

# FLEXCON INDUSTRIES LIMITED PRODUCT WARRANTY

## PRODUCTS COVERED: HYDRONIC EXPANSION TANKS MANUFACTURED AND DISTRIBUTED BY FLEXCON INDUSTRIES

**Important:** Read carefully the installation, operating and maintenance instructions manual ("Manual") to avoid serious personal injury and/or property damage and to ensure safe use and proper care of this product.

**Warranty:** Warranty is extended to all purchasers of the new product. The warranty is non-transferable. Flexcon warrants to the purchaser or first user of the new product that at the time of manufacture, the product is free from defect in material or workmanship for (5) years from the date of manufacture. Any warranty claim must be made within (5) years unless another time period is set forth in the manual, measured from the date of manufacture.

In the event of a breach of the foregoing warranty and upon proper and timely notification to Flexcon, Flexcon will at its option either: make repairs to correct and defect in material or workmanship, or supply and ship either new or used replacement parts or products. Flexcon will not accept any claims for, nor will Flexcon be responsible for, any other costs including labor

**Exclusions:** This warranty does not cover any failure or problem unless it was caused by a defect in material or workmanship. In addition, this warranty shall not apply:

- If the Product is not correctly installed, operated, repaired or maintained as described in the Manual provided with the Product.
- To any failure or malfunction resulting from (i) misuse or abuse, (ii) improper or negligent handling, shipping (by anyone other than Flexcon), storage, use or operation, or (iii) damages to the tank caused by lightning, floods, fire, freezing or any other environmental condition.
- To damages caused by any unauthorized alteration to the Product, or any attempt to repair tank leaks or parts.
- To any failure or problem resulting from the use of the Product for any purpose other than those specified in the Manual.
- If the Product is used anywhere except the United States, its territories or possessions, or Canada.
- To labor costs, shipping charges, service charges, delivery expenses, administrative fees or any costs incurred in removing or reinstalling the Products.
- To any claims submitted to Flexcon or a Flexcon authorized distributor or dealer more than 30 days after expiration of the applicable warranty time period described in this Warranty;
- To any repair or replacement costs not authorized in advance by Flexcon.

**Warranty Limitations** - All implied warranties including the implied warranties of merchantability and fitness for a particular purpose are specifically disclaimed.

**Limitations of Remedies** - The remedies contained in this warranty are the purchaser's or first user's exclusive remedies. In no circumstances will Flexcon be liable for more than, and purchaser-first user's remedies shall not exceed, the price paid for the Product. In no case shall Flexcon be liable for any special, indirect, incidental or consequential damages, whether resulting from non-delivery or from the use, misuse, or inability to use the Product or from defects in the product or from Flexcon's own negligence or other tort. These exclusions apply regardless of whether such damages are sought for breach of warranty, breach of contract, negligence, strict liability, in tort or under any other legal theory. Excluded damages include, but are not limited to, inconvenience, loss or damage to property, mold, loss of profits, loss of savings or revenue, loss of use of the Products or any associated equipment, facilities, buildings or services, downtime, and the claims of third parties including customers.

**What To Do If You Have a Problem Covered By This Warranty** - You must notify the authorized Flexcon distributor or dealer who sold you the Product within 30 days of the event leading to the Warranty claim. Any covered Warranty service must be authorized by the Flexcon distributor or dealer which sold you the Product. If you do not receive a prompt response, call Flexcon directly at 781.986.2424. Notice of a Warranty claim should be submitted within 60 days of the event leading to the claim by the authorized distributor/dealer to Flexcon at the following address:

Flexcon Industries, Warranty Claim Dept., P.O. Box 782, Randolph, MA 02368

Before Flexcon determines to provide any replacement part or Product, it may, as a pre-condition to making such a determination, require that the warranty claimant ship the Product, postage prepaid, to an authorized Flexcon distributor, or to Flexcon, and provide proof of purchase evidenced by the original sales receipt.

**Replacement Product Warranty** - In case of replacement of a Product or any component part, Flexcon reserves the right to make changes in the design, construction, or material of the substitute components or products, which shall be subject to all of the terms and limitations of this Warranty, except that the applicable warranty periods shall be reduced by the amount of time the warranty claimant owned the product prior to submitting notification or the warranty claim.

Owners Record Keep for later use

Serial number (see tank data label at bottom of tank): \_\_\_\_\_

Model (see tank data label at bottom of tank): \_\_\_\_\_

Date Installed: \_\_\_\_\_

Installer Name: \_\_\_\_\_

Telephone number: \_\_\_\_\_

Retain copy of cancelled check and installation receipt

# INSTALLATION, WARNINGS, AND OPERATION INSTRUCTIONS

## FLEX 2 PRO, HYDRONIC EXPANSION TANKS



### DESCRIPTION

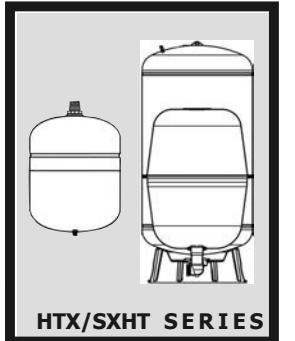
Flexcon hydronic expansion tanks are designed to accommodate the natural expansion of water in a hydronic (forced hot water) heating system. When water heats up, it expands and in a closed system can cause unsafe operating pressures and nuisance operation of the boiler relief valve. These tanks are not to be used in open or potable (domestic) water systems. The air and water is permanently separated in a Flexcon tank by a 100% butyl rubber diaphragm.



**THIS IS THE SAFETY ALERT SYMBOL. IT IS USED TO ALERT YOU TO POTENTIAL PERSONAL IN-JURY HAZARDS. OBEY ALL SAFETY MESSAGES THAT FOLLOW THIS SYMBOL TO AVOID POSSIBLE INJURY OR DEATH.**



**INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN SERIOUS INJURY, DEATH, AND/OR SIGNIFICANT PROPERTY DAMAGE.**



**WARNING** This product must be installed by a **Qualified Professional** following all local and national plumbing and electrical codes. Read and understand fully the instructions included here and those on the Flexcon website which are updated on a regular basis. This product must be inspected annually by a qualified professional for any signs of corrosion or leakage and replaced immediately if these signs are present. Failure to follow these instructions may result in serious injury, death, and/or property damage and will void the product warranty.

**WARNING EXPLOSION HAZARD** This expansion tank is designed for water storage at a maximum pressure of 100 PSI and a maximum temperature of 240 F. A properly sized pressure relief valve set to local code must be installed on the system. This tank is shipped with a pre-charge of 12 PSI and any adjustment to the pre-charge must be done prior to installation and at ambient temperature. Do not adjust the pre-charge of this tank if the product is corroded or damaged or shows any signs of diminished integrity. Do not adjust the pre-charge of the expansion tank with the system under pressure. Failure to follow these instructions is UNSAFE and may result in serious injury, death, and/or property damage.

**WARNING** This expansion tank and the associated piping will in time leak. This tank must be installed in a location that allows for easy access, visual inspection and where water leakage will not cause property damage. Installation must include a means for adequate drainage. This tank must not be installed in a location that is subject to freezing. This tank must be installed in the vertical position. The manufacturer of this product is not liable or responsible for any water damage associated with the installation and/or failure of this product. Failure to follow these instructions will void the warranty and may result in serious injury, death, and/or property damage.

**WARNING** This tank is intended for use on closed water systems only and any other use may be dangerous and void the warranty. This products performance and lifespan can be significantly and adversely impacted by aggressive water conditions. A water test should be conducted at regular, periodic intervals specifically looking for corrosive water, acids and other relevant water contaminants which, if present, must be treated immediately and appropriately. The system piping must be properly grounded to earth and a di-electric union is recommended in the installation. Failure to follow these instructions may result in serious injury, death, and/or property damage.

**WARNING CALIFORNIA PROPOSITION 65** **WARNING!** This product contains a chemical known by the State of California to cause cancer and birth defects or other reproductive harm. (California installer-California law requires that this notice be given to the consumer/end user of this product.) For more information, contact the manufacturer at [www.flexconind.com](http://www.flexconind.com).

These instructions and warnings are subject to periodic updates on the Flexcon website [www.flexconind.com](http://www.flexconind.com) and should be regularly reviewed by the consumer for important safety and instruction updates.

## BEFORE INSTALLATION

### PRODUCT INSPECTION

Visually inspect the product for any signs of damage that may have occurred during transportation. If the tank is dented, bent or scratched, return the product to the original purchase point for replacement.

### PRE-CHARGE ADJUSTMENT

This expansion tank is shipped from the factory with a pre-charge of 12 psi. Any adjustments to the factory pre-charge must be done prior to initial tank installation and with 0 psi pressure on the system. **DO NOT ADJUST THE PRE-CHARGE OF THE EXPANSION TANK WITH THE SYSTEM UNDER PRESSURE!**

The expansion tank should be pre-charged to match the boiler fill valve setting.

**failure to properly adjust the pre-charge will shorten the life expectancy of the product.**

### TO ADJUST TANK PRECHARGE

Remove the protective cap from the air valve.

Check the tank pre-charge pressure using a standard tire pressure gauge.

If required add air to the tank using a manual bicycle tire pump until the proper pre-charge pressure is reached.

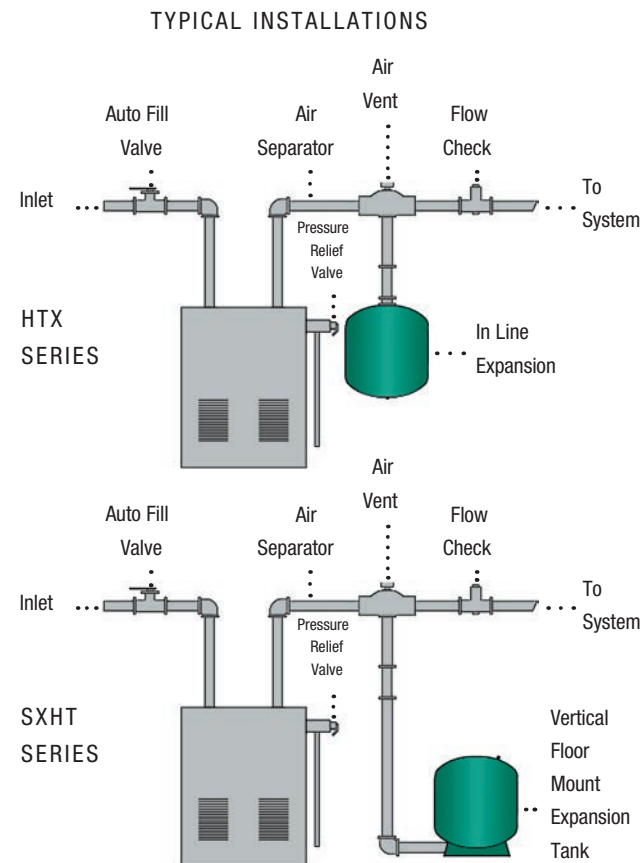
Replace the protective cap on the air valve.

## INSTALLATION

1. Drain boiler system or isolate the area where expansion tank will be installed.
2. Install expansion tank on supply side of the boiler, on the suction side of the circulator. Adequate thread sealant (pipe dope) must be added to ensure a leak free installation.
3. Connect system piping to discharge opening of the tank using a tee, air scoop, or other suitable tapping in the system.
4. Pressurize the system and check for leaks.
5. Restart the boiler system.

### WARNING

The tank (HTX) is designed to be supported by system piping. Make sure that there is adequate means of supporting the system piping and, if necessary, add strapping, brackets, or pipe hangers. **DO NOT INSTALL THIS EXPANSION TANK IN THE HORIZONTAL POSITION.**



## MAINTENANCE

This expansion tank and the entire system must be checked annually by a qualified professional.

Visually examine the tank and its connection to the system piping looking for any signs of water leakage or corrosion on the exterior of the tank or the connection.

### WARNING

If this expansion tank shows any visible signs of leaking, corrosion or rusting, the tank must be replaced immediately to avoid personal injury or property damage. Do not adjust the tank air pressure if there are any signs of corrosion on the tank. Failure to follow these instructions may result in serious injury or death and or property damage.

## SPECS/DIMENSIONS

### MATERIALS OF CONSTRUCTION

- Tank: 16-gauge, cold rolled steel
- Finish: Appliance quality paint for corrosion resistance
- Water Chamber SXHT: Top diaphragm is 100 % butyl rubber, lower water chamber is copolymer polypropylene
- Diaphragm Material HTX: 100% butyl rubber
- Connection: Welded steel
- Testing: High pressure, seam weld, helium, final pre-charge check
- Air Valve: Brass valve with o-ring seal
- Warranty: 5 years

### DIMENSIONS & CAPACITIES

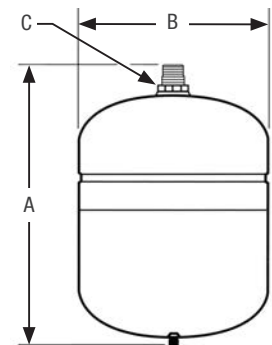
Model	Capacity (gallons)	Acceptance Volume (@12/30 PSIG)	Max. Acceptance Volume	Dimensions (inches)			Weight (lbs)
				Connection Size (C)	Diameter (B)	Height (A)	
HTX 15	2.1	.85	1.0	½" MPT	8	11.6	6
HTX 30	4.8	1.9	2.4	½" MPT	11	14.5	10
HTX 60	6.0	2.9	3.6	½" MPT	11.4	17.6	11
HTX 90	15.0	6.0	6.0	¾" MPT	16	20.8	28
SXHT 30	15.0	6.0	6.0	1" FPT	16	21.7	32
SXHT 40	20.0	8.0	8.0	1" FPT	16	28.8	39
SXHT 60	33.0	13.3	13.3	1" FPT	16	42.8	57
SXHT 90	44.0	17.7	17.7	1 ¼" FPT	21	36.2	72
SXHT 110	62.0	24.9	24.9	1 ½" FPT	21	47.9	112
SXHT 160	81.0	32.6	32.6	1 ½" FPT	21	62.0	123

Maximum working pressure 100 psig. Maximum working temperature, 240 F. Tank pre-charge 12 psig. Note: HTX series expansion tanks ARE NOT suitable for potable water and are only to be used on closed systems.

### QUICK SIZING CHART

Boiler Output 1000's BTUH	Copper Baseboard & Radiant	Type of Radiation		
		Convectors & Unit Heaters	Cast Iron Radiators	Cast Iron Baseboard
25	HTX 15	HTX 15	HTX 15	HTX 15
50	HTX 15	HTX 30	HTX 30	HTX 30
75	HTX 30	HTX 30	HTX 60	HTX 60
100	HTX 30	HTX 30	HTX 60	HTX 60
125	HTX 30	HTX 60	HTX 60	HTX 60
150	HTX 30	HTX 60	HTX 90	HTX 90
175	HTX 60	HTX 60	HTX 90	HTX 90
200	HTX 60	HTX 60	HTX 90	HTX 90
250	SXHT 30	SXHT 30	SXHT 40	SXHT 30
300	SXHT 30	SXHT 40	SXHT 40	SXHT 30
350	SXHT 30	SXHT 40	SXHT 60	SXHT 40
400	SXHT 30	SXHT 60	SXHT 90	SXHT 40
500	SXHT 40	SXHT 60	SXHT 90	SXHT 40
600	SXHT 40	SXHT 90	SXHT 90	SXHT 60
700	SXHT 60	SXHT 90	SXHT 90	SXHT 60
800	SXHT 60	SXHT 110	SXHT 110	SXHT 90
900	SXHT 60	SXHT 110	SXHT 110	SXHT 90
1000	SXHT 90	SXHT 110	SXHT 110	SXHT 90

### HTX SERIES



### SXHT SERIES

