

# Water Treatment

If this water heater will be installed in an application where the supply water is hard, the water must be treated with either a water softener, which removes the hardness, or by using sequestering agents, such as the Noritz Scale Shield, that reduce the amount of scale deposits. Refer to the below tables for suggested treatment and maintenance measures to be taken based on the water hardness level. Damage to the water heater as a result of water in excess of 12 gpg (200 mg/L) of hardness is not covered by the Noritz America Limited Warranty.

Note: When installing a water softener, consult with the manufacturer for proper sizing and installation guidelines; the below diagram is for reference only. For more information about Scale Shield, contact Noritz America at 866-766-7489.

Residential Use Treatment Guidelines

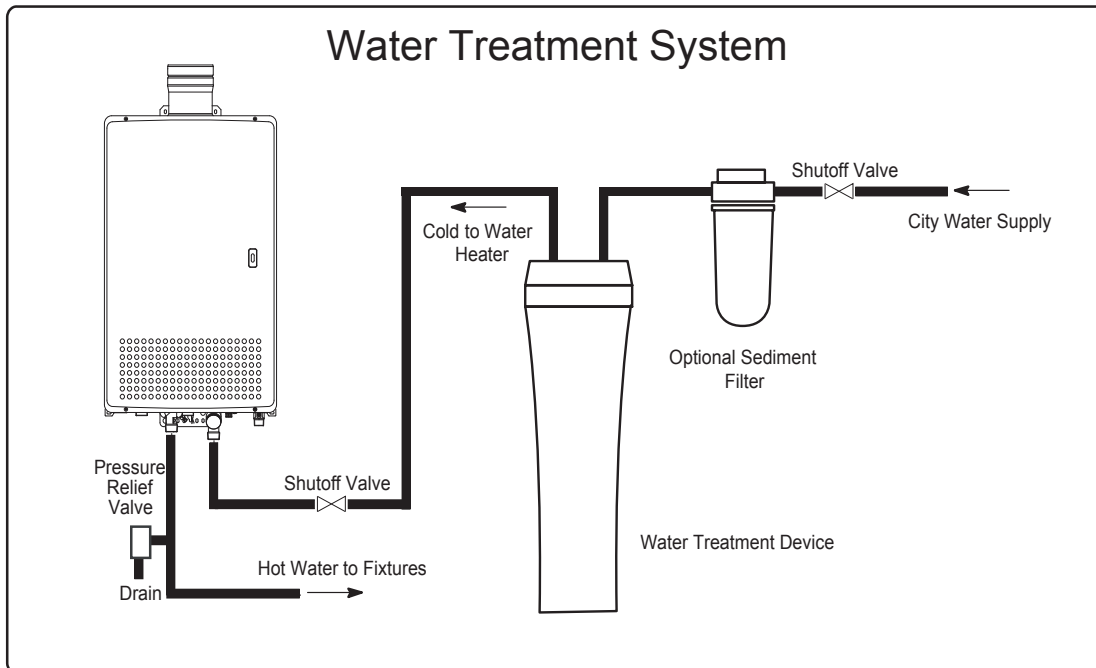
Type of Water	Hardness Level	Treatment Device	Flush Frequency*
Soft	0-1 gpg (0-17 mg/L)	None	None
Slightly Hard	1-3 gpg (17-51 mg/L)	None	None
Moderately Hard	3-7 gpg (51-120 mg/L)	ScaleShield	Once a Year
Hard	7-10 gpg (120-171 mg/L)	ScaleShield	Once a Year
Very Hard	10-14 gpg (171-239 mg/L)	Water Softener	Softener Required
Extremely Hard	> 14 gpg (> 239 mg/L)	Water Softener	Softener Required

\* Install Noritz Isolation Valves to allow for flushing.

Commercial Use Treatment Guidelines

Type of Water	Hardness Level	Treatment Device	Flush Frequency*
Soft	0-1 gpg (0-17 mg/L)	None	None
Slightly Hard	1-3 gpg (17-51 mg/L)	None	None
Moderately Hard	3-7 gpg (51-120 mg/L)	Water Softener Suggested	Once a Year**
Hard	7-10 gpg (120-171 mg/L)	Water Softener Suggested	Twice a Year**
Very Hard	10-14 gpg (171-239 mg/L)	Water Softener	Softener Required
Extremely Hard	> 14 gpg (> 239 mg/L)	Water Softener	Softener Required

\* Install Noritz Isolation Valves to allow for flushing.  
\*\*Flushing is required if a water softener is not installed.



## Water Quality

Damage to the water heater as a result of poor water quality is not covered by the Limited Warranty. To ensure full warranty coverage, treat or condition water that exceeds the target levels provided in this table.

Source: EPA National Secondary Drinking Water Regulations (40 CFR Part 143.3)

Total Hardness*	: 200 mg/L (12 gpg) or less
Aluminum	: 0.05 to 0.2 mg/L or less
Chloride	: 250 mg/L or less
Copper	: 1 mg/L or less
Iron	: 0.3 mg/L or less
Manganese	: 0.05 mg/L or less
pH	: 6.5 - 8.5
Total Dissolved Solids	: 500 mg/L or less
Zinc	: 5 mg/L or less
Sulfate ion	: 250 mg/L or less
Residual chlorine	: 4 mg/L or less

\* Maximum limit suggested by Noritz.