

Hotels & Motels

Large hotels may combine residential apartments, retail stores, elaborate recreation facilities, lavish landscaping, and office space at the same site. Each purpose may have its own special needs for water. Smaller motels may have similar guest-room water uses, plus recreation facilities and irrigated landscapes. Typically, large buildings require water for HVAC, restrooms, food service, and maintenance.

Plumbing

Appropriate water-saving technologies include high-efficiency toilets requiring not more than 1.3 gallons per flush and urinals that use 1 gallon or less per flush, with no automatically timed flushing systems. Choose self-closing faucets with flows of 0.5 gpm for hand washing. If available, and where codes and health departments permit, non-potable water may be used for flushing.

In guest rooms, limit faucets to flows of 1.5 gpm or less and shower heads to flows of 2.0 gpm or less. Install only one shower head per personal shower stall. Substitute showers for bathtubs. Where bathtubs are necessary, use low-volume tubs.

Cooling and Heating Systems

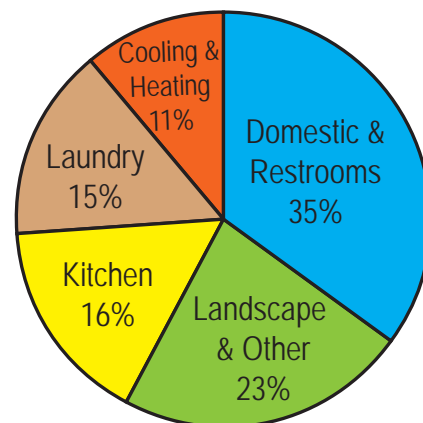
Refer to the “Office Buildings” and “Schools” summaries for recommendations on evaluating cooling towers *versus* air-cooling, open- *versus* closed-loop systems. Heat and hot-water system practices are also discussed in these summaries.

Floor Cleaning

Recommendations for floor cleaning include:

- ◆ floor cleaning may use wet methods, but wasteful open hoses are discouraged.
- ◆ install drains close to areas where liquid discharges are expected.
- ◆ arrange equipment for easy use of a mop and squeegee system or floor-cleaning machine.
- ◆ install self-closing nozzles, limiting flow to 5 gpm on wash-down hoses.

Showers in guest rooms should have only one shower head per personal shower stall. Avoid installing bathtubs when possible.



Typical water use in hotels and motels



Ice Machines

Ice machines use water for ice and sometimes for cooling the compressor. Select:

- ◆ ice-making machines that are air-cooled, using remote heads to expel warm air outside the work space and customer areas. Air-cooled machines are preferred over cooling-tower loops.
- ◆ energy-efficient flake or nugget machines rather than cube-ice machines. If cube-ice machines are used, those that meet CEE Tier 2 efficiency standards are preferred. Tier 3 machines are even more efficient (CEE Commercial Kitchens).

Many hotels have lavish landscaping. Ensure use of climate-appropriate plant materials. Carefully monitor irrigation systems to apply only the amount of water necessary.

Submetering

Separate metering of water-using systems and building areas is recommended where possible in order to ensure that the costs of water use and, where feasible, wastewater disposal are equitably dispersed and accounted for accurately. Reflecting actual use and costs often offers a reliable incentive for water-use efficiency.

Other

Other recommendations include:

- ◆ installing automatic shutoff and solenoid valves on all hoses and water-using equipment.
- ◆ installing faucets on set tubs and janitorial sinks with flows not to exceed 2.2 gpm.
- ◆ encourage guests to engage in “green” practices for bed linens and towels to avoid unnecessary laundry use.

For water features, therapeutic pools, swimming pools, and landscapes, refer to the summary for **“Water Features, Pools and, Landscapes.”** For kitchens and food service areas, refer to **“Restaurants and Fast-Food Outlets”** and **“Industrial Bakeries.”**

TIP: Conspicuously mark fire-protection plumbing so no connections will be made other than those for fire protection. Install flow-detection meters on fire services to reveal unauthorized water flows.

