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Growth drivers in Uponor's businesses

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Heating and Cooling

Georg von Graevenitz
Executive Vice President, Uponor Nordic

Key applications

Underfloor Heating (UFH)

- Complete systems for underfloor heating in residential, commercial and industrial buildings

Outdoor Heating

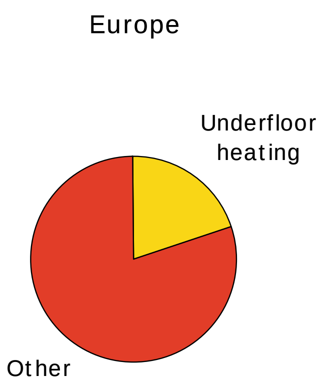
- Systems for snowmelt, permafrost protection, and turf conditioning

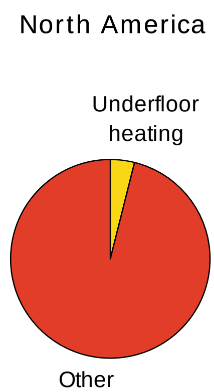
Cooling

- Systems for thermal activation of building structures
  - Use the concrete mass to store heat/cool and thereby reduce the peak load and transfer some of that load to outside the period of occupancy (e.g. night time in office buildings)

Share of underfloor heating

- UFH accounts for less than 25% of the European heating market and less than 5% of the North American heating market



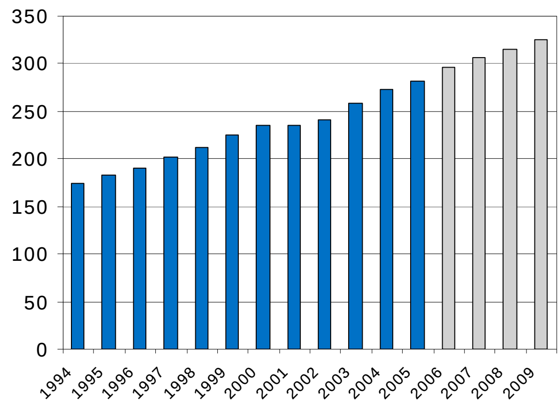


“Other” includes hydronic radiators, electric radiators, electric UFH and forced-air (USA).

Development of underfloor heating in Europe

- Hydronic underfloor heating is still in the growth phase of its product lifecycle in many European markets, while growth opportunities still exist in more mature markets
- Ex: The Spanish UFH heating market has experienced annual growth in the region of 15% in recent years

Millions of metres of UFH tubing sold in Europe



Source: KWD

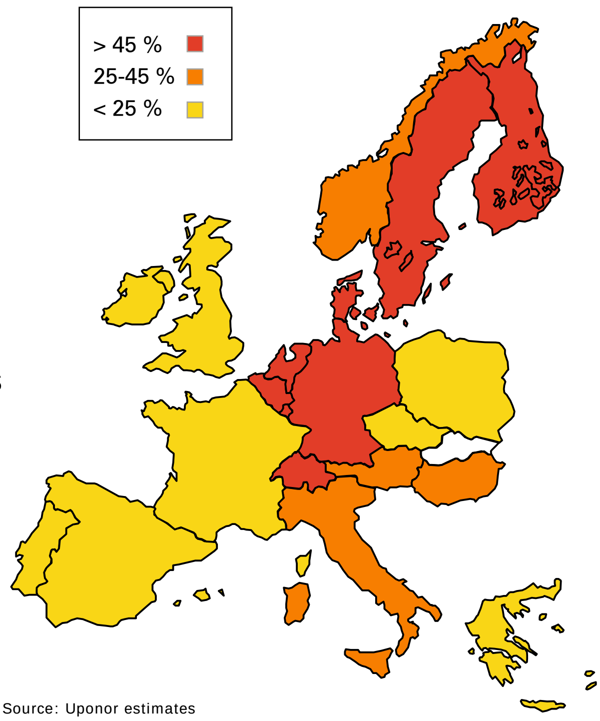
Penetration of UFH in new single-family houses in Europe

By Geography

- Penetration rates in Northern and Central Europe are much higher than in other regions

By Segment

- The share of UFH in the multi-family and non-residential segments remains significantly lower than the single-family segment

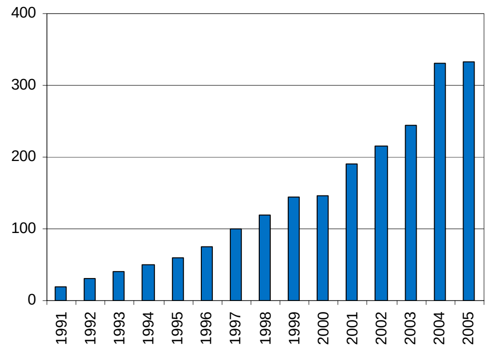


Source: Uponor estimates

Development of underfloor heating in North America

- Although the penetration of underfloor heating in North America is low, growth has averaged 19% during the past decade
- The high-end, single family segment represents the largest share of the market, while the share of the multi-family and mid-range, single family segments is still small
- Frost & Sullivan predicts that the North American radiant heating market will grow from $467 million in 2004 to $1,567 million in 2011

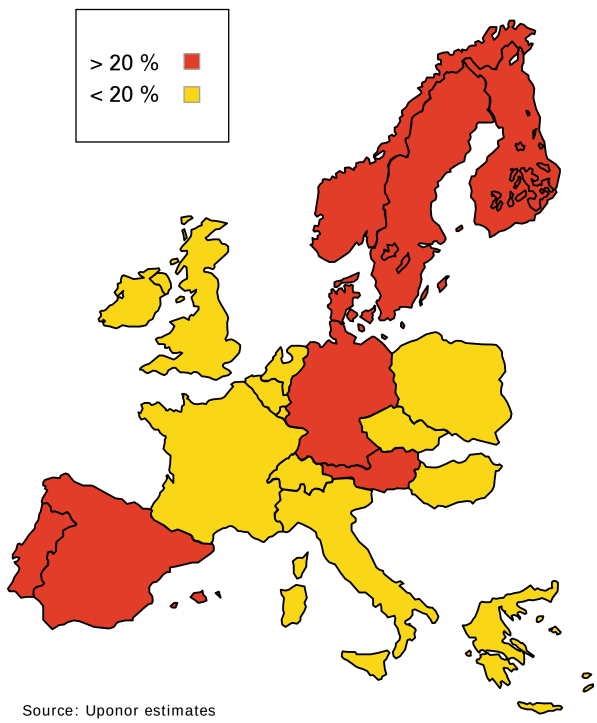
Millions of feet of UFH tubing sold in North America



Source: Radiant Panel Association manufacturer survey

Uponor's share of the UFH market

- Uponor is estimated to be the number 1 or number 2 provider of hydronic UFH in the Nordic, Central Europe, Europe-WES, and North America regions
- Within Europe, Uponor is strongest in the Nordics, Central Europe, and Iberia
- In North America, Uponor's share of the hydronic UFH market is about 50%



Source: Uponor estimates

Drivers of underfloor heating

Expected growth impact

- Increasing demands from consumers
  - More attention is being placed on comfort and air quality at work and in the home

- Increasing environmental standards and awareness
  - Ex: Energy Performance of Buildings directive
  - A lower operating temperature presents the opportunity to employ renewable heat sources, such as solar and heat pumps, thereby reducing CO_2 emissions

- Increasing emphasis on aesthetics and design
  - As an invisible heat source, UFH allows more architectural freedom and complete utilization of floor space

Competitive environment (1/2)

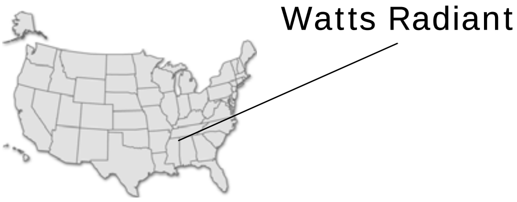
- The heating industry includes hydronic radiator, electric radiator, forced-air, hydronic UFH, and electric UFH producers

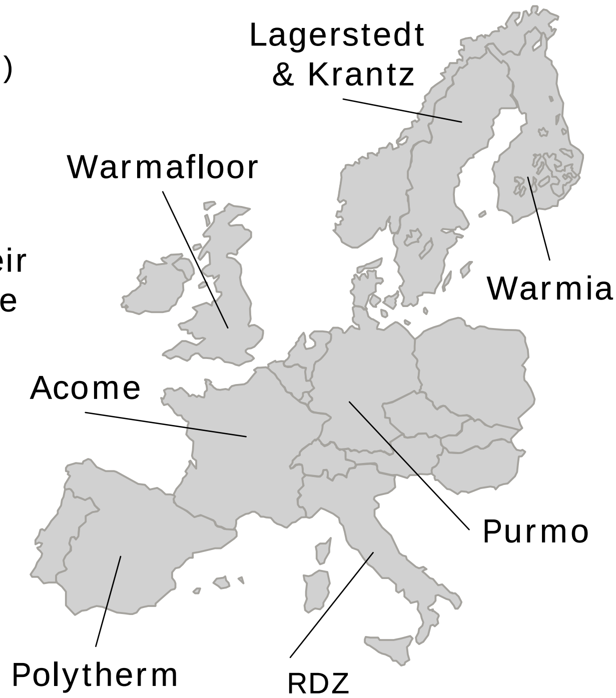
- Low barriers to entry have resulted in a fragmented hydronic underfloor heating market.
  - In Germany, there are at least 20 UFH suppliers on the market

- Strong partnerships with installers, specifiers, and distributors are key

Competitive environment (2/2)

- There are only a handful of international players:
  - **Uponor** (N. America and Europe)
  - **Rehau** (N. America and Europe)
  - **Roth** (Europe)
- Most companies concentrate their activities on a single market (see map)





Plumbing Solutions

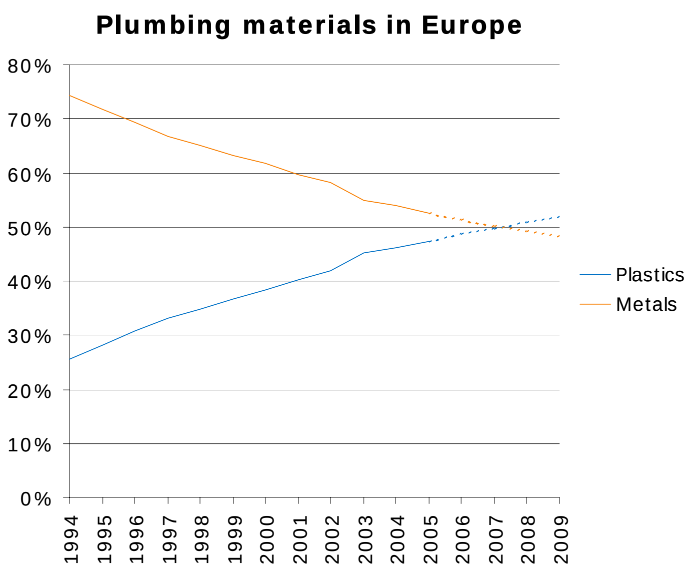
Jukka Kallioinen
Executive Vice President, Offering and Development

Key applications

- Tap Water
  - Comprehensive range of tap water systems for domestic and commercial premises
  - Offering includes pipes, fittings, components and tools for easy installation
- Radiator Connections
  - Offering includes pipes, fittings, and tools
- House Connections
  - Pre-insulated pipe systems for supplying hot and cold water to buildings

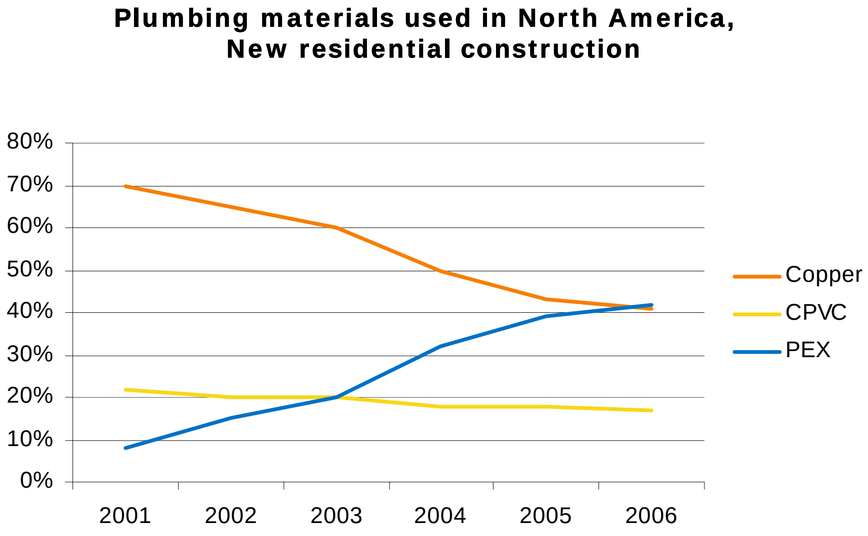
Drivers of plumbing – plastics penetration in Europe

- The penetration of plastics continues to rise
  - More installers are gaining experience in plastic pipe systems
  - Copper prices have more than doubled since January 2005



Source: KWD

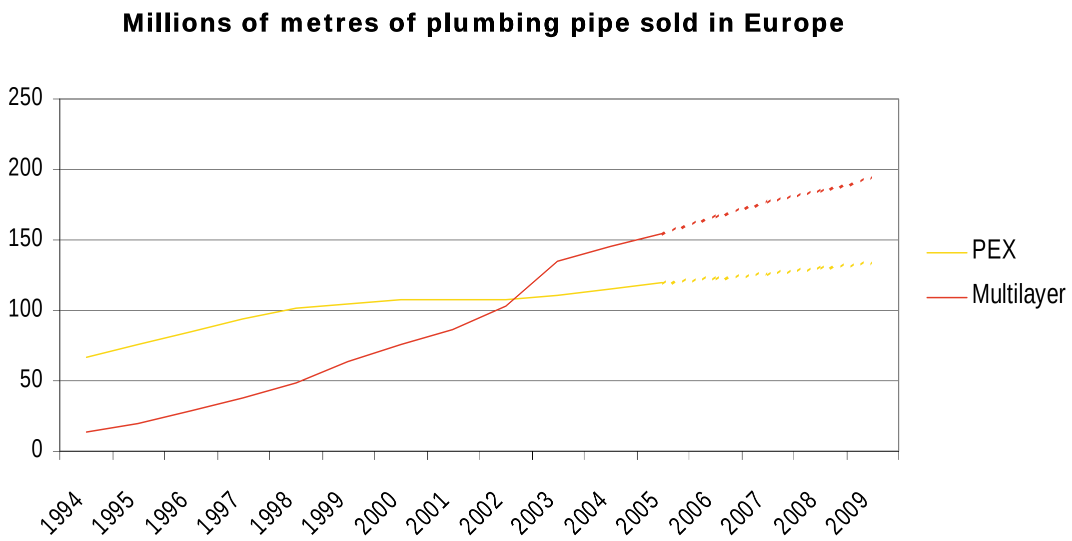
Drivers of plumbing
– plastics penetration in North America



Source: Uponor Estimates

Drivers of plumbing
- growth within the plastics segment

- While both PEX and multilayer pipes continue to grow in popularity, multilayer pipes have grown at a faster rate

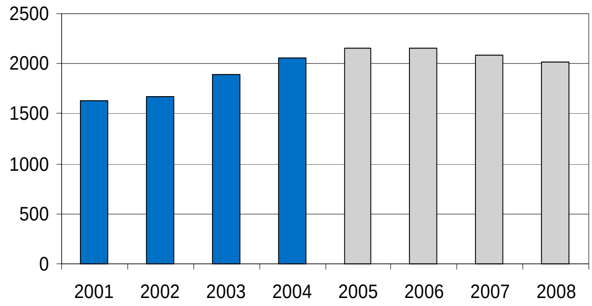


Source: KWD

Drivers of plumbing – new construction

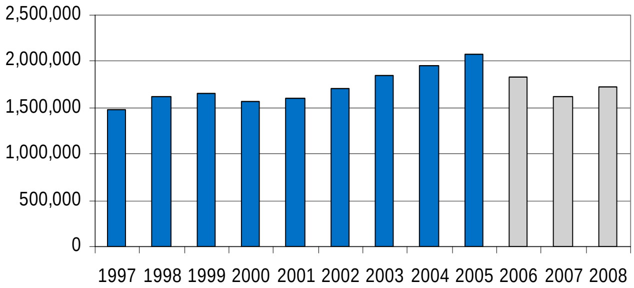
The European residential construction market is expected to level off in the near term

Housing Starts in Europe



Source: Euroconstruct

Housing Starts in the US



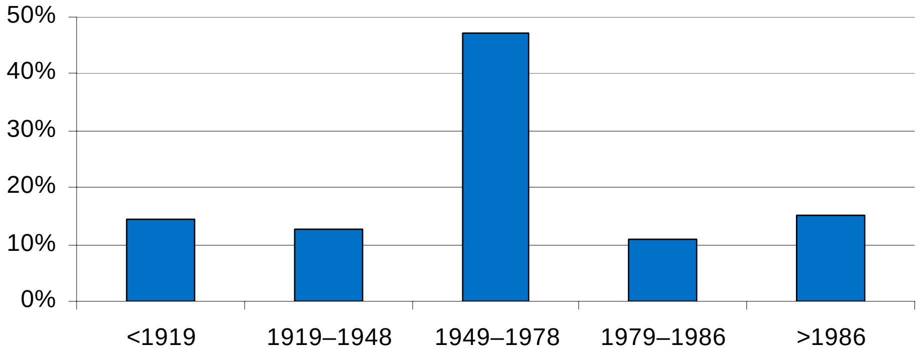
Forecasts: NAHB

The North American market has already begun retreat from the high levels seen in 2004-05

Drivers of plumbing – renovation

- Renovation activity is set to accelerate
  - High levels of construction in the 50's and 60's should lead to high levels of renovation in the short and medium term
  - Spending on renovation already exceeds new construction spending in many countries

Age of German Housing Stock

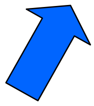


Source: Housing Statistics in the European Union 2004

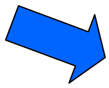
Drivers of plumbing – summary

Expected growth impact

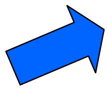
- Plastics penetration
  - Migration to plastics to continue or even accelerate as a result of copper prices



- New residential construction
  - Activity is expected to remain at or near current levels



- Renovation
  - Activity is expected to increase



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Competitive environment

- The plumbing supplies industry is more consolidated than the underfloor heating industry

- The strongest players are present in most European markets and may offer plastics, metals, or both:

Plastics	Metals
Uponor	KME
Geberit	Geberit
Rehau	Viega
Wavin	
Viega	

- It is becoming more difficult to follow a strategy of differentiation based on products alone
  - Strong partnerships with installers, specifiers, and distributors are key

Infrastructure

Jyri Luomakoski
CFO and Deputy CEO

Key applications (1 / 2)

- House drainage and decentralised waste water treatment
  - Soil and waste and technical drainage systems
  - Decentralised waste water treatment systems for residential construction outside municipal sewer networks
    - Infiltration systems
    - Biological waste water treatment

Key applications (2 / 2)

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- Sewer and storm water
  - Pipe systems for municipal sewer and storm water networks
- Pressure water, sewer and gas
  - Pipe systems for municipal pressure water, sewer and gas networks
- Cable and telecom
  - Cable ducting systems for municipal electricity, telecom, and optic cables

Business drivers

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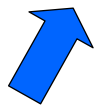
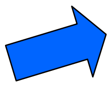
Expected Growth Impact

- Increasing plastics penetration
  - Currently at approximately 50%

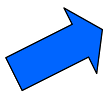


- Increasingly demanding environmental standards
  - Ex: Decentralised waste water treatment systems



- Increasing importance of cost leadership
  - Privatisation of water utilities and public procurement regulations have increased the importance of cost in procurement decisions

- Increasing age of water and gas networks
  - Ex: Thames Water has budgeted GBP 1.1 billion for pipe replacement to reduce the 900 million litres of drinkable water lost daily in its distribution system



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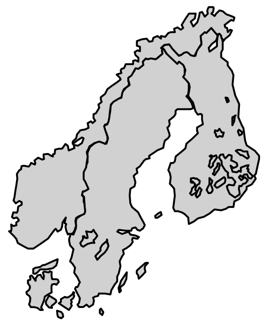
Competitive environment

- In addition to plastics, the infrastructure industry includes concrete, cast iron, and steel producers
- The industry is increasingly dominated by a small number of players

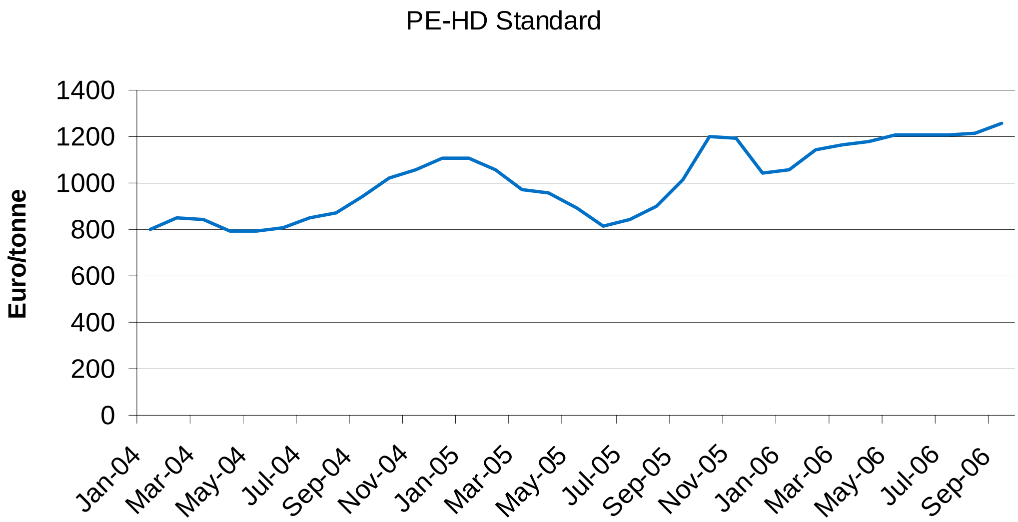
Nordic region:
Uponor, KWH, Pipelife, Wavin



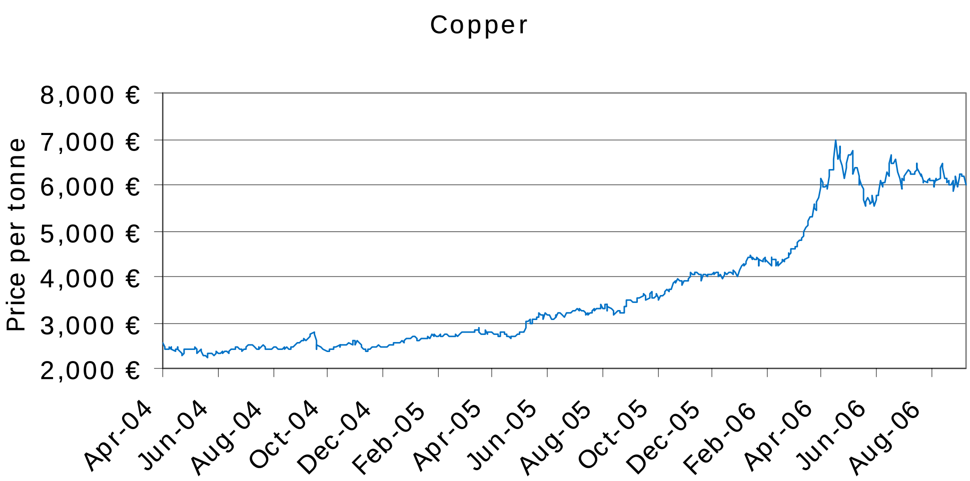
UK and Ireland:
Uponor, Aliaxis, Polypipe, Wavin

Supporting Material

Resin prices

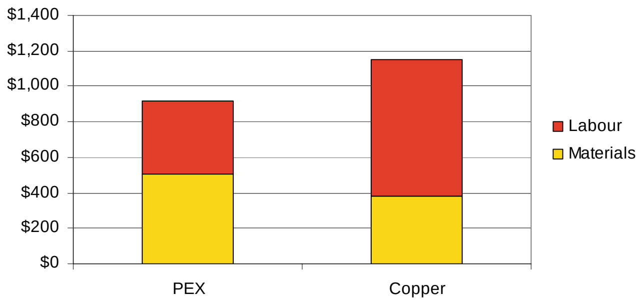


Copper prices



Cost of PEX vs copper systems

The National Association of Home Builders (NAHB) recently published the results of their comparison of material and labour costs involved in plumbing identical houses with PEX or copper.



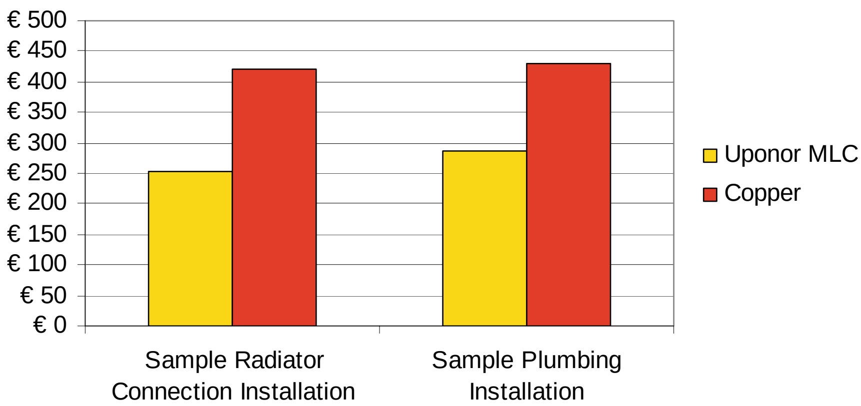
Source: NAHB Research Center, Evaluation of Residential Water Distribution Piping Installation

These installations took place between October 2005 and February of 2006. The price per tonne for copper has increased another 50% since February 2006.

The copper jobs averaged 36.1 man hours and PEX jobs averaged 19.3, a difference of 47%.

Note that the PEX jobs were performed using a central manifold, while Uponor NA recommends the use of remote manifolds. This reduces material costs in most cases.

Cost of MLC vs copper systems



- The sample radiator connection installation is for a 8.5 x 6 m apartment, with radiators in three rooms.
- The sample plumbing installation is for a 15 sqm bathroom, with a tub, sink, and toilet.
- Costs are from Germany and do not include labour.
- The prices are list prices (Q3/2006).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