Safety Instructions

The following safety instructions have been included in this manual to provide you with basic information necessary for safe operation of the BuildClean HEPA 360° Air Scrubber.

**Electrical hazards**

1. Damaged cords can be dangerous and should be replaced immediately. Risk of electrical shock.
2. Do not connect the air scrubber to an ungrounded socket. Risk of electrical shock.
3. Plug unit or rated extension cord into grounded socket only.
4. The Main Power Switch should be turned off before unplugging the air scrubber.
5. Unplug the air scrubber when carrying out maintenance work.

**Make sure the area of use is firm and level, so that the air scrubber does not tip over. Risk of personal injury and damage to unit.**

**WARNING**

**DO NOT ATTEMPT TO OPERATE THE AIR SCRUBBER UNTIL YOU READ AND UNDERSTAND ALL SAFETY PRECAUTIONS AND MANUAL INSTRUCTIONS. READ AND SAVE THESE INSTRUCTIONS.**

1. Do not stand on unit.
2. Do not sit on unit.
3. Do not drop unit. Falling equipment could cause personal injury and damage to unit.

**WARNING**

1. The BuildClean HEPA 360° Air Scrubber can only be used with dry, non-explosive materials.
2. The machine must not be used in environments where explosive gases may be present. Serious risk of explosion.
3. Do not operate in standing water.
4. Keep wiring and motor dry. If electrical components become wet, allow them to dry completely before using.
5. Dust that is hazardous to health can be spread when the pre-filter and the HEPA filter are replaced. Accordingly, the user should wear protective glasses, protective gloves, and breathing protection.
6. Do not puncture the HEPA filter. Risk of dust dispersion.
Introduction

This manual is intended to acquaint you with the BuildClean HEPA 360° Air Scrubber. The BuildClean HEPA 360° Air Scrubber is a self-contained, fully portable air filtration machine for professional residential remodeling projects. It uses a fan to draw in dirty air from the space, pass it through a 360-degree, two-stage filtration system to remove dust and particulates, and return clean air into the room.

Developed specifically for use during residential remodeling and construction projects, the BuildClean HEPA 360° Air Scrubber captures and removes up to 90% of the particulates in the air, including cement, insulation, silica, lead, wood and drywall dust.

Before operating the BuildClean HEPA 360° Air Scrubber:

1. Read this manual from cover to cover.
2. Follow all instructions in this manual.
3. Keep this manual in a safe place.

If you have questions about the BuildClean HEPA 360° Air Scrubber or wish to obtain additional copies of this manual, call 1-855-595-2860.

For sales or customer service assistance, call 1-855-595-2860 or visit www.BuildClean.com.

How the BuildClean 360° HEPA Filtration System Works

The BuildClean HEPA 360° Air Scrubber has an advanced 360-degree HEPA (High Efficiency Particulate Air) air filtration system that effectively cleans air in two stages:

1. The first stage uses a coarse pre-filter to trap larger particles and protect the main filter.
2. The second stage HEPA filter collects fine particles and unhealthy dust that is invisible to the eye.

Pre-filter characteristics
The coarse filter is designed to collect large particles and protects the main HEPA filter.

Main filter characteristics
The main filter, classified as HEPA, is designed to collect fine, dry dust and should be preceded by a pre-filter.

CAUTION
1. Exposure to water can damage the (HEPA) filter and the pre-filter.
2. Pre-filters cannot be cleaned and must be replaced when full.
3. The HEPA filter cannot be cleaned and must be replaced when full.
Main Features and Controls

**Durable Plastic Housing:** The BuildClean HEPA 360° Air Scrubber has a durable plastic housing built especially for the rigors of construction work. It is easy to clean and resists scuffing and denting.

**360° Design:** Maximizes particle collection, allows multi-directional air collection and boosts efficiency.

**Power Status Display:** Indicates the status of the unit - ON, OFF.

**Dynamic Fan Speed Control:** Improves efficiency as the motor speed automatically adjusts to the filter load to maintain desired CFM airflow.

**Hour Meter:** Counts and displays the number of hours the Air Scrubber has been operating, allowing you to confirm the amount of time the unit has been used on a job.

**Auto Dust Sensor Status Light:** When illuminated, this light indicates that the dust sensor needs cleaning. See page 8.

**Auto Dust Sensor:** Allows the Air Scrubber to run in “AUTO” mode. While in AUTO mode, the Auto Dust Sensor automatically samples the air and adjusts the fan speed accordingly. For example, when a high level of particulate is sensed, the Auto Dust Sensor will automatically run the Air Scrubber on HIGH until a lower level of particulate is sensed or the unit is powered down.

**Advanced Two-Stage Filtration System:**
1. **Pre-Filter** - The coarse pre-filter traps larger particulates.
2. **HEPA Filter** - High Efficiency Particulate Air (HEPA) filter traps 99.7% of particles down to 0.3 microns in size.

**Filter Status Display:** Stoplight-style red, yellow and green LED display indicates the cleanliness of the pre-filter and HEPA filter.
Preparing the Air Scrubber for Use

Unpacking the Air Scrubber
Find a level spot to unpack and assemble your BuildClean HEPA 360° Air Scrubber.

When unpacking the machine, check that the air scrubber and all its parts have not been damaged in transport. Confirm that both the pre-filter and HEPA filter are in place correctly.

Save the box and packing material. If you need to ship the BuildClean HEPA 360° air scrubber to a job site or return the product, using the original box and packing material ensures that the air scrubber can be transported without being damaged.

BuildClean 360° Air Scrubber Checklist of Parts
1. Air Scrubber Top Cover
2. Air Scrubber Base
3. Pre-Filter
4. HEPA Filter
5. Attached Short Power Cord

If the air scrubber or its parts have been damaged or if there are any other concerns, call BuildClean at (855) 595-2860.

WARNING
Check the power cord on the air scrubber to ensure it has not been damaged in transit. A damaged power cord can cause electrical shock and personal injury. Do NOT operate an air scrubber with a damaged cord or plug.

Views of unit showing locations of prefilter (left) and HEPA filter (right)
Positioning the Air Scrubber

**Preparation**
Before using an air scrubber, start with a clean unit and new pre-filter – best practice is to clean the unit, replace the pre-filter and inspect the HEPA filter after every job.

**Positioning the Air Scrubber in the Room**
Many factors, such as the size of the room or available floor space, determine where to place the HEPA 360° Air Scrubber on a job site.

The unique 360° design allows the unit to be placed just about anywhere in the work area and be run in either a vertical or horizontal orientation. How the unit is positioned will affect the amount of airborne dust that can be collected.

Ideally, the unit should be operated in the center of the work area and should be located strategically within the space to maximize air circulation or, if being run in Negative Air Pressure Mode, to provide the best venting.

*The BuildClean HEPA 360° Air Scrubber can be positioned vertically (left) or horizontally (right).*

**NOTICE**
When locating the air scrubber, be sure to position the exhaust vent so that airflow from the vent can flow freely into the room. If greater air filtration is needed, the unit can be moved closer to where dust is being generated, but note that the air scrubber is NOT to be used as a vacuum at point-of-dust-generation. To ensure that the clean part of the home stays free of particulates, you can locate a second BuildClean HEPA 360° Air Scrubber just outside the work space. This way, the unit will capture any particles that escape the barrier in the home.
Operating the Air Scrubber

Plugging In the Air Scrubber

- **WARNING**
  - Fire and Electric Shock Hazard Unit must be electrically grounded.

The BuildClean HEPA 360° Air Scrubber is equipped with a short three-prong powercord that must be used with a UL® approved 15 Amp, 125 Volt, 1875 Watt three-prong extension cord and a three-prong grounded outlet.

- **WARNING**
  - Keep wiring and motor dry. Do not operate in standing water. If electrical components become wet, allow them to dry completely before using.

**CAUTION**
- If using the exhaust vent hose, attach the hose using an 8” screw clamp before plugging in the unit.

- **WARNING**
  - 1. Avoid blocking the exhaust vent.
  - 2. Do not put anything in the exhaust vent as it may damage the fan blades.

Turning ON the Air Scrubber

Turn on the air scrubber by pressing the Main Power Switch located on the back of the unit.

Starting the Air Scrubber

Start the air cleaning process by turning the START knob to AUTO or the desired fan air speed:

- **H** (High 600 CFM*),
- **M** (Medium 400 CFM*),
- **L** (Low 200 CFM*).

* Cubic Foot per Minute

When started the unit performs a systems calibration test prior to starting the fan; during this process the word CAL will appear in the Hour Meter, and the green lights blink. This is the first of two performance tests that are run every time the air scrubber is started.

Once completed, you will hear the fan start, ramp up to maximum speed and run for several seconds to completed the second performance test that determines the cleanliness of both the pre-filter and the HEPA filter. During this process the Power Status Display will be green, the Hour Mete will display tESt and the Filter Status Display will flash yellow.
Operating the Air Scrubber

Determining Operating Speed
The BuildClean HEPA 360° Air Scrubber is equipped to produce a maximum air flow of 600 cubic feet per minute (CFM).

The HEPA 360° Air Scrubber has three speeds: 
H (High 600 CFM), 
M (Medium 400 CFM), 
L (Low 200 CFM)

Plus an automatic setting in which the fan will automatically adjust to the optimum speed based on the results of the air sampling. Select the speed that best suits your needed level of dust control. Rotate the speed control knob to the desired speed setting,

<table>
<thead>
<tr>
<th>Setting</th>
<th>Speed</th>
<th>Recommended Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH</td>
<td>600 CFM</td>
<td>Maximum performance; use during the points of greatest dust generation, such as demolition and drywall sanding.</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>400 CFM</td>
<td>Ideal speed for everyday dust collection on the job site.</td>
</tr>
<tr>
<td>LOW</td>
<td>200 CFM</td>
<td>Lowest performance setting; use to remove light dust.</td>
</tr>
<tr>
<td>AUTO</td>
<td>200 TO 600 CFM</td>
<td>For times and jobs where you desire limited interaction with the air scrubber - speed adjusts based upon the amount of dust present in the air.</td>
</tr>
</tbody>
</table>

Power Status Display
Unit Status – Green light when unit has been turned on at the Main Power Switch at the rear of the air scrubber.

Filter Status Display

Green Lights - “GO” - filters are clean and unit is ready to operate.

Yellow Lights - “CAUTION” - filters are getting dirty. The unit will continue to operate. Once the filters reach full capacity the lights will turn red.

Red Lights - “STOP” – Replace the noted filter.

DANGER
Failure to clean and replace the pre-filter will result in a shortened life of the HEPA filter.

Auto Dust Sensor Status
Red light indicates that the Auto Dust Sensor needs to be cleaned. To clean the dust sensor, unplug the unit and use compressed air to blow dust out of the opening to the Auto Dust Sensor.

NOTICE
While operating the filter performance test will occur every 60 minutes. During this test you will hear the air scrubber fan ramp up to maximum speed and run for 15 seconds.
Determining Mode Of Operation

The BuildClean HEPA 360° Air Scrubber has been designed to run in either air recirculation mode or in negative pressure mode. Before preparing your unit for operation, first determine the best mode of operation for your purposes:

**Recirculation Mode:** In this mode, the air scrubber is placed within the room without any ducting. Air is filtered, cleaned and recirculated within the room. **In most cases, the BuildClean HEPA 360° Air Scrubber will be used in the recirculation mode.**

**Negative Air Pressure Mode:** In this mode, the air scrubber is used to collect dust and to create a slight vacuum in the area surrounding the machine. To use the air scrubber in Negative Air Pressure Mode, it is necessary to use a vent hose (Accessory #512050) to remove the exhaust air out of the work area. If the area is sealed and vented correctly, negative pressure and a slight vacuum is created and air will flow into the work area minimizing the migration of nuisance dust outside of the work zone.

**Creating a negative pressure environment using HEPA-Filtered Portable Air Scrubbers**

Simplified, to create a negative pressure environment, more air must leave the space than enters it. To create this environment, the project area must be walled off with permanent or temporary construction barriers. The air scrubber then must be placed inside the construction area and the air exiting the air scrubber has to be ducted somewhere outside of the project area, preferably to the outside of the building. Since the air is HEPA-filtered, it is not mandatory to exhaust air to the outdoors.

Air always flows from areas of higher pressure to areas of lower pressure so air will flow into the work area from the space under the door and other small openings. Since dust will not flow against this air stream the air scrubber is acting as a simple negative air machine.

**WARNING**

DO NOT create an negative pressure environment around household mechanicals like water heaters and gas furnaces. Fumes from these items will be drawn back into the work area and not out the intended exhaust pipes.
Changing the Pre-Filter

![Image]

**WARNING**

The air scrubber should be turned OFF at the Main Power Switch before unplugging the unit.

**WARNING**

Risk of dust dispersion – Use personal safety equipment. Unhealthy dust can be spread when removing the pre-filter. Wear protective glasses and a breathing mask.

**Removing the Pre-Filter**

1. Turn the air scrubber OFF at the Main Power Switch.
2. Remove the top cover of the air scrubber by unlatching the three cover latches.
3. Carefully lift the pre-filter up and out of the air cleaner.

Place the used filter in a plastic bag for disposal. Replace pre-filter with Part # 512100.

**Replacing the Pre-Filter**

1. Remove the used pre-filter.
2. Slide the new pre-filter over and halfway down the HEPA filter.
3. Find the locator pin on the bottom of the pre-filter.
4. Insert the locator pin into the Filter Orientation/Activation Hole on the base of the unit. This will orient the pre-filter properly during installation and activate the filter monitoring electronics.
5. Push the remainder of the pre-filter sock down so it covers the entire HEPA filter and touches the base of the air scrubber.
6. Put the cover back on the unit and be sure to properly latch all three tabs.

**WARNING**

The air scrubber WILL NOT operate if the pre-filter locator pin is not inserted into the Orientation/Activation Hole.
Changing the HEPA Filter

Removing the HEPA Filter
1. Turn the air scrubber OFF at the Main Power Switch.
2. Remove the top cover of the air scrubber by unlatching the three cover latches.
3. Carefully lift the pre-filter up and out of the air cleaner.
4. To remove the HEPA filter, use a Phillips head screwdriver to unscrew the retaining screw.
5. Remove the protective cover and set aside. Gently lift up the HEPA filter and replace it with Part# 512200.

Replacing the HEPA Filter
1. Remove the HEPA filter.
2. Replace the used HEPA filter with a new BuildClean HEPA filter, Part #512200.
3. Place it on the base. There is no “top” or “bottom” so it doesn’t matter which side is positioned up.
4. Set the protective cover on top.
5. Using a Phillips head screwdriver, screw in the retaining screw.

Filter Maintenance
The BuildClean HEPA 360° Air Scrubber is equipped with stop-light style LED display lights that indicate the status of the pre-filter and HEPA filter. When the display lights flash red, filter maintenance is needed and the filters should be changed following the instruction provided earlier in this manual.

<table>
<thead>
<tr>
<th>FILTER LED LIGHT NOTIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Light Color</strong></td>
</tr>
<tr>
<td>GREEN</td>
</tr>
<tr>
<td>YELLOW</td>
</tr>
<tr>
<td>RED</td>
</tr>
</tbody>
</table>

NOTE: FILTERS SHOULD BE REPLACED IMMEDIATELY IF DAMAGED OR TORN.
After Using the Air Scrubber

Turn the fan off by turning the knob to the OFF position.

Turn the unit off by moving the Main Power Switch to the OFF position.

To avoid the migration of dust, remove and bag the pre-filter after each project. See the section on Changing the Air Filters for detailed instructions. Install a clean pre-filter on the unit for the next use.

Inspect the HEPA filter and replace if needed. See the section on Changing the Air Filters for detailed instructions.

Thoroughly clean the unit. Wipe down the exterior. Blow dust out of the opening to the Auto Dust Sensor using compressed air.
Troubleshooting

The BuildClean HEPA 360° Air Scrubber is designed and manufactured for severe environments and tasks, but the user must note that the machine components must be protected from knocks and blows. Filters and sealing connections are carefully chosen to serve the operator. Therefore, the machine must be handled with care if it is to work correctly for many years.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Causes</th>
<th>What To Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air scrubber does not start when turned on.</td>
<td>The air scrubber is unplugged.</td>
<td>Make sure the air scrubber’s plug is pushed completely into the outlet.</td>
</tr>
<tr>
<td></td>
<td>Power switch (red switch at back of unit) is set to “OFF” or circuit breaker is tripped.</td>
<td>Flip switch to “RESET”.</td>
</tr>
<tr>
<td></td>
<td>GFCI has been tripped.</td>
<td>Depress the “RESET” button on the GFCI on the back of the unit.</td>
</tr>
<tr>
<td></td>
<td>Power failure.</td>
<td>Restore power to the outlet.</td>
</tr>
<tr>
<td></td>
<td>Damaged or defective power cord.</td>
<td>Contact Customer Service (855) 595-2860.</td>
</tr>
<tr>
<td>Red filter indicator lights are lit.</td>
<td>Blocked/dirty filter</td>
<td>Change appropriate filter.</td>
</tr>
<tr>
<td>The fan stops suddenly.</td>
<td>Power failure.</td>
<td>Restore power.</td>
</tr>
<tr>
<td></td>
<td>Unit in “ERROR” state.</td>
<td>See Error State Table (Below).</td>
</tr>
<tr>
<td>Fan runs but suction is poor.</td>
<td>Blocked/dirty filter.</td>
<td>Change filters.</td>
</tr>
<tr>
<td></td>
<td>Area too large.</td>
<td>Add additional air scrubber.</td>
</tr>
<tr>
<td></td>
<td>Unit too far from point of dust generation.</td>
<td>Move unit closer to work area.</td>
</tr>
<tr>
<td>Unit rattles during operation.</td>
<td>Cover loose.</td>
<td>Check that cover latches are fastened. Tighten retaining screw.</td>
</tr>
<tr>
<td>Dust or dirty air blows from unit.</td>
<td>Defective or loose filter.</td>
<td>Adjust or change.</td>
</tr>
<tr>
<td></td>
<td>Loose cover.</td>
<td>Check that cover latches are fastened.</td>
</tr>
</tbody>
</table>

**Unit Error Codes**

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Blocked/dirty filter</td>
<td>See Filter Status Display, change appropriate filter.</td>
</tr>
<tr>
<td>2</td>
<td>Pre-filter fault</td>
<td>Install BuildClean pre-filter</td>
</tr>
<tr>
<td></td>
<td>Pre-filter fault</td>
<td>Assure the pre-filter activation pin in fully inserted.</td>
</tr>
<tr>
<td></td>
<td>Pre-filter fault</td>
<td>Make sure vent hose is not blocked.</td>
</tr>
<tr>
<td>3</td>
<td>HEPA filter fault</td>
<td>Install BuildClean HEPA filter.</td>
</tr>
<tr>
<td>4</td>
<td>Dust sensor malfunction</td>
<td>Clean dust sensor by blowing compressed air through inlet.</td>
</tr>
<tr>
<td>5</td>
<td>Fan pressure sensor malfunction</td>
<td>Clean area (black rubber air intakes) where the filters are installed. Contact Customer Service if problem persists.</td>
</tr>
<tr>
<td>6</td>
<td>Pre-filter pressure sensor malfunction</td>
<td>Clean area (black rubber air intakes) where the filters are installed. Contact Customer Service if problem persists.</td>
</tr>
<tr>
<td>7</td>
<td>HEPA-filter pressure sensor malfunction</td>
<td>Clean area (black rubber air intakes) where the filters are installed. Contact Customer Service if problem persists.</td>
</tr>
<tr>
<td>8</td>
<td>RPM sensor malfunction or locked up fan</td>
<td>Contact Customer Service (855) 595-2860.</td>
</tr>
</tbody>
</table>

**NOTE:** Air Scrubber has to be plugged into a wall outlet to reset the GFCI.
BuildClean HEPA 360° Air Scrubber Specifications

Voltage 112 VAC (1 phase)
Max Power Output 395 W (full speed)
Max Air Flow 600 CFM 3-speed
Pre-Filter Classification MERV 10
Pre-Filter Size 12" tall x 24.75" flat
HEPA Filter Classification HEPA
HEPA Filter Size 9.5" tall x 14.75" dia.
Weight 38 lbs.
GFCI Protected Outlets 12 amps, 8 amps auxiliary outlet
Main Power Switch Located on the back of the unit

Item Numbers

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td># 512000</td>
<td>HEPA 360° Air Scrubber</td>
</tr>
<tr>
<td># 512100</td>
<td>Coarse Particle Pre-filter</td>
</tr>
<tr>
<td># 512200</td>
<td>Fine Particle HEPA Filter</td>
</tr>
<tr>
<td># 512050</td>
<td>System Vent Hose</td>
</tr>
</tbody>
</table>

For spare parts, call (855) 595-2860.
Warranty

BuildClean HEPA 360° Air Scrubber
Warranty and Limitations

BuildClean warrants that new BuildClean HEPA 360° Air Scrubbers will be free from defects in material and workmanship for the period shown below, after the date of delivery to the original user.

ONE-YEAR LIMITED WARRANTY

This warranty is limited to tools sold solely in the United States.

BuildClean's sole liability and Buyer's sole remedy hereunder shall be to replace any part or accessory which proves to be defective with the warranty period as stated above. Any replacement part or accessory provided in accordance with this warranty will carry a warranty for the balance of the period of warranty applicable to the part it replaces.

The warranty does not cover defects which are the result of normal wear and tear, negligence, defective use, unauthorized repair or the air scrubber being connected to the incorrect voltage. This warranty is void on any machine which has been subjected to misuse, abuse, accidental or intentional damage, use with filters not meeting BuildClean specification, size or quality, improperly maintained, repaired by an unauthorized service provider, or altered. Do not attempt to repair the HEPA 360° Air Scrubber without the consent of the manufacturer. If you attempt to repair the BuildClean HEPA 360° Air Scrubber for any reason without the consent of the manufacturer, the warranty will be null and void.

The BuildClean HEPA 360° Air Scrubber can only be used with dry, non-explosive materials. The manufacturer will not be held responsible if the air cleaner is used for other applications or has been used in ways other than those outlined in this instruction manual. If the BuildClean HEPA 360° Air Scrubber is used for any other application other than as stated herein, manufacturer's warranty shall be null and void.

In the event of any complaint, please call (855) 595-2860.

All spare parts used for the BuildClean HEPA 360° Air Scrubber must be those specified by the manufacturer.