DIVISION OF INDUSTRY SERVICES
Plumbing Product Review
P.O. Box 2658
Madison, Wisconsin 53701-2658
TTY: Contact Through Relay

Scott Walker, Governor
Dave Ross, Secretary

August 13, 2015 **REVISED COPY**

WISCONSIN WATER TREATMENT
QUADE & SCHOONE PLUMBING & HEATING INC.
3239 N. LAKE GEORGE. RD
RHINELANDER WI 54501

Re: Description: WATER TREATMENT DEVICE - SOFTENER/CATION EXCHANGE
Manufacturer: WISCONSIN WATER TREATMENT
Product Name: IRON FILTER (trans id 2545021)
Model Number(s): 5654
Product File No: 20150127

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters SPS 382 through 384, 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 August 2020.

This approval supersedes the approval issued on September 29, 2010 under product file number 20100267.

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 manufacturer's published instructions.

- Where the Department of Natural Resources (DNR) has jurisdiction, a 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) 267-9787.

- If this approved device is 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.

- These cation exchange water softeners shall be sized, installed, programmed and maintained such that wastewater volumes, total dissolved solids and chloride discharges are minimized.

- The department does not recommend the use of water softeners for reducing dissolved iron concentrations in excess of 3.0 mg/l. This is because applying water softeners in this way sacrifices long-term water softener performance and efficiency. The use of water softeners for reducing dissolved iron concentrations exceeding 3.0 mg/l also generates excessive, and otherwise avoidable, quantities of chloride and dissolved solids which are subsequently discharged to ground and/or surface water supplies. Once present in ground and/or surface water supplies, chloride and dissolved solids tend to remain in the water resource and may travel great distances from the original point source. Presently, there are no economically viable methods to remove chloride and dissolved solids from water supplies because available technologies generate waste streams of their own, further concentrating the problem. It has been established by the Wisconsin Department of Natural Resources that chloride is chronically toxic to representative aquatic organisms, including forage and sport fish, at 395 mg/l, and acutely toxic at 757 mg/l.

AESTHETIC CONTAMINANT REDUCTION CAPABILITIES
PRODUCT FILE NUMBER 20150127
TABLE 1 OF 1

Flow rate: 7.6 liters per minute (lpm) [2.0 gallons per minute (gpm)]
Capacity: 2,271 liters (l) at a 4.5 kilogram (Kg) salt dosage [600 gallons at a 10.0 pound (lb.) salt dosage]

Tested Contaminant	Influent Challenge (mg/l)*, 1
Dissolved iron (Fe^{+2})	6.0
pH (low)	6.5 pH units

Other conditions: the contaminant reduction performance capabilities displayed in Table 1 of 1 were verified by testing conducted by Wisconsin Water Treatment Corp. on naturally occurring well water in Rhinelander WI. The dissolved iron concentration was reduced to an average of 0.13 mg/l and the pH was increased to an average of 7.1 pH units.

***** = unless otherwise indicated
1 = milligrams per liter (mg/l) are equivalent to parts per million (ppm)

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

Sincerely,

Glen W. Schlueter
Environmental Engineer - Plumbing Product Reviewer
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