



Jim Doyle, Governor
Mary P. Burke, Secretary

May 8, 2006

RAINSOFT
AQUION WATER TREATMENT PRODUCTS
KATHLEEN FRITSCH
2080 E. LUNT
ELK GROVE VILLAGE IL 60007

Re: Description: WATER TREATMENT DEVICE- SOFTENER
Manufacturer: RAINSOFT
Product Name: AMAZON APOLLO GOLD AND SILVER SERIES
Model Number(s): AMC 50V, AMC 50CV, AQC 50V, AQC 50CV, AMC 60SV, AMC 60SCV, AQC 60SV, AQC 60SCV, AMC 60SSV, AMC 60SSCV, AQC 60SSV, AQC 60SSCV, LMC 60V, LMC 60CV, LQC 60V, LQC 60CV, AMC 75V, AMC 75CV, AQC 75V, AQC 75CV, AMC 100V, AMC 100CV, AQC 100V, AQC 100CV, LMC 100V, LMC 100CV, LQC 100V, LQC 100CV, AMC 100V, AMC 100CV, AQC 100V, AQC 100CV, AMC 150V, AMC 150CV, AQC 150V, AQC 150CV, AMC 250V, AMC 250CV, AQC 250V, AQC 250CV, AMC 400V, AMC 400CV, AQC 400V AND AQC 400CV ALL USING "V" RESIN
Product File No: 20060040

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 supersedes the approval issued on September 26, 2003 under product file number 20030153.

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

- At the time of installation, these devices shall be provided with an effective means to warn the users when they are not performing their function. This shall be accomplished by one of the following:
1. sounding and alarm or flashing a light, each connected to an acceptable power source;
 2. providing a sampling kit for analysis of hardness or other appropriate contaminants; or
 3. providing a hardness monitor.

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 3 of this letter.

**WATER SOFTENING CAPABILITIES
 PRODUCT FILE NUMBER 20060040
 TABLE 1 OF 1**

Model Numbers		Capacity*						Flow Rate vs. Pressure Loss
		Rating 1		Rating 2		Rating 3		
Gold Series (metered)	Silver Series (time clock)	Grains	Pounds	Grains	Pounds	Grains	Pounds	gpm @ psig
AQC 50 V	AMC 50 V	7,550	2.0	14,400	5.0	17,000	7.5	10.0 @ 12.0
AQC 50 CV	AMC 50 CV	7,550	2.0	14,400	5.0	17,000	7.5	10.0 @ 15.0
AQC 60SS V	AMC 60SS V	8,020	2.0	14,500	6.0	16,500	9.0	12.0 @ 14.0
AQC 60SS CV	AMC 60SS CV	8,020	2.0	14,500	6.0	16,500	9.0	11.0 @ 15.0
LQC 60 V	LMC 60 V	8,020	2.0	14,500	6.0	16,500	9.0	12.0 @ 14.0
LQC 60 CV	LMC 60 CV	8,020	2.0	14,500	6.0	16,500	9.0	12.0 @ 15.0
AQC 60S V	AMC 60S V	8,020	2.0	14,500	6.0	16,500	9.0	12.0 @ 14.0
AQC 60S CV	AMC 60S CV	8,020	2.0	14,500	6.0	16,500	9.0	11.0 @ 15.0
AQC 75 V	AMC 75 V	8,020	2.0	21,500	7.5	25,800	11.0	10.0 @ 14.0
AQC 75 CV	AMC 75 CV	8,020	2.0	21,500	7.5	25,800	11.0	8.8 @ 15.0
AQC 100 V	AMC 100 V	10,430	2.5	25,450	10.0	29,400	15.0	10.0 @ 10.0
AQC 100 CV	AMC 100 CV	10,430	2.5	25,450	10.0	29,400	15.0	10.0 @ 14.0
LQC 100 V	LMC 100 V	10,010	2.5	24,400	10.0	28,200	15.0	9.5 @ 8.0
LQC 100 CV	LMC 100 CV	10,010	2.5	24,400	10.0	28,200	15.0	10.0 @ 14.0
AQC 100S V	AMC 100S V	10,010	2.5	24,400	10.0	28,200	15.0	9.5 @ 8.0
AQC 100S CV	AMC 100S CV	10,010	2.5	24,400	10.0	28,200	15.0	10.0 @ 12.0
AQC 150 V	AMC 150 V	15,600	3.8	38,200	15.0	44,000	22.5	11.0 @ 13.0
AQC 150 CV	AMC 150 CV	15,600	3.8	38,200	15.0	44,000	22.5	9.0 @ 15.0
AQC 250 V	AMC 250 V	26,100	6.2	63,600	25.0	73,400	37.5	12.0 @ 14.0
AQC 250 CV	AMC 250 CV	26,100	6.2	63,600	25.0	73,400	37.5	11.0 @ 15.0
AQC 400 V	AMC 400 V	41,700	10.0	101,800	40.0	117,500	60.0	13.5 @ 15.0
AQC 400 CV	AMC 400 CV	41,700	10.0	101,800	40.0	117,500	60.0	10.6 @ 15.0

* The softener capacity rating is based on grains of hardness, due to calcium and magnesium cations, removed (as calcium carbonate) while producing soft water between successive regenerations and is related to the pounds of salt required for each regeneration. The tests run to generate the data for table 1 were conducted in accordance with Water Quality Association Standard S-100. Studies conducted on sulfonated poly-styrene di-vinyl benzene (SSDVBC) cation exchange media have documented that if hardness is reduced to less than 1.0 grain per gallon (17.1 mg/l), then barium and radium will also be effectively reduced. Thus, the capacity of these device for reducing barium and/or radium are based on the hardness reduction capacity ratings displayed above.

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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 which 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
(608) 267-1401 **Phone**
(608) 267-9566 **Fax**
gschlueter@commerce.state.wi.us **Email**
8:00AM – 4:30PM CDT **Work Hours**

GWS:gws