

Drain Water Heat Recovery and the Power-Pipe Systems

Presented by:
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www.renewability.com

QUICK BACKGROUND

Company founded in 2000

Developer and Manufacturer of:

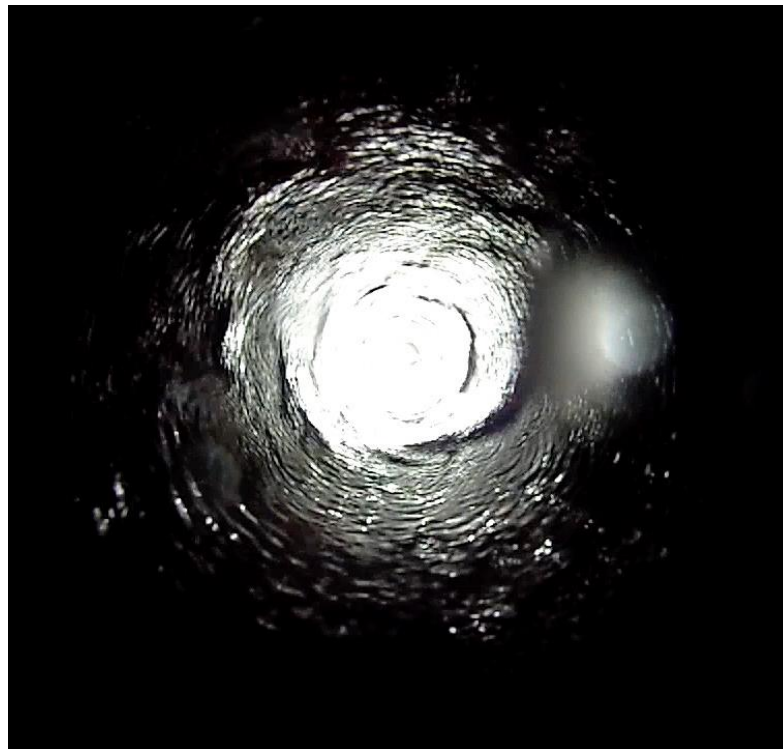


Over 40,000 Power-Pipes® installed in Homes, Apartment Buildings, Commercial and Industrial Applications

Offices in Canada, the United States and Europe

DRAIN WATER HEAT RECOVERY (DWHR)

In residential, DWHR works by using the outgoing warm drain water (primarily from the shower) to pre-heat the incoming cold fresh water



Temperature Rise on CSA 52.2% eff DWHR @ 9.5 lpm

Fresh Inlet ~ 46°F

Drain Inlet ~ 101°F

Fresh Outlet ~ 75°F



Now **Mandatory** in New Homes – Ontario and Manitoba

**Ontario: new single residential since
January 2017**

**Manitoba: all new single & multi-family
residential since April 2016**

Checklist: What You Need to Know

Using Drain Water Heat Recovery is Simple!

Be sure that the DWHR model you are using meets the SB-12 2017 Requirements:

- minimum 42% rated efficiency according to CSA B55.1
- complies with CSA B55.2 for safety and quality

When installing DWHR units be sure:

- to install within 5° of vertical
- the incoming cold water is connected to the bottom of the unit
- it is downstream of a water softener, where a water softener exists
- if installed in a wall, it is insulated to prevent sweating
- at least 2 showers are connected to a unit(s) except for homes that have only 1 shower

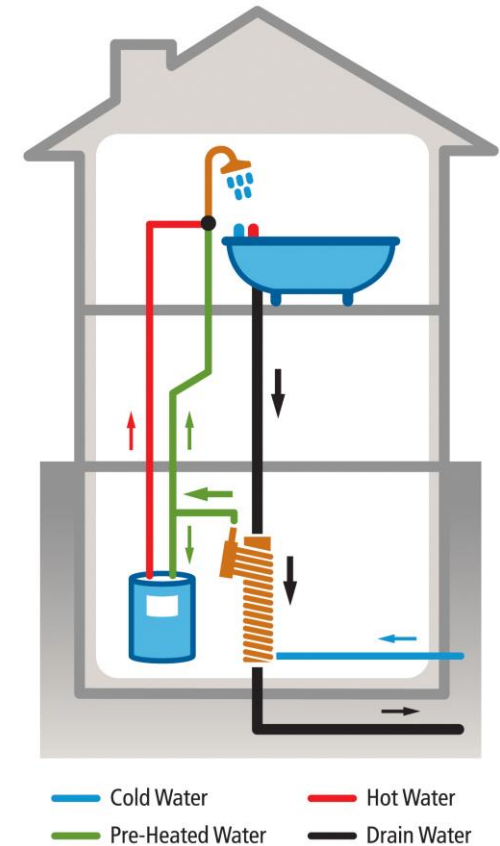
Let us help you smoothly and cost-effectively transition into using DWHR.

Simply call:

1-877-606-5559

Installation: Equal Flow - Most Energy Savings

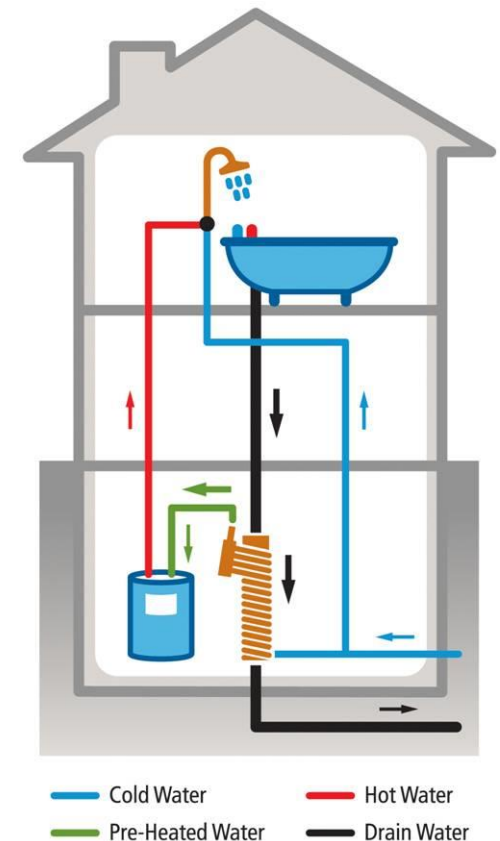
connect fresh water from DWHR unit to the cold side of shower and to the water heater (all the water in the home, except the kitchen sink)



Installation: Unequal Flow to Water Heater

connect fresh water from DWHR unit
to the water heater only

results in about 23% lower energy
savings than equal flow



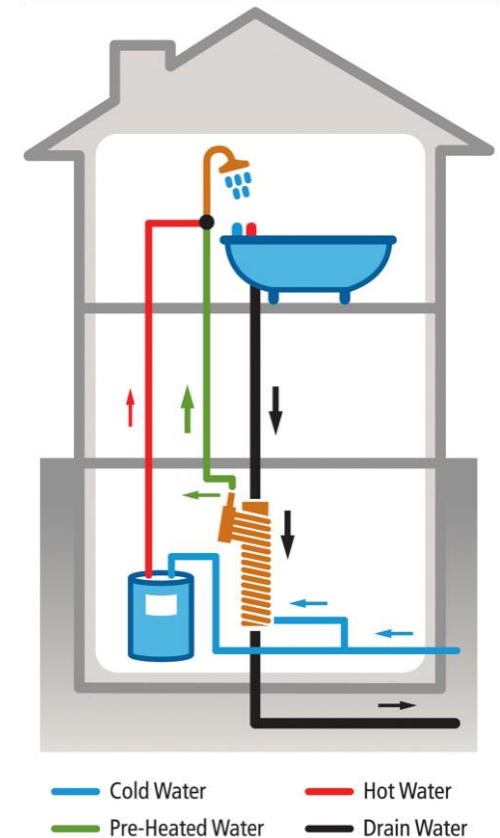
Installation: Unequal Flow to Cold Side of Shower

Connect preheated water connected to the cold side of shower only

also results in about 23% lower energy savings than equal flow

NOTE:

To comply with SB-12, DWHR units can be connected in any of these three configurations.



Efficiency versus Length?

While 42% efficient unit is the minimum code requirement, many builders opt for longer, more efficient, units when doing Energy Star for New Homes and Performance Path simply because it is more cost competitive than many other options

Power-Pipe R3 Series - Efficiency vs Length

