

nova scotia real estate COMMISSION

What is Kitec plumbing?

Kitec plumbing consists of flexible aluminum pipe between an inner and outer layer of plastic pipe (PEX pipe) with brass fittings. Marketed as a cheaper and easy-to-install alternative to copper piping, Kitec was sold between 1995 and 2007 for potable water, in-floor, and hot-water baseboard heating systems. The sizing of the pipe require fittings from its own manufacturer, IPEX, and these fittings were made with a high zinc content that caused dezincifying in situations with aggressive water conditions. This in turn could either restrict water pressure or cause the fittings to fail completely, causing flooding and water damage to homes.

In Nova Scotia, Kitec piping is primarily used in hot-water baseboard and in-floor heating systems. There are fewer fittings used in heating systems than potable-water systems, so the potential damage is likely to be lessened, and quicker to spot if fittings fail, because they are more visible than the fittings in potable-water systems.

However, fittings aren't the only issue. In Nova Scotia there have been problems with the actual pipe disintegrating. One theory is that the pipes degrade from running the hot water system at too high a temperature. Kitec was certified to run at a maximum temperature of 180° F. A typical hot water boiler is set at a high of 170° F. In cases where the coil that heats the water off the main boiler degrades and reduces water temperature, some homeowners increase the temperature of the hot water system past what it was designed to handle, causing the piping to disintegrate.

Where is Kitec likely to be encountered?

Kitec was sold between 1995 and 2007, which means it can be found in houses constructed or extensively renovated during this time.

Orange "hot water" and blue "cold water" Kitec pipes



Kitec brass crimp fittings



Kitec electrical panel sticker



Kitec in mechanical room



How do I identify Kitec plumbing?

Most Kitec plumbing can be identified by its bright orange (hot water) and bright blue (cold water), which were the most common colours; however, it was also sold in red, blue, gray and black. The pipe is typically marked with one of the following brand names; Kitec, PlumbBetter, IPEX AQUA, WarmRite, Kitec XPA, AmbioComfort, XPA, KERR Controls or Plomberie Améliorée.

If fittings are visible, look for Kitec or KTC stamped on them. The terms CSA B137.9/10 or ATSM F1974 could also indicate a Kitec system. Often, the best place to look for the Kitec system is near the hot water tank or in the mechanical room where the pipe connects or exits the walls. Also look under kitchen sinks or bathroom vanities, where the pipe and/or fittings exit the wall.

Look at the electrical panel doors, both inside and out, for a bright yellow or neon coloured sticker stating that Kitec was used in the home and that the electrical system cannot be grounded to it (electrical systems must have a metal ground).