



INSTALLATION, OPERATION, AND MAINTENANCE MANUAL
WELKER® ATMOSPHERIC EXHAUST FILTER



MODEL
AEF-1

DRAWING NUMBER
AD837BA

MANUAL NUMBER
IOM-180

REVISION
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IMPORTANT SAFETY INFORMATION

READ ALL INSTRUCTIONS



Notes emphasize information and/or provide additional information to assist the user.



Caution messages appear before procedures that could result in damage to equipment if not observed.



Warning messages appear before procedures that could result in personal injury if not observed.

This manual is intended to be used as a basic installation and operation guide for the Welker® OdorEyes® Atmospheric Exhaust Filter, AEF-1. For comprehensive instructions, please refer to the IOM Manuals for each individual component. A list of relevant component IOM Manuals is provided in Appendix A of this manual.

The information in this manual has been carefully checked for accuracy and is intended to be used as a guide for the installation, operation, and maintenance of the Welker® OdorEyes® equipment described in this manual. Correct installation and operation, however, are the responsibility of the end user. Welker reserves the right to make changes to this manual and all products in order to improve performance and reliability.

BEFORE YOU BEGIN

Read these instructions completely and carefully.

IMPORTANT - Save these instructions for local inspector's use.

IMPORTANT - Observe all governing codes and ordinances.

Note to Installer - Leave these instructions with the end user.

Note to End User - Keep these instructions for future reference.

Installation of this Atmospheric Exhaust Filter is of a mechanical nature.

Proper installation is the responsibility of the installer. Product failure due to improper installation is not covered under the warranty.

If you received a damaged Atmospheric Exhaust Filter, please contact a Welker® representative immediately.

Phone: 281.491.2331

Address: 13839 West Bellfort Street
Sugar Land, TX 77498

SECTION 1: PRODUCT INFORMATION

1.1 Introduction

We appreciate your business and your choice of Welker® products. The installation, operation, and maintenance liability for this equipment becomes that of the purchaser at the time of receipt. Reading the applicable *Installation, Operation, and Maintenance (IOM) Manuals* prior to installation and operation of this equipment is required for a full understanding of its application and performance prior to use.*

If you have any questions, please call Welker at 1-281-491-2331.

**The following procedures have been written for use with standard Welker® OdorEyes® parts and equipment. Assemblies that have been modified may have additional requirements and specifications that are not listed in this manual.*

1.2 Product Description

The Welker® OdorEyes® AEF-1 Atmospheric Exhaust Filter is designed to remove mercaptan odor from natural gas exhaust lines at stations near or in populated areas. The internal filter media absorb offensive odors from constant or intermittent bleed systems.

Welker may custom design the AEF-1 to suit the particular application and specifications of each customer.

1.3 Specifications



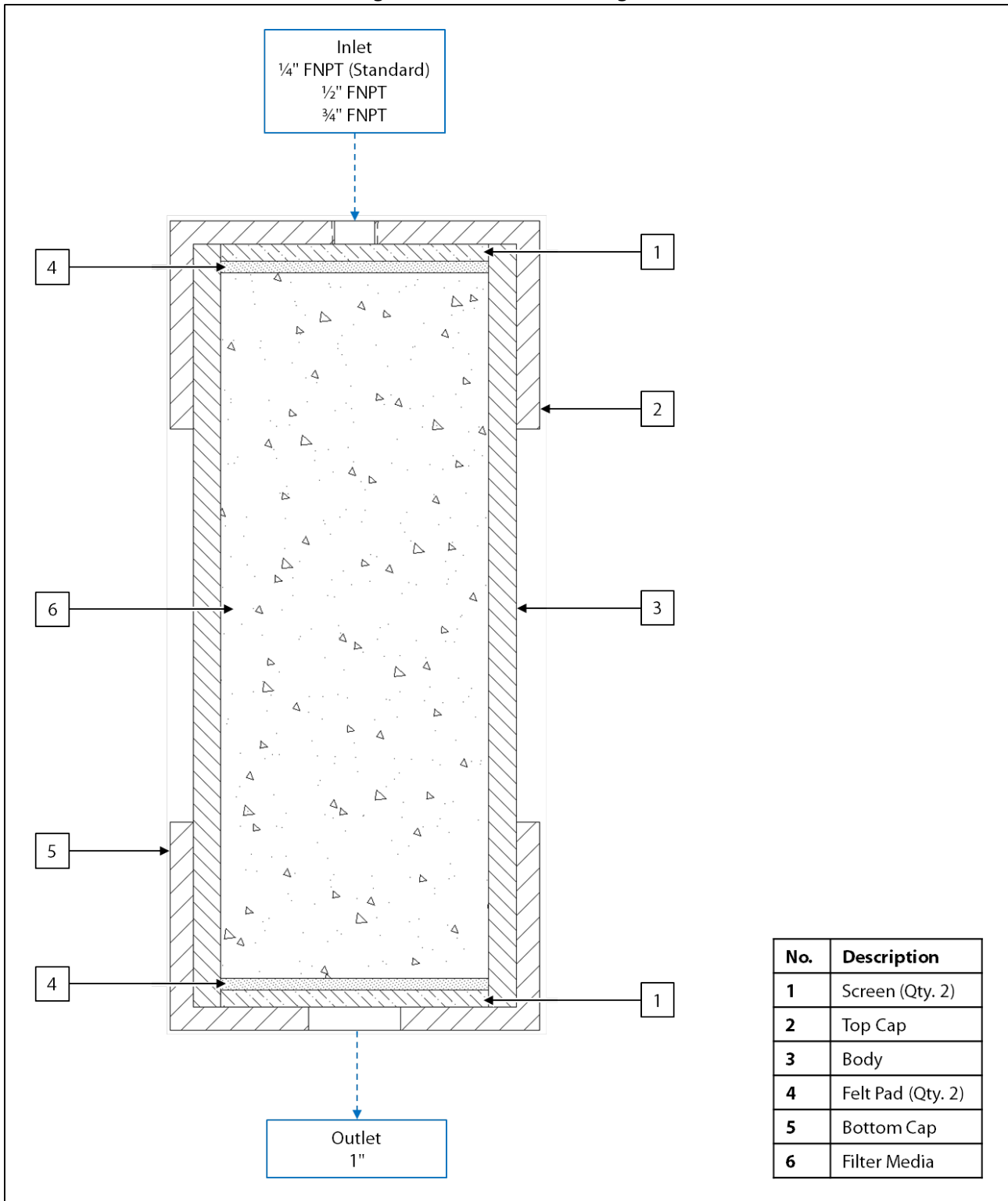
The specifications listed in this section are generalized for this equipment. Welker can modify the equipment according to your company's needs. **Please note that the specifications may vary depending on the customizations of your equipment.**

Table 1: AEF-1 Specifications

Application	Odor Removal From Natural Gas Exhaust Lines
Materials of Construction	Resilient Composites
Maximum Allowable Operating Pressure	Atmospheric Conditions Only
Temperature Range	0 °F to 140 °F (-17 °C to 60 °C)
Inlet Connection	1/4" FNPT (Standard) 1/2" FNPT 3/4" FNPT
Filter Media	Activated Charcoal (Standard) Silica Gel

1.4 Equipment Diagram

Figure 1: Welker® AEF-1 Diagram



SECTION 2: INSTALLATION & OPERATION

2.1 Before You Begin



After unpacking the unit, check the equipment for compliance and any damage that may have occurred during shipment. Immediately contact a Welker® representative if you received damaged equipment.



When sealing fittings with PTFE tape, refer to the proper sealing instructions for the brand used.

2.2 Installation and Operation



The AEF-1 is designed to be used in conjunction with existing equipment powered by odorized natural gas. Refer to the *Installation, Operation, and Maintenance (IOM) Manual* for the equipment and company standards for proper equipment arrangement.

1. Tube from the natural gas exhaust line to the inlet of the AEF-1 (*Figure 1*).



The AEF-1 must be installed vertically with the outlet pointing down.

2. As necessary, open any valve(s) before the AEF-1 to allow exhaust flow to the AEF-1.
3. During operation, monitor for the smell of odorized natural gas. If the smell of odorized natural gas is noticeable, the AEF-1 is no longer filtering effectively and needs to be replaced.

3.1 Before You Begin

1. **Replacement of the AEF-1 is necessary when the smell of odorized natural is noticeable.**
2. Welker recommends having an adjustable wrench available for maintenance. Please note that the exact tool required may vary by model.

3.2 Replacing the AEF-1

1. As necessary, close any valve(s) before the AEF-1 to isolate the AEF-1 from the exhaust flow.
2. Remove the AEF-1 from the exhaust line and discard.
3. Connect the inlet of the replacement AEF-1 to the natural gas exhaust line (*Figure 1*).



The AEF-1 must be installed vertically with the outlet pointing down.

4. As necessary, open any valve(s) before the AEF-1 to allow exhaust flow to the AEF-1.
5. The replacement AEF-1 is now operational.

APPENDIX A: REFERENCED OR ATTACHED DOCUMENTS

Welker® *Installation, Operation, and Maintenance (IOM) Manuals* suggested for use with this unit:

- None

Other *Installation, Operation, and Maintenance (IOM) Manuals* suggested for use with this unit:

- None

Welker® drawings and schematics suggested for use with this unit:

- Assembly Drawing: AD837BA

NOTES



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