DIVERSITECH

Part of Absolent Air Care Group

# Operation & Maintenance Manual

# T-STORM 3000/4500


READ AND SAVE THESE INSTRUCTIONS

Visit our Website for more information on this product

www.diversitech-air.com  www.diversitech.ca

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# SECTION 1 - SAFETY PRECAUTIONS OF FUME & DUST EXTRACTION/COLLECTION

READ BEFORE USE

This manual contains specific cautionary statements related to worker safety. To protect yourself and others, read this manual thoroughly and follow as directed before use. Not all hazards of fume & dust control are listed in this manual, and no hazards related to welding, cutting, grinding, painting, deburring or other applications are listed. Consult a qualified safety professional.

DO NOT USE

Do not use this equipment:

- To extract smoke or fumes above 180°F/82°C.
- To extract combustible dust, liquid vapors, or aggressive fumes such as acids.
- If the power cord has been damaged or ground (third prong) removed.
- Without a filter.

## 1.1 Symbols

This manual uses several symbols to highlight specific hazards. Be familiar with these symbols and when you see them in this manual, read adjoining warning text to avoid the hazard.

**WARNING! DANGER!**

**ELECTRIC SHOCK**

**MOVING PARTS**

**HOT PARTS**

## 1.2 User's responsibility

- Improper use can be hazardous.
- All users must carefully read and understand this instruction manual prior to use
- No objects, such as tools, should be placed on the machine.
- When moving machine, care should be taken to ensure the user's feet remain clear of the wheels.
- Motor should not contact any objects, and all motor repairs should be performed while the power switch is off and the power source is disconnected. Operator should not touch motor during use.
- Blower assembly should not contact any objects, and all blower repairs should be performed while the power switch is off and the power source is disconnected. Operator should not touch blower during use.
- For maintenance of any and all components, power switch must be off and the power source disconnected
- It is your responsibility to follow all applicable ANSI, OSHA, UL, CSA, National & Local Fire Codes, and other regulatory guidelines covering the safe use and installation of equipment that extracts fumes, collects dusts, and exhausts filtered air either indoors or outdoors.
- Before use, inspect the unit for damage and verify it is working properly.
- Only qualified persons should install, operate, maintain, or repair this unit.
- Do not modify or repair the unit with parts or accessories not supplied by the manufacturer.

## 1.3 Fume extraction hazards

- Breathing smoke, fumes, or dusts produced in applications such as welding, cutting, grinding, painting, deburring are hazardous to user's health. Proper ventilation or use of well maintained fume extraction and/or dust collection equipment helps the user avoid these hazards.
- Breathable contaminants may not be visible or have an odor.
- Stop operation and leave the area immediately if 1) breathing becomes difficult, 2) experience dizziness, impaired vision, 4) or eye/nose/mouth irritation.

### 1.4 Dust collection hazards

- Dusts from many metalwork, welding, cutting, grinding, painting, or deburring applications can be combustible.
- Do not use or install equipment where any potential for combustible fumes or dusts are present, until a qualified person has indicated it is safe to do so.
- Never use or install equipment where the potential for combustible fumes or dusts are present without a fire/explosion protection system.
- If you are unsure if the product you purchased is correct for your application, call Diversitech at 1-855-976-5190

### 1.5 Safety stickers

- This machine is equipped with safety stickers to remind operators of the inherent dangers during use and maintenance.
- The stickers are only reminders, and all safety precautions contained in this manual must be well understood and adhered to by all users.

## SECTION 2 - INTRODUCTION

This manual provides installation, operation, and maintenance instructions for the Diversitech T-STORM 3000 and T-STORM 4500 Ambient Air Cleaners.

These industrial air cleaning systems are designed to reduce airborne dust, smoke, fumes, and other particulate contaminants commonly present in manufacturing and industrial environments. Using a circular airflow pattern combined with a modular multi-stage filtration system, the T-STORM units efficiently clean and recirculate ambient air throughout the workspace.

This manual outlines recommended procedures to help ensure safe operation, proper installation, and reliable system performance.

Certain procedures—such as electrical wiring, mechanical installation, and handling suspended or heavy equipment—must be performed only by qualified personnel and in accordance with all applicable local, provincial/state, and federal regulations.

For additional information, application guidance, or technical support, please contact Diversitech through the company website.

## SECTION 3 - GENERAL SAFETY WARNINGS

The Diversitech T-STORM 3000 and T-STORM 4500 Ambient Air Cleaners are industrial equipment that involve heavy lifting, high-speed rotating components and electrical power. Safe operation depends on proper planning, training, and adherence to all applicable health, safety, and environmental (HSE) regulations.

All personnel involved in receiving, installing, operating, or maintaining must be trained, authorized, and familiar with this manual. Typical tasks may involve electricians, installers, operators, and maintenance staff. The site supervisor must ensure that all workers understand the potential hazards and follow the required safety precautions.

### 3.1 Lockout/Tagout (LOTO)

The Diversitech T-STORM 3000 and T-STORM 4500 Ambient Air Cleaners must comply with OSHA 29 CFR 1910.147 (“Control of Hazardous Energy”) or equivalent local regulations.

- Before servicing, cleaning, replacing filter or inspecting the unit, isolate all energy sources including electrical and any stored energy in moving parts.
- Apply lockout and tagout devices to prevent accidental start-up.
- Verify zero energy before beginning work.

If unsure, consult your company’s LOTO procedures or your Safety Department.

### 3.2 Electrical safety

- Electrical work must be performed only by qualified and licensed electricians.
- Disconnect and lock out the main power supply before performing any work inside electrical enclosures or wiring.

### 3.3 Warning labels and safety guards

- Do not remove, cover, or alter any warning decals. Replace them if they are missing or unreadable.
- Ensure all safety guards and covers are installed and secure before operating the equipment.
- Never bypass safety interlocks or switches.

## SECTION 4 - GOODS RECEPTION

### 4.1 General delivery information

- The unit is shipped on a wooden pallet and securely fastened with straps.
- Use caution when handling the pallet due to the large dimensions and weight of the unit.

### 4.2 Inspection and Unpacking

Upon delivery, inspect the shipment before removing it from the carrier's vehicle.

- Check the packaging for visible signs of damage, including dents, punctures, or tipping.
- Document any damage with photographs and written notes on the bill of lading prior to accepting the shipment.
- Notify Diversitech immediately of any visible damage or missing components.

After acceptance:

- Carefully remove all packaging materials.
- Verify that the unit and all ordered accessories are present.
- Inspect the equipment for any concealed damage that may have occurred during transport.

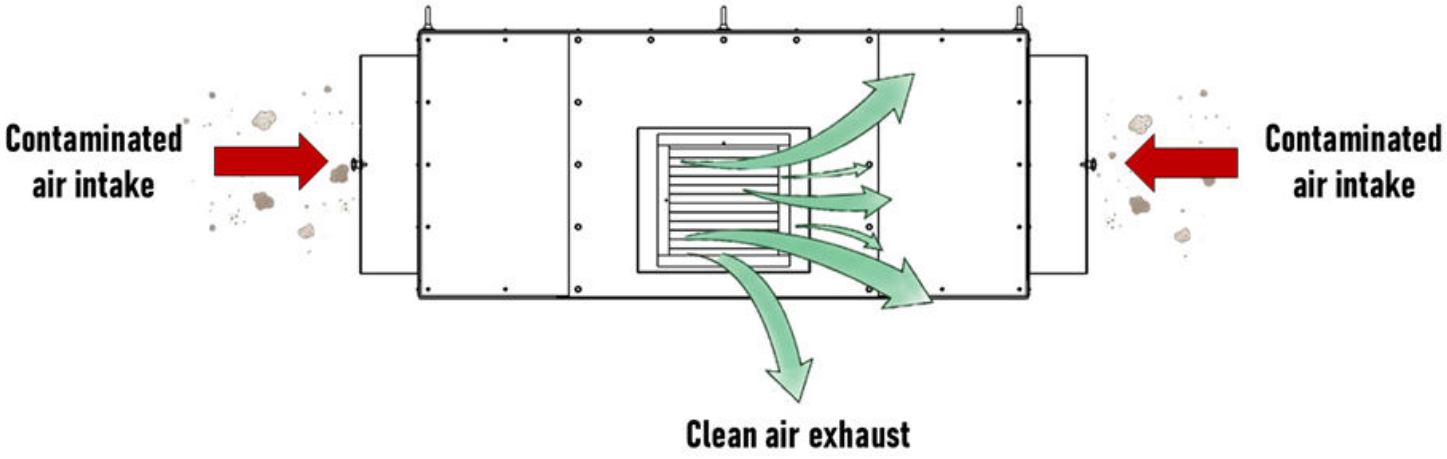
Shipping Damage Responsibility:

- If Diversitech arranged the shipment, the customer must notify Diversitech of any damage or shortages. Diversitech will coordinate directly with the carrier to resolve the issue.
- If the shipment was arranged by the customer or a third party, the owner is responsible for filing any damage or loss claims directly with the carrier.

## SECTION 5 - SYSTEM DESCRIPTION AND OPERATING PRINCIPLE

The T-STORM Ambient Air Cleaners operate using a T-configuration airflow design. The unit is a self-contained, ductless air cleaning system and does not require connection to external ductwork.

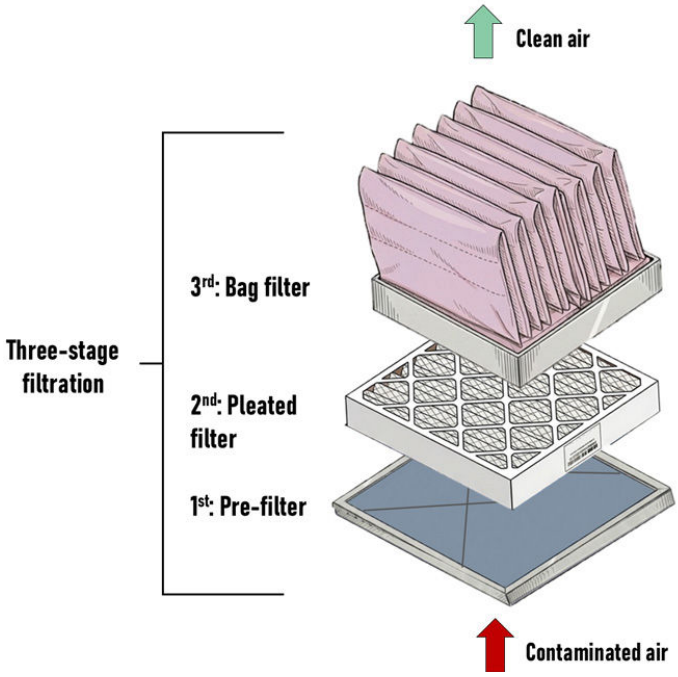
Contaminated ambient air is drawn into the unit through dual side air inlets and directed through a three-stage filtration system designed to progressively remove airborne particulate contaminants. After passing through the filtration stages, the cleaned air is discharged through the front exhaust outlet, allowing the filtered air to be recirculated back into the workspace.




Filtration Stages

Each unit utilizes a three-stage filtration system:

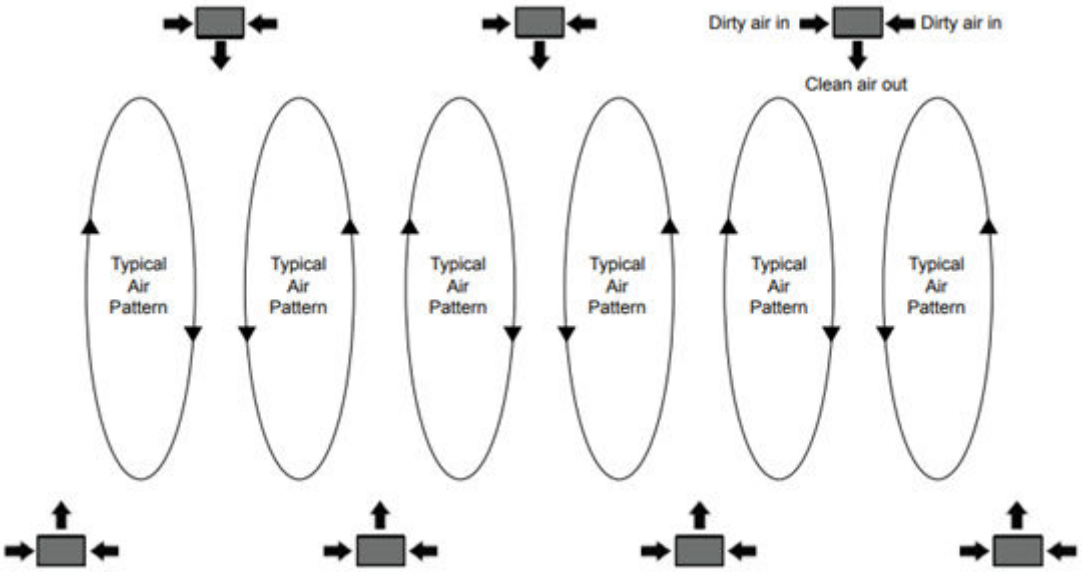
- 1st Stage: MERV 7 prefilters
  - ◊ Purpose: Capture large particles and debris, protecting the downstream filters.
- 2nd Stage: MERV 8 pleated panel filters
  - ◊ Purpose: Capture medium-sized particles and provide secondary filtration.
- 3rd Stage: MERV 14 multi-pocket bag filters
  - ◊ Purpose: Provide primary filtration by capturing fine particles, including welding fumes.



## Multi-Unit Airflow Strategy

When multiple units are installed, they should be arranged in a staggered configuration along facility walls or structural columns.

This layout allows each unit to discharge airflow toward the intake zone of the adjacent unit, creating a continuous circular airflow path across the workspace and maintaining consistent air circulation.




## Typical Applications

The T-STORM filtration system is suitable for:

- Welding smoke and fumes
- Wood dust
- Oil mist from machining operations
- Grinding dust
- General airborne particulate contaminants

# SECTION 6 - PRODUCT SPECIFICATIONS AND OPTIONS

### 6.1 Technical Specifications

**T-STORM 3000**

| Configuration | Airflow (CFM) | Motor (HP/Hz/Voltage) | Dimensions | Approximate Weight |
|---|---|---|---|---|
| Single Unit | 3000 CFM | 1.5 HP [120 V/1/60 Hz] | 82” W x 33” H x 34” D | 410 lbs |

**T-STORM 4500**

| Configuration | Airflow (CFM) | Motor (HP/Hz/Voltage) | Dimensions | Approximate Weight |
|---|---|---|---|---|
| Single Unit | 4500 CFM | 3 HP [230 V/ 3 /60 Hz]<br>3 HP [460 V/ 3 /60 Hz]<br>3 HP [575 V/ 3 /60 Hz] | 82” W x 33” H x 34” D | 480 lbs |
| Double-Stacked Unit | 4500 CFM | 3 HP [230 V/ 3 /60 Hz]<br>3 HP [460 V/ 3 /60 Hz]<br>3 HP [575 V/ 3 /60 Hz] | 82” W x 62” H x 34” D | 680 lbs |

Dimensions and weight may vary depending on selected accessories.

## 6.2 Optional Accessories

- **Wall Mount Bracket:** Allows the unit to be securely mounted to a wall structure and positioning the air cleaner at an optimal height for effective air circulation.

- **Minihelic Gauge:**

  A Minihelic gauge measures the pressure drop across the filters.

  This device allows operators to:

  - Monitor filter loading
  - Identify when filters require replacement
  - Maintain optimal airflow performance

- **HEPA Filter With Frame:**

  An optional HEPA final filtration stage provides additional high-efficiency particle removal.

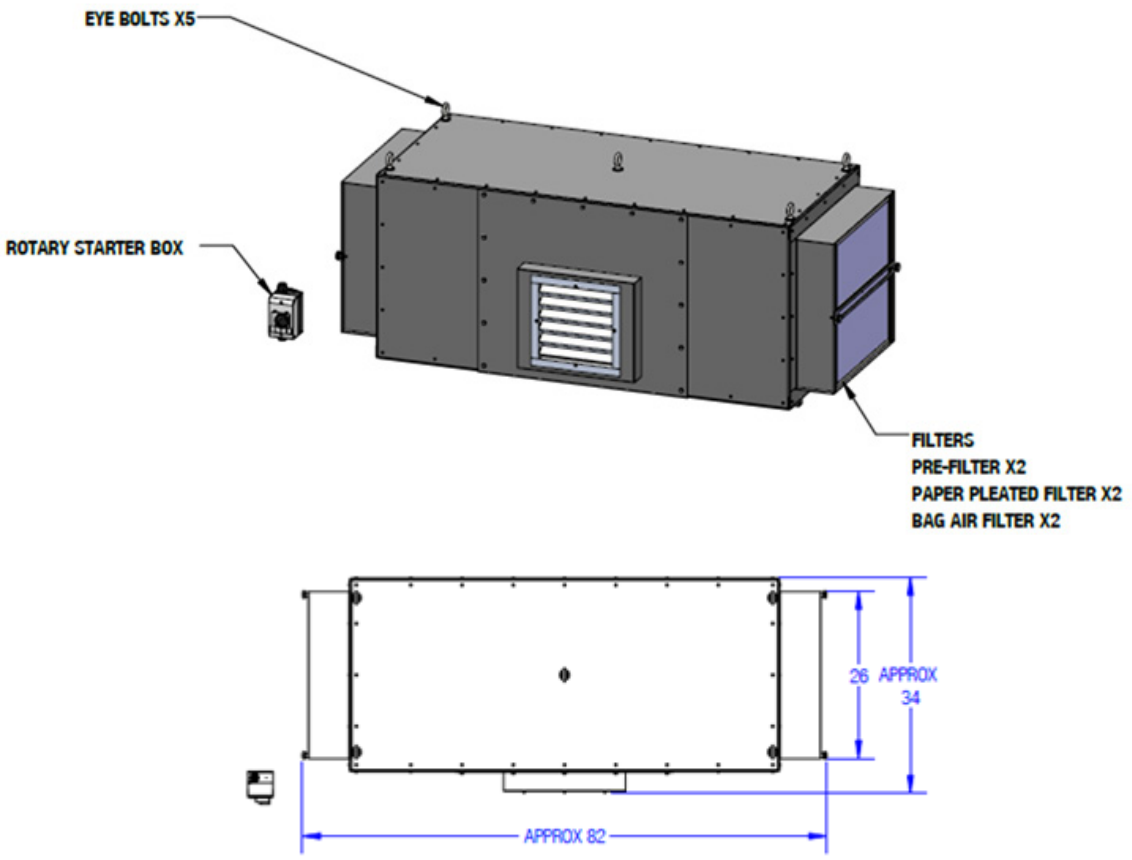
  This option:

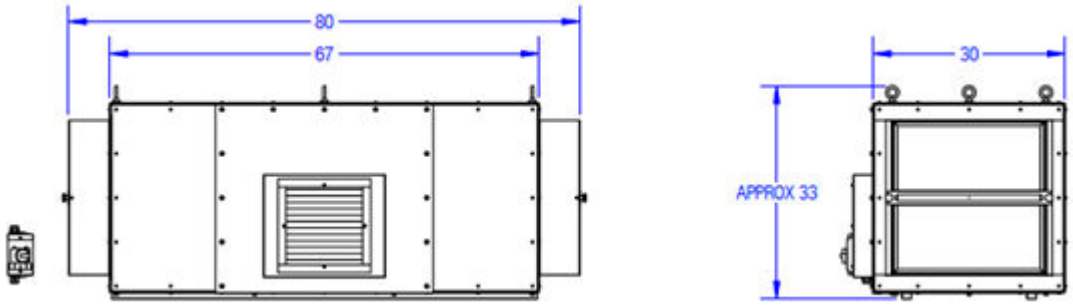
  - Captures extremely fine airborne contaminants may pass through the primary three-stage filtration system
  - Provides enhanced air quality in sensitive environments

  Installation of the HEPA filter:

  - Adds approximately 45 lb to the unit weight
  - Increases overall unit depth to 42 in. (standard depth is 34 in.)

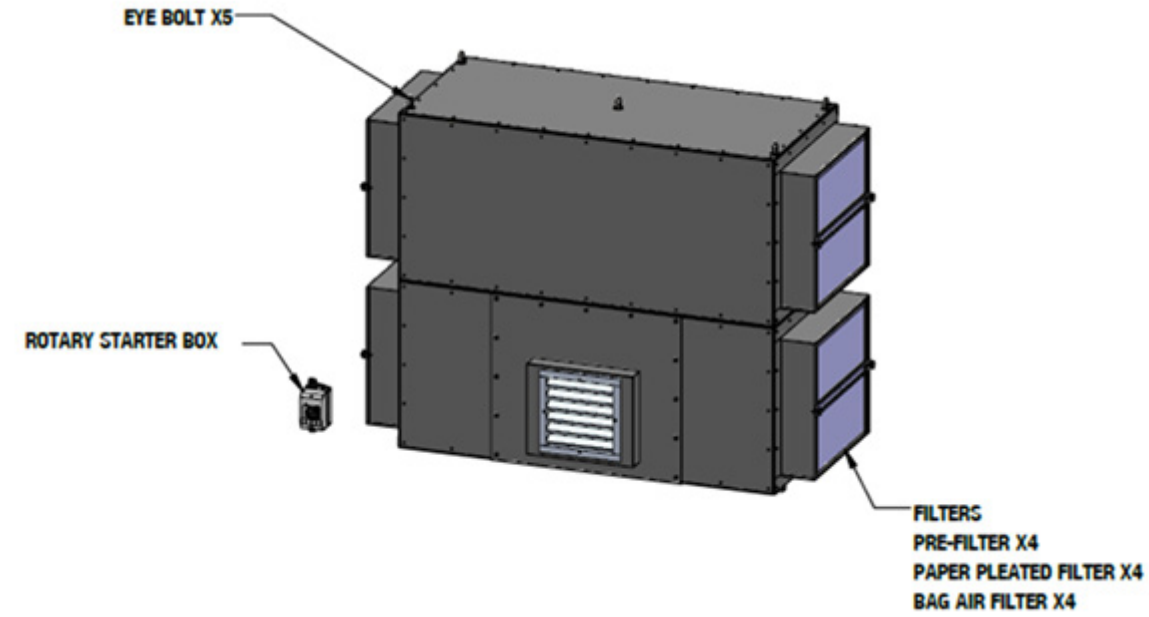
### 6.3.1 Single Unit Configuration

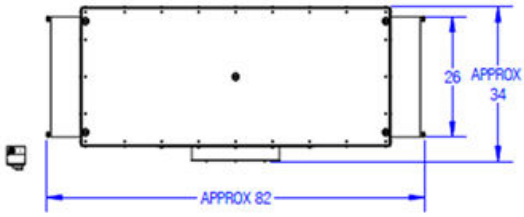


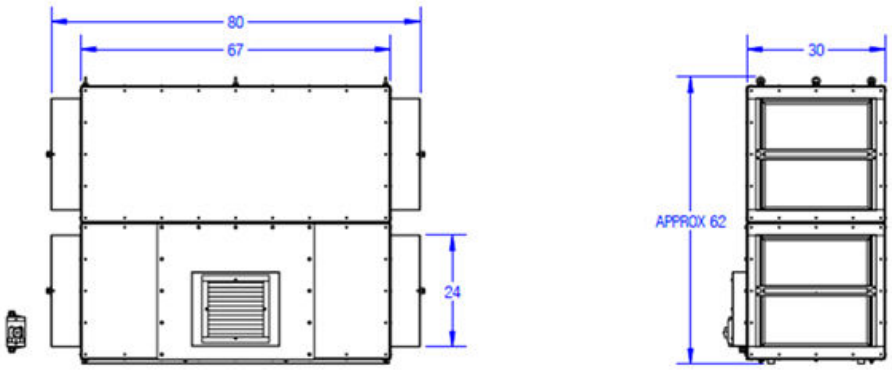



Unit of measure: inches.

6.3.2 Double-Stacked Unit Configuration

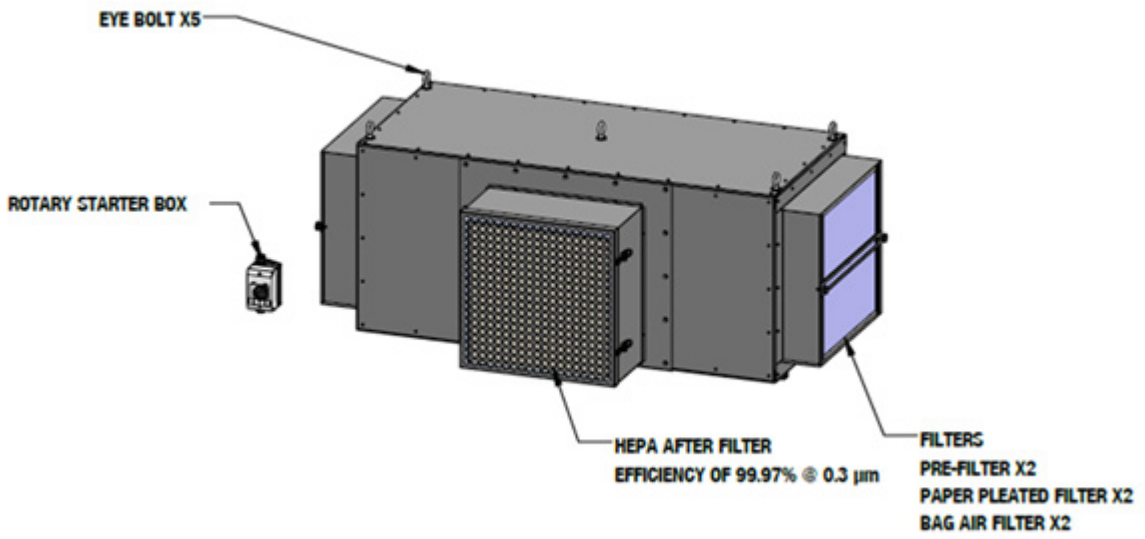


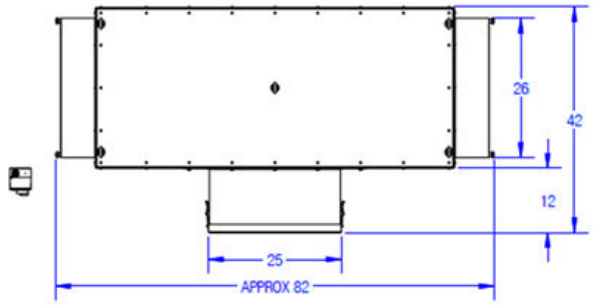



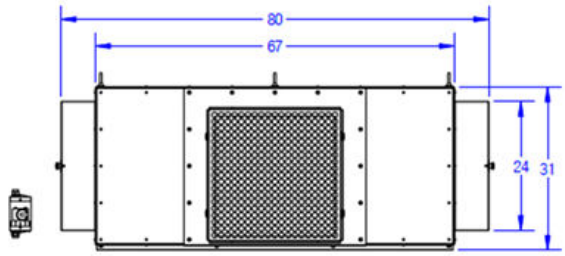



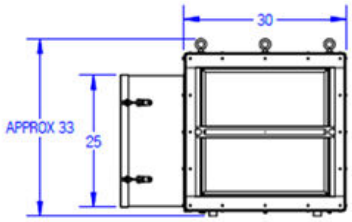

Unit of measure: inches.

6.3.3 Single Unit configuration with HEPA filter:




Unit of measure: inches.

# SECTION 7 - INSTALLATION OVERVIEW

T-STORM units may be installed using one of the following mounting methods:

- Wall mounting
- Suspension from overhead structures using factory-installed eyebolts

Units should be positioned to promote circular airflow within the facility, ensuring efficient air circulation and contaminant removal.
The mounting structure must be capable of supporting the full operating weight of the unit, including the additional weight from accumulated particulate matter within the filters.

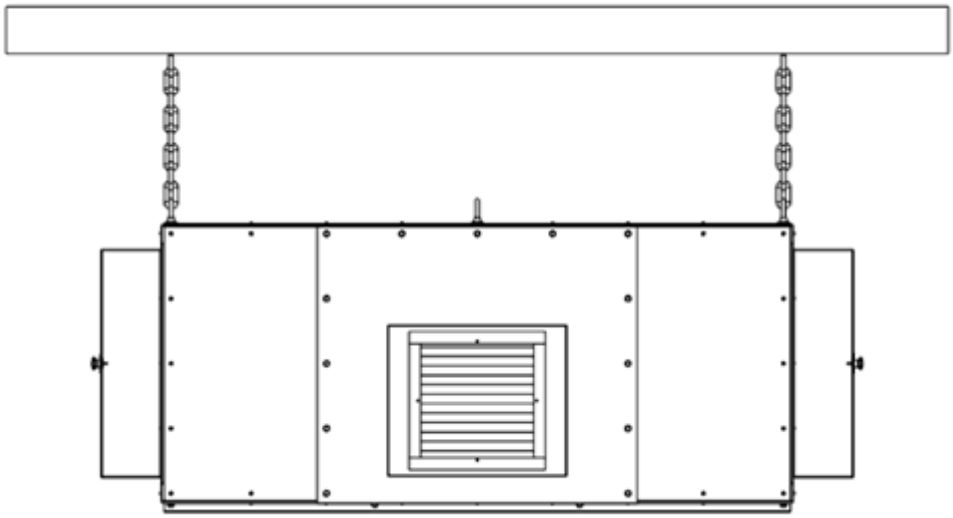
Consult local building codes to ensure appropriate installation methods and materials are used.
Failure to use proper hardware or structural support may result in:

- Equipment damage
- Personal injury
- Voidance of the manufacturer warranty

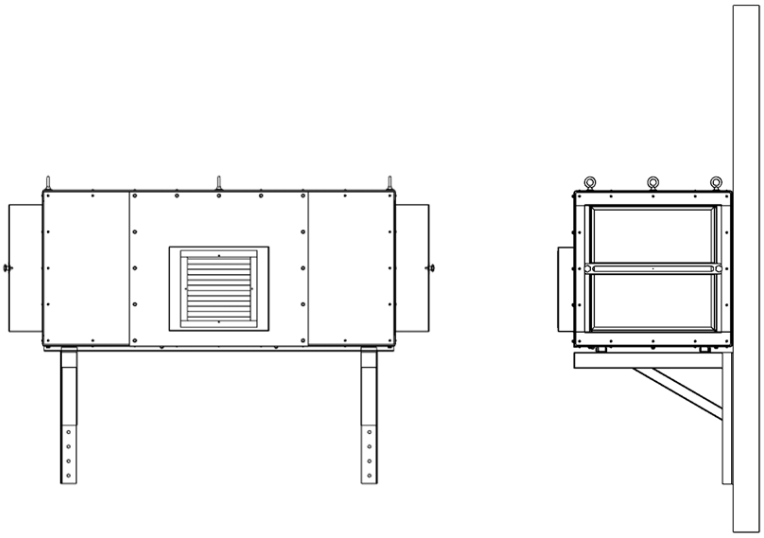
## 7.1 Single Cabinet

Two primary installation methods can be used for the ambient air cleaner:

1. Chain Suspension Mounting: The unit is suspended using chains connected to the factory-installed lifting eyebolts and attached to overhead structural supports.



2. Angle Bracket Mounting: Structural angle brackets are mounted to building supports or walls to provide rigid support for the unit.

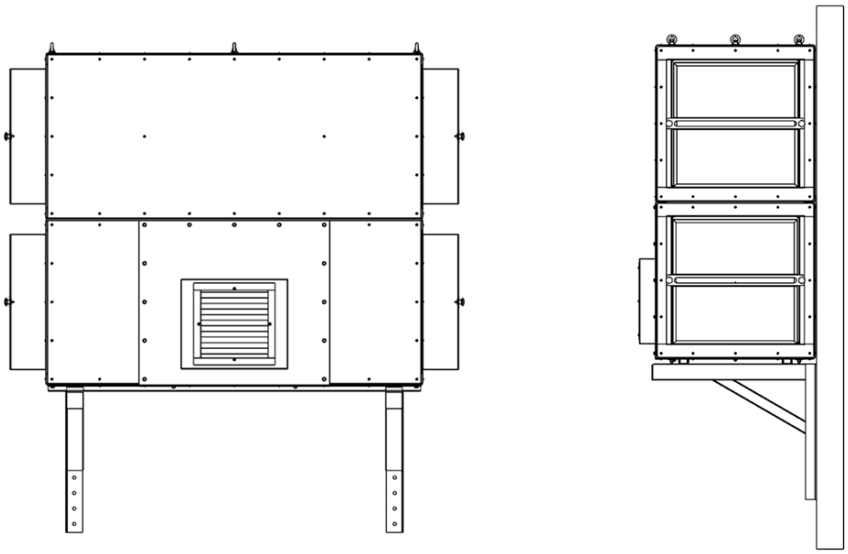


## 7.2 Double Cabinet

Double-cabinet units must not be suspended using chains.

Approved mounting methods include:

1. Angle Bracket Mounting: Structural angle brackets are mounted to building supports or walls to provide rigid support for the unit.



## SECTION 8 - ELECTRICAL CONNECTIONS

The unit is factory-wired to the rotary starter box and is supplied with a power cable terminated with a NEMA 5 plug.

Whenever possible, each motor should be powered from a separate electrical circuit with adequate capacity to minimize voltage drop during startup and operation.

If portable extension cords are used, they should be kept as short as possible and properly sized for the load. Long or undersized cords—especially when used with hard-starting loads—can cause excessive voltage drop and may result in motor damage or failure.

## SECTION 9 - STARTUP PROCEDURE

1. Inspect the Unit

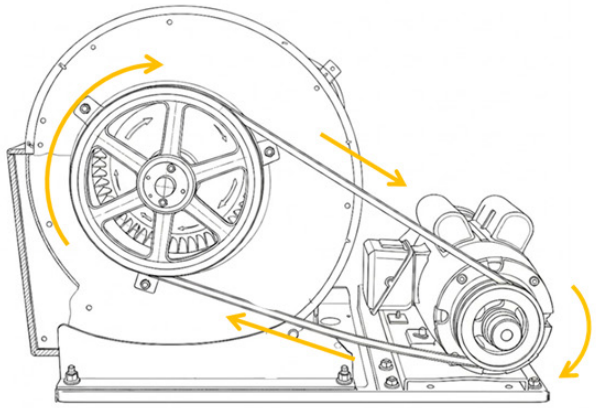
Verify that all filters are properly installed and that all access panels are closed and securely fastened.

2. Connect Power

Connect the unit to the appropriate power supply.

3. Verify Motor Rotation

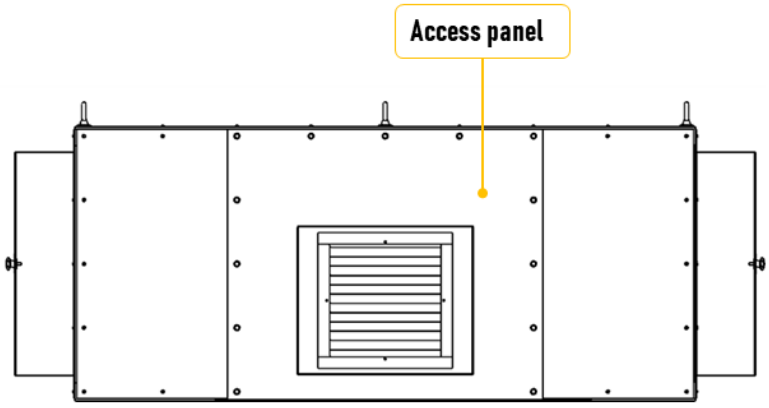
Rotation is set at the factory. Briefly start the unit and verify that the motor and blower rotate in the correct direction, as shown in the image below.

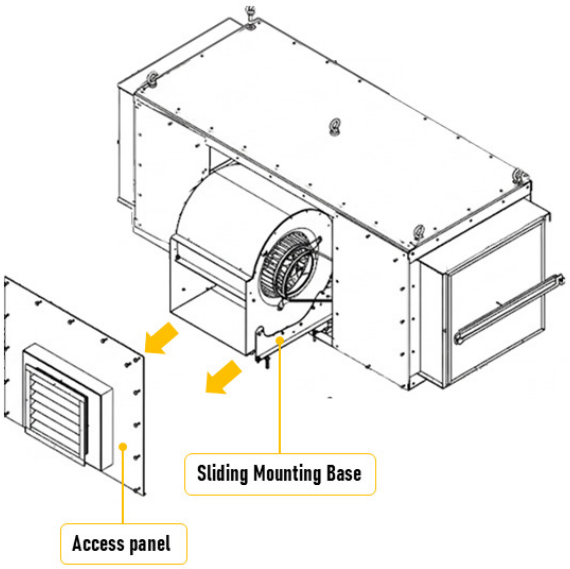


Incorrect rotation will reduce airflow, increase motor current, produce excessive noise, and may cause the motor overload protection to trip within a few minutes.

4. Correct Rotation if Required

To access the motor, remove the front access panel of the unit, then slide the motor and blower assembly out.






If the rotation is incorrect, refer to the wiring diagram on the motor nameplate and adjust the wiring accordingly.

5. Check Motor Current

After correcting the rotation, confirm that the motor is operating within its rated full-load amperage (FLA).

If you have any questions or doubts regarding installation, wiring, or operation, please contact Diversitech for assistance.

## SECTION 10 - OPERATION

- During operation, monitor airflow, noise, vibration, and pressure drop to ensure the unit is operating normally.
- If the unit is equipped with a Minihelic gauge, monitor the system pressure and replace the filter when the pressure drop exceeds 4 in. w.c.
- If the unit is not equipped with a Minihelic gauge, monitor the airflow and replace the filter if a noticeable reduction in airflow occurs.

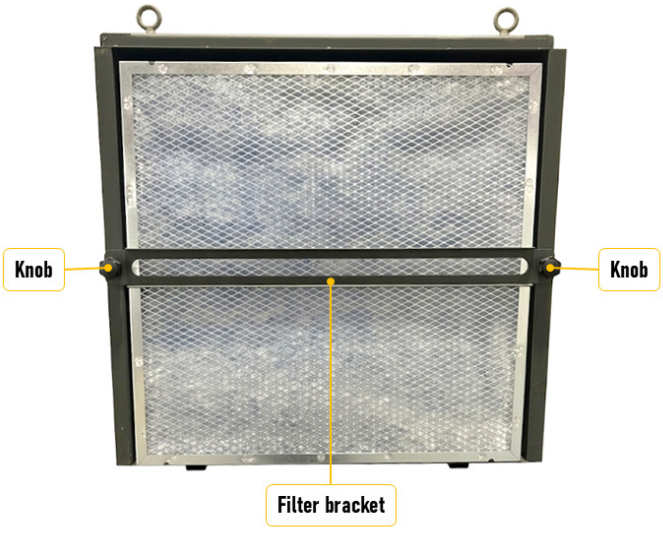
## SECTION 11 - FILTER INSTALLATION

Contact Diversitech for assistance in selecting the most suitable replacement filters for your application.

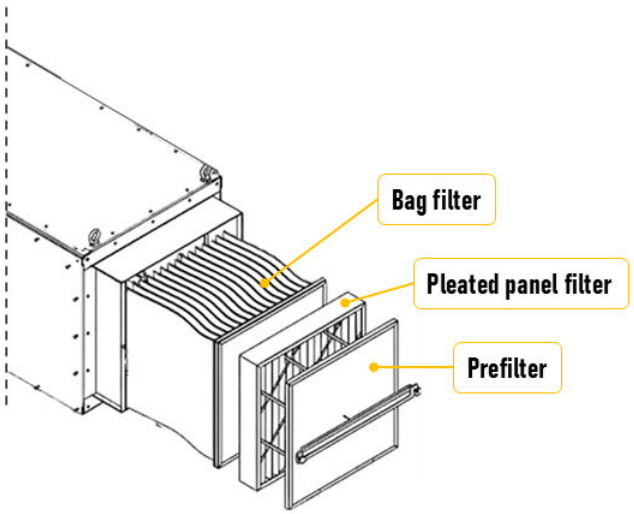
### 11.1 Three-stage filtration system

1. Disconnect all power and shut off the electrical supply to the motor.

2. Loosen the knobs and remove the filter bracket.



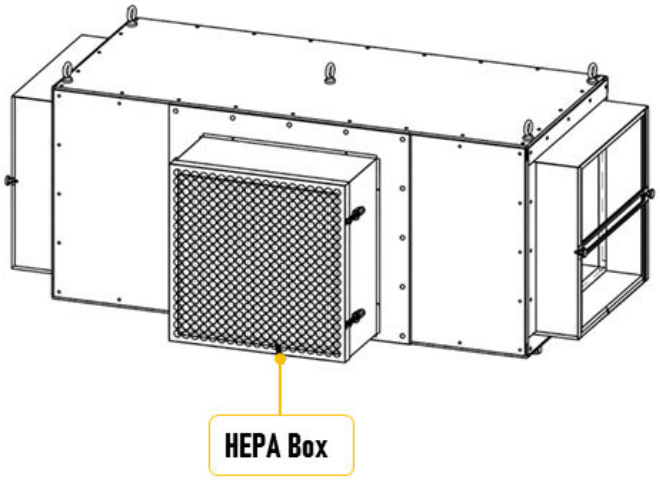
3. Remove the filters and replace them in the correct order.



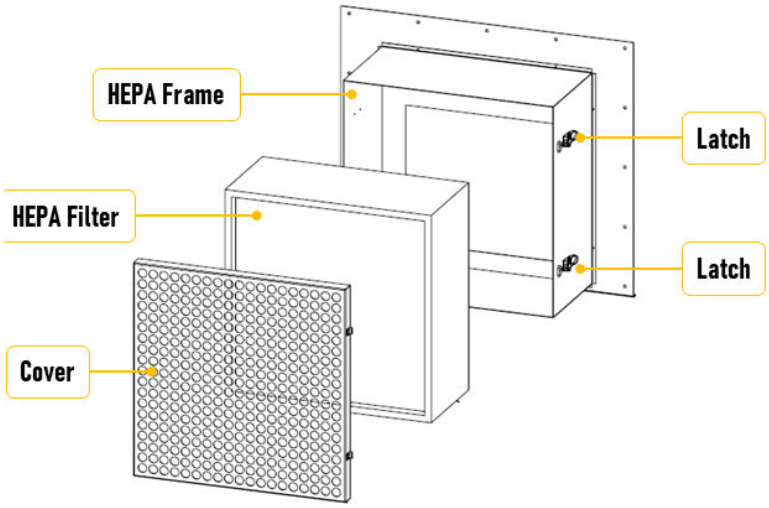

4. Reinstall the filter bracket and tighten the knobs to secure the bracket and filters in place.

## 11.2 HEPA Filter (optional):

1. Disconnect all power and shut off the electrical supply to the motor.
2. The HEPA filter is located inside the HEPA box at the front of the unit.



3. Unlatch the cover from the frame to access the HEPA filter.




4. Remove the HEPA filter and install the new filter in the correct position.

5. Close the cover and latch it securely to the frame to ensure the filter is properly sealed inside the HEPA box

## SECTION 12 - ROUTINE INSPECTION & PREVENTIVE MAINTENANCE

**Danger:** Before performing any maintenance, disconnect the power supply and allow the motor to come to a complete stop. If the motor is equipped with capacitors, ensure they are properly discharged before servicing the unit.

### 12.1 General maintenance

Remove any dirt accumulation in and around the ventilation openings using a vacuum cleaner. Dust and debris buildup can restrict airflow, causing motor overheating and creating a potential fire hazard.

Enclosed motors may also be cleaned using compressed air. When using compressed air, always wear appropriate eye protection.

### 12.2 Filter

The unit is equipped with a multi-stage filtration system. Regular inspection and timely replacement of filters are essential to maintain proper airflow, filtration efficiency, and system performance.

**a. Stage 1 — MERV 7 Prefilter**

- Inspection:
  - ◊ Perform a light test: hold the filter up to a light source to evaluate loading.

| What you see | Action |
|---|---|
| Light passes through easily | Filter is still acceptable |
| Light partially blocked | Monitor closely |
| No light passes through | Replace the filter |

- ◊ Check for visible accumulation of dust, lint, hair, or debris on the filter surface.
- ◊ Look for grey or brown matting across the media.
- ◊ Inspect for holes or tears in the filter media. Since this is the first filtration stage, any damage may allow large particles to pass through to down-

**b. Stage 2 — MERV 8 Pleated Panel Filter**

- Inspection:

◊ Hold the filter up to a light source. A new filter allows light to pass through easily, while a loaded filter significantly blocks light.

◊ Inspect the pleats for grey or brown discoloration. Uniform loading is normal; however, uneven discoloration may indicate uneven airflow distribution.

◊ Check for collapsed, bent, or torn pleats, which reduce effective filtration area and allow air bypass.

◊ Inspect the frame for moisture damage or warping, which may allow air to bypass the filter media

**c. Stage 3 — MERV 14 Bag Filter**

- Inspection:

◊ Inspect the inlet face of the filter bags. Dust or soot buildup is normal during operation.

◊ Check for holes, tears, or collapsed pockets. Any physical damage requires immediate replacement, regardless of filter loading.

◊ Inspect the sealing gasket around the frame. A damaged or deformed gasket may allow unfiltered air to bypass the filter media.

◊ Note that color change is normal. Filter bags may gradually change from pink or yellow to grey or black as they collect particles.

◊ Monitor for reduced airflow or increased pressure drop, which may indicate that the filter is approaching the end of its service life.

The service life of the Stage 3 bag filter depends greatly on the maintenance of Stages 1 and 2. Neglecting the prefilters will cause the bag filters to load rapidly and require more frequent replacement.

**d. HEPA Filter (optional)**

- Inspection:

◊ Inspect the pleated media face for visible dust buildup. Surface discoloration alone does not necessarily indicate that the filter has reached the end of its service life.

◊ Check for physical damage, including punctures, tears, or crushed pleats. Any damage requires immediate replacement.

◊ Inspect the gasket and seal around the filter frame. Proper sealing is critical for HEPA filtration; gaps, cracks, or deformation may allow unfiltered air to bypass the filter media.

◊ Monitor for reduced airflow and pressure drop: A loaded HEPA will cause a noticeable and sustained pressure drop increase across the filter stack.

**Recommended Filter Inspection and Replacement Schedule:**

| Stage | Filter | Inspect | Replace |
|---|---|---|---|
| 1 | MERV 7 Prefilter | Monthly | Every 1–2 months |
| 2 | MERV 8 Pleated | Every 2 months | Every 3–4 months |
| 3 | MERV 14 Bag | Every 3 months | Every 6–12 months |
| - | HEPA (if equipped) | Every 6 months | Every 1-3 years when properly protected by Stages 1–3 |

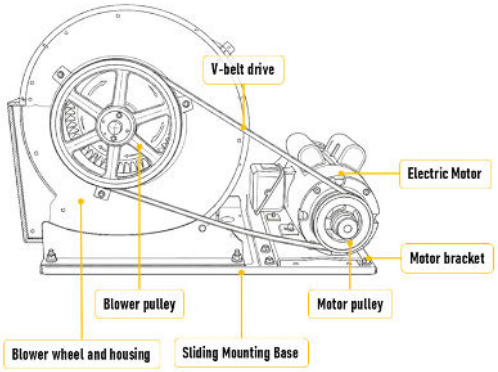
* Note: These are general recommendations. Inspection and replacement intervals may vary depending on the application and frequency of use.

## 12.3 Belt-Driven Blower-Motor assembly

The unit is equipped with a belt-driven centrifugal blower system consisting of the following main components:

- Blower wheel and housing
- Electric motor
- Motor pulley and blower pulley
- V-belt drive
- Sliding mounting base
- Motor bracket

Regular inspection and maintenance of the belt drive and blower components are required to ensure proper airflow, maintain system efficiency, and extend equipment service life.




**a.** **Belt inspection:** Inspect the drive belt regularly for signs of wear or damage.

- Check for:
  - ◊ Cracks or fraying on the belt surface
  - ◊ Glazing or shiny belt surfaces (indicates slipping)
  - ◊ Uneven belt wear
  - ◊ Loose belt tension

- Recommended action:
  - ◊ Replace belts if any damage or excessive wear is observed.

**b.** **Belt tension:** Improper belt tension can lead to slipping, reduced airflow, and premature bearing failure.

- Inspection:
  - ◊ Press the belt midway between the motor pulley and blower pulley.
  - ◊ The belt should deflect slightly under moderate pressure.

- Adjustment:
  - ◊ Loosen the motor mounting bolts.
  - ◊ Slide the motor on the adjustment base to achieve proper belt tension.
  - ◊ Retighten all mounting bolts securely after adjustment.

**c.** **Pulley Alignment:** Misaligned pulleys cause belt wear, vibration, and noise.

- Inspection:
  - ◊ Check that the motor pulley and blower pulley are aligned.
  - ◊ Use a straight edge across both pulley faces to confirm alignment.

- Adjustment:
  - ◊ Adjust the pulley position on the shaft if misalignment is detected.
  - ◊ Tighten all set screws after alignment.

**d.** **Blower Wheel Inspection:** Inspect the blower wheel for contamination or damage.

- Check for:
  - ◊ Dust buildup on the blades
  - ◊ Debris lodged in the wheel
  - ◊ Bent or damaged blades

- Recommended action:
  - ◊ Adjust the pulley position on the shaft if misalignment is detected.
  - ◊ Tighten all set screws after alignment.

Accumulated debris may cause imbalance, vibration, and reduced airflow

**e. Motor inspection:** Inspect the motor during routine maintenance.

- Check for:
  - ◊ Excessive vibration or noise
  - ◊ Overheating
  - ◊ Loose mounting bolts
  - ◊ Electrical connection integrity

Ensure the motor operates within its rated full-load amperage (FLA).

**f. Fasteners and Mounting Hardware:** Periodically inspect all mounting hardware.

- Check for:
  - ◊ Motor mounting bolts
  - ◊ Blower housing bolts
  - ◊ Base frame fasteners

Tighten any loose hardware to prevent vibration and mechanical damage.

**Recommended Maintenance Schedule:**

| Component | Inspection Interval | Maintenance Action |
|---|---|---|
| Drive belt | Monthly | Inspect for wear and proper tension |
| Pulley alignment | Every 3 months | Verify alignment |
| Blower wheel | Every 3–6 months | Clean if required |
| Motor | Every 6 months | Inspect operation and mounting |
| Hardware | Every 6 months | Tighten bolts and fasteners |

## SECTION 13 - REPLACEMENT PARTS

**T-STORM 3000 unit replacement parts**

| Part Number | Description |
|---|---|
| 10002888 | Pleated Prefilter, 24 x 24 x 4 |
| 10002886 | Bag Filter |
| 10003052 | Holding Frame for Filter Saver Pad 24 X 24 |
| 10003092 | Filter Saver Pad. 24 x 24 x 2 Thick |
| 10002953 | Filter Saver Roll 27 x 2 x 75 ft. |
| 10001885 | Motor 1.5 HP [115–230 V / 1 / 60 Hz] |
| 10004867 | Blower Assembly |
| 10002115 | Manual Rotary Starter Enclosure |
| 10002122 | Manual Starter Overload Contactor, 10-16 A |
| 10003845 | Extra-Grip Shaft Collar, for 5/8 in. Diameter |
| 10004776 | Pulley 10 in. OD, For 1 in. Shaft Dia. |
| 10004709 | Pulley 4.95 in. OD, For 5/8 in. Shaft Dia |
| 10004704 | V-Belt. 60 in. Outer Circumference |
| 10005351 | Minihelic Gauge |

**T-STORM 4500 & T-STORM X2 unit replacement parts**

| Diversitech PN | Sell Description |
|---|---|
| 10002888 | Pleated Prefilter, 24 x 24 x 4 |
| 10002887 | Bag Filter |
| 10003052 | Holding Frame for Filter Saver Pad  24 x 24 |
| 10003092 | Filter Saver Pad. 24 x 24 x 2 Thick |
| 10002953 | Filter Saver Roll 27 x 2 x 75 ft. |
| 10001874 | Motor 3 HP [575 V / 3 / 60 Hz] |
| 10001873 | Motor 3 HP [230–460 V / 3 / 60 Hz] |
| 10004865 | Blower Assembly |
| 10002115 | Manual Rotary Starter Enclosure |
| 10002118 | Manual Starter Overload Contactor, 2.5-4 A |
| 10002119 | Manual Starter Overload Contactor, 4-6 A |
| 10002120 | Manual Starter Overload Contactor, 6-10 A |
| 10003846 | Extra-Grip Shaft Collar, for 7/8 in. Diameter |
| 10004776 | Pulley 10 in. OD, For 1 in/ Shaft Dia. |
| 10004593 | Pulley 4.95 in. OD, For 7/8 in. Shaft Dia |
| 10004704 | V-Belt. 60 in. Outer Circumference |
| 10005351 | Minihelic Gauge |

## SECTION 14 - TROUBLESHOOTING

| Symptom | Possible Cause(s) | Corrective Action |
|---|---|---|
| Excessive noise | 1. Blower wheel contacting housing<br>2. Foreign material inside blower housing<br>3. Motor shaft misalignment<br>4. Loose, defective, or out-of-balance fan blade or blower wheel | 1. Realign or replace components as necessary<br>2. Remove debris and clean the blower housing<br>3. Realign the motor shaft and pulleys<br>4. Tighten set screws; repair or replace the fan blade or blower wheel |
| Excessive vibration | 1. Loose mounting bolts or hardware<br>2. Blower wheel imbalance due to dirt buildup<br>3. Misaligned pulleys<br>4. Worn motor or blower bearings | 1. Tighten all mounting hardware<br>2. Clean the blower wheel<br>3. Align motor and blower pulleys<br>4. Inspect and replace bearings if necessary |
| Insufficient airflow | 1. Obstruction in the system<br>2. Clogged filters | 1. Remove obstruction<br>2. Replace filters |
| Excessive airflow | 1. Filters not installed<br>2. Filter bypass or improper installation | 1. Install filters properly<br>2. Verify filters are properly seated and sealed in the filter rack |
| Unit fails to operate | 1. Blown fuse on the power supply<br>2. Tripped circuit breaker on the power supply<br>3. Defective motor | 1. Check and replace the blown fuse on the incoming power supply line. Power spikes from the supply side will blow the fuse to protect the unit<br>2. Reset the circuit breaker on the incoming power supply. If it trips again, contact the local power provider to investigate<br>3. Repair or replace motor |
| Motor fails to start | 1. Low voltage at motor terminals due to line voltage drop<br>2. Improper electrical connections<br>3. Motor overload<br>4. Motor's capacitor may be faulty | 1. Increase wire size and check for poor connections; consult the local power provider if necessary<br>2. Verify wiring against the motor wiring diagram<br>3. Identify and reduce any excessive load on the motor, reset the thermal overload relay, and check for low voltage or high ambient temperature as contributing factors<br>4. Test the capacitor with a multimeter and replace it if it is found to be faulty or weak |
| Motor does not reach full speed | 1. Low voltage at motor terminals<br>2. Excessive starting load<br>3. Excessive mechanical load or belts too tight/ loose | 1. Check for loose or corroded electrical connections, verify that the supply voltage from the power provider matches the motor's rated voltage, and ensure no other high-demand equipment is sharing the same circuit and causing voltage drop<br>2. Verify the starting load on the motor<br>3. Reduce load and adjust belt tension |
| Belt slipping or excessive belt wear | 1. Belt tension too loose<br>2. Misaligned pulleys<br>3. Worn or damaged belt<br>4. Oil or contamination on belt | 1. Adjust belt tension<br>2. Align motor and blower pulleys<br>3. Replace belt<br>4. Clean pulleys and replace contaminated belt |

## SECTION 15 - WARRANTY

Diversitech warrants its products for 2 years from the date of purchase against defects in material, workmanship, or construction, provided the product remains in its original form and is serviced or maintained using only original Diversitech parts and consumables. Any modifications, additions, or use of non-original parts will void this warranty.

During the warranty period, Diversitech will, at its discretion, repair or replace any defective parts. This warranty is limited to replacement parts only and does not cover personal injury, property damage, normal wear, or issues caused by improper installation, inadequate maintenance, misuse, misapplication, operation beyond rated capacities, or any customer modifications.

# Terms and Conditions to Sales Orders

**1. INTERPRETATION**

1.1. All references to “we”, “us” or “our” herein mean Diversitech Equipment and Sales (1984) Ltd.

1.2. All references to “you” or “your” herein mean:

(a) the “Customer” referred to herein and in the Sales Order joining these presents (such Sales Order together with any amendments, supplements and additional agreements related thereto and all annexes and schedules in respect thereof, collectively the “Sales Order”); and

(b) any affiliates and any party related, whether directly or indirectly, to such “Customer”.

**2. LIMITED WARRANTY AND LIABILITY**

2.1. All units and equipment sold by us to you (collectively “Units”) pursuant to the Sales Order are warranted to be free from defects in material for a period of 2 years from the date of purchase (the “Warranty Period”).

2.2. We expressly exclude all warranties whatsoever, other than those included at Section hereof, express or implied, legal or conventional, including, without limitation, any and all warranties of quality, merchantability and fitness for a particular purpose.

2.3. We will repair or replace, at our discretion, any defective parts that fail during the Warranty Period. The client will be responsible to return defective parts to the manufacturer’s plant with freight prepaid. This warranty is limited to replacement parts ONLY, subject to on-site or in- house evaluation of defective materials and does not apply to any personal liability or property loss that occurs due to the use or installation of this equipment.

2.4. During the Warranty Period, prior to any warranty work being effected, any such work must be pre-approved by us by sending a request to us at service@diversitech.ca in the prescribed warranty claim form available on our website at •. All such work must be completed by us or a party expressly authorized by us. We may charge you any costs, expenses and disbursements incurred by us to effect such work, the whole in our entire discretion.

2.5. In the event that you direct a third-party to complete any service or warranty work during the Warranty Period and:

(a) the authorization and approval pursuant to Section **2.4** hereof has been received but such third-party has not been expressly authorized by us to complete such work; or

(b) the authorization and approval has not been received pursuant to Section **2.4** hereof, then any costs, expenses and disbursements of such third-party for such work shall be borne entirely by you.

2.6. Any repair, rework or modifications of any sort, including, without limitation, modifications to software, hardware and components, not authorized by us or completed by anyone other than us, or a party authorized by us, will void the warranty set forth at Section **2.2** hereof.

2.7. To the extent that any Units are integrated with any products, equipment, units, connections and/or systems of a third-party (“Third-Party Products”), we hereby expressly exclude all of the following warranties, express or implied, namely:

(a) warranty against defects of any kind (latent or apparent), fitness for purpose, merchantability or functionality to the extent of any such Third-Party Products; and

(b) any warranty against any defects or problems of any kind, whether latent or apparent, in respect of Units or a Third-Party Product, caused or arising directly or indirectly as a result of the integration with or use of Units in connection with any Third-Party Product.

2.8. You hereby expressly waive and renounce to any and all claims against us relating to loss of profits, loss of business or goodwill, interruption of business and all indirect, special, incidental or consequential damages of any kind whether arising from or in connection with the Sales Order or from the use of Units, however caused, and whether in the nature of breach of obligations, breach of warranty, repudiation of contract, tort, negligence (save in the event of gross negligence or intentional fault) or otherwise. Accordingly, save in the event of gross negligence or intentional fault, we shall have no liability whatsoever towards you under these presents or the Sales Order for any losses or damages, direct or indirect, consequential, exemplary, incidental or otherwise, regardless of whether we received advanced notice or were advised of the possibility of such claim, loss or damage.

2.9. You are solely responsible for:

(a) determining if Units fit your particular purpose and are suitable for your designated process, application, fitment, tooling, set-up and uses(s); and

(b) all hazards associated with your processes, products and ingredients, regardless of whether the hazards relate to fire, explosion, material handling, expo sure to harmful dusts, fumes or other contaminants, or any other hazard that poses a risk to persons or property.

2.10. Unless otherwise expressly agreed and indicated and without limiting any of the foregoing, we do not provide any guarantee or warranty with respect to compliance with process safety, environmental health and safety or codes and standards.

2.11. Without limiting any of the foregoing, you hereby undertake to indemnify and hold us harmless and you agree to fully indemnify and defend us, at your sole cost and expense, against any and all present and future, actual, potential, contingent or threatened suits, actions or claims, of any nature or source whatsoever, which may, at any time, be made or asserted against us by any person, including, without limitation, your employees (current or former), contractors, representatives or any third-party, directly or indirectly, for any reason whatsoever, related to and/or arising from exposure to emissions, dust, fumes, pollutants or noxious substances from your processes, materials, ingredients, systems or improper use of Units.

**3. FREIGHT CLAIMS**

3.1 Shipments must be inspected by you upon arrival. All Units are sold ex-plant. Therefore, it is the receiver's responsibility to file any freight claims with the carrier for obvious or concealed damages. Damaged shipments must be refused at the time of receipt.

**4. RETURN MATERIAL POLICY**

4.1 Prior to the return of material, for whatever reason, a return merchandise authorization number ("**RMA#**") is required from our customer service department. This procedure is necessary for proper control and handling of returned materials. Call **1-800-361-3733** or email **support@diversitech.ca** to obtain a RMA #. Credit will be given for returns for warranty repair or replacement. It is the shipper's responsibility to ensure that material being returned to us is adequately packaged for shipment in order to prevent damages.

**5. FEES AND CANCELLATION CHARGES**

5.1 You will be responsible for any additional charges and fees not expressly included in the Sales Order, including, without limitation, any fees or charges relating to installation, service calls, consulting, installation, customization, "right-sizing", engineering, maintenance and/or repair. For greater certainty, unless expressly provided in the Sales Order, we do not provide you with any form of service with respect to Units, including, without limitation, installation, repair and maintenance services

5.2 In the event that you:

(a) cancel the Sales Order at any time whatsoever, including, without limitation, prior to shipment;

(b) refuse to honour the Sales Order; or

(c) fail to take possession of any Units for any reason whatsoever,

you will be responsible for reimbursement to us of any and all costs, expenses and charges we have incurred to date.

5.3 In the event that:

(a) the Sales Order is for a customized product, including, without limitation, any custom engineered product; and

(b) an event set forth at Section **5.2** hereof occurs,

you will be responsible for payment of the entire amount of the Sales Order in addition to the reimbursement set forth at Section **5.2** hereof.

**6. JURISDICTION AND ATTORNMENT**

6.1. The interpretation, validity and enforcement of these presents and the Sales Order shall be subject to and governed by the laws of the Province of Quebec and the laws of Canada applicable therein.

6.2. The parties hereto expressly submit, attorn and consent to the exclusive jurisdiction of the appropriate Court for the District of Montreal, Province of Quebec, with respect to any controversy arising out of or relating to these presents and the Sales Order, or any supplement hereto or to any transactions in connection therewith. To the extent permitted by applicable law, you irrevocably waive any objection (including any claim of inconvenient forum) that you may now or here after have to the venue of any legal proceeding arising out of or relating to these presents and the Sales Order in such courts.

**7. GENERAL**

7.1. If any provision of these presents or the Sales Order shall be held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall in no way be affected or impaired thereby.

7.2. These presents and the Sales Order shall be binding upon and inure to the benefit of the parties' respective successors and assigns.

7.3. The parties hereto acknowledge that they have requested and are satisfied that the foregoing as well as the Sales Order and all notices, actions and legal proceedings be drawn up in the English language. / Les parties à cette convention reconnaissent qu'elles ont exigé que ce qui précède ainsi que le « Sales Order » et tous avis, actions ou procédures légales soient rédigés et exécutés en anglais et s'en déclarent satisfaites.

For full product support, visit our website;

DIVERSITECH

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