

Raychem

Engineering in Today's Environment:

Current building regulations require architects and building engineers to actively seek opportunities to reduce energy and/or to increase the use of renewable sources of energy.

The energy saving that can be realised on the hot water distribution will have a larger proportional impact on the total energy reduction of a building than most other services.

The conventional means of distributing hot water throughout a building is that of a 'flow & return' system of recirculated DHWS. The main design criterion of the flow & return solution is simply the temperature of the water at the tap outlet, with no consideration of energy efficiency... in fact the simplest synopsis of the re-circ system is that it is actually designed to lose heat!

An Established Modern Solution to an Age Old Design Problem:

The Raychem hot water temperature maintenance system (HWAT) offers a simple, proven, energy-efficient replacement for re-circulation systems. Combining hot water comfort with economy, the self regulating heating cable on a single-pipe supply network compensates for the heat loss of the water in the pipe and ensures hot water is delivered at the desired temperature all the way to the HWS outlet.

The result is a system that has as much as 50% less pipe work, delivering quality hot water to every outlet regardless of location on the pipe network. The Raychem HWAT system is specifically designed for this application and has been shown to realise energy reductions of the order of 60%.

The Raychem HWAT system therefore manages to provide high-quality and comfortable hot-water to every outlet, by the most energy efficient means – delivering benefits to everyone from the designer through to the end-user.

Key benefits include:

- Huge design benefits i.e. no hydraulic balancing needed!
- Flexible design & installation - modular components allow offsite build benefits
- Significant reduction of pipe work, reducing cost & installation time
- Maintenance free system
- Significant reduction in power consumption - up to 65% saving!
- Lower running costs
- "Renewable Ready" system - can take advantage of renewable energy production
- Potential for significant carbon reduction

Installation examples include:

- Hartcliffe Education Centre - 2.8km HWAT-M
- Brislington Enterprise College - 2.7km HWAT-M
- Bristol Brunel Academy - 1.4km HWAT-M
- Whitefield Fishponds Community School - 1.2km HWAT-M
- Various Glasgow Schools - 16km+ HWAT-M & HWAT-R
- Ascot Race Course - 12km+ HWAT-M
- The New Wembley Stadium - 9km HWAT-M
- Swiss Re (The "Gerkin") - 3km HWAT-M
- Pinderfields & Pontefract Hospitals - 17km+ HWAT-M
- Albion Riverside, London (residential) - 12km HWAT-M
- City Inn, Westminster - 13km HWAT-M

Raychem SaveWatt: Modelling the Energy & Cost Benefit of a Single Pipe System

Raychem provide a FREE OF CHARGE system comparison based on specific project data. Let us prepare a detailed real project comparison between recirculating and single pipe hot water systems. Contact us for more information.

TraceCalc.Net Construction

Generate your own system designs in minutes. Get valuable electrical loading information based on your actual design parameters.

Operating costs



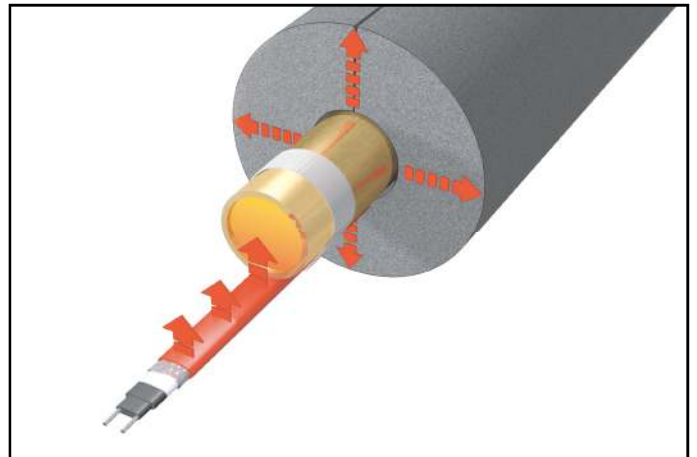
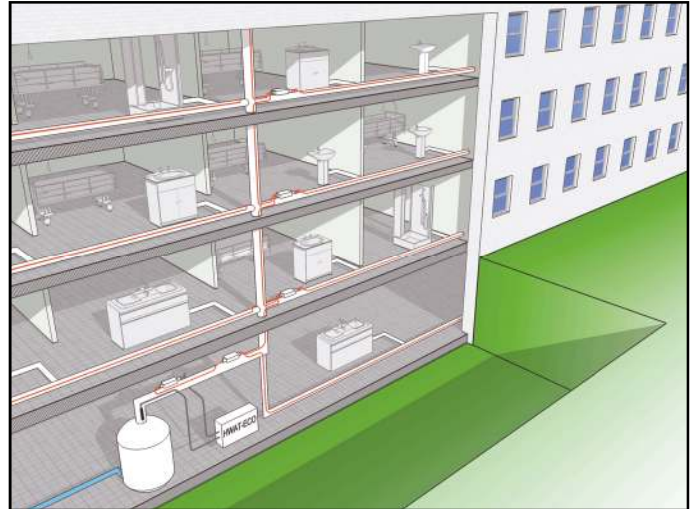
Operating costs: 10% lower operating

Energy demand



Operating costs: only 36% energy demand

Project specific cost and energy modelling software - Raychem SaveWatt™



Raychem HWAT electrical panel for integrated control, monitoring and electrical connection

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