



Markets Served:

- Clinics
- Educational Facilities
- Energy / Power
- Food / Beverage Production
- Food Service / Restaurants
- Grocery
- Healthcare / Hospitals / Bio-Pharmaceutical
- Hospitality / Lodging
- Manufacturing
- Municipal Drinking Water
- Oil / Gas

The Culligan HE 1.5 Skid Series

Nearly 200 configurations of multi-tank softener and filter systems available to meet your water treatment needs.

Culligan® Commercial and Industrial Solutions is focused on providing a modular platform of water treatment systems designed to solve your unique water treatment concerns. Our Commercial Skid Series offers nearly 200 different duplex and triplex configurations of our top softener and filter models available with different piping material and flow configurations depending on your performance and budgetary needs. All tanks are shipped fastened onto the steel skid for safe and easy transportation. The plumbing and wiring harnesses are pre-assembled in the factory to keep the installation time and labor at the absolute minimum. Every system offers simple, single point field utility connections for inlets, outlets, drains and power supplies on the most compact space possible.

Save yourself the uncertainty of quoting customized solutions piecemeal with non-Culligan systems. Our Commercial Skid Series are sold as standard part numbers with competitive pricing and lead times. Contact Culligan® today to find the best skid solution for you.

CULLIGAN® COMMERCIAL & INDUSTRIAL ADVANTAGES:

- Simple System Integration
- Global Product Platform
- Flexible Configurations
- Quick Delivery / Easy Installation
- Exclusive Culligan Advanced Electronics
 - Historical Operating Data
 - Alarm Recognitions
 - US Standard and Metric Readings
 - Remote Monitoring Options
 - Telemetry Options



PRE-TREATMENT SOLUTIONS.

SYSTEM SPECIFICATIONS

System Specifications

Specification	US	Metric
Inlet Pressure (dynamic)	20–125 psig	135–860 kPa
Power Voltage Frequency Phase	120 Volts 50/60Hz	
Feed Water Temperature	33–120° F	0–48° C
Turbidity Chlorine Iron	5 NTU, max. ² 1 mg/L, max. ² 5 mg/L, max. ²	

1 120 Volt/24 Volt CUL/UL listed Transformer Included.

2 See media specification for details.

Warranty

Culligan's HE 1.5 water softeners and filters are backed by a limited 1-year warranty against defects in material, workmanship and corrosion. In addition, softener tanks are warranted for a period of 5 years.†

† See printed warranty for details. Culligan® will provide a copy of the warranty upon request. Some localities have corrosive water. A softener cannot correct this condition, so its printed warranty disclaims liability for corrosion of plumbing lines, fixtures, or water-using equipment. If you suspect corrosion, your independently operated Culligan® dealer has equipment to help control the problem.

Examples of Softener and Filter Applications

- Food and Beverage- Improved Taste and increased cost savings (S)
- Drinking Water- Reduces turbidity and chlorine; improves taste and clarity (F)
- Boilers- Reduction of turbidity and sludge blow-down (F)
- Educational facilities- Boiler and cooling tower make-up water for scale reduction and improved energy costs (S)
- Restaurants- For dishwashing, cleaning material savings, scale reduction (S)
- RO Softener / DI Pretreatment (S & F)
- Car washes- Improved rinsing results, detergent and water heating savings, scale reduction (S & F)
- Apartment buildings, assisted living facilities and hotels- Quality water for laundry, dishwashers, boilers (S)
- Grocery / Retail- Quality water for aesthetics and to help extend equipment life (S & F)
- Light industry- For process and make-up water, boiler and cooling system pretreatment, general housekeeping (S). Reduction of particulate matter (F)
- Office buildings- For heating plant pretreatment, tenant convenience, general housekeeping (S)

HE 1.5 System Features:

- Culligan's smart controller (GBE) and communication cables are included to provide programming and monitoring capabilities typically found in more expensive PLC controls
- Carbon Filters- For reduction of organics (flow rates up to 12 gpm per tank) or chlorine (flow rates up to 24 gpm per tank)
- Depth Filters- Flow rates up to 36 gpm per tank
- Bagged media included
- Corrosion resistant positive motor-driven regeneration valve- motor driven piston resists dirt, iron and turbidity
- Corrosion resistant tanks- Made of fiberglass reinforced polyester
- Under-drain design reduces pressure loss
- Vacuum Breakers included on each tank
- Telemetric Capability
- Regeneration is controlled by time clocks. Alternative meters (including Aqua-Sensor® Kits) are available as an after-market item
- Brine Systems are sold separately
- UL / CUL Ratings

Available Variations for HE 1.5 Skid Systems

- Multiple Tank Configurations: Duplex (2 tanks) or Triplex (3 tanks) systems can increase the holding capacity of your systems in terms of grain removal and reducing organic and chlorine particles.
- Culligan's patented Progressive Flow technology is installed on all HE 1.5 skid models. Simply re-program the GBE to change from Parallel Flow to the Progressive Flow configuration
- Alternating Flow is available for all Duplex Softener Skid Systems



PRE-TREATMENT SOLUTIONS.

SYSTEM SPECIFICATIONS

(Note that flow and media measurements are for individual tanks: not all skid variations are shown.)

Type	Model	Resin Qty. ft ³ (L)	Duplex or Triplex System	Pipe Size in. (mm)	Flow Rates gpm (lpm)		Tank(s) Size*** in. (mm)	Skid Footprint in. (mm)
					Continuous*	Peak**		
Softeners	HE 1.5-PF-060	2 (56.6)	Duplex	1.5 (38)	25.1 (95.0)	31.5 (119.2)	14" x 47" (356 x 1194)	18" x 40" (457 x 1016)
			Triplex				14" x 47" (356 x 1194)	18" x 60" (457 x 1524)
	HE 1.5-PF-090	3 (85)	Duplex	1.5 (38)	26.6 (100.7)	35.2 (133.2)	16" x 53" (406 x 1346)	18" x 40" (457 x 1016)
			Triplex				16" x 53" (406 x 1346)	18" x 60" (457 x 1524)
	HE 1.5-PF-120	4 (113.3)	Duplex	1.5 (38)	23.3 (88.2)	31.8 (120.4)	16" x 65" (406 x 1651)	18" x 40" (457 x 1016)
			Triplex				16" x 65" (406 x 1651)	18" x 60" (457 x 1524)
	HE 1.5-PF-150	5 (141.6)	Duplex	1.5 (38)	27.2 (103)	35.8 (135.5)	18" x 65" (457 x 1651)	26" x 56" (660 x 1422)
			Triplex				18" x 65" (457 x 1651)	26" x 84" (660 x 2134)
	HE 1.5-PF-210	7 (198.2)	Duplex	1.5 (38)	28.0 (106)	37.4 (141.6)	21" x 62" (533 x 1575)	26" x 56" (660 x 1422)
			Triplex				21" x 62" (533 x 1575)	26" x 84" (660 x 2134)

*Flow rate at a 15 psi pressure loss.

**Flow rate at a 25 psi pressure loss.

**** Dimensions are diameter by tank height. FRP tank height is measured flange to flange.

Flow rates shown are per tank

Low flow channeling (flow rates less than 0.5 gpm/cubic foot of resin) may cause hardness leakage into effluent.

Type	Model	Duplex or Triplex System	Pipe Size in. (mm)	Service Flow Rates ¹		Backwash Flow ² gpm (lpm)	Media Qty. lbs. (kg)	Tank(s) Size ³ in. (mm)	Skid Footprint in. (mm)
				Normal	Peak				
				gpm @ psi drop (lpm @ kPA drop)	gpm @ psi drop (lpm @ kPA drop)				
Depth Filters	HE DF-12	Duplex	1.5" (38)	8 @ 3 (30.3 @ 20.7)	12 @ 5 (45.4 @ 34.5)	10 (37.9)	180 (82)	12" x 52" (305 x 1321)	18" x 40" (457 x 1016)
		Triplex	1.5" (38)					12" x 52" (305 x 1321)	18" x 60" (457 x 1524)
	HE DF-14	Duplex	1.5" (38)	11 @ 3 (41.6 @ 20.7)	16 @ 6 (60.6 @ 41.4)	15 (38.1)	208 (94)	14" x 47" (356 x 1194)	18" x 40" (457 x 1016)
		Triplex	1.5" (38)					14" x 47" (356 x 1194)	18" x 60" (457 x 1524)
	HE DF-16	Duplex	1.5" (38)	14 @ 4 (53.0 @ 27.6)	21 @ 6 (79.5 @ 41.4)	20 (75.7)	280 (127)	16" x 53" (406 x 1346)	18" x 40" (457 x 1016)
		Triplex	1.5" (38)					16" x 53" (406 x 1346)	18" x 60" (457 x 1524)
	HE DF-21	Duplex	1.5" (38)	24 @ 8 (90.8 @ 55.2)	36 @ 13 (136.3 @ 89.6)	30 (113.6)	615 (279)	21" x 62" (533 x 1575)	26" x 56" (660 x 1422)
		Triplex	1.5" (38)					21" x 62" (533 x 1575)	26" x 84" (660 x 2134)

1. Service flow rates are based on: Normal (10 gpm/ft² - 24 m³/hr/m²)- Best quality effluent at specified flow.

Lowest pressure loss. Recommended for suspended solids loads up to and greater than 300 ppm.

Peak (15 gpm/ft² - 37 m³/hr/m²)- Very good quality effluent at specified flow. Increased pressure loss. Recommended for suspended solids loads <300 ppm.

2. Backwash flow rates are based on 12-14 gpm/ft² (29-34 m³/hr/m²) using 50°F (10°C) water. A different backwash rate may be required depending upon water temperature.

3. Dimensions are diameter by height. FRP tank height is measured flange to flange.

Type	Model	Duplex or Triplex System	Pipe Size in. (mm)	Service Flow Rates		Backwash Flow ³ gpm (lpm)	Media Qty. ft ³ (m ³)	Tank(s) Size ⁴ in. (mm)	Skid Footprint in. (mm)
				Taste Odor & Organic Removal ¹	Dechlorination ²				
				gpm @ psi drop (lpm @ kPA drop)	gpm @ psi drop (lpm @ kPA drop)				
Carbon Filters	HE CF-12	Duplex	1.5" (38)	4 @ 1 (15.1 @ 6.9)	8 @ 1 (30.3 @ 6.9)	8 (30.3)	2 (0.057)	12" x 52" (305 x 1321)	18" x 40" (457 x 1016)
		Triplex	1.5" (38)					12" x 52" (305 x 1321)	18" x 60" (457 x 1524)
	HE CF-14	Duplex	1.5" (38)	5 @ 1 (18.9 @ 6.9)	11 @ 2 (41.6 @ 13.8)	10 (37.9)	3 (0.085)	14" x 47" (356 x 1194)	18" x 40" (457 x 1016)
		Triplex	1.5" (38)					14" x 47" (356 x 1194)	18" x 60" (457 x 1524)
	HE CF-16	Duplex	1.5" (38)	7 @ 1 (26.5 @ 6.9)	14 @ 2 (53.0 @ 13.8)	15 (56.8)	3 (0.085)	16" x 53" (406 x 1346)	18" x 40" (457 x 1016)
		Triplex	1.5" (38)					16" x 53" (406 x 1346)	18" x 60" (457 x 1524)
	HE CF-21	Duplex	1.5" (38)	12 @ 2 (45.4 @ 13.8)	24 @ 8 (90.8 @ 55.2)	25 (94.6)	6 (0.170)	21" x 62" (533 x 1575)	26" x 56" (660 x 1422)
		Triplex	1.5" (38)					21" x 62" (533 x 1575)	26" x 84" (660 x 2134)

1. Service flow rates for taste, odor and organic removal are based on 5 gpm/ft² (12 m³/hr/m²)

2. Service flow rates for dechlorination are based on 10 gpm/ft² (24 m³/hr/m²)

NOTE: Operational maintenance and replacement requirements are essential for advertised performance. Specifications shown are for single models.

3. Backwash flow rates are based on 10 gpm/ft² (24 m³/hr/m²) using 50°F (10°C) water. A different backwash rate may be required depending upon water temperature or type of carbon used.

4. Dimensions are diameter by height. FRP tank height is measured flange to flange.



PRE-TREATMENT SOLUTIONS.

Finally, an end-to-end solution from a single source.

Place your commercial and industrial water treatment needs in the hands of a global leader.

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For over 80 years, Culligan[®] has made better water. Our global network, comprised of 800+ dealers and international licensees in over 90 countries, is dedicated to addressing your water-related problems. As a worldwide leader in water treatment, our sales representatives and service technicians are familiar with the local water conditions in your area. Being global and local position us to deliver customized solutions to commercial and industrial water issues that affect your business and your bottom line.

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