



***NHW CustomSoft™
Commercial Water Softening System***



*Custom-sized to fit usage
and hard water requirements;
power-vented to eliminate
salt-gas corrosion.*

CHOOSING YOUR NHW CUSTOMSOFT™ WATER SOFTENING SYSTEM

Single Unit		NHW 15072	NHW 15120	NHW 15168	NHW 15240	NHW 15360	NHW 20120	NHW 20168	NHW 20240	NHW 20360
PIPE SIZE	(In.)	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0
FLOW RATE	(GPM)	33	40	43	45	45	46	51	54	62
DAILY USAGE 22 hr period (gallons)										
Hardness (Grains)	5	14,400	24,000	33,600	48,000	72,000	24,000	33,600	48,000	72,000
	10	7,200	12,000	16,800	24,000	36,000	12,000	16,800	24,000	36,000
	15	4,800	8,000	11,200	16,000	24,000	8,000	11,200	16,000	24,000
	20	3,600	6,000	8,400	12,000	18,000	6,000	8,400	12,000	18,000
	25	2,800	4,800	6,700	9,600	14,400	4,800	6,700	9,600	14,400
	30	2,400	4,000	5,600	8,000	12,000	4,000	5,600	8,000	12,000
	35	2,000	3,400	4,800	6,800	10,200	3,400	4,800	6,800	10,200
	40	1,800	3,000	4,200	6,000	9,000	3,000	4,200	6,000	9,000
	45	-	2,600	3,700	5,300	8,000	2,600	3,700	5,300	8,000
	50	-	2,400	3,300	4,800	7,200	2,400	3,300	4,800	7,200
	55	-	2,100	3,000	4,300	6,500	2,100	3,000	4,300	6,500
60	-	-	2,800	4,000	6,000	2,000	2,800	4,000	6,000	

Sized to Save You Money.

Don't pay extra to purchase and operate a larger system than necessary for your facility. Choose the water softening power you need and save equipment and operating costs with NHW CustomSoft™ Commercial Water Softening Systems.

Choosing Your Water Softener

- STEP 1:** Determine the pipe size (required or present).
- STEP 2:** Estimate the Maximum Flow Rate required (gpm).
- STEP 3:** Test for water hardness.*
- STEP 4:** Determine daily water usage of your facility (gallons).

DUAL UNIT WATER SOFTENER SYSTEM

Dual Unit		NHW 20168D	NHW 20240D	NHW 20360D
PIPE SIZE	(In.)	2.0	2.0	2.0
FLOW RATE	(GPM)	51	54	62
DAILY USAGE 24 hr period (gal.)				
Hardness (Grains)	5	134,400	192,000	288,000
	10	67,200	96,000	144,000
	15	44,800	64,000	96,000
	20	33,600	48,000	72,000
	25	26,880	38,400	57,600
	30	22,400	32,000	48,000
	35	19,200	27,429	41,143
	40	16,800	24,000	36,000
	45	14,933	21,333	32,000
	50	13,440	19,200	28,800
	55	12,218	17,455	26,182
60	11,200	16,000	24,000	

*Water hardness testing is available **FREE** from National Hot Water. A full water analysis is also available at additional cost.

NHW CUSTOMSOFT™ COMMERCIAL WATER SOFTENING SYSTEM SPECIFICATIONS

MODEL NUMBER		Size/ GPH	NHW 15072	NHW 15120	NHW 15168	NHW 15240	NHW 15360
Pipe Size	—	(In.)	1.5	1.5	1.5	1.5	1.5
Exchange Capacity	—	(KGr)	72	120	168	240	360
Service Flow	Flow A ¹	(GPM)	33	40	43	45	45
	Flow B ²	(GPM)	44	54	58	60	60
Drain Line Flow Control (DLFC)	—	(GPM)	5	9	10	15	20
Resin	—	(Cu Ft)	3	5	7	10	15
Dimensions	Softener	(Dia. x Ht)	14 X 65	18 X 65	21 X 62	24 X 72	30 X 72
	Top Opening	(In.)	4	6 Flange	6 Flange	6 Flange	6 Flange
	Brine	(Dia. x Ht)	24 X 50	24 X 50	24 X 50	24 X 50	30 X 50
Space Requirement ³ (W x D x H)	—	(In.)	45 X 25 X 74	50 X 25 X 80	53 X 25 X 80	56 X 25 X 88	68 X 31 X 84
Brine Tank Salt Capacity	—	(Lbs)	900	900	900	900	1400
Salt Per Regeneration	—	(Lbs)	24	40	56	80	120
Water Meter Size	—	—	Optional	Optional	Optional	Optional	Optional
Estimated Weight	Dry-Shipping	(Lbs)	350	600	900	1000	1400
	Wet-Operational	(Lbs)	1000	1900	2400	3000	3900

MODEL NUMBER		Size/ GPH	NHW 20120	NHW 20168	NHW 20240	NHW 20360	NHW 20168D	NHW 20240D	NHW 20360D
Pipe Size	—	(In.)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Exchange Capacity	—	(KGr)	120	168	240	360	168	240	360
Service Flow	Flow A ¹	(GPM)	46	51	54	62	51	54	62
	Flow B ²	(GPM)	59	66	70	80	66	70	80
Drain Line Flow Control (DLFC)	—	(GPM)	9	10	15	20	10	15	20
Resin	—	(Cu Ft)	5	7	10	15	7	10	15
Dimensions	Softener	(Dia. x Ht)	18 X 65	21 X 62	24 X 72	30 X 72	21 X 62	24 X 72	30 X 72
	Top Opening	(In.)	6 Flange	6 Flange	6 Flange	6 Flange	6 Flange	6 Flange	6 Flange
	Brine	(Dia. x Ht)	24 X 50	24 X 50	24 X 50	30 X 50	24 X 50	30 X 50	30 X 50
Space Requirement ³ (W x D x H)	—	(In.)	50 X 25 X 80	53 X 25 X 80	56 X 25 X 88	68 X 31 X 85	105 X 25 X 80	124 X 31 X 88	136 X 31 X 85
Brine Tank Salt Capacity	—	(Lbs)	900	900	900	1400	900	1400	1400
Salt Per Regeneration	—	(Lbs)	40	56	80	120	56	80	120
Water Meter Size	—	—	Optional	Optional	Optional	Optional	2 ⁴	2 ⁴	2 ⁴
Estimated Weight	Dry-Shipping	(Lbs)	650	950	1050	1450	1900	2100	2900
	Wet-Operational	(Lbs)	1950	2450	3050	3950	4900	6100	7900

NOTES:

1 Flow A: Pressure loss not exceeding 15 PSI at a temperature of 60° F and inlet pressure of 60 PSI.

2 Flow B: Pressure loss not exceeding 25 PSI at a temperature of 60° F and inlet pressure of 60 PSI.

3 Space requirements: Add 18 inches to height dimension for installation and service. Space required does not include operating and maintenance area.

4 Water Meter Size: Dual systems include 2 softeners, 2 brine tanks and with a 2-inch meter and 2-inch alternating valve for each system.

NHW CUSTOMSOFT™ COMMERCIAL WATER SOFTENING SYSTEM



Not Your Typical Water Softener.

With 12 model sizes to choose from, NHW CustomSoft™ breaks the industry norm of “one-size-fits-all” water softeners. Ranging in size from 72,000 to 360,000 grain, NHW CustomSoft™ provides flexibility to choose your model based on the specific water usage and range of water hardness for your installation.

12 model sizes for commercial applications



Model Sizes: NHW CustomSoft™

Models	Total Resin Exchange	Capacity Grains
NHW15072	3 cfm	72,000
NHW15120	5 cfm	120,000
NHW15168	7 cfm	168,000
NHW15240	10 cfm	240,000
NHW15360	15 cfm	360,000
NHW20120	5 cfm	120,000
NHW20168	7 cfm	168,000
NHW20240	10 cfm	240,000
NHW20360	15 cfm	360,000
NHW20168D*	7 cfm	168,000
NHW20240D*	10 cfm	240,000
NHW20360D*	15 cfm	360,000

*24 hour operation

Controller & Valve—1.5" or 2"

Top mount control valve features ease of installation and service combined with quality programming features designed to meet the needs of restaurants, hotels, motels and health care facilities.

- 6 inch flanged connector facilitates installation and service.
- All brass valve with epoxy coating for longevity
- Service flow rate of 60 gpm, backwash 50 gpm (1.5") or 75 gpm, backwash 50 gpm (2.0").
- Fully adjustable, solid state microprocessor, 6-cycle control with easy access front panel settings delivers: controlled backwash, down flow brining/slow rinse, second backwash, fast rinse, refill, and down-flow service.
- Front panel LCD digital display includes time of day, days until next regeneration, volume remaining, current flow rate, and total volume used (Totalizer).

- Four methods to initiate regeneration: meter immediate, meter delayed, time clock delayed, or pressure differential, offering system management flexibility including the option to set regeneration to occur during off-hours only.

- 12-volt output AC UL approved power pack provides safe and easy installation.

- Treated water regenerant refill
- Reliable and proven DC motor drive



Fully adjustable 6-cycle control with LCD display offers programming ease and flexibility.



Brine Tank

- High-density polyethylene construction
- Stress and crack resistant
- UV stabilized tank and top cover
- Salt support w/legs provides better water circulation within the tank
- 5" brine well tube w/slots for better flow
- Overflow safety float to protect boiler room and equipment.



Manifolding Capability for 24-hour Operation.

For 24-hour water softening, NHW CustomSoft™ offers manifolding capability in 168,000, 240,000 and 360,000 grain sizes. To ensure consistent, high quality installation, these NHW CustomSoft™ water softeners are available with manifold kits built exclusively by National Hot Water. Manifold Kit available in 1.5", 2.0" and Double 2". Specify Part numbers MFK15wf, MFK20wf, and MFKD20wf, respectively.

Exclusive Venting Technology.

All water softening systems produce salt gases during operation; only NHW CustomSoft™ offers optional power venting to capture and expel those equipment-harming gases to the outside air.



Sample Specification

The water softener shall be a NWH CustomSoft™ model with a flow rate not less than _____ cfm and a valve size of _____ inches. It shall be design certified with power-venting kit _____ and manifold kit _____. The entire installation shall be made in compliance with state and local codes and ordinances. Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.



Keeping your hot water running!

- Nationwide network of plumbing contractors
- Warehouse locations coast to coast
- On-demand service with one toll-free call

5 Year Limited Warranty

Water softener including brine tank, pressure vessel and filter control valves will be free from defects in material and workmanship under normal use and service for a period of five years from the date of shipment when installed and operated within recommended parameters. No warranty is made with respect to defects not reported within the warranty period and/or defects or damages due to neglect, misuse, alterations, accident, misapplication, physical damage, or damage caused by fire, acts of God, freezing or hot water or similar causes. See complete copy of warranty included with each softener and/or filter control valve.

**For technical information, service and installation contact National Hot Water's
24/7 Call Center—toll free at 888-444-4435.
Fax: 972-432-8884**