

# CHAPTER 3 - ON-SITE SYSTEMS: RECOVERY & TREATMENT

600

## 603.01 WASTEWATER REUSE



### INTENT

To reduce potable water usage by using on-site treated greywater.

### REQUIREMENT

For Golden and Platinum Sa'fa and for all new buildings, the building must be provided with a system for the collection and reuse of greywater (15% for Golden, 30% for Platinum).

For all cases and Sa'fa levels, if a system is installed for the collection and reuse of greywater produced within the building or uses Treated Sewage Effluent (TSE) from an external source, the following must be complied:

- The building must have dual-plumbing system for the collection and recycled use of drainage water (greywater). Pipes that transport greywater must be colour-coded differently from the pipes that are used for potable (drinking standard) water and must be labelled 'Not Suitable for Drinking.'
- There must be a minimum air break of 25 mm between any potable water sources and greywater collection systems.
- Greywater must not be used for purposes wherein it will come into contact with the human body. It must also be treated to the standard set forth by Dubai Municipality.

For all new commercial car washing facilities, at least 50% of the wastewater generated must be recovered and reused.

### SIGNIFICANCE

Population growth and resultant rise in infrastructure development, increases the water demand in cities. This leads to dependence on expanding the water treatment systems and water networks, to cater the increased demand. Utilising water conservation techniques help is successfully reducing the overall demand.

Greywater reuse is one such water conservation technique. Irrigation and flushing toilets do not need high quality water, so treated greywater can be reused for these purposes. Reusing greywater not only reduces the consumption of potable water, it also reduces the volume of water discharged into the sewerage system, thereby conserving water and energy.