

As the condensate formed from moisture in the air is relatively high quality water with low dissolved mineral content, it is suitable for use in cooling tower, irrigation and toilets or as process water in manufacturing etc.

Condensate water can also be reused for heat recovery as per the requirements set in *Regulation 502.10: Exhaust Air Energy Recovery Systems and Condensation of Water*. Condensate water however should not be used where it will not come in direct contact with the human body.

An example of condensate recovery system configuration is shown in fig. 601.03(1). However, this would vary based on the condensate reuse application in the project.

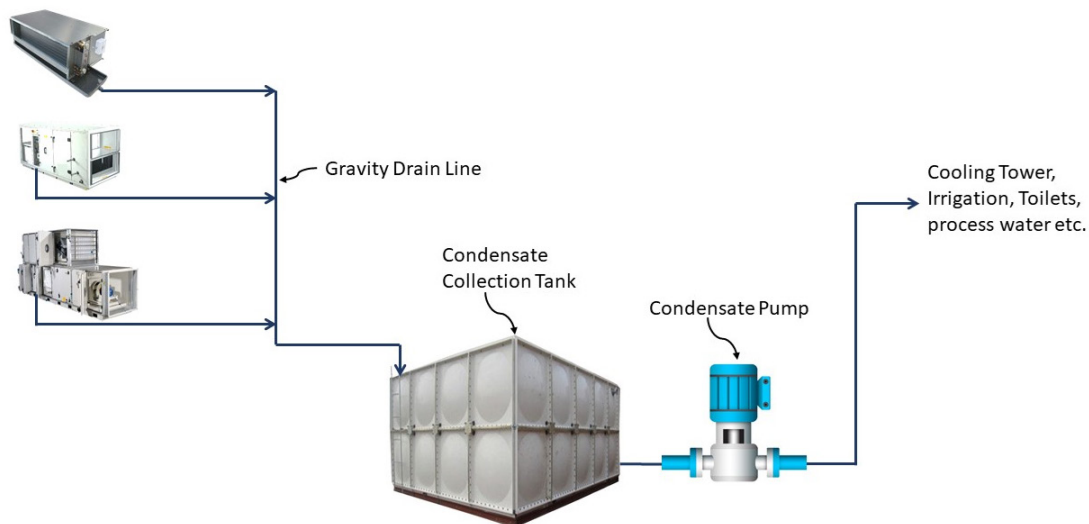


Fig. 601.03(1): Condensate Recovery System Configuration (Sample)

To ensure that the condensate water is safe for the on-site applications, legionella risk assessment must be evaluated as outlined in *Regulation 406.01: Legionella Bacteria and Building Water Systems*.

COMPLIANCE DOCUMENTATION

Table 601.03(1): Documents Required

Project Stages	Submittal Documents
Design Permit Application	1. Annual condensate water generation calculation. 2. Plumbing layout showing the method of reusing condensate water.
Construction Completion Application	1. Final approved plumbing layout showing the method of reusing condensate water.
After Completion	1. Calculations of the actual condensate water generated.

REFERENCES AND ADDITIONAL INFORMATION

Dubai Municipality. (2019). Al Sa'fat Green Building Regulations 502.10 – Exhaust Air Energy Recovery Systems and Condensation of Water.