29 September 2017

PLASTIC PIPES: DOMINATING NEW BUILD WITH EASE

By Gareth Samuel, BPF Pipes Group

Plastics are now the dominant material in hot and cold water supply systems inside buildings. Data from *Pipes and Fittings Market Report – UK 2016-2020 Analysis* shows that use of plastic piping systems for water supply in new build is now up to 60%. An upward trend is similarly being seen, and predicted to continue, for heating with the availability of barrier and multi-layer pipes for central heating and the energy efficiency benefits of warm water underfloor heating in providing space heating at lower water temperatures.

Whilst their flexibility, their quick and simple jointing and the added safety of no hot working have all driven this growth, with the large amount of pipework of different materials in existing buildings, it is definitely an advantage to be able to combine plastic with, for example, copper piping systems.

Bathrooms and kitchens are generally replaced due to lifestyle and design choices, and central heating boilers due to system efficiency and lifespan every 10–15 years. Plastic plumbing system manufacturers provide fittings that form reliable joints from plastic pipes to copper and other metallic pipes, which is a boon when refurbishing older properties. Over a property’s lifetime, the plumbing system can transition to plastic piping with the many in-service benefits of low thermal conductivity (safer to touch), low noise transmission (no creaking pipes), smooth bore (minimises limescale build-up), thermal expansion (reduced risk of bursts during frosts) and inherent corrosion resistance (cleaner heating system).

Well-engineered joint designs have made plastic piping very easy to work with and so, the material of choice for busy plumbers and larger-scale installers. Pipe coils can easily be cut to size, offering flexibility for even the most awkward applications – threading through joists, sitting beneath floors – and with a wide range of push-fit, press-fit and welded joints, ensure that connections are secure and leak-tight.
As installer confidence grows, so do the number of applications in which we now routinely see plastic piping systems. The BPF Pipes Group guidance on the use of plastics for discharge pipework from unvented hot water systems sets out the range of materials which can safely be used for discharge pipes and soil stacks taking discharges. Underfloor heating systems provide an attractive alternative to radiators – the massive performance improvements offered by warm water underfloor heating systems over electric systems and the dust-generating hot air systems means that this is a real option not only for commercial properties and luxury homes but also for housing developments and self-builders. All this has been made possible by the availability of well-designed and quality assured plastic pipes.

The BPF Pipes Group provides guidance on the use of plastic pipes and fittings in a wide range of building services applications at https://www.bpfpipesgroup.com/application-groups/ag2-building-services/

A full list of BPF Pipes Group members is available at www.bpfpipesgroup.com/members

ENDS


Gareth Samuel is chair of the BPF Pipes Group’s working group on Building Services: hot and cold water applications. He is also hot and cold product manager at Wavin, where he has worked on a wide range of products for 14 years, being involved in plumbing and heating for the last eight years.

PHOTO CAPTION: Plastic pipes have many benefits for domestic hot and cold water systems

Contacts
Media information:
Bridget Summers, Footprint PR, 01723 447424, bridget@footprintpr.org.uk

BPF Pipes Group:
Caroline Ayres, BPF Pipes Group, 01932 343409, carolinea@plasticpipesgroup.com

About the BPF Pipes Group
Part of the British Plastics Federation, the BPF Pipes Group is a trade association representing manufacturers and material suppliers of plastic piping systems across the UK. Committed to sustainable construction, its aims are to provide a forum for the exchange of technical expertise between member companies and to promote the importance of plastic as a pipework material, for the full spectrum of above and below ground, pressure and non-pressure applications. It also plays a key role in initiating and disseminating research and informing and influencing the standards bodies pertaining to plastic pipe systems. It works closely with the BPF and TEPPFA, the European Plastic Pipes and Fittings Association.