

Foam Soap Advantages



Labor



Safety



**Water
Conservation**

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Foam Soap Advantages in Labor, Safety and Water Conservation

The product savings realized by using foam soap is well documented. (See our [E-Guide on Restroom Budget Control: How Foaming Hand Soap Saves Product Costs](#)).

However, many facilities overlook the additional benefits of using foam soap including labor savings, safety advantages, and water conservation. The labor savings, in particular, are enhanced when foam soap is dispensed in top-filling counter mount dispensers. Safety advantages are elevated when eliminating the chance for contamination by using sealed refill containers.

This E-Guide explains the various soap dispensing options, their features, and the additional benefits provided by using foam soap instead of liquid.

LABOR SAVINGS

There are basically five configurations of soap dispensers used for both liquid and foam soap, available in both manual and automatic options. Some systems have more steps when refilling with varying degrees of difficulty which can impact the amount of time to complete the refill process. We've compared these different dispensing options and the steps involved in refilling them:

1. Wall Mount Bulk Refill
2. Wall Mount Sealed Refill (top and bottom dispensing)
3. Counter Mount / Under Counter Refill (sealed)
4. Counter Mount / Above Counter Refill (bulk)
5. Counter Mount / Above Counter Refill (sealed)

Wall Mount Bulk Fill Systems

Steps to Refill:

1. Unlock dispenser shell (if necessary)
2. Open dispenser shell.
3. Pour bulk soap into container
4. Close dispenser shell.
5. Clean any spill-overs (if necessary)
6. Lock shell (if necessary)

Bulk wall mounted dispensing systems enable “topping-off” of soap product. Bulk dispensers are available in both plastic and stainless steel models.

Some plastic models enable a full view of product while other models have a smaller “view window.” The refill process is quite simple, however smaller access openings (depending on the model) can make refilling more difficult and can lead to spillage over the sides.



All bulk wall mount dispensers currently on the market are bottom dispensing, which means there can be leakage due to gravity.

LABOR STEPS TO REFILL: 3-6 steps

EASE OF REFILL: Moderate

“TOP-OFF” CAPABILITY: Yes

SPILL POSSIBILITY: Yes

Wall Mount Sealed Systems (top and bottom dispensing)

Steps to Refill:

1. Unlock dispenser shell (if necessary)
2. Open dispenser shell.
3. Remove empty container.
4. Insert full container
5. Close dispenser shell.
6. Lock dispenser shell (if necessary)

Most wall mounted dispensing systems are designed to dispense soap from the bottom. An exception is Kutol Products Company’s unique top dispensing configuration which eliminates gravity-causing leakage. The configuration also makes it easier for users to see the product being dispensed, so repeat activations are not as frequent.



Wall mounted sealed systems are refilled with soap products contained in sealed hard plastic containers or flexible plastic bags with a discharge nozzle located at the bottom of the unit (or in the case of Kutol Products, at the top).

In most cases, the dispenser “shell” is unlocked with a key or similar device to enable access for refill purposes. The empty container is removed from the dispenser and the new refill is snapped into place. The unit’s shell is then closed and locked.

LABOR STEPS TO REFILL: 4-6 steps

EASE OF REFILL: Easy

“TOP-OFF” CAPABILITY: No

SPILL POSSIBILITY: No



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(inside view)

ABOUT COUNTER MOUNT OR IN-COUNTER SOAP DISPENSERS

Counter-mounted soap dispensers provide an upscale, streamlined look to restrooms. They are easier to clean and avoid messy counters from dripping hands reaching for a wall-mounted dispenser.

Some sink installations have panels that hide plumbing, providing a finished appearance and protection from vandalism.

It is more difficult to refill this type of configuration, as the access panel needs to be removed. Sometimes this requires special tools or calling upon facility maintenance for assistance.



Counter Mounted Under-the-Counter Refill (sealed)

Steps to Refill:

1. Remove sink access panel, if necessary.
 - a. Call facility maintenance or use special tools, if needed.
2. Crawl under the counter.
3. Detach appropriate attachments.
4. Unscrew or detach refill container.
5. Install new container and secure (locking system or twist to secure)
6. Press any “reset” button, as necessary.
7. Slide out from under counter.
8. Dispose of refill container.
9. Re-attach access panel, if necessary.



Counter mount soap dispensers with refill cartridges under the counter require staff to either crawl underneath the counter or twist, bend, and maneuver in ways to clearly view the soap level hidden under the countertop.

If the cartridge needs to be replaced, staff slides onto the floor, wriggles under the counter, dislodges the soap cartridge from the dispensing unit, and replaces it with a new cartridge.

If there isn't enough product to last until the next restroom cleaning, many partially filled cartridges will be replaced before they are completely empty, wasting soap product and money.

LABOR STEPS TO REFILL: 6 to 9 steps

EASE OF REFILL: Moderate to Difficult

“TOP-OFF” CAPABILITY: No

SPILL POSSIBILITY: No

Counter Mounted Above-the-Counter Refill (bulk fill)

Steps to Refill:

1. Unlock top to refill container, if necessary.
2. Open access to container.
3. Pour bulk liquid soap into refill container.
4. Close access to refill container.
5. Clean spill-overs on counter (if needed).
6. Lock top/pump as necessary.

The bulk refill system for refilling counter mounted dispensers enables staff to “top-off” dispensers, saving money because partially filled containers are not thrown away.

Although much easier than refilling from under the counter, the typical bulk refill “free-pouring” option can result in accidental drips, spill-overs, and air bubbles that cause the soap product to slop onto the counter.

LABOR STEPS TO REFILL: 3-6 steps
EASE OF REFILL: Moderate
“TOP-OFF” CAPABILITY: Yes
SPILL POSSIBILITY: Yes



Counter Mounted Above-the-Counter Refill (sealed)

Steps to Refill:

1. Remove pump top.
2. Insert the refill bag into dispenser
3. When filled, remove the sealed refill bag
4. Replace pump top.

The innovative system from Kutol Products Company solves the multiple hassles and time-consuming steps of refilling in-counter soap dispensers.

It enables users to easily refill dispensers from above the counter, ending the time and inconvenience of crawling under the counter to either check soap levels or replace refills.

It avoids contamination issues and allows for the “topping off” of partially filled containers with a patented refill “dock” and unique re-sealable refill bags. Simply remove the pump head, insert the refill bag and turn it to open the flow of soap into the sealed reservoir below the counter.

“Topping off” eliminates the waste of throwing away partially filled refill cartridges and decreases the likelihood of dispensers running out of soap before the next shift.

When the sealed reservoir is filled, the system automatically shuts off, avoiding spill-over messes. Staff then removes the refill bag, which automatically reseals, and moves onto the next dispenser for easy refilling. This system truly reduces the cost of soap and labor time!

LABOR STEPS TO REFILL: 4 steps
EASE OF REFILL: Easy
“TOP-OFF” CAPABILITY: Yes
SPILL POSSIBILITY: No



Compare the steps in refilling soap dispensers:

	Wall Mount (Bulk Fill)	Wall Mount (Sealed)	Counter-Under (Sealed)	Counter-Above (Bulk Fill)	Counter-Above (Sealed)
Steps	3-6 steps	4-6 steps	6-9 steps	3-6 steps	4 steps
"Top-Off" Refill	Yes	No	No	Yes	Yes
Ease of Refill	Moderate	Easy	Moderate to Difficult	Moderate	Easy
Spill Possibility	Yes	No	No	Yes	No

SAFETY ADVANTAGES

Increased Hand Washing Compliance

Perhaps the greatest challenge in any facility is to encourage proper hand washing. Many studies show staggering non-compliance rates in many different types of buildings. Of note is the non-compliance rates in hospitals and schools in spite of the fact that hand washing is the single most effective defense against the spread of cold, flu and other illnesses.

Studies have shown **higher hand washing compliance when soap dispensers are stocked with foam soap**. One example is a [Minnesota school study](#) which showed student hand washing rates increased by 75% when switching to foam soap.

Eliminating Contamination

It has been shown that **bulk refill systems can fail to provide pathogen-free hand soap because, by their design, they expose the soap product to environmental factors during the refill process.**

A [study conducted by the University of Arizona](#) found nearly 25% of the bulk soap dispensers sampled contained significant levels of bacteria.

Another [study published by the National Center for Biotechnology Information](#). U.S. National Library of Medicine noted washing with contaminated soap from bulk soap refillable dispensers can increase the number of pathogens that remain on hands and may play a role in the transmission of bacteria throughout a facility.



Sealed refill bags eliminate contamination concerns when "topping off" dispensers

To eliminate the chance of contamination, it is recommended to use a "sealed refill" system which won't allow the soap to be exposed to environmental factors.

	Wall Mount (Bulk Fill)	Wall Mount (Sealed)	Counter-Under (Sealed)	Counter-Above (Bulk Fill)	Counter-Above (Sealed)
Contamination Possibility	Yes	No	No	Yes	No

Slip and Fall Risks

Bottom dispensing units are more prone to leak due to gravity. This is especially true if the pump nozzle malfunctions and remains open, emptying the soap contents onto the floor.

To avoid this situation, which can lead to a slip-and-fall risk, install a top-dispensing unit. Because of its design it will not leak, as the pump nozzle is located at the top of the dispenser.



WATER SAVINGS

Since **foaming soap is pre-lathered and has a lower viscosity, it reduces the lather-up and rinse time** per handwash by five seconds or more.

The average faucet runs at 50 mL per second, so during just one handwash foaming soap saves 250mL of water.

Consider the savings of an office building with 150 occupants washing their hands three times a day. In just one month (working days only), approximately 580 gallons of water is conserved:

# of days	Savings 250 mL per wash
One day (450 washes)	112,500 mL (29 gallons)
Five days (2,250 washes)	562,500 mL (145 gallons)
10 days (4,500 washes)	1,125,000 mL (290 gallons)
20 days (9,000 washes)	2,250,000 mL (580 gallons)

Conclusion:

Experienced facility managers recognize the many benefits of using foam soap in their buildings as it not only saves product costs, but provides advantages in labor time, safety, and water conservation. These advantages are enhanced when a foam soap initiative is combined with sealed refills and above-the-counter sealed refill systems.

Foaming Soap For Needs, Budget Constraints

Increased popularity of foaming soap means greater product options are available. Kutol Products Company offers a foaming soap for every need and budget.

Product	Color	Fragrance	Environmental Notes
Foaming Ultra Green Hand Soap	Clear	None	Green Seal™ certified Allergy sensitive
Foaming Spring Meadow Hand Soap	Blue	Spring Meadow	Green Seal™ certified
Foaming Vanilla Essence Hand Soap	Green	Vanilla	Green Seal™ certified
Foaming Luxury Hand Soap	Pink	Tropical	Green Seal™ certified USDA BioPreferred®
Foaming Advanced Antibacterial Hand Soap	Amber	Citrus Spice	Formulated without Triclosan
Foaming Luxury Dye & Fragrance Free Hand Soap	Clear	None	Green Seal™ certified



Foaming Ultra Green Hand Soap



Foaming Spring Meadow Hand Soap



Vanilla Essence Hand Soap



Foaming Luxury Hand Soap



Foaming Advanced Antibacterial Hand Soap



Foaming Luxury Dye & Fragrance Free Hand Soap

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