

Certification

Kingbull piping systems have certificates from Australia SAI Global, French BV, Spanish AENOR, Swedish SP, Swiss SGS, ISO 9001, ISO 14001, China National Accreditation Service (CNAS) for Kingbull Lab, and other institutes. Kingbull piping products working life is 50 years and Kingbull provides customers 10 years quality warranty.

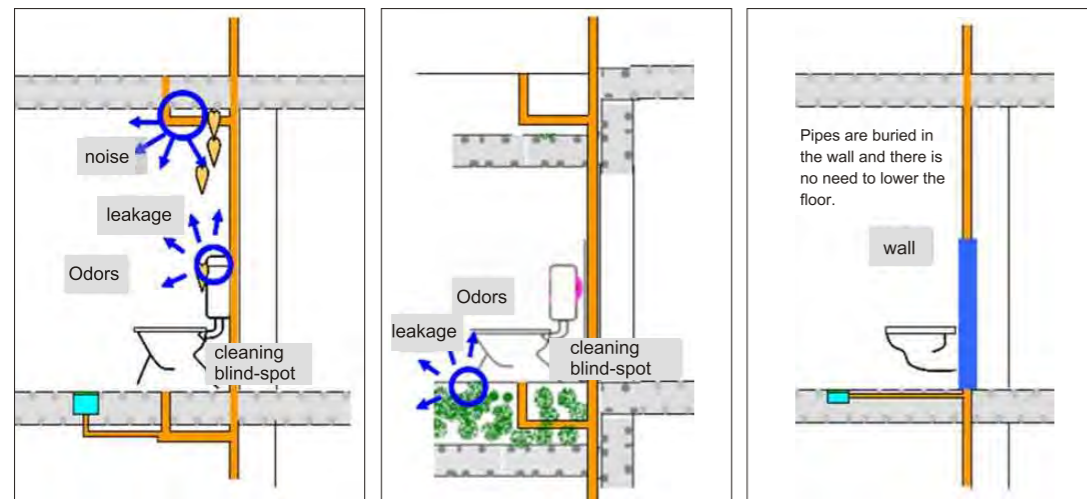


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Building Drainage Solution

There are generally three types of drainage solutions: traditional interlayer drainage system, same-floor floor drainage system and same-floor wall drainage system.



Traditional Interlayer Drainage

Same-floor Floor Drainage System

Same-floor wall drainage system

Traditional Through-floor Drainage

Traditional drainage is usually applied with UPVC and cast-iron pipes, mainly has four major problems:

1. **Noisiness.** Noise mainly comes from toilet flushes and floor drains. Sound is generated in the pipe where the water flow dramatic changes, such as at the bend and Y-branch fitting section. The widely used UPVC drainage pipe has poor sound insulation properties.
2. **Odors.** A big problem for residential bathroom is the sometime dreadful smell of floor drain, mainly caused by the evaporation of water seal or the pressure change in the tube, which will both lead to the failure of water seal and letting out drainage odors. The water seal in the floor drain is normally requested to be at least 50mm high, otherwise it is more likely to cause the water seal to be ineffective.
3. **Poor drainage performance.** Drainage discharge capacity depends on the diameter, slope and inner surface smoothness of drainage pipes. Bad design, rough inner surface of the pipe and scaling will all cause poor drainage performance. Because of the wall roughness of the cast iron pipe and its tendency to rust and scale, reduced pipe cross section and air return will usually form after a while, which will lead to inefficient drainage and further sedimentation, affecting the drainage capacity, resulting in poor performance.
4. **Leakage.** UPVC drainage pipe is more brittle and less impact resistant, therefore prone to rupture under flow impact of the drainage system. UPVC pipe and fitting connections adopt adhesive method, which are prone to leakage under repeated hot and cold water circulation.

Same-floor Floor Drainage System

Same level drainage with lowered floor system could solve the noise problem, but the lowered floor could also trap water and cause odor problem, it could not satisfy customers' demand in architecture design and aesthetic aspect.

Same-floor Wall Drainage System

Same-floor drainage refers to the solution of laying the sewage and drainage pipes and branch pipe of bathroom sanitary wares on the same floor, instead of passing through into the lower floor space. It will be connected to the building's main drainage systems on the same floor of bathroom sanitary wares. This has become the primary drainage solution in modern bathroom design. Comparing with traditional drainage solutions, same floor drainage system offers optimal pipe arrangement, unconstrained bathroom space and freedom from all the trouble caused by drainage pipes invading lower level space.

