Brent Council Leisure Centre

Cost-Saving Calculations for ONE washroom:

16 urinals
6 cistern tanks
Each cistern releases every 7 minutes (24 hours/day, 365 days/year)
Each cistern holds 0.01678 cubic metres of water
Every 7 minutes = 205.7 flushes/24 hour period
205.7 x 365 days = 75,080 flushes/tank per year
75,080 divided by 12 = 6,257 flushes/tank per month
6,257 x 6 tanks = 37,542 flushes/month in one washroom
37,542 x 0.01678 m3/tank = 629.95 cubic metres/month

We used the last two costs for water & sewage to calculate an average as follows:

Water: £1.1101/m3 + £0.9497/m3 = an average of £1.0598/m3 Sewage: £0.5335/m3 + £0.5900/m3 = an average of £0.56175/m3

Total average cost of water & sewage: £1.0598 + £0.56175 = £1.62155/m3

Your cost of water & sewage for the 16 urinals in one washroom is: 629.95 m3/month x £1.62155/m3 = £1,021.50/month or £12,258/year

The running cost of our Zero Flush system is £35/15,000 uses or at least every 6 months. As you have the hygienic door handles already installed, which require a refill change every 15 days, we can calculate the number of men through that particular washroom to be 5,272/month. As approx half use the urinals and half use the cubicles, this means the urinals are used approximately 2,600 times/month.

Unlike other waterless systems, you only need to change the refills as & when each urinal is used approx. 15,000 times. This means the urinals nearest the door will be used more often than the ones further away so you will need to change the refills more often in the ones nearest the door. The refills need to be changed at least every 6 months. If every male used the same urinal, it will still last 5.76 months (15,000 divided by 2,600) therefore you will only need to replace the refills every 6 months as this is the maximum period of time before a refill change is required.

Your running costs for Zero Flush are calculated as follows: $16 \text{ refills } (£35 \text{ each}) \text{ every } 6 \text{ months} = £35 \times 16 = £560 \text{ divided by } 6 \text{ months} = £93.33/\text{month or } £1,120/\text{year}$

Initial costs for Zero Flush: 16 urinals @ £199 each = £3,184 16 refills @ £35 each = £560 Total Cost £3,744 + installation + vat

Summary of cost saving for one washroom:

Your current water cost for urinals is £12,258/year
Zero Flush on-going cost will be £1,120/year
Saving you £928/month or £11,138/year
Initial cost of Zero Flush will be £3,744 + installation & vat.
Payback period is just 4.03 months