

NEW META-STUDY FINDINGS PROVE PLASTIC PIPE LIFETIMES ARE IN EXCESS OF 100 YEARS

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A new European meta-study on the service lifetimes of plastic pipes for pressure and non-pressure applications has confirmed through independent findings that actual lifetimes can be expected to be well above 100 years.

Ludo Debever, General Manager of TEPPFA commented on the meta-study: *"It is clear from this significant study that where all steps in the process of design, manufacturing, trenching and operating conditions follow currently valid EN and ISO standards for plastic pipes, fittings, valves and their installation, actual lifetimes can be expected to be well above 100 years. This provides welcome assurance to utility companies and water asset owners that their investments in plastic piping systems will last at least 100 years."*

The meta-study, called '100 years lifetime of plastic pipes,' was carried out by the Polymer Competence Center in Leoben, Austria, and commissioned by TEPPFA, the European Plastic Pipes and Fittings Association. It is a statistical analysis based upon significant and independently verified research and findings from existing literature on the expected service lifetime of plastic pipes, and is detailed at TEPPFA [website](#).

The study looked at pressure and non-pressure polyethylene, polypropylene and unplasticized polyvinyl chloride pipes, including both smooth and structured-wall pipes for the transportation of potable water, natural gas, sewerage and drainage waters. The analysis accounted for operational temperatures around the pipes of a maximum of 20°C, and assumed adherence to contemporary standards (EN, ISO and ASTM mainly) throughout the production, trenching and operational phases. The study excluded industrial pipe systems employed for conveying aggressive media, floor heating applications, and the use of non-virgin materials.

Based on a number of references, including scientific publications in peer-reviewed journals, protocols, reports, standards and conference presentations - most with dig-out studies of pipes operating for up to 50 years - the study also included 23 references (13 for pressure applications, 10 for non-pressure applications) with a clear statement of 100 years and more, using a variety of evaluation approaches. All test types are detailed and fully referenced in the study.

Reports of failures of either pressure or non-pressure plastic pipes were hardly found in any literature, other than by cases not following standard manufacturing or installation procedures. Significantly, no failure was found to be caused by material ageing or incorrect pipeline design.

More details can be found at TEPPFA [website](#).

End of Press Release

About TEPPFA

TEPPFA is the European Plastic Pipes and Fittings Association founded in 1991 with headquarters in Brussels. TEPPFA's 14 multinational company members and 15 national associations across Europe represent 350 companies that manufacture plastic pipes and fittings. TEPPFA members' final products have an annual production volume of 4 million tonnes directly employing 40,000 people with €12 billion combined annual sales. TEPPFA positions itself as polymer neutral. TEPPFA members' final products are subdivided into two application groups: above ground systems for hot and cold water, surface heating and cooling, waste water discharge and rainwater drainage, and below ground systems for sewers, stormwater and drainage, drinking water and gas supply and, cable ducts.

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