



Air

STANDARD

FOR  
RESIDENTIAL v1.0



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## 2.2.0 Preface

**RESET Air for Residential** is a continuous monitoring and communication standard for indoor air quality that defines monitor deployment, installation, performance, maintenance and reporting requirements.

Residential projects become **RESET Air Certified** when operational performance targets are achieved. The **RESET Air for Residential Standard** can be applied to new or existing residential interior projects, including single-home, detached, semi-detached and/or multi-family dwellings.

### Intent:

- Continuously monitor particulate matter (PM<sub>2.5</sub>), TVOC, CO<sub>2</sub> and CO\* representing all regularly occupied space types according to their function inclusive of all regularly occupied sleeping quarters.
- Report the data to project occupants to foster education and promote social equity.
- Standardize how indoor air quality performance is measured and communicated.
- Raise public awareness of indoor air quality and its impacts on environmental and occupant health.

**RESET Air for Residential** sets targets for daily IAQ performance as well as standards for air quality monitor performance, installation, data reporting and calibration.

\* Refer to section 2.2.7.4 for further explanation

## 2.2.1 Certification Approach

**RESET Air for Residential** is a performance-based standard. Its intent is to monitor, track and report the quality of air being breathed by project occupants.

Given the wide variety of space types occurring in the built environment and myriad ways occupants use these spaces, applying a prescriptive methodology across all projects would be ineffective.

In all residential projects, there are influencing factors that must be considered when designing an indoor air quality deployment plan. Hours of occupancy, spaces used for cooking, sleeping and entertaining all present unique air quality issues.

As a result, indoor residential spaces are dynamic and frequently defy traditional naming conventions. Room names appearing on floor plans are therefore highly contextual. Mandating a prescriptive methodology be applied to every project, would potentially deny the true function of a space from being accounted for.

Therefore, the **RESET Air Standards** employ a non-prescriptive approach for certification. Project teams must define and defend their inclusion or exclusion of space types as applicable based on their individual project(s) and specific use criteria.

Refer to **RESET Air Certification Process for Residential** (Section 2.3) for documentation requirements.

## 2.2.2 Indoor Air Quality Performance Targets

**RESET Air** is a performance-based building standard. In order for a project to achieve **RESET Air Certification for Residential**, indoor air quality parameters, as tracked through continuous monitoring and calculated into a daily average according to hours of occupancy, must be maintained within the limits listed below.

Targets are based on industry best-practices and international standards.\* Acceptable targets are requisite; residential projects must meet the limits as listed.

High Performance targets are listed as a reference for projects striving for more rigorous IAQ goals and/or for projects located in regions where ambient outdoor air quality levels typically stay within recommended health limits.

<b>PM2.5</b> Particulate Matter	<b>TVOC</b> Total Volatile Organic Compounds	<b>CO<sub>2</sub></b> Carbon Dioxide	<b>Temp</b> Temperature	<b>RH</b> Relative Humidity	<b>CO**</b> Carbon Monoxide
<b>Acceptable</b> < 35 µg/m <sup>3</sup>	<b>Acceptable</b> < 500 µg/m <sup>3</sup>	<b>Acceptable</b> < 1000 ppm	<b>Monitored</b>	<b>Monitored</b>	<b>Acceptable</b> < 9 ppm
<b>High Performance</b> < 12 µg/m <sup>3</sup>	<b>High Performance</b> < 400 µg/m <sup>3</sup>	<b>High Performance</b> < 600 ppm	<i>Although there are no requirements for temperature and humidity under <b>RESET™ Air</b>, both must be monitored given their impact on sensor readings for PM2.5 and TVOC.</i>		<i>CO monitors are only required in spaces with combustion.</i>

\*Refer to section(s) 2.1.2 -2.1.11, “How Does **RESET Air** Work”

\*\* Refer to section 2.2.7.4 for further details

## 2.2.2.1 IAQ Performance Targets - PM2.5

Particulate matter 2.5 (PM2.5) refers to particles with diameter 2.5  $\mu\text{m}$  or less. Exposure to high concentrations of PM2.5 can cause diseases in respiratory and cardiovascular systems.

### PM2.5 Target Requirement:

- a. Indoor PM2.5 levels do not exceed 35  $\mu\text{g}/\text{m}^3$ . [1]

### PM2.5 High Performance:

- b. Indoor PM2.5 levels do not exceed 12  $\mu\text{g}/\text{m}^3$ . [1]

[1] U.S. Environmental Protection Agency. National Ambient Air Quality Standards. <https://www.epa.gov/pm-pollution/table-historical-particulate-matter-pm-national-ambient-air-quality-standards-naaqs>

## 2.2.2.2 IAQ Performance Targets - TVOC

Volatile organic compounds (VOCs) are organic compounds that easily become vapors or gases. Common VOCs include formaldehyde, benzene, toluene, and styrene. Long-term exposure to VOCs can cause damage to the liver, kidneys, and the central nervous system.

### **TVOC Target Requirement:**

- a. Indoor TVOC levels do not exceed  $500\mu\text{g}/\text{m}^3$ . [2]

### **TVOC High Performance:**

- b. Indoor TVOC levels do not exceed  $400\mu\text{g}/\text{m}^3$ . [2]

[2] ILFI Living Building Challenge 3.1, Petal: Health and Happiness, Imperative: 08., IWBI WELL Building Standard, Feature 01, Part 01, Q4 2017 and USGBC LEEDv 4, USGBC's LEED v4: Reference Guide for Building Design and Construction EQ Credit: Indoor Air Quality Assessment, all require demonstration of total VOC levels less than  $500\mu\text{g}/\text{m}^3$ .

## 2.2.2.3 IAQ Performance Targets - CO<sub>2</sub>

Carbon Dioxide (CO<sub>2</sub>) concentration has a direct impact on productivity and comfort. Elevated CO<sub>2</sub> levels lead to drowsiness, dizziness and cognitive disfunction.

### **CO<sub>2</sub> Target Requirement:**

- a. The indoor CO<sub>2</sub> levels do not exceed 1000 ppm. [3]

### **CO<sub>2</sub> High Performance:**

- b. Indoor CO<sub>2</sub> level do not exceed 600 ppm. [3][4]

[3] Bierwirth, P.N. Carbon dioxide toxicity and climate change: a serious unapprehended risk for human health, December 23, 2016.

[4] Satish, U. et al. Is CO<sub>2</sub> an Indoor Pollutant? Direct Effects of Low-to-Moderate CO<sub>2</sub> Concentrations on Human Decision-Making Performance, December 2012.



## 2.2.2.4 IAQ Performance Targets - CO

Carbon monoxide (CO), is an odorless, colorless and toxic gas that results from combustion. Called “the silent killer”, levels of CO can build up quickly in improperly ventilated spaces and linger long after infiltration has occurred. High levels of CO can cause dizziness, confusion, unconsciousness, and death.

CO presents a specific hazard in the built environment. The **RESET Air for Residential Standard** therefore outlines specific rules that apply according to project typology. Refer to section 2.2.7.4.

In order to be considered for **RESET Air** Certification, project teams must adhere to the following

### **CO Target Requirement:**

- a. The indoor CO levels do not exceed 9 ppm.

## 2.2.3 Data Analysis Algorithm

**RESET Air for Residential** uses a multi-tier algorithm to parse through data submitted to the **RESET Assessment Cloud** for data analysis. The **RESET Assessment Cloud** is **RESET's** data analysis platform.

The data analysis algorithm compiles daily averages calculated from hours of occupancy and compares it against the indoor air quality limits in **RESET Air's Indoor Air Quality Performance Targets** (Section 2.2.2).

To qualify for initial certification for **RESET Air for Residential**, results from the data analysis must not exceed acceptable limits for a period of 3 consecutive months.

Refer to **RESET Air Data Analysis Methodology** (Section 2.9) for more information.

## 2.2.4 Data Provider Requirements

Data Providers are responsible for collecting and aggregating IAQ data according to **RESET** requirements. The required data is to be collected and transferred to the **RESET Assessment Cloud** for assessment purposes.

**Indoor air quality data must report to the RESET Assessment Cloud:**

- a. Projects must use a **RESET Air Accredited Data Provider** (Section 2.8) that reports to the **RESET Assessment Cloud**.

**Air quality data must be displayed to project occupants:**

- b. **RESET Air Projects** must provide project occupants access to hourly indoor air quality data. Project occupants include tenants, residents, renters (both short and long-term), employees (full and part-time as well as maintenance and cleaning staff), guests and visitors who at any time occupy the project for more than one hour per day.
- c. Acceptable methods of data access include, visual display screens in shared areas, phone apps, web apps, graphic signage with http address or QR code that directly connects users to the app or website where the data can be viewed.

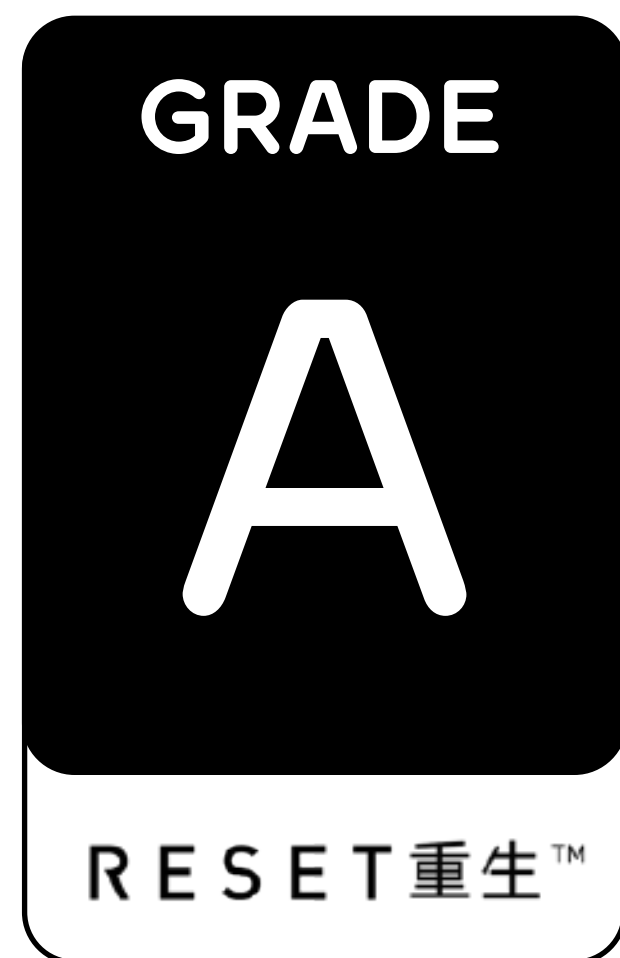
For more information, please refer to the **RESET Air Accredited Data Provider** (Section 2.8).

## 2.2.5 Monitor Requirements

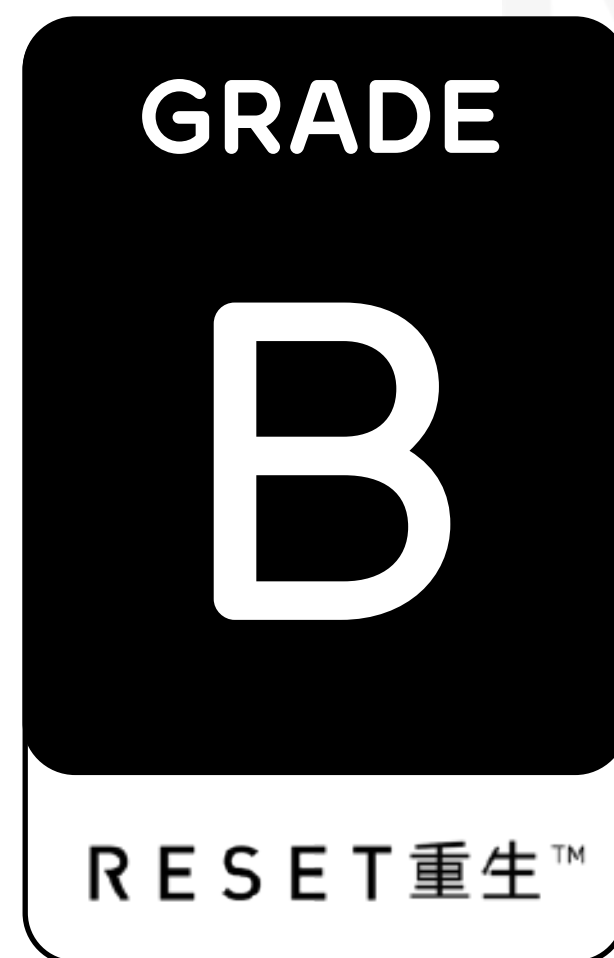
RESET Air requires continuous monitoring of regularly occupied spaces. The accuracy of air quality monitors is of critical importance to determine how IAQ is impacting occupant health and to appropriately guide HVAC operations and maintenance. Market-available monitors range widely in quality, accuracy and reliability, therefore, RESET Air sets standards for sensor performance, maintenance, and calibration.

Only Grades A & B are acceptable for use in RESET Air projects. Grade C are not acceptable.

Refer to the RESET Air Accredited Monitor Standard (Section 2.6) for full requirements.



Calibration grade monitors



Commercial grade monitors



Consumer grade monitors

## 2.2.6 Monitor Installation Requirements

In order to certify for **RESET Air for Residential**, projects must be able to demonstrate that the air in the breathing zone of building occupants adheres to **RESET Air** performance targets.

In order to do so, **RESET Air Accredited Monitors** (Section 2.6) must be installed according to the following requirements:

- a. Wall-mounted and centrally-located within monitored spaces
- b. Mounted within the breathing zone: between 900 - 1800 mm (3 - 6 feet) from the ground (after finished floor to underside of finished ceiling)\*.
- c. Located at least 5 meters (16 feet) away from operable windows. In areas where this is not possible, monitors must be located no closer to windows than half the width of the space, measured linearly from the windows inwards.
- d. Located at least 5 meters (16 feet) away from air filters and fresh-air diffusers. In areas where this is not possible, monitors must be located closer to air returns than air diffusers.
- e. Carbon monoxide (CO) detector must be installed within 5 meters of rooms used for sleeping purposes.\*\*
- f. Hard-wired to a permanent power source, (recommended but not mandatory,)

\*Aligns with ASHRAE 62.1

\*\*Refer to 2.2.7.4 for more information on CO monitor requirements

## 2.2.7 Steps for Calculating Monitor Deployment

The following section provides a step-by-step process to determine monitor deployment for a **RESET Air** **Interior residential typology**. The steps are as follows:

1. **Step One**  
Define the project boundary
2. **Step Two**  
Create an itemized list of regularly occupied space types within the project boundary. All areas used for the purpose of sleeping must be identified and individually itemized.
3. **Step Three**  
Deploy a minimum of one (1) monitor in each regularly occupied space type and one (1) monitor in every area used for sleeping purposes.
4. **Step Four**  
Deploy a minimum of one (1) CO detector within range of each regularly occupied sleeping quarter
5. **Step Five**  
Ensure monitor range of 500 m<sup>2</sup> (5,382 square feet)

## 2.2.7.1 Step One Define Project Boundary

### I. Define the project boundary.

The project should be defined by a clear boundary such that the project is physically distinct from other residences, homes, apartments or other independently-owned dwellings. Included in the boundary are all spaces associated with the project that support its typical operations.

A project boundary, once defined, must remain consistent for all subsequent calculations and are not permitted to unnecessarily meander or exclude portions of the building, HVAC system or interior spaces, that would unfairly allow the project to achieve any or all of the **RESET Air** Standard requirements (see glossary for full description).

Project teams must submit a detailed statement that defines and clarifies what is deemed a project boundary for their specific project. The statement must include sufficient information to substantiate the boundary as selected.

Refer to **RESET Air Certification Process for Residential** (Section 2.3) for full documentation requirements

# 2.2.7.1 Step One Define Project Boundary



Main Floor  
Exterior Area 676 sq ft

2nd Floor  
Exterior Area 672 sq ft

Basement (Below Grade)  
Exterior Area 507 sq ft



## 2.2.7.2 Step Two

# Itemized, Regularly Occupied Space Types

2. Create an itemized list of regularly occupied space types based on their function within the project boundary.

Space types are defined by their use and function. Depending on individual project scenarios, transient spaces such as corridors, elevators, stairways or other non-regularly occupied spaces potentially will not be necessary for inclusion in a project's monitor deployment calculation.

For all RESET Air Interior typologies, a regularly occupied space type is defined as any space that is occupied for more than one (1) hour per day. Specific to residential project typologies, all regularly occupied bedrooms must be monitored, i.e., one (1) monitor must be deployed in each regularly occupied bedroom.

Due to complexity, variety and uniqueness of the functional use of spaces within the built environment, project teams must define and defend their inclusion or exclusion of these spaces types.

Refer to **RESET™ Air Certification Process for Interiors** (Section 2.3) for full documentation requirements

## 2.2.7.2 Step Two

# Itemized, Regularly Occupied Space Types

### Space Types

- Bedroom
- Bedroom
- Master Bedroom
- Living
- Cooking
- Exercise



Main Floor  
Exterior Area 676 sq ft

2nd Floor  
Exterior Area 672 sq ft

Basement (Below Grade)  
Exterior Area 507 sq ft

## 2.2.7.3 Step Five Monitor Deployment

### 3. Deploy one (1) monitor in each regularly occupied space type.

Only one (1) monitor need be installed per space type appearing on the project's itemized list of regularly occupied spaces.

Monitors must be a **RESET Air Accredited Monitor** (Section 2.6) and must be installed according to **RESET Air for Interiors: Monitor Installation Requirements** (Section 2.2.5).

Refer to **RESET Air Certification Process for Interiors** (Section 2.3) for full documentation requirements

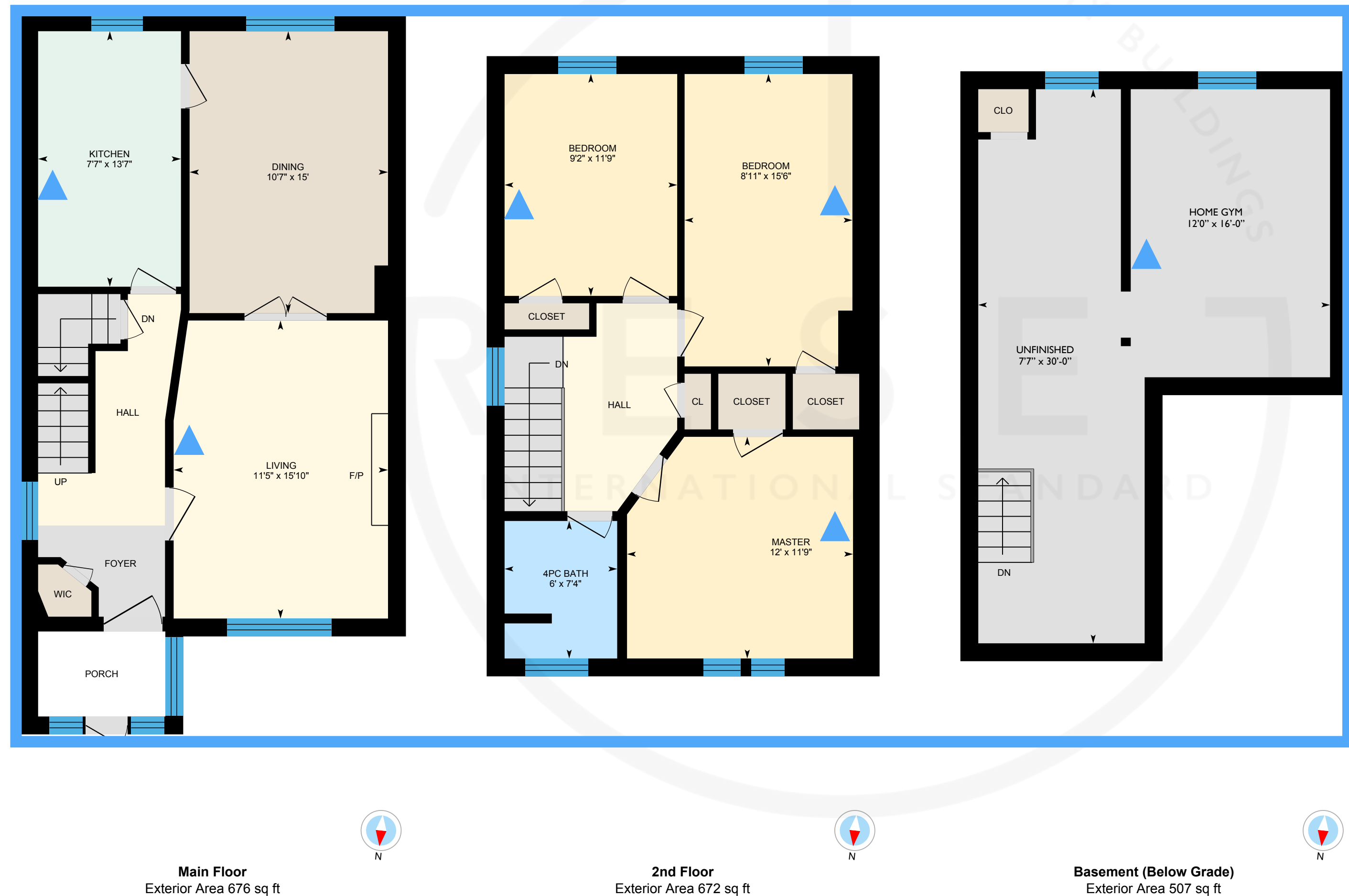
# 2.2.7.3 Step Three Monitor Deployment

## Space Types

- Bedroom
- Bedroom
- Master Bedroom
- Living
- Cooking
- Exercise

In this example, monitors needed to cover requisite space types: 6

▲ = Covers requisite space types



## 2.2.7.4 Step Six CO Monitor Deployment

### 4. Deploy a minimum of one (1) CO detector within range of each regularly occupied sleeping quarter

For all project typologies, install carbon monoxide detectors only if the project contains combustion sources, such as appliances, devices or systems that emit carbon monoxide, or are located near combustion sources that have potential to enter the project boundary such as through an attached parking structure or garage.

Residential projects must demonstrate compliance with applicable, local, building code(s), following the specifications as outlined in the local code for approved carbon monoxide detector type and installation, whether compulsory or elective.

Residential projects located in regions having no applicable code that outlines carbon monoxide detector type, installation or deployment, project teams must install one (1) carbon monoxide detector within 5 meters (16 feet) of rooms used for sleeping purposes. A centrally-located carbon monoxide detector serving multiple sleeping quarters is permitted but must be accompanied by a project narrative explaining project approach and how the deployment meets the intent of the RESET Air Standard.

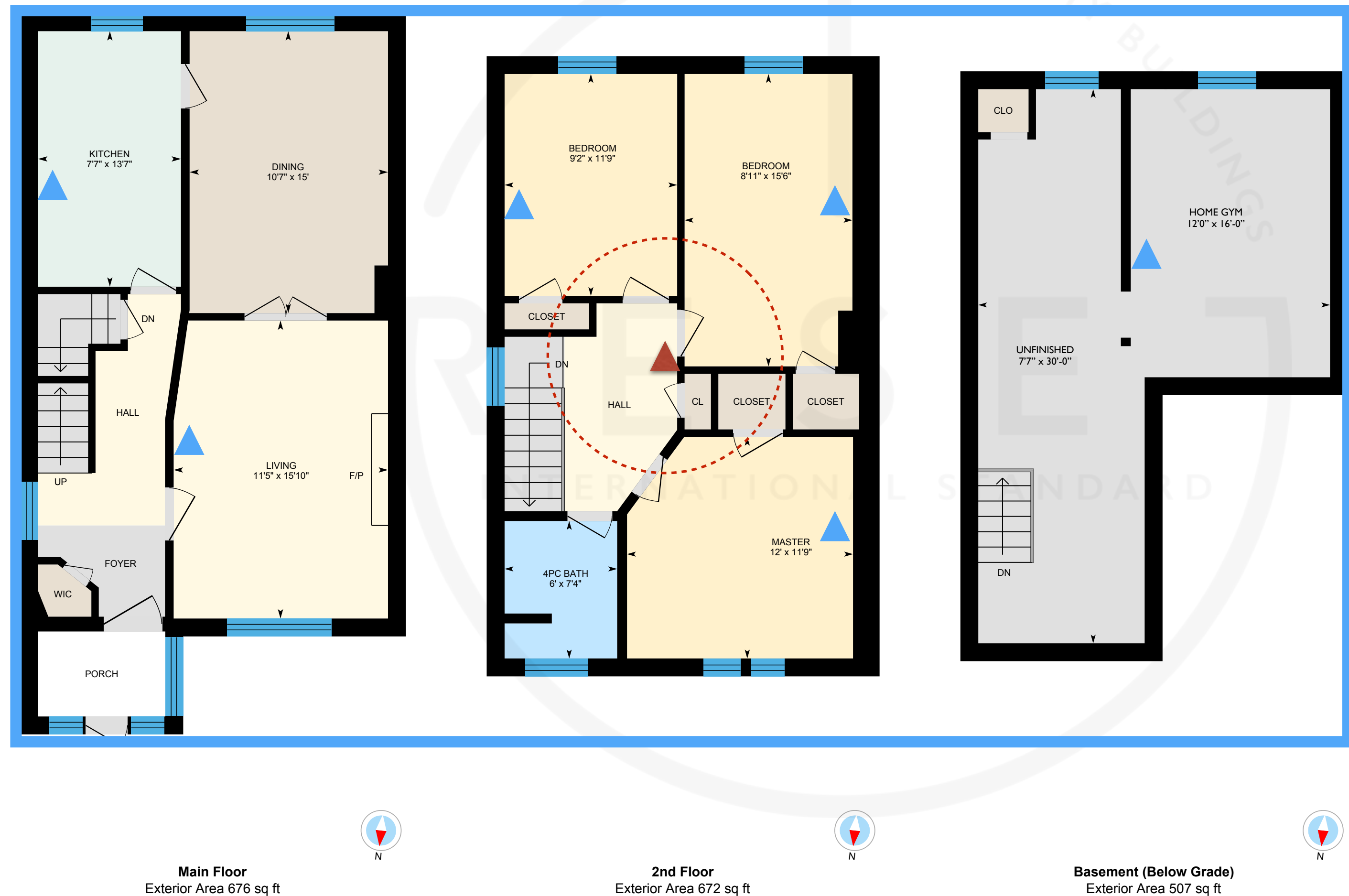
# 2.2.7.4 Step Four CO Monitor Deployment

## Sleeping Quarters

- Bedroom
- Bedroom
- Master Bedroom

In this example, an alarm-equipped CO monitor is installed within five meters (16 feet) of each bedroom.

▲ = CO Monitor



## 2.2.7.5 Step Seven Monitor Range

### 5. Ensure monitor range of 500 m<sup>2</sup> (5,382 square feet)

The final step to the monitor deployment plan is to calculate the number of monitors required per space.

One (1) monitor is allowed per 500 square meters (5,382 square feet) of project space.

Space types that exceed 500 square meters (5,382 square feet) require additional monitors in order to ensure complete coverage. The only exception to this rule is via a proof of air uniformity test. A proof of uniformity test permits teams to submit test results to potentially extend the 500 square meter monitor range to a maximum of 1,000 square meters (10,764 square feet) (refer to Glossary for details.).

Monitors must be a **RESET Air Accredited Monitor** (Section 2.6) and must be installed according to **RESET Air for Interiors: Monitor Installation Requirements** (Section 2.2.5).

Refer to **RESET Air Certification Process for Interiors** (Section 2.3) for full documentation requirements

## 2.2.7.5 Step Five Monitor Range

### Confirm Monitor Deployment Plan

In this example, there are no spaces larger than the 500 m<sup>2</sup> (5,382 square feet) size limit.

Total monitors required:  
Six (6) multi-parameter  
One (1) CO monitor





## 2.2.8 Glossary

### **ASHRAE**

American Society of Heating, Refrigerating, and Air-Conditioning Engineers [www.ashrae.org](http://www.ashrae.org)

### **monitor**

A device designed to hold individual sensors within it for the purposes of monitoring. A monitor typically consists of an outer housing in order to protect the sensors employed inside. Monitors may also be designed to include electrical ports, wiring and/or cabling for connection to electrical sources, including but not limited to, wifi, ethernet, LED screens, visual display screens and other vendor-specific features. In order to be utilized in a RESET Air project, a monitor must be Grade A or Grade B accredited. (Refer to RESET Air Accredited Monitor Standard)

### **occupant**

Occupants are any individuals, be they residents, tenants, renters (both long and short-term), guests, visitors, employees, hired help, clients, or other users inhabiting a space within the project boundary for more than one hour per day.

### **occupied space**

An enclosed space intended for human activities, excluding those spaces that are intended primarily for other purposes, such as storage rooms and equipment rooms, and that are occupied only occasionally and for short periods of time (ASHRAE 62.1–2010)

## 2.2.8 Glossary

### **project boundary**

The project boundary is not permitted to unnecessarily meaner or exclude portions of the building, HVAC system or interior spaces, that would purposefully and/or unfairly allow the project to achieve any or all of the **RESET Air Standard** requirements. Included in the boundary are spaces associated with the project that support its typical operations.

For **RESET Air Standard for Residential**, the boundary should include the entire space that the tenant/owner/lease holder is responsible for under a rental/leasing contract, legal sales agreement, or other similar property arrangement. Projects are not permitted to create a boundary for an interior space that represents only part of the dwelling (i.e., a boundary that is drawn around one bedroom in a home consisting of multiple bedrooms and other living spaces utilized by occupants.) The project team must define the boundary in a clear and distinct manner to communicate how the space is physically separate from other spaces within the building.

### **proof of uniformity**

For unobstructed expanses in a **RESET Air Standard for Residential Interior** project exceeding 500 square meters (5,382 square feet) project teams are permitted to submit proof of air uniformity as exception to the 500 square meter (5,382 square feet) monitor range limit, extending the 500 square meter (5,382 square feet) limit to a maximum of 1,000 square meters (10,763 square feet).

(continued on next page)

## 2.2.8 Glossary

proof of uniformity (continued)

Uniformity testing must be performed by an accredited air quality assessment lab technician or other qualified indoor air quality professional. Documentation for submission to **RESET** must clearly outline the test methodology, approach, and evaluation results as performed by the technician.

In order to meet uniformity requirements, all pollutants (parameters) as outlined in the **RESET Air Standard for Residential Interiors** must be monitored. Uniformity tests must be conducted using Grade A (calibration-grade) monitoring device(s) adhering to the following protocols:

- Within the project boundary and in the open space subject to the proof of uniformity test, identify three (3) test locations that will serve as fixed sampling points.
- The three (3) sampling points shall be the furthest distance from one another and positioned within the breathing zone as per **RESET Air Standards**.
- Position a Grade A monitor in each sampling point.
- Sequentially, between 3-10 minutes, record a minimum of 3 data intervals, (one (1) per minute).
- Record the average of (the total of the three sampling points or record the average of each point individually and then calculate the average of that?)
- The calculated average of the three (3) sampling points is not permitted to differ by more than 10%. (“differ” is confusing; what do we really mean here? Differ from one another, differ by 10% of the readings from that one monitor?)
- Using the same fixed sampling points, repeat the process of interval sampling as outlined, three times during a normal day of operations: morning, early afternoon and end of day with a minimum of three (3) hours between each test sequence.
- Submit the report to the **RESET** Assessors.

## 2.2.8 Glossary

### **regularly occupied space**

An area where one or more individuals normally spend time (more than one hour per person per day on average) seated or standing as they work, study, or perform other focused activities inside a building. The one-hour timeframe is continuous and should be based on the time a typical occupant uses the space. For spaces that are not used daily, the one-hour timeframe should be based on the time a typical occupant spends in the space when it is in use. (USGBC LEEDv4)

### **sensors**

Individual technology uniquely developed for the detection of specific air pollutants. A wide variety of sensor technology exists. Some examples include Tapered Element Oscillating Microbalance (TEOM), Beta Attenuation Mass (BAM), Non-dispersive Infrared Gas Detectors (NDIR), Photoionisation Detection (PID) etc.

### **space types**

In the context of **RESET Air**, space types are defined by their function. For example, a conference room, irrespective of size, serves the function of a space where a group of people convene. Varying sizes of conference rooms for the purpose of **RESET Air**, do not necessarily require individual itemization on a project's space type list. The space type methodology is meant to ensure that a cross-section of unique space types, based on their function, are represented in the monitor deployment plan.

End of **RESET™** **Air** STANDARD  
for Residential Interiors





Air

# CERTIFICATION PROCESS

FOR  
RESIDENTIAL v1.0



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## 2.3.0 Preface

The **RESET Air Certification Process for Residential** provides details on how to achieve **RESET Air Certification for Residential** (Section 2.2). The certification process includes 5 phases:

### **Phase 1 - Registration**

Initial project information and payment for Pre-deployment Documentation Review and Site Audit.

### **Phase 2 - Pre-deployment Documentation Review**

Document submittal for Pre-deployment Documentation Review

### **Phase 3 - Site Audit**

Arranging for Site Audit.

### **Phase 4 - Data Audit**

Meeting parameter thresholds and data requirements.

### **Phase 5 - RESET Certified**

Maintaining **RESET Air Certification**



## 2.3.1 Phase I - Registration

The first step towards **RESET Air Certification for Residential** projects is registration. Registration includes the project's basic information, terms and service agreement, and payment.

**RESET Air Projects** can be found at <https://project.reset.build/>.

The registration process is as follows:

1. Go to [project.reset.build](https://project.reset.build)
2. Login or Sign up if you don't have an account.
3. Register a project
4. Fill in registration information and Submit project boundary floor plan
5. Receive registration acknowledgement and pricing
6. Submit payment to begin Documentation Audit and Site Audit Process
7. Receive confirmation for completed Registration

## 2.3.2 Phase 2 - Pre-deployment Documentation Review

Pre-deployment Documentation Review ensures that a project's proposed deployment strategy meets the intent of the **RESET Air Standard for Residential** (Section 2.2). Passing the Pre-deployment Documentation Review is requisite prior to executing a deployment plan in a project.

The pre-deployment documentation review process is as follows:

1. Go to [project.reset.build](https://project.reset.build)
2. Go to your project.
3. Download Pre-deployment Documentation Review Template.
4. Fill in, upload, and submit Pre-deployment Documentation Review documents.
5. Receive Status on whether or not the Pre-deployment Documentation Review passed or failed. Projects are allowed a maximum of two submissions for Pass/Fail Verification from **RESET** for the Pre-deployment Documentation Review.

## 2.3.2 Phase 2 - Pre-deployment Documentation Review

The following information is required for Pre-deployment Documentation Review:

a. **Monitor Information**

Specification sheet(s) for all monitors deployed on the project that includes manufacturer name, product name, and product model number/SKU. All monitors must meet **RESET Air Accredited Monitor** Grade A or Grade B requirements.

For more information, please refer to the **RESET Air Accredited Monitors** (Section 2.6).

b. **Data Provider Information**

Name of the **RESET Air Accredited Data Provider** that will be utilized on the project. All data providers must meet **RESET Air Accredited Data Provider** requirements.

For more information, please refer to the **RESET Air Accredited Data Provider Standard** (Section 2.8).

## 2.3.2 Phase 2 - Pre-deployment Documentation Review

### c. **Calculating Monitor Deployment**

A brief yet detailed statement addressing the requirements of Section 2.2.7. The statement must include sufficient information to substantiate the subsequent methodology used in monitor calculations and deployment including area calculations demonstrating conformance to acceptable monitor range requirements. Project teams must effectively communicate the function and use of their individual spaces, number of occupants, and any calculations applied to prove that they have met the intent of the **RESET Air Standard for Residential** (Section 2.2).

### e. **Floor Plans**

Annotated and dimensioned floor plan(s) including partitions, furniture and millwork, that clearly indicate the project boundary and proposed location and quantity of certified indoor air quality monitors.

### f. **Reflected Ceiling and MEP Plans**

Annotated and dimensioned reflected ceiling plan(s) and MEP plan(s) including locations of fresh air diffusers and returns, recirculation diffusers and air returns (where applicable), that clearly indicate the project boundary and proposed location and quantity of certified indoor air quality monitors.

### g. **Proof of Air Uniformity**

Proof of air uniformity documentation if applicable.

## 2.3.2 Phase 2 - Pre-deployment Documentation Review

### Additional Pre-deployment Considerations

Once monitors and data providers are selected, plan for installation.



#### Power

##### Recommended: Permanent Power

Hard-wiring monitors to a permanent electrical source is recommended but not required. Permanent connections reduce the risk of accidental disconnection. Accidental disconnection may result in missing data and could affect your Data Audit.



#### Mounting

##### Required: Wall Mounted

Monitors are to be wall mounted between 900 mm and 1800 mm (3 - 6 feet) after finished floor. This follows industry best practices and provides a general representation of air within a space's breathing zone.



#### Network Connectivity

##### Recommended: Wired Installation

Wired installation is the most fail-safe option for monitors.

Wireless connectivity could be intermittent and may result in missing data that could affect your Data Audit.

*Note: For new projects, it is recommended that monitors be in place and reporting data after all major dust-generating activities have been completed and prior to FF&E (furniture, fixtures & equipment) installation.*

## 2.3.3 Phase 3 - Site Audit

The Site Audit ensures that a project has complied with all requirements as outlined in the **RESET Air** Standard and is appropriate for project typology. The is inclusive of monitor deployment locations, and installation requirements. A Site Audit is required after a project has completed installation of monitors according to the approved deployment plan. The site audit includes two parts: documentation and site verification.

The site audit process is as follows:

1. Go to project.reset.build
2. Go to your project.
3. Download Site Audit Documentation.
4. Fill in, upload, and submit Site Audit Documentation.
5. Site Audit documentation acknowledgement.
6. Arrange and confirm a time for a Site audit.
7. Site audit
8. Site Audit Pass/Fail acknowledgement.

Once the entirety of the Site Audit is passed, the project is **RESET Air Pre-Certified**, which means that the project is eligible to enter into Phase 4, the Data Audit period.

## 2.3.3.1 Phase 3 - Site Audit

The following information is documented during a Site Audit:

a. **Monitor Information**

Monitor Serial #(s)

Monitor commissioning report from a qualified **RESET AP**.

b. **Monitor Installation Pictures**

Picture(s) of the monitor(s), installed, with a reference to location within the floor plan. These will be used to confirm monitor installation before the site verification of the site audit.

c. **Hours of Occupancy**

The hours in which the space is occupied. Note that for **RESET Air** for Residential typologies, hours of occupancy default to 24 hours per day, seven days per week.

d. **Project Pictures**

The project will be showcased by **RESET**. A minimum of one picture of the project is required.

*Note: Additional documents may be required for clarification.*

## 2.3.3.2 Phase 3 - Site Audit

The site audit will be conducted by an independent **RESET Auditor** assigned by **RESET**. The site inspection consists of verifying monitor deployment to ensure monitors have been installed according to the approved Deployment Plan.

*Note: Additional documents may be required for clarification.*



## 2.3.4 Phase 4 - Data Audit

The Data Audit involves submitting data to the **RESET Assessment Cloud**. When data from a space successfully passes all conditions for 3 months, the space is **RESET Air Certified**. The Data Audit is the final phase for initial **RESET Air Certification for Residential Interiors**.

The data audit process is as follows:

1. Connect the project's **RESET Air Accredited Data Provider** to the **RESET Assessment Cloud**.
2. Establish that data is being transferred to the **RESET Assessment Cloud** according to the requirements in **RESET Air Accredited Data Provider** (Section 2.8). If data is not being received, a notification will be sent to solve the issue.
3. Go to [project.reset.build](https://project.reset.build). Go to your project. Select a month to start auditing. An audit month starts at the beginning of the month and ends at the end of the month.
4. Receive reports every month on certification status.
5. Once the project passes 3 consecutive months, it is awarded **RESET Air Certification**.

Refer to **RESET Air Methodology for Data Analysis** (Section 2.9) for full explanation of calculation methodology.

## 2.3.5 Phase 5 - RESET Certified

When a project reaches Phase 5, it has achieved **RESET Air Certification for Residential Interiors**.

**RESET Air** is a performance-based standard and projects are required to re-certify annually. Ongoing certification ensures that acceptable IAQ results are maintained within thresholds as outlined in the **RESET Air Standard for Residential Interiors** (Section 2.2).

Ongoing Certification Requirements include:

a. **Fees**

Recertification requires payment of a recurring Data Audit fee. Contact **RESET** to re-certify.

b. **Monitor Performance Check**

Monitors are required to be checked by a qualified technician. Certificates attesting to the performance of monitors must be submitted to **RESET** annually.

c. **Communication and Education**

Hourly data must be made available to project occupants via publicly available screens, desktop, or mobile app. Non-occupants need not have access to the data. Available data must include PM<sub>2.5</sub>, CO<sub>2</sub>, TVOC and CO (where applicable), as outlined in the **RESET Air Standard for Residential** (Section 2.2).

d. **Site Audits**

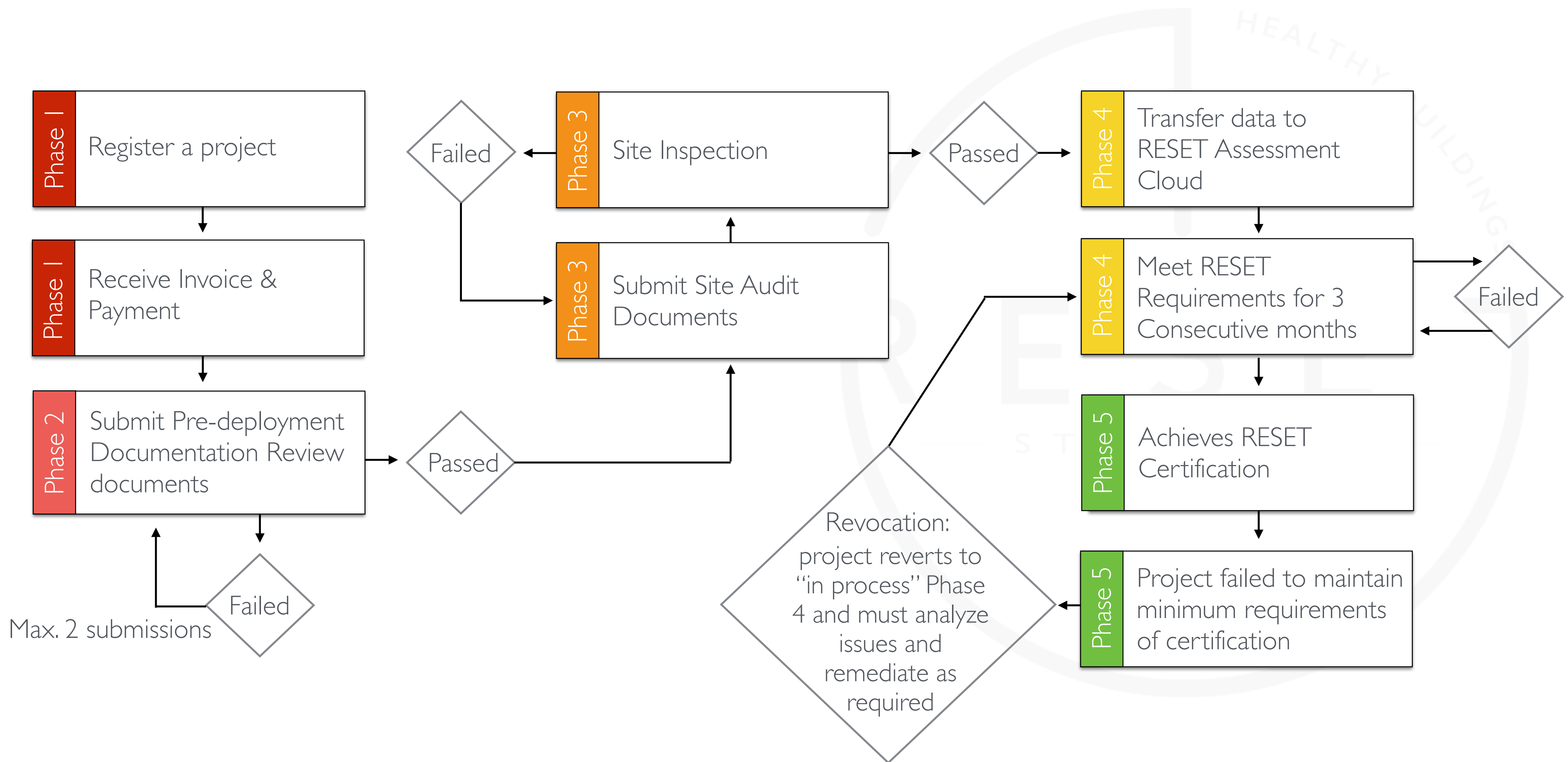
Site audits, performed by an independent **RESET** Auditor are required every 3 years or if the project undergoes renovation that changes the approved deployment plan according to the Site Audit.

## 2.3.5 Phase 5 - RESET™ Certified (continued)

### Conditions for Certification Revocation:

- e. If the project fails to meet acceptable IAQ levels as outlined in the **RESET Air Standard for Residential** (Section 2.2) for three consecutive months, certification is revoked. If revoked, a project will need to re-certify by passing three consecutive months of reporting demonstrating that the project is within acceptable air quality thresholds.
- f. If a project fails to pay the annual recurring Data Audit fee, certification will expire.
- g. If a project's monitors do not have valid certificates, certification is revoked. Monitors are required to be checked by a qualified technician and given a certificate attesting to the performance of the monitors and it must be submitted to **RESET** annually.

## 2.3.6 Flowchart of Certification Phases



## 2.3.7 Certification Fees

**RESET Air** for Residential Interiors Certification fees include the following:

1. **RESET Air** Pre-deployment Documentation Review for Residential Interiors (*one time*)
2. **RESET Air** Site Audit for Residential Interiors (*one time\**)
3. **RESET Air** Data Audit and Certification for Residential Interiors (*annual*)

Fees are based on the project size.

In addition to the above, project teams are advised to consider auxiliary fees including, but not limited to, **RESET AP** consulting, monitors for monitoring, Data Providers for retrieving and storing monitor data, and yearly monitors performance check.

For pricing estimates, please visit <https://reset.build/certification> for the pricing calculator.

\* Site audits, performed by an independent RESET™ AP, are required every 3 years or if the project undergoes renovation that changes the Approved Deployment Plan.

End of **RESET** *Air* **PROCESS**  
for Residential





[www.reset.build](http://www.reset.build)