Annex 4

Simple Calculation of Wastewater Generation

Lavatories on Site

Male Toilet

Discharge Unit (DU) from WC (Qty * DU)	=	5.4 L/s
Discharge Unit (DU) from Single Urinal with Cistern (Qty * DU)	=	1.2 L/s
Discharge Unit (DU) from Basin (Qty * DU)	=	0.9 L/s
Sum of DUs	=	7.5 L/s
Wastewater Flow Rate ($K\sqrt{\Sigma DU}$)	=	2.74 L/s

Remarks

1. Calculation of Wastewater Flow Rate is followed Plumbing Engineering Services Design Guide (PESDG).

2. Discharge Unit (DU) of WC = 1.8 L/s; DU of Basin = 0.3 L/s; DU of Single Urinal with Cistern = 0.4L/s; DU of Shower with plug = 1.3L/s, extracted from Table 5 of PESDG.

3. Total number of WC = 3; total number of Single Urinal with Cistern = 3; Total number of Basin = 3

4. Frequency of use, K = 1, extracted from Table 6 of PESDG.

Female Toilet

Discharge Unit (DU) from WC (Qty * DU)	=	5.4 L/s
Discharge Unit (DU) from Single Urinal with Cistern (Qty * DU)	=	0 L/s
Discharge Unit (DU) from Basin (Qty * DU)	=	0.9 L/s
Sum of DUs	=	6.3 L/s
Wastewater Flow Rate ($K\sqrt{\Sigma DU}$)	=	2.51 L/s

Remarks

1. Calculation of Wastewater Flow Rate is followed Plumbing Engineering Services Design Guide (PESDG).

2. Discharge Unit (DU) of WC = 1.8 L/s; DU of Basin = 0.3 L/s; DU of Single Urinal with Cistern = 0.4L/s; DU of Shower with plug = 1.3L/s, extracted from Table 5 of PESDG.

3. Total number of WC = 3; total number of Single Urinal with Cistern = 0; Total number of Basin = 3

4. Frequency of use, K = 1, extracted from Table 6 of PESDG.