



# LIDMAT™

Stormwater Filtration System



## Installation Guide

**Manufacturer:**

ACF Environmental  
2831 Cardwell Road  
Richmond, Virginia 23234  
Phone: (800) 448-3636

**Local Distributor:**

California Filtration Specialists  
11021 Via Frontera, Suite E  
San Diego, California 92127  
Phone: (858) 705-6483





## Caution:

*The **LIDMAT** should be installed by trained individuals who are familiar with all confined space entry, disposal procedures and traffic safety regulations.*

## 1.0 Introduction

A **LIDMAT**<sup>™</sup> filtration system is an economical, customizable filter that can be deployed in drainage infrastructure such as catch basins, vaults, manholes, trench drains, open channels, etc. The **LIDMAT** filters are designed to filter stormwater runoff through downflow, upflow or horizontal flow-through configurations.

All filters are shipped fully assembled and ready for installation.



## 2.0 Tools Required

- A. Regular mandated safety devices (eye protection, skin protection, work gloves, etc.)
- B. Manhole cover or grate lifting tool (hook, bar, etc.)
- C. Cleaning materials (broom, scraper, trash bag, vacuum) to remove any existing sediment and debris.
- D. Lifting equipment to safely lift and place filter mats into position

## 1.0 Delivery, Storage, and Handling

- A. The **LIDMAT** stand-alone systems are ordered by length, height, and width. Each length of **LIDMAT** has a unique serial number that is on the order tag. This will also identify the way that the **LIDMAT**S are connected to the inlet or



other **LIDMATS** in the system. The tags will also specify if there is a custom or specialized fabric or media selection.

- B.** The quality and composition of all system components and all other appurtenances and their assembly process shall be subject to inspection upon delivery and acceptance of the system at the work site.
- C.** Protect all materials from damage during delivery and store UV sensitive materials under tarp to protect from sunlight including all plastics, when time from delivery to installation exceeds two days. Storage should occur on smooth surfaces, free from dirt, mud and debris.
- D.** **LIDMAT** with **LIDMIX** media should be covered and kept dry until it is property installed and inspected.
- E.** Handling is to be performed with equipment appropriate to the materials and site conditions, and may include hand, handcart, forklifts, extension lifts, etc.

## 2.0 Project Conditions

- A.** Review installation procedures and coordinate installation with other work affected, such as grading, excavation, utilities, construction access, and erosion control.
- B.** Cold Weather
  - 1. Do not use frozen materials mixed or coated with ice or frost. Care must be taken when handling in air temperature that is 32 degrees or below as the mats become less flexible and difficult to set in position.
  - 2. Do not build on frozen ground or wet, saturated, or muddy subgrade.
- C.** Protect partially completed installation against damage from other construction traffic when work is in progress and following completion of backfill by establishing a perimeter with highly visible construction tape, fencing, or other means until construction is complete.
- D.** Soil stabilization of the surrounding site must be complete before the filtration system can be brought online. Soil stabilization occurs when 90% of the site has been paved or vegetated. Temporary erosion and/or sedimentation prevention measures shall be implemented to reduce the possibility of significant sediment load on the media.

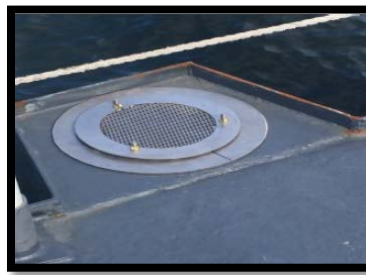


*Note: These products are post construction Best Management Practices and should only be installed after all construction BMP controls are installed and the site is stabilized.*

### 3.0 Installing LIDMATS

- A. Installation is to be performed only by qualified personnel trained in confined space entry and drainage utility construction.
- B. If the installation is in an area with vehicular traffic, local and state traffic safety precautions should be strictly adhered to including, but not limited to correct cone placement, signage and flaggers.
- C. Begin by removing the manhole access covers located over the inlet forebay, filtration deck and effluent chamber. Allow several minutes for the system to vent.

*CAUTION: Grates can be extremely heavy. Some type of lifting mechanism is highly recommended.*

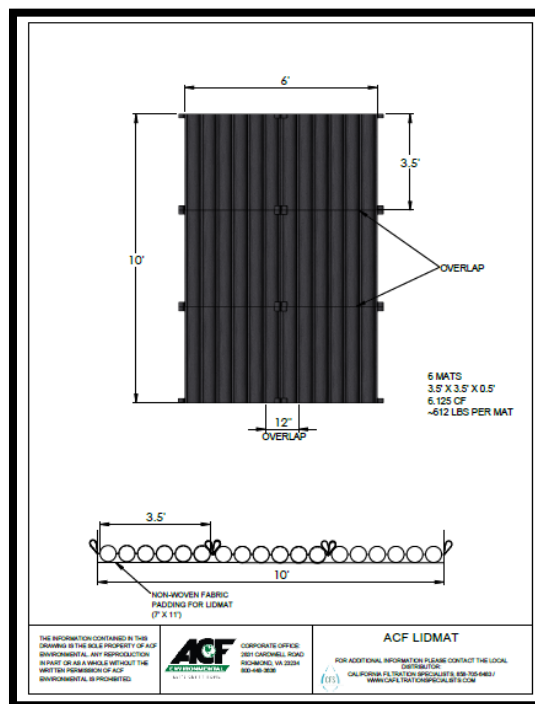


- D. Visually inspect all chambers for heavy sediment, trash and debris loading. A battery powered flashlight or droplight is recommended for thorough inspection.
- E. All structures and surfaces where a **LIDMAT** is installed must be clean of debris, dirt, oils and greases, and other potential contaminants
- F. All liquid, oils, sediment, debris, trash and other accumulates removed from the vault must be handled and disposed of in accordance with local, state and federal regulations. Solid waste disposal can typically be coordinated with a local landfill, whereas liquid waste can be disposed of at either a wastewater treatment plant, or a municipal vacuum truck decant facility.
- G. Installation commencement constitutes acceptance of existing conditions and responsibility for satisfactory performance. If existing conditions are found to be unsatisfactory, contact the Project Manager or Engineer for resolution prior



to installation. Proper documentation and inspection records should be provided.

- H.** Once the vault is clear, place the **LIDMATS** in the configuration as designed. Make note of the pick weights as the size and weight of the mats can vary with some being 25 lbs and some greater than 250 lbs. Attach lifting equipment to the lifting straps that are attached to the filter and proceed with placing mats as shown on the plans.
- i.** Reference the prepared plans, layout drawings or approved shop drawings for proper layout of filter material (example below). Ask a California Filtration Specialists Representative for a site-specific layout detail of the **LIDMATS**.



- ii.** **LIDMATS** may be designed with a Velcro strip to attach to a corresponding **LIDMAT**. Check the site-specific layout detail for more information.

## 4.0 Activate LIDMATS

- A.** The Manufacturer recommends flushing the **LIDMATS** with water once the units are installed (water volume equal to at least 0.25 to 0.5 times the media volume or until the color of the discharge is clear).



- i. The **LIDMAT** is filled with a proprietary media blend for pollutant removals. There are tannins within the blend and once the **LIDMATS** encounter a flow of water, the tannins will drain out. Per the Manufacturer's lab and field tests, the water will first appear brown. The activation process flushes and reduces the coloration until the discharge is clear.
- B. Once the activation is complete, carefully put the manhole cover or grate back in place.

*Note: Non-stormwater discharges during a LIDMAT activation should occur in accordance with local, state and federal stormwater regulations.*

## 5.0 Maintenance

- A. See the Maintenance Manual for the Manufacturer's recommended maintenance activities once the **LIDMATS** are installed and activated.

## 6.0 Technical Support

- A. Contact the Manufacturer, with any questions on proper installation:

**ACF Environmental**

Telephone: (800) 448-3636

2831 Cardwell Rd

Richmond, VA 23234

- B. Contact the local Value Added Reseller of LIDMAT with any questions on proper installation:

**California Filtration Specialists**

Telephone: (858) 705-6483

11021 Via Frontera, Suite E

San Diego, CA 92127

[www.cafiltrationspecialists.com](http://www.cafiltrationspecialists.com)