

Owners, Developers, Architects, Engineers, Contractors, and Licensed Plumbers

Dear Sir/Madam,

AIR PRESSURE TESTS FOR SANITARY PLUMBING SYSTEM

In 2016, PUB issued a Circular (Ref: WRN/17.2 dated 30 Dec 16) to remind QPs to submit air tightness tests results for sanitary plumbing system with the completion form (PUB-BPU-COMPOFWORK).

2 With these air tightness test, the plumbing industry has improved in ensuring air and water tightness of sanitary systems leading to much less instances of smell nuisance and water leakage from new developments in 2017/2018.

3 Over this past 2 years, we have conducted technical briefings to share on the importance of the dual stage high and low air pressure tests (See Annex 1). PUB staff have also conducted additional site inspections of progressive air tightness test carried out by plumbers during construction stage. This is to ensure that new sanitary plumbing systems are air tight and also inculcate the good practise that defects pointed out by the test are rectified immediately.

4 We have noticed that some projects had to rush to complete rectifications from failed air test just before TOP deadline. While PUB will help where possible, it is a more responsible practise for QPs/LPs to do all air test progressively and carry out necessary rectifications as part of the QA/QC system to ensure good quality workmanship for the project rather than leave it to just before the TOP inspection by PUB.

5 PUB will nevertheless continue to conduct the site inspections/audits on the air pressure tests during construction stage and at TOP inspection. QP/LP of projects will be informed in advance for the site inspections/audit. If you have any queries concerning this circular, please email us at PUB_BPU@pub.gov.sg

Yours faithfully



TAN CHEE HOON
Senior Principal Engineer
for Director
Water Reclamation Network Department
PUB, Singapore's National Water Agency

Annex 1

Air tightness tests are required to be carried out in two stages during development:

Stage 1- at construction stage before installation of WCs and floor traps:

A high pressure air test to confirm that all pipes and joints are air tight before enclosing the pipes within conduits/shafts. This will allow any defective and leaking pipes and pipe joints to be detected and repaired before the pipes are concealed.

Stage 2- at completion stage after installation of WCs and floor traps:

A low pressure air test to confirm that all WC connections and floor traps are air tight to prevent sewage gas/smell from entering the bathroom/toilet.

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