For Commercial and Industrial Applications

Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

LEAD FREE*

Models M8414-COM and M8416-COM

ScaleNet® Anti-Scale System

Connection Sizes: 2" (50mm)

Flow Rates: From 30 gpm to 450 gpm (114 lpm to 1703 lpm)

The ScaleNet® Anti-Scale System provides protection from scale formation on internal plumbing surfaces. The ScaleNet system may be installed at the point-of-entry to a building to treat both hot and cold water, or it can be located directly before a water heater, boiler, or other water heating device that requires protection from the ill effects of hard water.

ScaleNet prevents scale by transforming dissolved hardness minerals into harmless, inactive microscopic crystal particles, as water travels through the media filled tank. These precipitated micro-crystals stay suspended in the water and are passed to drain, thereby having a greatly reduced ability to react negatively like dissolved hardness does. The system requires very little maintenance, no backwashing, no salt, and no electricity. Typical hardness problems, especially build-up of scale in pipes, water heaters, boilers and fixtures are no longer a concern.

ScaleNet is not a water softener or a chemical additive (like anti-scalants or sequestrants). It is a scale prevention device with proven third party laboratory test data and years of successful residential and commercial applications. ScaleNet is the one water treatment device that effectively provides scale protection and is a great alternative to water softening (ion exchange) or scale sequestering chemicals.

M8416-COM

Features

- Systems are certified by WQA to NSF/ANSI standard 372 for Lead Free compliance.
- Systems and media are certified by WQA to NSF/ANSI standard 61
- Chemical-free scale prevention and protection – converts hardness minerals to harmless, inactive microscopic crystals making ScaleNet an effective alternative technology to a water softener for the prevention of scale due to water hardness
- Virtually maintenance free – No salt bags or other chemicals to constantly add
- No control valve, no electricity and no wastewater
- Uses environmentally friendly "green" technology
- Improves efficiency of all water using appliances – both hot and cold
- Simple sizing & installation – all you need to know is pipe size and the peak flow rate
- Perfect system for towns or communities where water softeners are banned or restricted
- Manifold assemblies for easy installation of multi-tank, high-flow applications (Can be operated in parallel for high flow applications.)
- ScaleNet does not remove minerals or add sodium to the water supply
- ScaleNet can be installed as pre-treatment to reverse osmosis (ScaleNet should be the last stage in treatment unless a point-of-use system is being used down stream.)

***The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.**

WATTS®

Models

Model	Maximum Flow Rate
M8414-COM	50 gpm (189.3 lpm)
M8416-COM	75 gpm (283.9 lpm)

Connections

M8414-COM	2" (50mm) PVC Union with 90° Socket
M8416-COM	2" (50mm) PVC Socket

Replacement Media

M8414-COM-RM	Media should be replaced every 3 years
M8416-COM-RM	Media should be replaced every 3 years

Specifications

A ScaleNet scale prevention system shall be installed on the main water service pipe just after it enters the building, but after other whole building water safety devices (backflow preventers or pressure reducing valves), to effectively address water hardness concerns. A system may also be installed further downstream to protect specific equipment or areas within a plumbing system. The system shall be plumbed with a bypass valve to allow isolation of tank(s) and to allow the bypass of untreated water in the event that service or media replacement be necessary. The installation area should be suitable in size for the tank(s) to be serviced without encumbrance and sit upright on a flat level surface.

The system must operate in an upflow manner and not require additional water to backwash, flush, or regenerate once put into service. The system must not require any chemical additives and must not require electricity for operation.

Multi-tank systems shall be installed in parallel with PVC/CPVC manifold to meet peak flow rate requirements. The system must be certified to NSF/ANSI standard 372 for Lead Free compliance and NSF/ANSI standard 61.

NOTICE

Copper lines need to be passivized for a minimum of 4 weeks before placing unit into service. Not for use on closed loop systems.

Feed Water Chemistry Requirements

pH	6.5 to 8.5
Hardness (maximum)	75 grains (1300 ppm CaCO3)
Water Pressure	15psi to 100psi (103 kPa to 6.9 bar)
Temperature	40°F to 110°F (5°C to 43°C)
Chlorine	< 3ppm
Iron (maximum)	0.3 mg/l
Manganese (maximum)	0.05 mg/l
Copper	None allowed
Oil & H2S	None allowed
Polyphosphate	None allowed
Silica (maximum)	10 ppm

Systems using ScaleNet technology prevent hard water scale formation inside the plumbing system at influent hardness levels of 75 grains per gallon of calcium carbonate and less. Due to variances in water chemistry, certain aesthetic conditions external of the plumbing system may not be attained. Scale is designed for the treatment of potable water that meets the requirements of the current USEPA Safe Drinking Water Act. The addition of soaps, chemicals, or cleaners, before or after ScaleNet treatment, may reverse its anti-scale treatment effects and/or create water with a heavy residue or spotting potential. Any adverse conditions caused by the addition of soaps, chemicals, or cleaners are the sole responsibility of the end user.

NOTICE

Water known to have heavy loads of dirt and debris may require pre-filtration prior to ScaleNet. Systems that may experience a vacuum, or are installed above the first floor in a building, must be protected with a properly sized vacuum breaker. Systems that are installed with rigid plumbing materials such as copper, galvanized pipe, or PVC must have a flex connector (Watts part number C515285) installed on the inlet and outlet of the system.

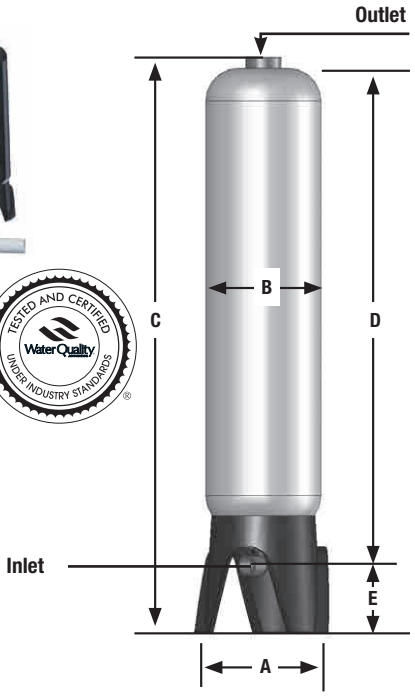
Standards

Independent scientific testing has confirmed Template Assisted Crystallization (TAC) technology provides scale reduction of over 95+%. Testing was conducted under protocol based on DVGW W512 test to access control of scale formation. Systems are certified by WQA to NSF/ANSI standard 372 for Lead Free compliance. Systems and media are certified by WQA to NSF/ANSI standard 61.

NOTICE

The information above shows flow rate data for our large single tanks (50gpm & 75gpm), high-flow applications with ScaleNet utilizing multiple tanks, plumbed in parallel, to meet flow rates from 100gpm up to and above 1000gpm or more. An example of a multi-tank ScaleNet system is shown below:

WQA Certified against NSF/ANSI Standard 61 and 372 for Lead Free.



Model	Description	Tank Size (IN.)	Pipe Size	Liters of Media	Space Required W x D x H (IN.)	Weight lbs.	Weight kgs
M8414-COM	50 Gallon Per Minute Scale Prevention System	14x65	2"	12.5	20x20x85	54	24.5
M8416-COM	75 Gallon Per Minute Scale Prevention System	16x65	2"	19	20x20x85	88	40.0

Dimensions

Model	Dimensions									
	A		B		C		D		E	
	in.	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*
M8414-COM	19 5/8	498	14	356	83 1/2	2121	65	1651	9 7/8	249
M8416-COM	19 5/8	498	16	406	84 1/2	2147	65	1651	10 3/4	272

The overall height and the height of the inlet fitting varies due to material variations and assembly tolerances. Please allow additional clearance above the tank for making connections.

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

A Watts Water Technologies Company

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