Glossary

active system	An alternative drainage system which provides relief at the Point of Need (PON). The system draws air from close to where it is needed as the event occurs so there is no time delay. This results in better protection of the trap seals.
air admittance valve	A device which allows fresh air to enter and vent the drainage system, but closes to prevent the release of foul sewer gases.
branch venting	Ventilating pipe connected to a branch discharge pipe.
discharge stack	Main (generally vertical) pipe, conveying discharges from sanitary fixtures.
domestic waste water	Water which is contaminated by use and normally discharged from WC, shower, bath, bidet, wash basin, sink, floor gully, etc.
drainage system	A system composed of drainage equipment, and other components collecting waste water and discharging by means of gravity.
drain venting	Venting near the end of a main drain or branch drain, the vent being installed on the wet side of the last fixture.
fixture	Fixed appliance supplied with water and used for cleaning or washing. For example, WC, shower, bath, bidet, wash basin, sink, floor gully, etc.
flood level	The maximum level to which waste water can rise within a drainage system.
floor gully	Discharge fitting intended to receive water from floors either through apertures in a grating or from pipes connected to the body of the gully. A gully may include a trap.
group venting	Venting of a group of fixtures, using one vent on the wet side of the last fixture.
induced siphonage	Caused by the discharge of water from another sanitary fixture connected to the same discharge pipe. As the water falls down the pipe and passes the branch pipe connected to it, it draws air from it, thus creating a partial vacuum and subsequently siphonage of the trap can take place.
line pressure	The air pressure in a branch or stack prior to the arrival of a transient pressure.

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negative transient pressure	A travelling pressure wave that reduces the line pressure, negative transient pressures are generated by an increase in water flow and entrained airflow.
nominal diameter (DN)	Numerical designation of size which is a convenient round number approximately equal to diameter in mm.
offset	A change of direction in the stack, not recommended as good design as it may cause local surcharge.
one-to-one vent pipe system	A system in which both the ventilating pipe and wastewater drainage pipes are of the same diameter.
P trap	See trap.
pathogen	Something that can cause disease, such as a bacterium or a virus.
peak flow	The maximum flow-rate achieved during a fixture discharge or during any observation period.
peak frequency	The highest oscillation frequency observed.
pipe network system (passive system)	The traditional drainage system where air enters only from the open vent stack, which waits for an event to occur and then deals with it, losing the trap seal due to the time delay. See also active system.
positive transient pressure	A travelling pressure wave that increases the line pressure, positive transient pressures are generated by a decrease in entrained airflow or an interruption to the established airpath, for example a flow surcharge.
pressure attenuator	A device that reduces the peak air pressure by absorbing a percentage of the incoming pressure transient.
pressure profile	Either the graph of pressure versus time at any location within the network (often recorded by a pressure transducer) or the variation in pressure at any particular time throughout the system, usually confined to pressure at one time up the full height of the vertical stacks.
pressure wave	A wave consisting of a repeating pattern of high pressure and low pressure regions moving through the drainage system.
rainwater	Water resulting from natural precipitation that has not been deliberately contaminated.

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sealed building drainage system	An actively vented drainage system without any requirements for open vents from within the building to the atmosphere.
self-siphonage	Self-siphonage is caused in fixtures such as wash basins, designed to be able to discharge their contents of water quickly. As the water discharges it sets up a plug of water which, as it passes down the pipe, creates a partial vacuum, causing siphonage of the trap to take place.
single stack system	Introduced in the UK in the 1970s, a drainage system where there is one vertical stack that acts both as a vent and as the conduit for waste and fixture discharge flow to the sewer connection.
siphonage	Removal of a trap seal by the action of self- or induced siphonage where the pressure on the system side of the trap falls below atmosphere, effectively drawing the trap seal water into the network.
stack venting	Extension of the vertical discharge pipe above the highest branch discharge pipe connection that terminates at an end, open to atmosphere or with an AAV.
swept entry	Equal branch junction that is 45° or less, or has a centre line radius less than the internal pipe diameter.
thermal depletion	Depletion of the trap seal through evaporation.
trade effluent	Water after industrial use and processes contaminated / polluted water including cooling water.
transient pressure	A travelling pressure wave that affects the line pressure.
trap	Fitting which provides a hydraulic seal between the waste outlet and the discharge pipe in order to prevent entry of foul air from the discharge pipe into the building, without obstructing the discharge of the wastewater. Traps may be either tubular (such as S and P traps) or bottle type, the latter having either a division or diptube. Other designs are usual permissible, provided that they meet the requirements of the relevant standards.

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trap seal	A water filled barrier placed between the fixture and the system branch to prevent the egress of contaminated air or noxious gas from the sewer into habitable space. As this arrangement is effectively a manometer, it responds to changes in system line pressure and may be depleted by the action of both positive and negative transients.
trap venting	Venting of a single fixture.
ventilating pipe	Pipe provided to limit the pressure fluctuations within the discharge pipe system.
ventilating stack	Main vertical ventilating pipe, connected to the discharge stack to limit pressure fluctuations within the discharge stack.
waste water	Water which is contaminated by use and all water discharging into the drainage system; e.g. domestic and trade effluent, condensate water and also rainwater when discharged in a waste water drainage system.
water trap	See trap seal.

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