

Advanced Plastic Industries (API) was founded in 1994, amidst the mountains of Lebanon, as a prime manufacturer of high quality plastic pipes and fittings solutions for the construction industry.

In effort to maintain their reputable market position, API's teams of experts continuously research and develop innovative production processes and quality control methods to ensure a world-class product. All its pipes and fittings are developed and manufactured using its contemporary in-house tool and die workshop and laboratory. They are produced in standard diameters and sizes, and are manufactured by cutting-edge extrusion and injection technologies.

### **INTRODUCING APISILENCE**

API has recently launched ApiSilence, its latest addition to its family of brands. It presents a piping system that is manufactured using the finest mineral reinforced polypropylene for use in drainage and wastewater applications, and fully complies with the most stringent noise damping requirements of today's relevant standards, such as DIN 4109, as a High Quality Silent Piping System, and VDI 4100 (17 dB at 4 L/s), as a Level III Sound Insulating System. It provides outstanding acoustic properties against airborne and structure-borne sounds, and is light in weight, easing the structural load on buildings, and facilitating its handling.

Owing to its low surface roughness, scaling and corrosion are significantly reduced. Its pipes and fittings are strong, tough, and possess high resistance for impact and mechanical strains, even at sub zero temperatures. The system offers high chemical resistance, making it safe to use with the widest variety of cleaning detergents, as well as elevated temperature resistance, excluding softness and/or weaknesses at normal operating conditions.

Given that API prioritizes environmental protection and sustainability, ApiSilence provides an eco-friendly product line that is recyclable after its lifetime. Its installation requires no solvents, and therefore, no volatile organic carbons, while its manufacturing process eliminates the use of heavy toxic metal stabilizers. The system is an excellent material choice in sustainable building practices.

### **MULTILAYER TECHNOLOGY**

ApiSilence is specifically designed, via an innovative multilayer piping technology, to provide high sound insulation through thinner pipe walls, providing lighter weight, and greater flow when compared to other products on the market.

The outer and inner layers of the pipe are compounded from natural PP-B and a distinct halogen free flame retardant additive, to provide additional protection in exposed drainage applications, or in case of fire. This combination has been carefully crafted to provide high resistance to flame propagation, without the use of bromine and fluorine

chemicals, which are notorious to produce toxic and corrosive fumes when a fire breaks out.

The middle layer is a compound of polypropylene with specialty heavy minerals. Advancements in mineral-filling technology provide increased density for sound absorption, and optimal mineral particle size for sound wave dissipation. The elastic nature of the plastic internalizes and inhibits vibrations caused by flowing water, and provides less sound emission throughout the entire pipe system.

Fittings are also manufactured from a mineral reinforced polypropylene compound, which possesses unique properties to provide optimum noise cancellation, and rigidity in connections. Heavy fittings play an integral role in sound absorption, specifically at directional changes and connections.

### **PUSH-FIT CONNECTION MECHANISM**

The ApiSilence range benefits from a push-fit connection mechanism, using elastomeric seals. The seals prevent leakage and backwash, compensate for minor misalignment during installation, and also eliminate the need to use chemicals for adhesion during installation, such as solvent cement. Due to their significance, the rubber seals employed are tested and certified in accordance with the requirements of EN 681.

The push-fit system is an innovative and secure solution that allows for easy installation, eradicates the need for special heavy tools and machinery, making it safer to install in closed spaces, and saves time and cost.

### **STANDARDS AND TESTING**

Aligned with API's track record of excellence, and to satisfy the requirements of the global market in terms of compliance and superior quality, ApiSilence's test results well-fulfill the requirements of all relevant standards; they are below the maximum allowable sound levels for their corresponding criteria.

### **APPLICATION**

ApiSilence is suitable for all domains of civil engineering. It extends its benefits to developers, who will offer better value to their clients, to contractors, who will enjoy the ease of installation, and to end users, who in turn, will benefit from the quieter ergonomic environment enabled by API products.

### **TO WRAP IT UP**

The silent range has been in the making for some time now, and API is proud to announce that they've finally attained an optimal product line that will surpass their clients' expectations. The pre-marketing for the brand is already creating a buzz amongst clients and engineering firms who value quality and innovation.

API remains on par with developments in the global construction industry, and expands to bridge all gaps in piping requirements for the building sector. Today, it has a broad network of trusted partners around the world, and is continuously seeking to expand its leadership to additional export markets.

**MEET US AT THE INTERCLIMA 2017 TRADE SHOW, FROM 7 – 10 NOVEMBER 2017, AT HALL 1 - STAND F133.**