



City of Bainbridge Island  
Planning & Community Development  
Building Division  
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**BUILDING DEPARTMENT POLICY  
WATER HAMMER ARRESTERS**

**APPROVED BY:** Building Official

Revised Date:  
Effective Date: 10/31/2013

**Prepared by: James R. Weaver**

**Question:**

Are water hammer arresters required to be installed when utilizing PEX (Cross-linked polyethylene)?

**Code Section(s):**

***UPC 609.10 Water Hammer.***

*Building water supply systems where quick-acting valves are installed shall be provided with water hammer arrester(s) to absorb high pressures resulting from the quick closing of these valves.*

**Issue:**

With the increased use of PEX it has been argued that water hammer arresters are not required and code provisions have lagged behind industry developments and do not address the material property differences between PEX and the historically used copper pipe.

**Additional Information:**

Water hammer arresters provide protecting to water supply piping by reducing the surge pressure and minimizing the amount of noise transmission. Surge pressure is of particular importance due to the fact that joint systems (fittings) may be adversely affected by close proximity to a quick-acting valve that can cause water hammer.

The code has incorporated provisions for PEX piping throughout the code but in the instance of water hammer arresters no mention or exception is offered if different material is used for the piping.

Should the city be provided with installation specifications from a PEX manufacturer clearly noting that their product does not require the installation of a water hammer arrester, the city will consider the specifications as equivalency to compliance with UPC Section 609.10.

**Determination:**

In the absence of manufacturer's specifications, the City of Bainbridge Island will require water hammer arresters on building water supply systems where quick-acting valves are installed regardless of pipe material used.

James R. Weaver,  
City Building Official