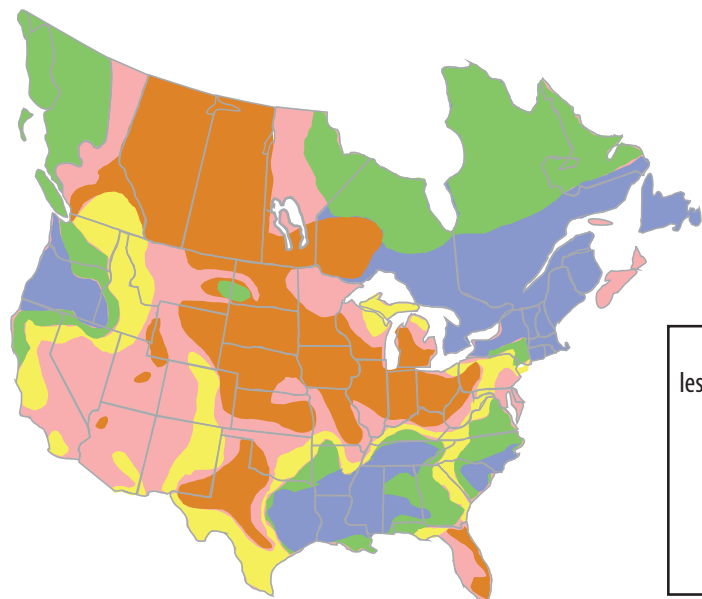


HARD WATER: Water described as "hard" is high in dissolved minerals, specifically calcium and magnesium. Hard water is not a health risk, but a nuisance because of mineral buildup on fixtures and poor soap and/or detergent performance.



According to the United States Geological Survey, 89.3% of the US homes have hard water.

Over 85% of Canada has a hard water problem.

Water Supply Classifications

less than 3 gpg	Blue	Slightly Hard
3 to 7 gpg	Green	Moderately Hard
7 to 10 gpg	Yellow	Hard
10 to 14 gpg	Pink	Very Hard
over 14 gpg	Orange	Extremely Hard
gpg= grains per gallons		

LEVELS OF HARDNESS

The hardness level depends on the concentration of calcium and magnesium present in the water. Hard water makes soap difficult to lather and may cause scaling or corrosion in water pipes, boilers, water heaters and other appliances, and industrial equipment. For details on the quality of your water, contact the local water municipality or have your water professionally tested by a water treatment expert.

HOW IS THE NORITZ PRODUCT AFFECTED BY HARD WATER?

- Problems resulting from scale formation are not covered by the warranty.
- Areas with moderately hard to hard water (3-10 gpg) have to flush the heater yearly (not necessary with H₂FLOW).
- Areas with very hard water (12 gpg or more) must be treated with either a water softener or a water treater that reduces the amount of scale deposits.

DISADVANTAGES OF TRADITIONAL SOFTENERS

Most conventional water-softening devices depend on a process known as ion-exchange in which "hardness" ions trade place with sodium and chloride ions. Most of the salt employed in the regeneration process gets flushed out of the system and is usually released into the soil or drainage system- something that can have damaging consequences to the environment. For this reason, many jurisdictions prohibit the use of water softeners.



Noritz heating element damaged by scale formation.

CONSEQUENCES OF HARD WATER: The harder the water, the more aggressive it is on appliances, especially water heaters. Water that is heated allows the dissolved minerals to come out of solution and deposit inside the water heater. Over time this scale reduces the performance as well as the longevity of a water heater.

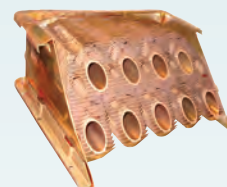
PLUGGED SHOWER HEADS & FAUCETS

Scale plugs up shower heads and faucets, restricting flow. This can be costly, depending on the number of shower heads or faucets that need to be replaced.



TANKLESS HEAT EXCHANGER

Accumulated scale is a poor conductor of heat. In tankless water heaters, accumulated scale insulates the water from the heat source.



Clean Noritz heat exchanger.

HOME PIPING

When untreated hard water is heated it begins to deposit solid calcium carbonate. This is the cause of lime scale building which leads to the blockage of water pipes.



Scale build-up on a Noritz heat exchanger in an extremely hard water area.

- Scale reduces the inner diameter of pipes and elbows, ultimately leading to restrictions in flow rate and pressure loss problems in systems.
- Scale often becomes encrusted on internal moving parts of valves & components, affecting their intended purpose or worse, causing safety failures.
- In a boiler or water heater, heating elements can become coated with scale, reducing system efficiency and increasing operating costs for end users.

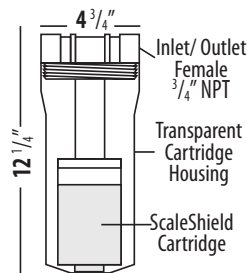
SCALESIELD

YOUR HEATER'S FIRST LINE OF DEFENSE

Applicable Hardness Range:

<input checked="" type="checkbox"/>	less than 3 gpg	<input type="checkbox"/>	Slightly Hard
<input checked="" type="checkbox"/>	3 to 7 gpg	<input type="checkbox"/>	Moderately Hard
<input checked="" type="checkbox"/>	7 to 10 gpg	<input type="checkbox"/>	Hard
<input type="checkbox"/>	10 to 14 gpg	<input type="checkbox"/>	Very Hard
<input type="checkbox"/>	over 14 gpg	<input type="checkbox"/>	Extremely Hard

- Noritz's ScaleShield is a unique product providing superior limescale prevention, corrosion control for your tankless water heater while retaining beneficial minerals in water without the waste.
- Provides consistent scale prevention and corrosion control.
- No electricity, maintenance or guesswork is required.
- A simple glance at the ScaleShield cartridge indicates when replacement is needed.
- Replace cartridge 1-2 times a year depending on usage.



Model	Description	Part Number
ScaleShield	Up to 9.8 GPM	SS-HB-1
ScaleShield	Up to 11.1 GPM	SS-HB-2
Cartridge	Replacement cartridge	HBC-1
Cartridge	Replacement cartridge	HBC-2

*For further information on flushing & the replacement schedule please see the Noritz tankless unit's installation manual.

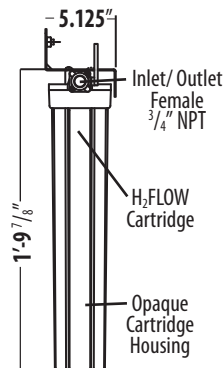
H₂FLOW

THE ULTIMATE TANKLESS HARD WATER SOLUTION

Applicable Hardness Range:

<input checked="" type="checkbox"/>	less than 3 gpg	<input type="checkbox"/>	Slightly Hard
<input checked="" type="checkbox"/>	3 to 7 gpg	<input type="checkbox"/>	Moderately Hard
<input checked="" type="checkbox"/>	7 to 10 gpg	<input type="checkbox"/>	Hard
<input checked="" type="checkbox"/>	10 to 14 gpg	<input type="checkbox"/>	Very Hard
<input checked="" type="checkbox"/>	over 14 gpg	<input type="checkbox"/>	Extremely Hard

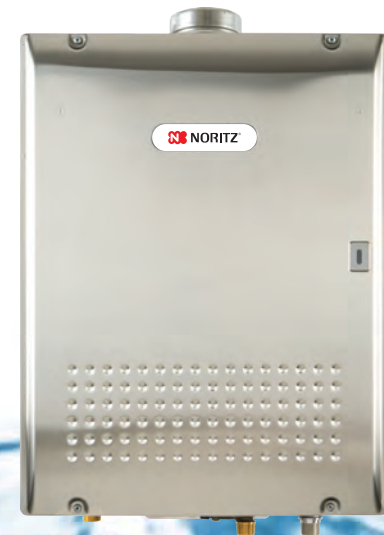
- H₂FLOW is not a water softener. No salt or chemicals to add or maintain & no discharge.
- Compact design allows for installation in tight areas.
- Economical and efficient. Very low maintenance.
- Retains "beneficial minerals" in water and produces no waste water.
- Inlet ball valve for easy isolation shutoff and filter changes.
- Replace cartridge every 2 years.
- Extends life of heating system components and reverses existing scale problems.



Model	Description	Part Number
H2Flow	Up to 10 GPM	H2F
Cartridge	H2Flow replacement cartridge	H2F-C

*For further information on flushing & the replacement schedule please see the Noritz tankless unit's installation manual.

NORITZ®



Tankless Hard Water Protection

Protect Your Investment

(866) 766-7489

www.noritz.com/watertreatment

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The Ultimate Tankless Hard Water Solution

● Maintains Efficiency

Maintains maximum output capabilities and efficiency of a water heater, boiler or tankless unit and downstream plumbing components.

NO SCALE

● Environmentally Friendly

The “green” alternative to water softeners. Uses no chemicals or salts. Does not produce wastewater or use any electricity.

NO SALT

● Low Maintenance

Virtually maintenance free. Cartridge replacement every 2 years. Extends life of heating system components. Reverses existing scale problems.

EXTENDS LIFE

Scale build up can accumulate inside water heaters and boilers, especially in hard water areas. Lime scale deposits tend to thrive with the high heat ranges typically found in these appliances. This hard water build up can rob your appliance of its efficiency and even cause it to break down prematurely.

● The Ultimate in Scale Protection

H₂FLOW is the answer to effectively handle hard water scale build up that can affect the performance of your appliance. This breakthrough technology has now been made available for all water heater types, including tankless, boilers, and tank type water heaters. H₂FLOW is an economical solution to hard scale build up that can help to protect your appliance for years to come.

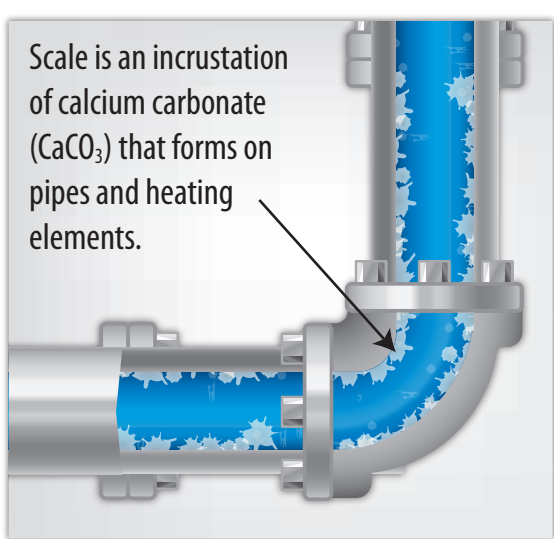
● Features

- H₂FLOW is not a water softener. No salt or chemicals to add or maintain & no discharge.
- Compact design allows for installation in tight areas.
- Economical and efficient. Very low maintenance.
- Retains “beneficial minerals” in water and produces no waste water.
- Inlet ball valve for easy isolation shutoff and filter changes.

What is scale?

- Scale is primarily composed of calcium, magnesium and bicarbonate.
- Scale deposits grow over time and are highly insoluble, making scale extremely difficult to remove once formed and often leading to costly remediation efforts.
- Hard water contains a high scale content. More than 85% of American homes have hard water

Scale is an incrustation of calcium carbonate (CaCO_3) that forms on pipes and heating elements.



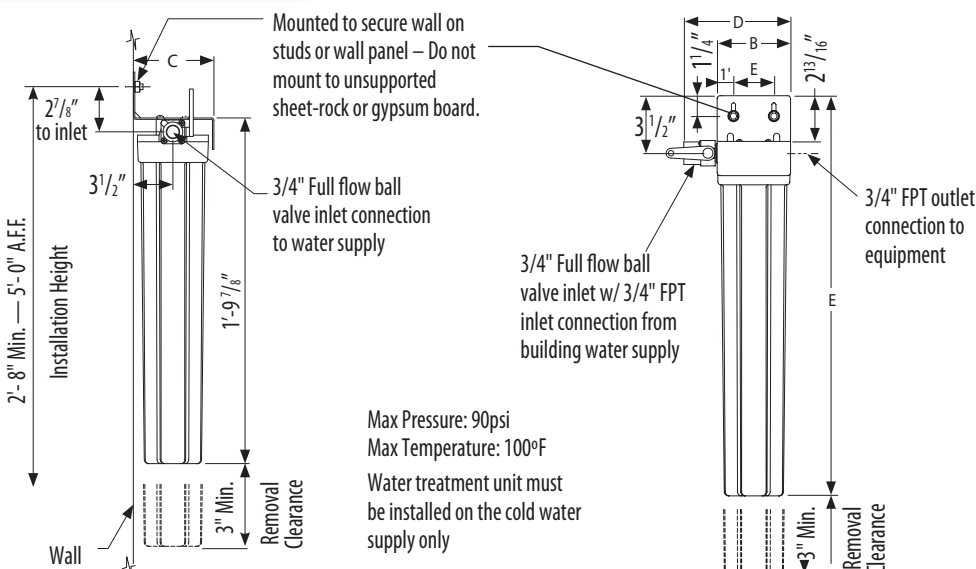
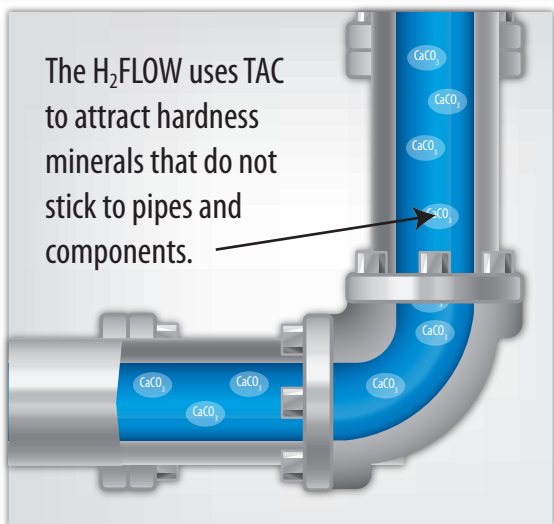
Why is scale harmful?

- Scale reduces the inner diameter of pipes and elbows, ultimately leading to restrictions in flow rate and pressure loss problems in systems.
- Scale often becomes encrusted on internal moving parts of valves & components, affecting their intended purpose or worse, causing safety failures.
- In a boiler or water heater, heating elements can become coated with scale, reducing system efficiency and increasing operating costs for end users.

How does H₂FLOW help?

- H₂FLOW media uses template assisted crystallization (TAC) to attract hardness minerals and convert them into harmless "soft" scale particles that do not stick to pipes and components.
- The harmless crystals will not stick to your pipes, tankless water heater or other downstream components.
- H₂FLOW achieved a 99.6% effectiveness rating in scale prevention.

The H₂FLOW uses TAC to attract hardness minerals that do not stick to pipes and components.



Dimensions										Weight	
A		B		C		D		E			
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs
26	66	7 ³ / ₄	20	8 ⁵ / ₈	23	9 ¹³ / ₁₆	25	5 ³ / ₄	15	19	8.6

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

Product	Part Number
H ₂ FLOW (contains 1 cartridge)	H2F
Replacement Cartridge	H2FC



Tankless for Professionals™

ScaleShield™: Your Tankless Water Heater's First Line of Defense





SCALESIELD™: YOUR TANKLESS WATER HEATER'S FIRST LINE OF DEFENSE

Noritz's ScaleShield™ Water Conditioning System is a unique product providing superior limescale prevention and corrosion control for your tankless water heater. In many cases, the ScaleShield™ Water Conditioning System offers many of the same advantages as conventional water softening systems, except at a lower cost with little professional maintenance. When it comes to protecting your Noritz tankless water heater, no other product offers the level of protection from limescale and corrosion than ScaleShield™.

The ScaleShield™ conditions water at a constant rate resulting in consistent scale prevention and corrosion control for predictable periods of time. No electricity, maintenance, or guesswork is required. A simple glance at the ScaleShield™ cartridge indicates when replacement is needed.

BENEFITS

Less Maintenance

Keeps scale-causing minerals in solution inhibiting limescale formation, requiring less descaling maintenance.

Maintain Efficiency

Scale-free surfaces allow unit to operate at maximum efficiency.

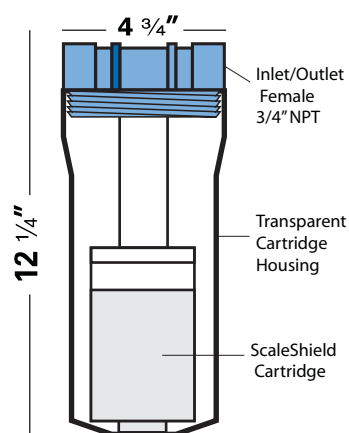
Longer Life Span

Coats wetted surfaces and acts as a shield from scale and corrosion, increasing the lifespan of your Noritz heater and other appliances.

Simple Installation

The compact size of ScaleShield™ allows for easy installation when compared to conventional water conditioning systems.

SPECIFICATIONS



Models	SS-HB-1	SS-HB-2
Max. Pressure	150psi	150psi
Max. Temperature	125°F	125°F
Connection Size	3/4" Female NPT	3/4" Female NPT
MSRP	\$250	\$280

Cartridge	HBC-1	HBC-2
Qty / Box	6	6
MSRP / Piece	\$100	\$130

SELECTION GUIDE

Unit	Model	Description
N-063 Series	SS-HB-1	Installation on cold-water line feeding tankless heater only
N-069 Series		
N-084 Series	SS-HB-2	Installation on cold-water line feeding tankless heater only
N-132 Series		2 units required for installation on cold-water line feeding tankless heater only
Whole House	Contact Noritz	
Commercial		