# FLOOR-SAVVINESS FOR ENVIRONMENTAL SERVICES

How to Maximize Effectiveness While Minimizing Downtime

By Brian Leafblad

e live and work in a world that is moving faster, with demands that seem to pile quicker than our ability to meet them. So what do you do? How do you prioritize your task list? How do you decide on what to have your team focus? Floor-savvy environmental service leaders are finding ways to save one to two hours of downtown per room every year.

Maintaining the floors in your buildings can be a very daunting task. As hospital designs change, it is becoming more common to find several different flooring types in a room, hallway, or unit. Whether you are following manufacturer's recommended procedures, your supplier's recommended procedures, or you have your own procedures, the days of having one simple procedure for your one type of floor are long gone.

But do all those different flooring types really need different products and procedures? In his book, *The One Thing: The Surprisingly Simple Truth Behind Extraordinary Results*, author Gary Keller writes that extraordinary results "are directly determined by how narrow you can make your focus." Most of you are probably familiar with the 80/20 concept first described by the mathematician

Vilfredo Pareto. In essence, it states that a small amount of effort (or workers or procedures) usually leads to a majority of the results. If we combine what these two men are talking about into one concept, it would say that if we can focus on a very few—and only the most important—procedures, we will be able to achieve the vast majority of the results we want to accomplish.

# Minimizing the Downtime

The more time we spend maintaining a floor, the less time a room or hallway is accessible for patient care. In order to achieve the best results with the minimum downtime, you really only have to pay attention to two main concepts: 1) the location within the building, and 2) the floor substrate.

When considering the location, divide your building into the following spaces: entrances/exits, hallways, patient care areas, and general purpose areas.

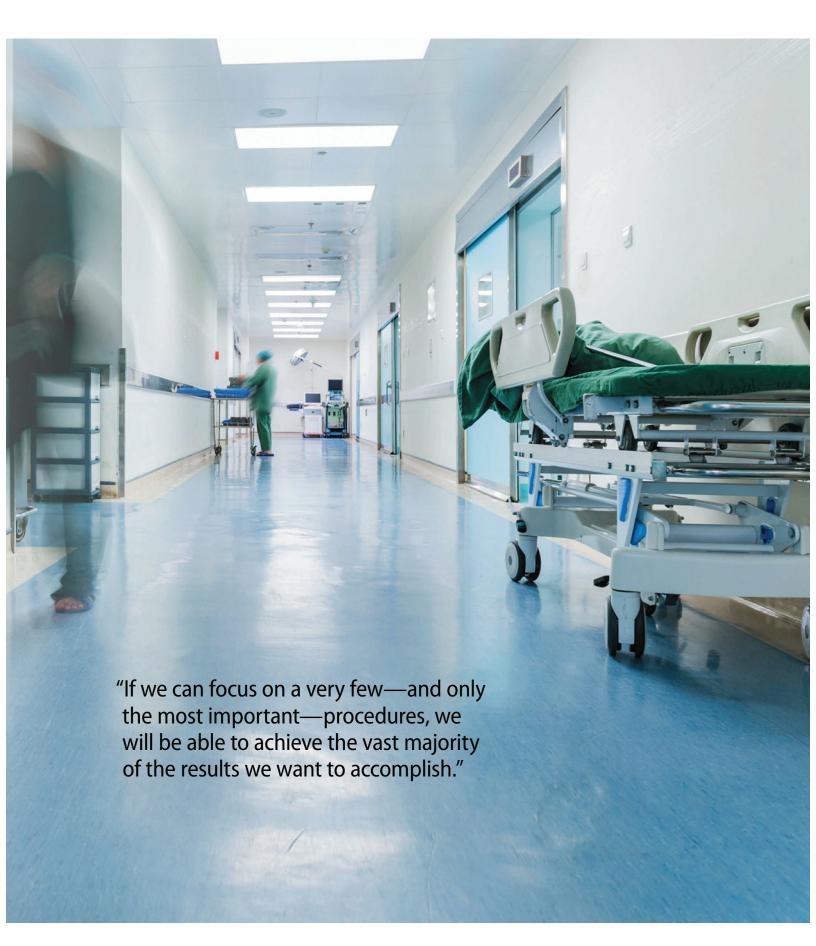
# Location, Location

Entrances/Exits: The most important thing you can do to save in cleaning near entrances is to have proper walk-off matting installed. According to the Carpet & Rug Institute, some 80 percent of soil and moisture can be removed by having entrance matting that covers the first five or six steps into a building (approximately

15 feet). Remove the dirt and water (also salt/sand if you are in a northern climate in winter) before it is tracked throughout your building and you will have less to clean up later. Periodic spot-moping with a portable flat-mop system to clean up general dirt, liquid spills, salt residue, etc., will allow you to spread out more intensive cleaning.

Hallways: These are the areas that will see the most foot traffic and are therefore the hardest to shut down for maintenance. The focus here should be on using a regular (daily to multiple times a shift) cleaning procedure that not only cleans the floor but maintains the look of the floor so you can avoid restorative maintenance procedures that limit access. High-performing, low-foaming, and no/low-fragrance neutral cleaners (that come in a ready-to-use microfiber mop system for spot cleaning or can be used in an autoscrubber for general cleaning) will allow you to clean as needed without having to restrict access due to wet floors that need a long time to dry.

Patient Care Areas: Use of a microfiber mop system for general cleaning of patient rooms will provide the most effective dirt removal while minimizing the amount of water on the floor that needs to dry before the room can be safely used. In a November 2002 report in the JCAHO Environment of Care Standards,



the U.S. EPA reported on a case study at the UC Davis Medical Center that showed 60 percent lifetime cost savings for mops, 95 percent reduction in the chemical cost of mopping, and 20 percent labor savings per day when compared against the same procedures performed with string mops. If you are disinfecting the floors, make sure to use a cleaner/disinfectant product that does both jobs in one application with the shortest contact time required for efficacy.

General Purpose Areas: Some of the hardest floors to care for are in general-purpose areas such as cafeterias, break rooms, back hallways, and storage areas. They take a regular beating from foot traffic, sliding chairs, moving equipment, and carts. The easiest floor to maintain will be one that has a matte or reduced-gloss coating on it. Matte finishes come in a range of gloss levels from a flat look to a satin or semi-gloss, allowing you to choose the look you want. A durable, matte-look floor finish will help hide dirt and a lot of the minor scratches and scuffs that will occur. As in other areas of your facility,

regular cleaning will help push out the restorative maintenance steps. Due to the higher soil load in these areas, an alkaline floor cleaner will be more effective than a neutral cleaner that may work well somewhere else.

### **Substrates**

Luxury vinyl tile (LVT) is quickly becoming the substrate of choice in a lot of industries. According to a 2014 study by Catalina Research and the Floor Covering Institute, commercial sales of LVT have more than tripled since 2007 with a significant portion of that replacing vinyl composite tile (VCT). The advantage of LVT is that the only maintenance needed is regular mopping/cleaning as their protective coatings used are typically very chemical and scratch resistant. However, no protective coating will last forever under high wear and tear and/or abrasive environments. Eventually, they will get scratched and damaged where you will be forced to make a choice of either applying a floor finish and taking on those maintenance requirements, or completely replacing the floor. Therefore, if we consider the potential for time savings within your facilities, use of LVT will provide the greatest benefit in hallways and patient care areas, rather than entrances or general areas.

Stone substrates are also becoming increasingly popular, particularly in building entrances and reception areas. Polished concrete, marble, and terrazzo floors can give your facility a very stylish look. Water spots and spills will be obvious on highly polished stone, particularly in areas with high levels of incident lighting such as near windows and doorways. Minimizing the potential for obvious spots through the use of walk-off mats and regular spot cleaning will minimize the need for larger-scale moping. Also, softer or porous stones such as concrete, slate, and sandstone can be protected through the use of an impregnator product. These products will introduce a penetrating protectant into the stone that will help repel liquids, while maintaining the original, natural appearance of the stone.

Vinyl flooring (either VCT or sheet vinyl) still covers the greatest square footage of any category of flooring. These flooring types need to be coated with a floor finish in order to last, and the finish you choose will be the key driver for how much maintenance (and therefore, time) is required. There are three main ways you can cut down on maintenance time on finished floors. The first one is to choose a finish with more of a satin/matte look. The higher the gloss of the finish, the more it will show dirt and look dull as it wears. There are a number of highquality finishes that will give you a nice looking shine, but one that is not a true "wet look." As facilities move to a softer, more comfortable feel to the design of their buildings, a satin look to the floors will strengthen that image. If you do go with a matte or satin look finish, you will save even more maintenance time if it is one that you can burnish without turning it glossy. As with any floor finish, matte finishes will need maintenance. The ability to burnish your matte or satin floor periodically will help it last longer without needing to either scrub and recoat, or strip and refinish.



www.walshintegrated.com

### TIME TO CRUNCH THE NUMBERS

If you want to minimize your downtime and maintenance spend, the best way to do that is install no-maintenance flooring. But what if your budget does not allow for the higher installations cost? Or what about those areas of your hospital where you need a finished floor to achieve the desired appearance? The following example will take a look at the various labor steps that contribute to your overall maintenance spend for different finish types, comparing both the downtime and labor cost you can save over a two-year period for an average room.

	Standard program	Matte finish	Fast dry, high durability, glossy finish
Install time	5 coats @ 30 minute dry =	3 coats @ 30 minute dry =	5 coats @ 20 minute dry =
	2 hours 30 min	1 hour 30 min	1 hour 40 min
Burnish time	1 time/quarter = 2 hours	None	1 time/six months = 40 minutes
Scrub and recoat	1 time/6 months = 2 hours 30 min	1 time/6 months = 1 hour 30 min	1 time/12 months = 55 min
Strip and refinish	1 time/12 months = 7 hours	1 time/12 months = 5 hours	1 time/24 months = 2 hour 30 min
Total time spent	14 hours	8 hours	5 hours 45 minutes
Time saved		6 hours	8 hours 15 minutes
Labor cost saved*		\$90.00	\$123.75

<sup>\*</sup>Assume an average labor cost of \$15/hour.

The second way you can cut down on maintenance time with finished floors is to use a finish that dries fast and will give you the look you want in as few coats as possible. Most conventional finish manufacturers will use a recommended dry time per coat of approximately 30 minutes. One reason is that the finish really can take that long to dry, particularly if it is laid down thick as it takes time for all the water to evaporate. The second reason is that we all know that very few people actually let the finish dry that long in between coats. Recoating too fast can lead to problems such as hazing, recoat attack, and even footprints! The longer recommended dry times provide some extra confidence that the floor will look great while allowing for the variations in application. While 30 minutes has been a common guideline for decades, we are starting to see products with faster dry times. If you can use a finish with a 20-minute dry time, a standard five-coat application will save you at least 50 minutes of downtime per room.

When deciding how many coats of finish to apply, the most important factor is what you want your floor to look like. Once you have three coats down, the only reason to apply more is if you want to increase the shine. Since matte finishes are designed to give you a lower gloss level compared to standard glossy finishes, they are formulated to only need two to three

coats when installed on a bare floor. By using a matte finish you can decrease your coating time by at least 40 percent over a standard five-coat system.

Another common strategy that has been used over the years is to use a higher solids finish. As polymer technologies have improved, a higher solids level does not automatically mean a better product as much as it used to. Higher solids will give you a thicker dry coat, which typically leads to higher gloss. All other things being equal, you should get approximately the same gloss level with four coats of a 25 percent solids product as you would with five coats of a 20 percent solids product. But do you really need that gloss level? For every coat you eliminate, you will save 20–30 minutes of install time.

Lastly, you can save downtime by minimizing how frequently you strip and refinish your floors. The best way to do this is to make sure you have a strong daily cleaning program, and then use a scrub and recoat process for as long as possible. With a scrub and recoat process, you need to use either a concentrated alkaline cleaner or a chemical-free abrasion method to remove the top couple of layers of finish. Once the floor is rinsed and dried, then apply one to two coats of fresh finish. With a 200 square-foot room, this process will take approximately 60–90 minutes. A full strip and recoat of that same 200 square-foot

room will take approximately four to five hours if you apply five fresh coats of finish. So if you take your one time per year strip and recoat process and replace it with a scrub and recoat process completed every six months, you will still save one to two hours of downtime per room every year.

## Talk to Your Supplier

We all take pride in our work and strive to deliver the best results possible. But doing more does not always lead to better results. It is possible to eliminate some steps to optimize procedures and make choices up front that will save us time down the road. Talk to your distributor or chemical supplier. Have them walk your building with you so they have a full appreciation for your specific situation and challenges. And then ask them how they can help you minimize down time.



**Brian Leafblad** is a 19-year veteran of the environmental services industry with Ecolab, specializing in floor care for almost a decade. He is a

scientist and inventor, a veteran speaker, and author with AHE. He can usually be found staring at a floor, studying the changing dynamics of the flooring industry, or mentoring his R&D team in the creation of new technologies.