SAFETY AND BUILDINGS DIVISION
Plumbing Product Review
P.O. Box 7162
Madison, Wisconsin 53707

Wisconsin
Department of Commerce

Jim Doyle, Governor
Cory L. Nettles, Secretary

September 26, 2003

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): WM2-IC10 2.0, WM2-IC10A 2.0, WM2-IC12 2.0 AND WM2-IC12A 2.0, TF-IC 10 2.0, TF-IC 10A 2.0, TF-IC12 2.0 AND TF-IC12A 2.0
Product File No: 20030168

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 2008.

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.

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 20030168
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)]:

WM2-IC10 2.0 WM2-IC10A 2.0 TF-IC10 2.0
TF-IC10A 2.0

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

WM2-IC12 2.0 WM2-IC12A 2.0 TF-IC12 2.0
TF-IC12A 2.0

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
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Safety and Buildings Division
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