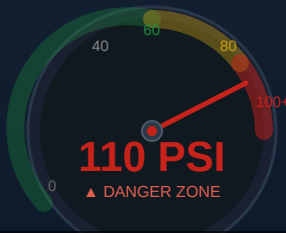


IT FEELS LIKE GREAT PRESSURE — BUT IT MAY BE DESTROYING EVERYTHING BEHIND YOUR WALLS



# The Silent Damage High Water Pressure Causes Inside Your Home

08

PSI DANGER ZONE	PIPES & JOINTS	FIXTURES & APPLIANCES	VISIBLE SIGNS
 <p><b>110 PSI</b> ▲ DANGER ZONE</p> <p>SAFE RANGE: 40–60 PSI IRC max: 80 PSI — above = code violation + warranty void</p>	<p>50 PSI — normal</p> <p>110+ PSI — overpressure</p> <p>WATER HAMMER shockwave</p> <p>supply line RUPTURE</p> <p><b>PIPE &amp; JOINT FATIGUE</b> Micro-stress every cycle leads to pinhole leaks inside walls</p>	<p>WASHER WATER HEATER</p> <p>valve failure</p> <p>FAUCET</p> <p>T&amp;P dripping</p> <p>DISHWASHER</p> <p>pump stress</p> <p>Overpressure cuts appliance lifespan 50–70% — and voids most manufacturer warranties</p>	<p>banging pipes</p> <p>dripping faucets</p> <p>rising water bills</p> <p>supply line rupture</p> <p>running toilet</p> <p>surge on open</p> <p>T&amp;P weeping</p> <p>fixtures worn fast</p> <p>wet spots / stains</p> <p><b>30-SECOND SELF-TEST</b> Attach a \$15 gauge to any outdoor hose bib. Stop all water use inside. Read the PSI. Check for leaks.</p>

## THE PSI PROBLEM — WHY IT GOES UNNOTICED

### Your Municipal Supply Is the Source

City mains are pressurized at **60–150 PSI** to push water through miles of distribution pipe. That pressure arrives at your home unchecked unless a Pressure Reducing Valve (PRV) is installed and working. Many homes have no PRV — and those that do often have one past its 7–12 year service life, silently allowing street pressure to run through your plumbing 24 hours a day.<sup>[1]</sup>

### The 80 PSI Code Threshold

The International Residential Code (IRC) §P2903.3.1 sets **80 PSI as the residential maximum**. Above this, a PRV is code-required. Most appliance manufacturers rate products to 80 PSI — **failure caused by overpressure voids the warranty**. A licensed plumber may not warrant work performed above 80 PSI.<sup>[2,3]</sup>

### Water Hammer — The Shockwave You Hear

Every solenoid valve closure — dishwasher, washer, ice maker — stops flow abruptly. At high pressure, this creates a **shockwave through your entire pipe system**, hammering joints and solder points hundreds of times monthly. The bang you hear is structural fatigue accumulating.<sup>[1]</sup>

### CODE & WARRANTY STANDARD

**IRC §P2903.3.1:** water pressure shall not exceed **80 PSI** at any fixture. Above this a PRV is required by code — and appliance warranties may be void regardless of failure cause. Water heaters are rated to 80 PSI maximum.<sup>[2,3]</sup>

## WHAT OVERPRESSURE DESTROYS & HOW FAST

### 50–70%

Appliance lifespan reduction from sustained overpressure — washers, dishwashers, water heaters<sup>[4]</sup>

### 30%

Increase in water bills from high-pressure leakage across fixtures and pipe joints<sup>[5]</sup>

### 80 PSI

IRC code maximum — above this, documented progressive damage to pipes, fixtures, and appliances<sup>[2]</sup>

### 7–12 Yrs

PRV service life before calibration drifts and overpressure begins passing through<sup>[1]</sup>

### Pipes, Joints & Supply Lines

Overpressure doesn't burst pipes overnight — it fatigues them. **Copper joints, soldered fittings, and threaded connections** absorb micro-stress with every spike, creating pinhole leaks inside walls undetected until drywall, framing, and subfloor are compromised. Braided supply lines are rated to 125 PSI but sustained pressure causes liner degradation leading to **catastrophic sudden failure** with no warning.<sup>[4,6]</sup>

### Fixtures, Seals & Appliance Pumps

Every cartridge, fill valve, diverter, and solenoid is **designed for 40–60 PSI**. At 100+ PSI, seals compress beyond design limits every cycle — faucets drip, toilets run constantly, and showerhead diverters fail. These are pressure symptoms, not maintenance issues. Replacements will keep failing until the root cause is addressed.<sup>[1,2]</sup>

## SIGNS YOUR PRESSURE IS TOO HIGH

- ▶ **Banging or hammering** in walls when an appliance or valve shuts off — water hammer from pressure spikes<sup>[1]</sup>
- ▶ **Water surges** when you first open a faucet — pressurized system releasing built-up force
- ▶ **Faucets that drip** no matter how many times you replace the cartridge or seat<sup>[2]</sup>
- ▶ **Toilet running constantly** — fill valve seal compressed beyond capacity<sup>[1]</sup>
- ▶ **T&P valve weeping** — tank experiencing thermal expansion it cannot manage without an expansion tank
- ▶ **Higher water bills** with no usage change — pressure-driven leakage at multiple points<sup>[5]</sup>
- ▶ **Appliances failing early** — washer valves, dishwasher pumps, ice maker lines<sup>[4]</sup>
- ▶ **Wet spots or soft drywall** — hidden pinhole leaks behind walls<sup>[6]</sup>

## WHAT DAYCO CHECKS ON EVERY VISIT

- ✓ **Hose bib pressure test** — 30-second gauge read showing exactly what your system runs
- ✓ **PRV evaluation** — age, output pressure, and replacement recommendation if needed
- ✓ **Expansion tank check** — Schrader valve pressure and bladder integrity

### THE FIX

A properly calibrated PRV sets your home at **50–60 PSI** — protecting every fixture, appliance, pipe, and joint simultaneously. One of the highest-value single upgrades in residential plumbing.<sup>[3]</sup>

[1] Absolute Plumbing / Axsom Air, 2025 • [2] IRC §P2903.3.1 / IAPMO • [3] Norfleet Family Plumbing, 2025 • [4] Blue Mountain Service, Jan 2026 • [5] Woodbridge Plumbing, 2021 • [6] MNS Plumbing, 2025 • PSI standards: Lulani / Applause Plumbing, 2024–2025