



Jim Doyle, Governor
Cory L. Nettles, Secretary

September 24, 2004

TG ANALYTICAL LABORATORIES
RUSS PARKER
N1022 QUALITY DRIVE
PO BOX 170
GREENVILLE WI 54942

DIAMOND WATER CONDITIONING
TOM GRIESBACH
N2471 HWY 45
PO BOX 39
HORTONVILLE WI 54944

Re: Description: WATER TREATMENT DEVICE-OXIDIZING
Manufacturer: DIAMOND WATER CONDITIONING
Product Name: DIAMOND WATER FE SERIES IRON FILTER
Model Number(s): FE-100A, FE-150A AND FE200A
Product File No: 20040468

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters Comm 82 through 84, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of September 2009.

This approval is contingent upon compliance with the following stipulation(s):

- This product has undergone sufficient testing to document the product's ability to reduce only those contaminants and/or substances as specified in this approval letter when the product is installed and maintained in strict accordance with the manufacturers published instructions.
- For buildings not served by a municipal water supply, Department of Natural Resources (DNR) written approval may be required prior to installation of this product in a water supply system to reduce the concentration of a contaminant that exceeds the primary drinking water standards contained in ch. NR 809, Wis. Admin. Code, the enforcement standards contained in ch. NR 140, Wis. Admin. Code, or for a water supply system that is subject to a written advisory opinion by the DNR. For more information contact the DNR Section of Private Water Systems, P.O. Box 7921, Madison, WI 53707, telephone (608) 266-3415.
- If these approved devices are modified or additional assertions of function or performance are made, then this approval shall be considered null and void, unless the change is submitted to the department for review and the approval is reaffirmed.
- A backflow preventer with intermediate atmospheric vent (ASSE 1012) or a reduced pressure principal backflow preventer (ASSE 1013) must be installed in the water supply serving this product.

Based on testing data submitted to and reviewed by the department, this approval recognizes that these plumbing products will reduce the concentration of contaminants as specified on pages 1 through 2 of this letter.

**AESTHETIC CONTAMINANT REDUCTION CAPABILITIES
PRODUCT FILE NUMBER 20040468
TABLE 1 OF 1**

Flow Rates and Corresponding Pressure Losses:

FE-100A = 7.6 liters per minute (lpm) @ 10.3 kilopascals (kPa) [2.0 gallons per minute (gpm)
@ 1.5 pounds per square inch gauge (psig)]
FE-150A = 7.6 lpm @ 10.3 kPa (2.0 gpm @ 1.5 psig)
FE-200A = 15.1 lpm @ 17.9 kPa (4.0 gpm @ 2.6 psig)

Capacities:

FE-100A = 4,096 liters (l) [1,082 gallons (gals.)]
FE-150A = 6,144 l (1,623 gals.)
FE-200A = 8,192 l (2,164 gals.)

Tested Contaminant	Average Influent Challenge (mg/l) ¹
Dissolved iron (Fe ⁺²)	10.0 ± 10%

Other Conditions: the contaminant reduction performance capabilities displayed for Table 1 of 1 were verified by testing conducted in accordance with WQA Standard S-200-73. To qualify for dissolved iron reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 0.2 mg/l. Note, the maximum influent dissolved iron concentration for these devices is 10.8 mg/l.

1 = milligrams per liter (mg/l) are equivalent to parts per million (ppm)
± = plus or minus
≤ = less than or equal to

This device was tested under controlled laboratory, or field, conditions. The actual performance of this device for a specific end use installation will vary from the tested conditions based on local factors such as water pressure, water temperature and water chemistry.

The department is in no way endorsing this product or any advertising, and is not responsible for any situation that may result from its use.

Sincerely,

Glen W. Schlueter
Engineering Consultant-Plumbing Product Reviewer
Bureau of Integrated Services
Safety and Buildings Division
Department of Commerce
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GWS:gws