



Jim Doyle, Governor
Mary P. Burke, Secretary

October 4, 2005

HELLENBRAND INCORPORATED
JILL MCDONALD
404 MORAVIAN VALLEY ROAD
PO BOX 187
WAUNAKEE WI 53597

Re: Description: WATER TREATMENT DEVICE-OXIDIZING
Manufacturer: HELLENBRAND INCORPORATED
Product Name: IRON CURTAIN
Model Number(s): TF-IC-10, TF-IC-10A, TF-IC-12, TF-IC-12A, TS-IC-10, TS-IC-10A,
TS-IC-12, TS-IC-12A, WM2-IC-10, WM2-IC-10A, WM2-IC-12 AND WM2-IC-12A
Product File No: 20050692

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 October 2010.

This approval supersedes the approval issued on January 30, 2003 under product file number 20020463.

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.
- 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) 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.

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 2 through 3 of this letter for test waters 1 through 9.

**AESTHETIC CONTAMINANT REDUCTION CAPABILITIES
PRODUCT FILE NUMBER 20050692
TABLE 1 OF 1**

Flow Rates: the following model numbers have a maximum rated service flow of 5.0 gallons per minute (gpm) [18.9 liters per minute (lpm)]:

TF-IC-10 TF-IC-10A TS-IC-10 TS-IC-10A
WM2-IC-10 WM2-IC-10A

The following model numbers have a maximum rated service flow of 7.0 gallons per minute (gpm) [26.5 liters per minute (lpm)]:

TF-IC-12 TF-IC-12A TS-IC-12 TS-IC-12A
WM2-IC-12 WM2-IC-12A

Capacity: 500 gallons (gals.) [1,893 liters (l)]

Tested Contaminant	Influent Challenge (mg/l)* ¹
Hydrogen sulfide	10.0 ± 2.0
Iron	10.0 ± 1.0
Manganese	2.0 ± 0.2
pH (low)	6.1 ± 0.1 pH units

Other Conditions: the contaminant reduction performance capabilities displayed for Table 1 of 1 were verified by testing conducted in accordance with WQA Standard S-200-93. To qualify for hydrogen sulfide reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 0.2 mg/L. To qualify for dissolved iron reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 0.2 mg/L. To qualify for manganese reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 0.05 mg/L. To qualify for pH adjustment, the device must increase the pH of the influent challenge concentrations such that all effluent pH measurements are ≥ 6.8 pH units.

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

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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