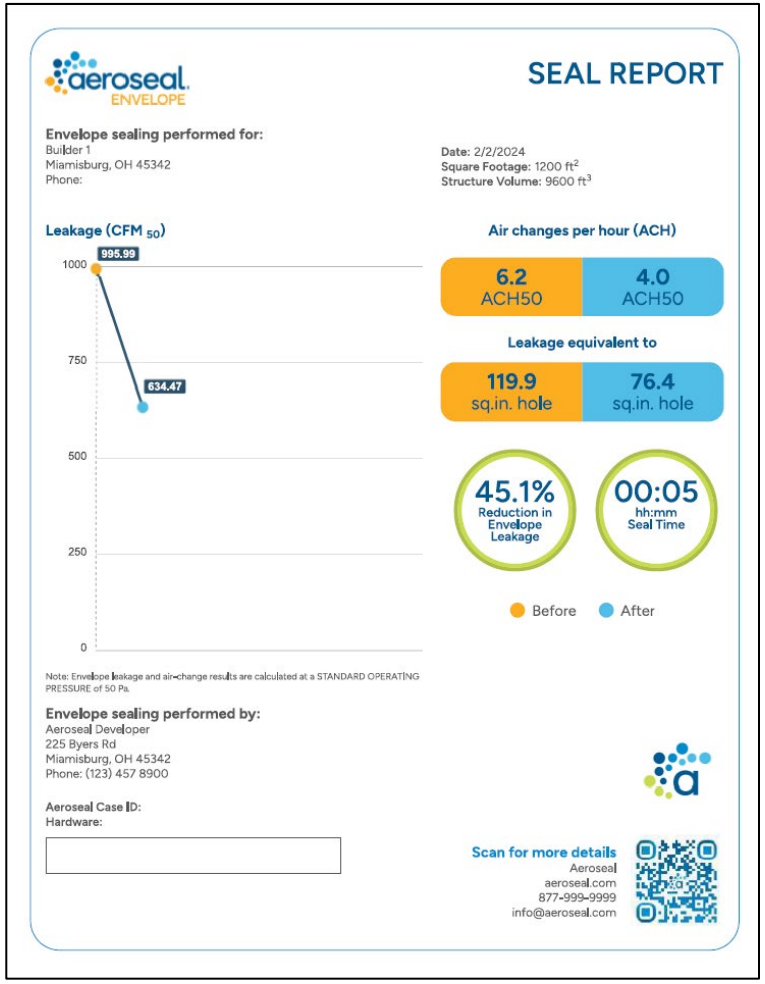
# Depressurize



# Seal Report


AeroSuite 1.0.2.1
aeroseal
Certificate
8203U
February 22, 2024
Dashboard
Projects
Settings
Logout
Preprep
Preseal
Seal
Postseal
Flush
Depressurize
Results
aeroseal ENVELOPE
SEAL REPORT
Envelope sealing performed for:
Aerobarrier Builders
225 Byers Rd.
Miamisburg, OH 45342
Phone:
Date: 2/22/2024
Square Footage: 1500 ft²
Structure Volume: 13500 ft³
Operational Leakage: 115.3 CFM50
Leakage (CFM 50)
600
450
300
556.89
325.48
Air changes per hour (ACH)
2.5 ACH50
1.4 ACH50
Leakage equivalent to
67.0 sq.in. hole
39.2 sq.in. hole
Before
After
52.4%
00:19
Language
English (United States)
Certificate Option
Seal Report
Feedback
Print
Run Additional Seal
Start New Job
Previous (F8)

## Seal Report



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SEAL REPORT

**Envelope sealing performed for:**
Builder 1
Miamisburg, OH 45342
Phone:

**Date:** 2/2/2024
**Square Footage:** 1200 ft²
**Structure Volume:** 9600 ft³

**Leakage (CFM 50)**




**Air changes per hour (ACH)**

| 6.2 ACH50 | 4.0 ACH50 |
|---|---|

**Leakage equivalent to**

| 119.9 sq.in. hole | 76.4 sq.in. hole |
|---|---|

45.1% Reduction in Envelope Leakage

00:05 hh:mm Seal Time

Before After

Note: Envelope leakage and air-change results are calculated at a STANDARD OPERATING PRESSURE of 50 Pa.

**Envelope sealing performed by:**
Aeroseal Developer
225 Byers Rd
Miamisburg, OH 45342
Phone: (123) 457 8900

**Aeroseal Case ID:**
**Hardware:**

**Scan for more details**
Aeroseal
aeroseal.com
877-999-9999
info@aeroseal.com

## Seal Report with Depressurization

aeroseal ENVELOPE

SEAL REPORT

**Envelope sealing performed for:**
Builder 1
Miamisburg, OH 45342
Phone:

**Date:** 2/2/2024
**Square Footage:** 1200 ft²
**Structure Volume:** 9600 ft³

**Leakage (CFM 50)**




**Air changes per hour (ACH)**

| 6.2 ACH50 | 4.0 ACH50 |
|---|---|

**Leakage equivalent to**

| 119.9 sq.in. hole | 76.4 sq.in. hole |
|---|---|

**Depressurization Results**

| 3.8 ACH50 | 72.4 sq.in. hole |
|---|---|

45.1% Reduction in Envelope Leakage

00:05 hh:mm Seal Time

Before After

Note: Envelope leakage and air-change results are calculated at a STANDARD OPERATING PRESSURE of 50 Pa.

**Envelope sealing performed by:**
Aeroseal Developer
225 Byers Rd
Miamisburg, OH 45342
Phone: (123) 457 8900

**Aeroseal Case ID:**
**Hardware:**

**Scan for more details**
Aeroseal
aeroseal.com
877-999-9999
info@aeroseal.com

aeroseal®

# ENVELOPE

2024