Push-fit flame retardant waste and drainage system inside buildings
Peles Castle - Bucharest (Romania)
Valsir PP, the push-fit system that stands out for its simplicity

Valsir PP is a waste system made up of pipes, fittings and accessories for the construction of waste and rainwater drainage systems.

Valsir PP is an extremely light system and thanks to the push-fit socket with hydraulic seal it represents the most simple solution for the construction of waste and drainage systems.

Valsir PP is manufactured to European Standard EN 1451 and can be used for waste systems at low and high temperatures, ventilation systems for waste networks and for rainwater drainage systems inside buildings for civil and industrial use, hospitals and hotels.

The wide range of pipes, fittings and accessories allow the entire waste network to be made, from the branches to sanitary appliances to the stacks and waste manifolds.
LIGHT WEIGHT, SIMPLICITY AND RELIABILITY

The advantages of using the Valsir PP waste system

• **Light weight and extreme ease of installation** on site without the aid of special tools, thanks to the push-fit connection. Furthermore, the push-fit socket does not require the use of harmful glues or solvents.
• **Corrosion and abrasion resistance.**
• **Resistance to intermittent discharges at temperatures as high as 95°C.**

• **High chemical resistance** to the substances dissolved in civil and industrial waste waters.
• **Wide range of diameters from DN 32 mm to DN 160 mm.**
• **Wide range of transition fittings for connection to other waste systems such as cast iron, PE, PVC.**
• The product, its recyclability and the production processes used are based on **Green Building principles**, in respect for the environment and for the conservation of resources.

The Valsir PP waste system can transport waste liquids at temperatures as high as 95°C, it has a high resistance to the most common chemical agents and is characterised by an extremely smooth internal surface that prevents the accumulation of deposits inside the waste network.

Furthermore, polypropylene is a material that does not come under the attack of microorganisms and guarantees the absence of internal deposits and the build-up of bacterial flora. This system is also free of problems relating to stray currents.
A COMPLETE RANGE FOR ALL REQUIREMENTS

The range is composed of pipe lengths from 150 mm to 3 m with one socket, two sockets or smooth pipes without sockets.

It features a wide choice of fittings and accessories that allow the most diverse system configurations to be constructed. Diameters range from the smallest such as 32, 40 and 50 mm for the installation of branches on each floor to larger diameters such as 160 mm for the waste manifolds.

The range is made complete with accessories for connection to other Valsir waste systems, accessories for connection to sanitary appliances and anchor brackets.

Fire collars

Valsir PP has a very good resistance to fire, it is in fact class B1 in compliance with German Standard DIN 4102-1 and class M1 according to NF P 92-505.

However, when fire protection standards or local regulations require the compartmentalization of rooms such as, for example, central heating plants, underground car parks and industrial facilities that are at risk of fire, then fire collars can be used.

To meet all system requirements a complete range is available which covers diameters from 40 to 160 mm.
PUSH-FIT JOINT: RAPID AND EASY INSTALLATION

Valsir PP ensures a practical and rapid installation without the use of glues or special tools thanks to the jointing system with push-fit sockets.

The particular shape of the seal and the housing of the push-fit joint guarantee hydraulic tightness and allow the normal movements of the pipe including those caused by thermal expansion.

A system that is suitable for temperature fluctuations: the thermal expansion of Valsir PP is extremely low compared to the most common plastic materials, a 3 m pipe will expand in length by just 13 mm when the waste liquid flows at a continuous temperature of 60°C.

It is thanks to this low coefficient of thermal expansion that the push-fit joints are capable of absorbing the variations in length of the pipe without taking any particular precautionary measures; it is enough to follow the installation instructions in the Valsir technical manuals.

The bi-joint sleeve to reduce wastage to a minimum

To allow the use of leftover pieces of pipe, Valsir supplies a bi-joint sleeve. This is a special fitting that allows two pipes without sockets to be connected guaranteeing hydraulic tightness without compromising flow rates.
Il casinale - Puegnago del Garda (Italy)
REFERENCES

The Romanian Athenaeum - Bucharest (Romania)

Victoria Aqua Park - Samara (Russia)

Dinamo Stadium - Bucharest (Romania)

Golf Club Riviera - Cattolica (Italy)

Ristorante La Passerella - Wien (Austria)
TECHNICAL SUPPORT AND ASSISTANCE

Valsir provides complete support both during the planning phase and on site, thanks to a first-class technical office made up of a team of highly experienced engineers, capable of dealing with the most complex system requirements.

Valsir also boasts an important training centre called Valsir Academy catering for clients, distributors, plumbers and planners. Two highly equipped halls are available where theoretical and practical courses are organized on the use and design of water supply systems using the Silvestro software, a program that was developed specifically within Valsir.
The design of floor and radiator heating systems, water supply as well as waste and drainage systems, is extremely easy and the production of the project technical documents is extremely rapid when using the Silvestro software program.

Rapid, simple, unique, Silvestro allows the user to design and calculate primary, direct and indirect parallel or secondary ventilation systems, both in a plan view and vertical elevation plan.

The strong points are many:
- rapid learning curve thanks to a simple and intuitive interface;
- completely graphic background that facilitates input of the project details;
- automatic drawing of the loops in the floor radiant systems;
- automatic repositioning of the stack points on the plan view;
- generation of calculation reports that are exportable in an .xls format;
- import and export of files in .dwg format;
- immediate update of software with a guided procedure;
- creation of complete bill of materials from the project files.
Efficient processes and reliable products are not the only parameters used to evaluate a company’s conduct: today, in fact, the capacity of the company and its management team to design and implement production processes that are sustainable from an environmental point of view are of equal importance.

Valsir has always been committed to the manufacture of recyclable products and the implementation of sustainable processes, in line with the most advanced Green Building principles (green building and environmentally friendly project design), and today boasts highly sustainable production plants which, thanks to the use of renewable energy and planning that aims at the conservation of resources, have obtained a Class A energy certificate.

The consistency of Valsir’s commitment is demonstrated by its product approvals which amount to 160 in total, obtained around the world from the most severe certification bodies (figure updated on 20/02/2013), and by the certified quality system in compliance with the European Standard UNI EN ISO 9001:2008.