

Housekeeping

by William D. Frye, Ph.D., CHE

Determining the correct levels and time to reorder housekeeping supplies

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Housekeeping managers are responsible for reordering supplies, amenities and equipment so that their associates have the needed items to complete their assigned daily tasks. When supplies and amenity items run out, productivity can grind to a halt and guests are adversely impacted. When supplies run low to the point where reorders will not arrive in time before an outage occurs, housekeeping employees are forced to decide how to ration their supplies and guestroom amenities in order to make it through until the delivery arrives.

Take guestroom stationary for example. Should a piece of stationary that is slightly stained or creased be replaced with a new sheet of writing paper? Of course! Most service standards would dictate that this is the appropriate course of action. But what if stationary supplies are critically low and the lead time before new stationary can arrive is 28 days? All of a sudden the condition of the slightly imperfect stationary is overlooked by the room attendant in hopes that no one else will notice or object.

Assuming that Management is not trying to skimp on ordering supplies and amenities at the expense of compromising service standards just to realize a cost-savings, scenarios such as this can be avoided by developing and implementing a standardized reorder plan for non-recycled items.

Perpetual inventory terminology

The first step is to understand a few basic purchasing terms and how they fit into the purchasing equation. If a manager understands these terms, he or she can develop a perpetual inventory system that will streamline reordering and avoid shortages.

Minimum quantity: This is the fewest number of purchase units that should be in stock at any time. The housekeeping department's inventory level for a particular item should never fall below the minimum quantity, unless there is a delay in delivery. The minimum quantity should reflect a "safety stock" level in case there are shipping delays caused by bad weather, strikes, or a supplier's inability to fill a hotel's order when they receive it. As a general rule of thumb, the minimum quantity should equal at least the lead time quantity. In situations where hotels tend to run consistently high occupancy, it would be appropriate to increase the minimum quantity to two or even three times the lead time quantity amount.

Lead time quantity: This is the number of purchase units that will be used or consumed once a reorder is placed until the time when the reorder will be delivered to the hotel, assuming no shipping delays. This is normally calculated by multiplying the average daily use/consumption rate for each specific item within the hotel by the number of calendar days it take for a reorder to arrive.

Reorder level: When the number of purchase units falls to this level, it is time to reorder the supply or amenity item. This is calculated by adding the minimum quantity + lead time quantity.

Maximum quantity: This is the maximum number of purchase units that should be in inventory for a specific item at any point in time. If the hotel stocks more than the maximum quantity of an item, it is unnecessarily tying up hotel monies in unneeded assets. Those monies could be better spent on other inventory items, improvements, or collecting interest in the bank.

Reorder quantity: This is the number of purchase units that should be ordered from the supplier when inventory falls to the reorder level for a supply or amenity item. Once this reorder quantity arrives at the hotel, it will be added to the remaining inventory and brings the combined inventory level for the item to the maximum quantity. The reorder quantity should always



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match how the purchase units are packaged so that the hotel is only ordering full case or containers. Remember that many suppliers will charge an extra fee for any order not equal to a full case, drum, or standardized container.

Know the product

The next steps to developing a standardized re-order plan for supplies and amenity items is to know about the products, their usage or consumption rates, lead times, and price breaks. The more knowledgeable a manager is about these aspects, the more reliable the perpetual inventory system becomes and fewer resources will be tied up in inventory.

Critical aspects that a housekeeping manager must ascertain for each supply or amenity item include:

- How much of each item is used or consumed on a daily basis within the hotel? Fluctuating occupancy will assuredly increased or decrease
 this amount. Consistent occupancy levels make it much easier to ascertain usage and consumption levels. Hence, housekeeping managers
 must have accurate occupancy forecasts if they are to reorder supplies with accuracy. Tracking historical usage or consumption for each
 item will certainly increase the accuracy of the predicted need.
- What is the lead time once a reorder is placed with a supplier? This number is critical to ensure that the hotel does not run out of needed inventory before the supplier can deliver the reorder. Are there specific factors that will affect the lead time such as manufacturer's set up and fulfillment? Items such as toilet paper and glass cleaner can generally be filled right away. But items such as hotel stationary, monogrammed soap, replacement collateral for the compendium, or anything with a brand or logo may require longer lead time.
- *How does each item come packaged? Is it suitable for long-term storage or does it have a limited shelf life?* Some cleaning chemicals may lose their potency if stored for prolonged periods of time after manufacture. Other items may not fare well (e.g., paper products) if left sitting in humid storage closets or vermin infested areas. Are there disposal concerns that should be considered? Will the packaging significantly increase the waste haul expense incurred by the hotel?
- Are there price breaks if the purchase units are reordered in larger quantities? What is the savings realized by the hotel for purchasing in larger quantities? Are these savings substantial enough to justify tying up greater cash flow or credit amounts? Does the hotel have secure storage for larger inventory levels? Or will larger levels likely results in higher levels of shrinkage and employee/guest theft?

An example

Here is a housekeeping example of a perpetual inventory in action.

Let's assume that the XYZ hotel has 300 guestrooms and is located in a tourist destination. The overall occupancy is projected to be at 90% for the next three months, ranging from 75% - 100% for each night. Each guest bathroom has a standard amenity setup of one soap, one shampoo, one conditioner and one body lotion. The soap does not bear the hotel's logo, but the bottles containing the shampoo, conditioner and body lotion are monogrammed with the hotel's logo. Hotel service standards dictate that each amenity item that is used or appears opened will be replaced with a new amenity item during daily housekeeping service. The typical lead time for reorders of soap is 5 calendar days, whereas the typical lead time for reorders of shampoo, conditioner and body lotion is 10 calendar days. The hotel chooses to keep a safety stock level equal to twice the lead time quantity for soap but the safety stock level for shampoo, conditioner and body lotion is set at the lead time quantity for those items. The hotel's supplier offers a 30% discount on orders of 30 full cases per bathroom amenity item, so the hotel always orders 30 cases of each bathroom amenity item when inventory falls to the reorder level.

Amenity Item	Packaged	Projected Occupancy	Amount Consumed	Minimum Quantity	Lead Time Quantity	Reorder Level	Maximum Quantity	Reorder Quantity
Soap	288/case	90.0%	270/day	2700	1350	4050	11340	8640
Shampoo	144/case	90.0%	270/day	2700	2700	5400	7020	4320
Conditioner	144/case	90.0%	270/day	2700	2700	5400	7020	4320
Body Lotion	144/case	90.0%	270/day	2700	2700	5400	7020	4320

As illustrated above, the housekeeping or purchasing manager will reorder 30 cases of soap when inventory levels fall to 4050 units (or about 14 cases remaining). Likewise, 30 cases of shampoo, conditioner or body lotion will be reordered when the inventory for each of those items falls to 5400 units (or about 37.5 cases remaining). The hotel maintains a 10 day safety stock level in cases of emergency or unforeseen circumstances beyond its control while taking advantage of the 30 case price discount. All the manager must do now is keep track of the inventory levels and be sure to rotate the amenities on a first in-first out (FIFO) basis. It's that simple! \diamond

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