

The Superstratum Whole Home System

DIY Protocol for Mycotoxin Cleaning and Removal

Mold remediation approaches often focus primarily on containing and eliminating visible mold and its spores. However, these methods frequently overlook the invisible, odorless mycotoxins that can persist even after mold removal.

When mold is detected, there's a high probability that mycotoxins have contaminated the entire home. Mycotoxins, toxic compounds produced by certain molds, can pose serious health risks, including respiratory issues, allergies, and even more severe conditions. The Superstratum Whole Home System is designed to comprehensively eradicate both airborne and surface-bound mycotoxins from the entire home using a three phase process: **Clean, Gas, Coat.** Our Whole Home System uses three powerful products: Superstratum Building Cleaner, Superstratum Deodor Bombs, and the Superstratum Endurance Coating. If you are ready to take the first step to heal your home and environment from mycotoxins, grab a tape measure and enter your home's details into our free Whole Home System Order Wizard Let's get started!

Before implementing the Superstratum Whole Home System, it's essential to have any active mold identified and professionally removed by a certified specialist.

Instruction Overview:

STEP 1: PRE-FOG WITH SUPERSTRATUM BUILDING CLEANER

STEP 2: MICROCLEAN WITH SUPERSTRATUM BUILDING CLEANER

STEP 3: PREPARE FOR SUPERSTRATUM DEODOR BOMB TREATMENT

STEP 4: RE-FOG WITH SUPERSTRATUM BUILDING CLEANER

STEP 5: GAS WITH SUPERSTRATUM DEODOR BOMBS

STEP 6: AIR OUT SUPERSTRATUM DEODOR BOMB GAS

STEP 7: COAT WITH SUPERSTRATUM ENDURANCE COATING

Equipment Needed

- Ultra-low volume (ULV) cold fogger Rental
 Option, Electric ULV Portable Fogger, Silver
 Bullet Pro
- Handheld Spray Bottle or Garden Sprayer for Superstratum Building Cleaner application
- HEPA filtered vacuum optional Shop-Vac 4
 Gallon Wet/Dry
- with HEPA filter
- Non-woven/Microfiber disposable wipes
 Hygrometer
- N95 Mask for Deodor Bombs
- PD-100 full face respirator gas mask for Deodor Bomb Pros

- Nitrile Gloves
- Electric fans or box fans
- Painter's tape
- 6 mil plastic sheeting
- Items to elevate Superstratum Deodor Bombs boxes, stools, tables, buckets, etc.
- Warm water
- Air purifiers and dehumidifiers (optional)
 Microfiber cleaning cloth (optional) Handheld
 Spray Bottle, Garden Sprayer, or Airless Sprayer
 with 411 or 211 tip for Superstratum
 Endurance Coating application
- UV light indicator (optional)

STEP 1:

PRE-FOG WITH SUPERSTRATUM BUILDING CLEANER

The first step of the Whole Home System is designed to suppress dust particles, remove mycotoxins from the air, and destroy mycotoxins on visible surfaces.

Equipment Needed

Ultra-Low Volume (ULV) cold fogger: Rental option, Electric ULV Portable Fogger, Silver Bullet Pro Painter's tape 6 mil plastic sheeting Prepare the home for the fogging application. Protect or remove selected items that will sustain water damage from repeated exposure to the Building Cleaner fogging mist. Use 6 mil plastic sheeting and painter's tape to cover these items. Items to protect or remove include but are not limited to:

- Instruments
- Taxidermy
- Oil paintings and exposed artwork
- Electronic TVs, laptops, headphones, monitors, etc.
- Paper goods
- Leather surfaces
- Antique stained furniture

Repeated exposure to the Building Cleaner in a fog application may cause a color change in the antique's stain due to the oxidation properties of HOCl.

If applicable, prepare the HVAC system by turning off the A/C and heat. Then, turn the Fan to the ON position so that air is circulating throughout the home. Fill your Ultra-Low Volume (ULV) cold fogger with Superstratum Building Cleaner, and begin to fog the entire home.

Fog your entire home with Superstratum Building Cleaner suppressing dust particles and destroying mycotoxins. Move from room to room to ensure full volumetric coverage of all spaces in your home by fogging the general air space, wall-to-wall, and floor-to-ceiling, as well as accessible crawlspaces and attics.

Coat the walls, ceiling, and general air space with the Building Cleaner mist. Fog your furniture and contents, applying a moderate mist to all items such as clothing, bedding, towels, dog beds, furniture pieces, rugs, cushions, mattress, toiletries, dishware, etc. No personal protective equipment is required for this step. Once the pre-fog step is complete, you may turn the HVAC cooling and heating systems back on if desired. Allow the surfaces to dry before proceeding to the next microclean step.

Coverage Guidelines: 1 gallon of Superstratum Building Cleaner covers approximately 5000 cubic feet for pre-fog step application. You may use our Whole Home System Order Wizard to easily calculate the amount of Building Cleaner needed for the prefog.

STEP 2:

MICROCLEAN WITH SUPERSTRATUM BUILDING CLEANER

The second step of the Whole Home System is designed to remove the dust particles and remaining mycotoxins from the surfaces and items in the home.

Equipment Needed

32oz Spray Bottles or Garden Pump Sprayer

Disposable paper towels or wipes

HEPA Filtered Vacuum optional -Shop-Vac 4-Gallon Wet/Dry Shop Vacuum with HEPA filter If your home has high levels of dust and debris, it is recommended to use a HEPA filtered vacuum to make this microclean step easier and more effective. Focus your attention on areas in the home that accumulate dust, such as baseboards, around window and door frames, cabinets, shelves, and light fixtures. Use a HEPA filtered vacuum to remove dust and debris from moderate to high dust and debris areas and furniture.

Grab your spray bottles or garden pump sprayers full of the Building Cleaner and have a large supply of non-woven microfiber disposable wipes on hand. Spray all horizontal surfaces and contents in your home thoroughly with Superstratum Building Cleaner. Allow the solution to dwell on the surface for 10 seconds before wiping the surface dry and removing the dust with disposable paper towels or wipes . Make sure to have more than enough disposable wipes on hand for this step! Use one disposable wipe for each content or one disposable wipe for every 3 square feet of surface area.

Coverage Guidelines: 1 gallon of Superstratum Building Cleaner covers approximately 300 square feet with direct spray application. You may use our Whole Home System Order Wizard to easily calculate the amount of Building Cleaner needed for the microclean.

STEP 3:

PREPARE FOR SUPERSTRATUM DEODOR BOMB TREATMENT

The third step of the Whole Home System prepares the home for gassing with Superstratum Deodor Bombs.

Equipment Needed

Painter's tape
6 mil plastic sheeting
Electric fan or box fan
N95 Mask for Deodor Bombs
PD-100 full face respirator gas mask
for Deodor Bomb Pros
Nitrile Gloves
Items to elevate Superstratum
Deodor Bombs - boxes, stools,
tables, buckets, etc.

IMPORTANT: Superstratum Deodor Bombs are for use in interior living and working spaces and required PPE include an N95 mask and nitrile gloves. Deodor Bomb Pros may be used in uninhabited spaces such as garages, basements, attics, crawlspaces, etc. and required PPE include a PD-100 full face respirator gas mask and nitrile gloves.

Gather personal protective equipment including an N95 mask or PD-100 full face respirator gas mask and nitrile gloves.

Ideally the Deodor Bomb treatment is completed overnight, because sunlight significantly decreases the performance of chlorine dioxide gas. If you perform this gas treatment during the day, block all sunlight from entering through the windows.

Remove all people, plants, and pets from the home! Remove or protect selected items that may sustain damage during the Deodor Bomb treatment due to the oxidative power of chlorine dioxide gas. Use 6 mil plastic sheeting and painter's tape to cover these items if you have not already done so in the previous steps. Items to protect or remove include but are not limited to:

Repeated exposure to the Deodor Bombs during a 12hr gassing may cause a color change in the antique's stain due to the oxidation properties of chlorine dioxide.

Turn off the smoke detector system, remove smoke detectors, or cover with 6 mil plastic sheeting and seal with painter's tape. Close all exterior windows, doors, and fireplace damper. Seal any gaps or cracks around exterior windows and doors using painter's tape and 6 mil plastic sheeting.

Open all interior doors, drawers, cabinets, and closets to allow the gas to permeate freely through the home. Stand your furniture cushions and mattresses upright and remove all bedding, fitted sheets, and plastic mattress protectors to allow the chlorine dioxide gas to permeate freely through as many exposed surfaces as possible.

If desired, remove clothes from storage drawers and lay flat or place on coat hangers to allow gas to permeate freely through the clothing fibers.

Distribute Deodor Bomb kits throughout the home. Space the kits apart in each room. Use buckets, side tables, boxes, stools, etc. to raise the kits at least three feet above the ground. Do not place packets directly on carpet or beds to avoid discoloration if spillage occurs.

Turn off any air purifiers and dehumidifiers. Turn on low speed overhead fans and/or use electrical fans to circulate the chlorine dioxide gas throughout the home, but please do not direct airflow of electrical fans to blow directly over the top of the Deodor Bombs. Providing adequate airflow with fans is important, because stagnant chlorine dioxide gas may cause discoloration on certain surfaces.

Post warning placard included in the Deodor Bomb kit to entry door to ensure the home remains unoccupied for the entire duration of the gas treatment

Coverage Guidelines: You may use our Whole Home System Order Wizard to easily calculate the size and quantity needed for the gassing.

For interior living and working spaces -> 100G Superstratum Deodor Bomb covers 1000 cubic feet, 50G Superstratum Deodor Bomb covers 500 cubic feet, and 25G Superstratum Deodor Bomb covers 250 cubic feet. For uninhabited spaces -> 100G Superstratum Deodor Bomb Pro covers 2000 cubic feet, 50G Superstratum Deodor Bomb Pro covers 1000 cubic feet, and 25G Superstratum Deodor Bomb Pro covers 500 cubic feet.

STEP 4:

STEP 4: RE-FOG WITH SUPERSTRATUM BUILDING CLEANER

The fourth step of the Whole Home System is designed to prepare the humidity and temperature for the Superstratum Deodor Bomb gas treatment, suppress dust particles, and remove more mycotoxins from the air and destroy them on surfaces.

Equipment Needed

Ultra-Low Volume (ULV) cold fogger -Rental option, Electric ULV Portable Fogger, Silver Bullet Pro Hygrometer Painter's tape 6 mil plastic sheeting Check all electronics such as flat screen TVs, computers, and laptops are removed or protected to prevent water damage while re-fogging. All exposed artwork, instruments, taxidermy and other delicate items should already be protected from moisture and oxidation damage in Step 3 using 6 mil plastic sheeting and painter's tape.

Confirm or adjust the temperature of the home between 65F and 90F. Once the desired temperature is achieved, turn OFF the HVAC system, and turn the Fan to the ON position so that air is circulating through the home. If desired, you may leave the heating system on for the Deodor Bomb treatment.

Remove and discard your return air vent filter, and leave the vent door open for easy gas access. You may also remove vent grilles throughout the home if desired.

Fill your ULV cold fogger, and begin to re-fog the home with Building Cleaner room by room suppressing more dust particles, destroying mycotoxins, and raising the relative humidity levels. Be sure to re-fog the crawlspaces and attics if applicable. After you have finished re-fogging all the Building Cleaner for this step, monitor humidity levels with a hygrometer.

If you have not achieved at least 65% relative humidity, continue raising the relative humidity levels. Tips for raising humidity include fogging with water and letting the steam from hot showers fill the home. Optimal conditions for a Superstratum Deodor Bomb treatment are 70°F and 70% relative humidity.

Once the re-fog is complete and your desired relative humidity levels and temperature are achieved, you may proceed immediately to the next step.

Coverage Guidelines: 1 gallon of Superstratum Building Cleaner covers approximately 10,000 cubic feet for re-fog step application. You can use the Whole Home System Order Wizard to easily calculate the amount of Superstratum Building Cleaner needed for the re-fog.

STEP 5:

GAS WITH SUPERSTRATUM DEODOR BOMBS

The fifth step of the Whole Home System is designed to penetrate chlorine dioxide gas deep into the hidden recesses of your home to destroy mycotoxins, VOCs, and odors.

Equipment Needed

N95 Mask for Deodor Bombs
PD-100 full face respirator gas mask
for Deodor Bomb Pros
Nitrile Gloves
Warm water

IMPORTANT: Superstratum Deodor Bombs can quickly create CIO2 gas. Before activating the first dry sponge, place all Deodor Bomb kits in their correct location throughout the building. Begin activating the Deodor Bombs from the furthest point of the home, and work backwards moving towards the exit to reduce exposure as much as possible.

One person should not activate more than 10 Deodor Bombs. Be sure to have enough water available to activate all dry sponges before you begin. If you experience lightheadedness, or difficulty breathing during or after treatment, seek medical attention immediately.

Assemble a pitcher of warm water, and put on your personal protective equipment. Remove all contents from the Deodor Bomb plastic clamshell container.

Wearing your N95 mask and nitrile gloves, gently pour water into all the clamshell containers to the top of the indicated fill line. Do not overfill the containers. Remove the dry sponge from the foil wrapper, and place the dry sponge BLUE side down into the water. The sponge will begin to expand and activate. Do not pour excess water on top of the sponge. Within minutes the sponge will begin to generate a calculated amount of chlorine dioxide gas.

Remember chlorine dioxide gas is extremely dangerous if it is inhaled. Be sure to wear your mask at all times when activating the Deodor Bombs.

Exit and lock up the confined space after you activate the Deodor Bombs! Ensure the warning placard is taped to the exterior door to ensure no one enters the containment zone or disturbs the Deodor Bomb treatment.

Allow the gas to envelope the home and all the contents inside for 12 undisturbed hours. You may wait more than 12 hours before returning to the area; however, this will not affect the performance of the Deodor Bombs.

STEP 6:

AIR OUT SUPERSTRATUM DEODOR BOMB GAS

The sixth step of the Whole Home System is designed to clear out the chlorine dioxide gas from the home so you may safely reenter.

Equipment Needed

N95 Mask for Deodor Bombs
PD-100 full face respirator gas mask
for Deodor Bomb Pros
Nitrile Gloves
Electric fans or box fans
Air purifiers and dehumidifiers
(optional)
Microfiber cleaning cloth (optional)

Put on an N95 Mask or PD-100 full face respirator gas mask, and Nitrile Gloves, and reenter the home. Close plastic containers with liquid and sponge packets inside. The remaining yellow liquid is an oxidizer; therefore, do not spill as bleaching may occur. Dispose of plastic holder and contents in an outdoor refuse container or outdoor composter. The sponge is biodegradable, and the plastic container is #3 plastic and recyclable. The plastic container may be rinsed and reused.

Open all exterior doors and windows to allow rooms to air out. Depending on the size of the home, air out may take a few hours. You can reduce the air out time needed by using fans, air purifiers, and dehumidifiers to remove the chlorine dioxide gas and odor from the home. You may turn on the HVAC system and install new air filters at this time. After the air out is complete, you may notice a residual chlorine dioxide odor. Some homes may require up to a few days for the residual chlorine dioxide odor to completely dissipate.

IMPORTANT: If you feel nauseous, experience headaches, or feel any sensitivity to the residual chlorine dioxide odor, exit the home, and continue the air out until the odor has completely dissipated.

After the gas treatment, you may notice a residual salt film on your home's surfaces. This is completely normal. Our Building Cleaner and Deodor Bombs do not leave behind any toxic residue, only harmless salt. To remove visible salt films, wipe surfaces with a dry microfiber cloth. You may also apply more Building Cleaner directly to surfaces to loosen the salt's adhesion and wipe if desired. This step is completely optional.

STEP 7:

COAT SURFACES WITH SUPERSTRATUM ENDURANCE COATING

The final step of the Whole Home System involves applying Superstratum Endurance Coating on your freshly cleaned surfaces. This water-resistant dry coating resists future mold and mildew growth.

Equipment Needed

Handheld Spray Bottle, Garden Sprayer, or Airless Sprayer with 411 or 211 tip UV light indicator (optional) Depending on the size of the surface area you will coat, use a handheld spray bottle, a pump garden sprayer, or even an airless sprayer to apply. To begin, shake the Endurance Coating for 10 - 20 seconds. Apply a light mist to desired surfaces around the home. As you spray, create a light coat on the surface so that it is damp, but there should be no dripping or running as this will leave unprotected streaks on the surface. Allow the surface to air dry, and do not wipe. You may shine a UV light indicator over the surface to ensure desired coverage is achieved. The coating will appear speckled.

Superstratum Endurance Coating is an invisible, breathable, and water resistant dry film that contains preservatives to prevent the growth of mold and mildew on its coating's surface through 100s of wet and dry cycles. This coating's protection can last up to 10 weeks in high traffic moisture areas, 2 years in low traffic moisture areas, and 10 years in undisturbed moisture areas.

Superstratum Endurance Coating may be used on virtually any surface, indoor and outdoor; however, it is not recommended on glass or varnished surfaces. Apply the coating to all moisture-exposed and previously contaminated areas prone to collecting dust. It is safe to use on wood, brick, stone, concrete, siding, outdoor furniture, etc. Ideal locations inside the home include, but are not limited to attics, crawlspaces, basements, wall cavities, grout lines, caulk, baseboards, new air filters, HVAC systems, ductwork and vents, baseboards, around window frames, back sides of furniture and appliances, plumbing, curtains, etc.

Coverage Guidelines: 1 gallon of Superstratum Endurance Coating covers approximately 600 square feet. You can use the Whole Home System Order Wizard to easily calculate the amount of Superstratum Endurance Coating needed.