

**NORTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH**

SEPTIC TANK EFFLUENT FILTER APPROVAL

Septic Tank Effluent Filter Approval Number: EF-17-R3

Issued To: Tuf-Tite, Inc

1200 Flex Court

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For: Septic Tank Effluent Filter Models EF-4 and EF-6 and Filter Housings TB-4 and TB-6

Date: October 25, 1999
October 20, 2003 Addition of Model EF-6 and TB-6
December 31, 2024 Updated for 18E and renewed for 2025
December 31, 2025 Renewed for 2026

In accordance with G.S. 130A-335 and 130A-335.1 and 15A NCAC 18E .1404 and .1405, an application by Tuf-Tite, Inc, for renewal of the approval for septic tank effluent filters has been reviewed and approved when the following conditions are met.

I. Description

- a. Effluent filters shall be designed and manufactured in accordance with the plans, specifications and documents submitted by the manufacturer with the application.
- b. Effluent filters shall meet the specifications in Table I.

Table I. Approved Filter Model Specifications

Filter Models	Size	Support Case ¹	Case Dimensions		Min. Tank Liquid Depth Required	Min. Access Opening Size ³
			Above Liquid Level	Below Liquid Level ²		
EF-4	4" dia. x 18"	4" PVC Tee or TB-4 Filter Housing ²	6"	12-inch minimum ³	36"	15 x 15 in. or 17 in. dia. or equal
Dual EF-4	2 filters, each 4" dia. x 18"	2 cases, 4" PVC Cross, + 2-4" PVC Tees or 2-TB-4 Filter Housings ²	6"	12-inch minimum ³	36"	17 x 17 in. or 17 in. dia. or equal
EF-6	6" dia. x 18"	TB-6 Filter Housing ²	6"	12-inch minimum ³	36"	15 x 15 in. or 17 in. dia. or equal
Dual EF-6	2 filters, each 6" dia. x 18"	2 cases, 4" PVC Cross, + 2-TB-4 Filter Housings ²	6"	12-inch minimum ³	36"	18 x 18 in. or 20 in. dia. or equal

Notes:

1. Support case provided by the septic tank manufacturer.
2. Optional TB-4 filter housing for EF-4 filters and required TB-6 filter housing for EF-6 filters provided to tank manufacturer by filter manufacturer.

3. Other minimum opening sizes or configurations proposed by the septic tank manufacturer shall be approved by the State on a case-by-case basis if documentation is provided showing both adequate access is provided for filter maintenance and for pumping the tank outlet compartment.

II. Sizing

The approved effluent filters may be used in approved septic tanks. The approved flow capacities are shown in Table II. The effluent filter sizing must be compatible with the design daily flow and the minimum septic tank size in accordance with 15A NCAC 18E .0801.

Table II. Effluent Filter Sizing Criteria^{1,2}	
Filter Model	Maximum Design Flow (gallons/day)
EF-4	800
Dual EF-4	1,600
EF-6	1,500
Dual EF-6	3,000

Notes:

1. Sizing based on domestic strength effluent in accordance with 15A NCAC 18E .0402(a), Table III.
2. If the effluent filters are used in a system with a design daily flow greater than 3,000 gallons/day, the design requires a Professional Engineer and a project specific approval.

III. Installation

The effluent filters and effluent filter support case shall be assembled and installed in accordance with the filter manufacturer's specifications and applicable rules. The filter case shall be located in such a manner that the filter can be readily accessible by the operator from the access opening and removable by hand from finished grade. The access opening shall also provide enough room to allow for pumping of the tank compartment. An access device manufactured by Tuf-Tite, Inc, shall be provided whenever the tank is installed with the filter handle deeper than 18-inches below the access opening or more than 18-inches below finished grade.

IV. Operation and maintenance

Effluent filters shall be used and maintained in accordance with the effluent filter manufacturer's specifications and applicable laws and rules. Manufacturer-specified procedures shall be followed to minimize the bypass of unfiltered effluent while the filter is being removed when servicing is needed. Tuf-Tite, Inc, has available for purchase a slotted sleeve removal tool that prevents material from leaving the outlet tee while the filter is being replaced. Upon removal, effluent filters shall either be replaced with a new effluent filter and the used effluent filter disposed of in an approved disposal method, or debris shall be washed off the effluent filter into the septic tank and the effluent filter placed back into service.

Approved by: _____ Date: _____