What You Need to Know About
Wall Protection

Construction Specialties®

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WHAT YOU NEED TO KNOW ABOUT WALL PROTECTION

For decades, wall protection was primarily used in healthcare environments to prevent scratches, dents and gouges to walls that would compromise the structure and interior aesthetic. This can be accomplished by incorporating handrails, crash rails, corner guards and rigid sheet into a facility. Though sometimes thought to restrict design, some wall protection options can now incorporate nearly any image or color. Spaces can display full or partial wall murals that are no longer exposed and vulnerable to damage. This means designs can effectively display art that resonates with the building's intent.

However, these wall protection benefits are not restricted to healthcare environments. Any facility that sees a lot of traffic, either people or equipment, should use wall protection. It's important to choose the right wall protection product for a particular facility or space as well as selecting the best placement and application for optimal functioning. The following pages will provide information about wall protection in order to enhance your next building project.

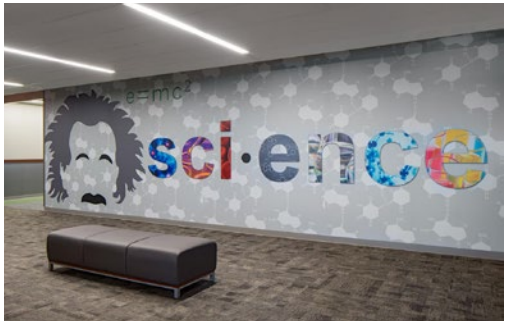
LOCATIONS WALL PROTECTION CAN BE USED

Eldercare facilities, such as long-term and assisted living, differ in many ways from typical hospital environments. They are designed to appear residential and home-like. However, these buildings still receive interior wall damage from wheelchairs, furniture, food/service/laundry carts and other objects. Crash rails and handrails should be incorporated throughout the facility to provide wall protection and avoid falls. Some handrail models integrate the crash rail feature for a seamless look. To emulate a residential interior design, subtle patterns and colors can be used on the walls while easily visible wayfinding can direct residents, visitors and staff.

Educational facilities like day cares, K-12, technical schools as well as colleges and universities can be easily damaged. There are numerous common areas, like gymnasiums and cafeterias, prone to wall damage from moving furniture, equipment and more. Ensuring that walls are well maintained will enhance the aesthetics of the building and impress visitors and potential students.

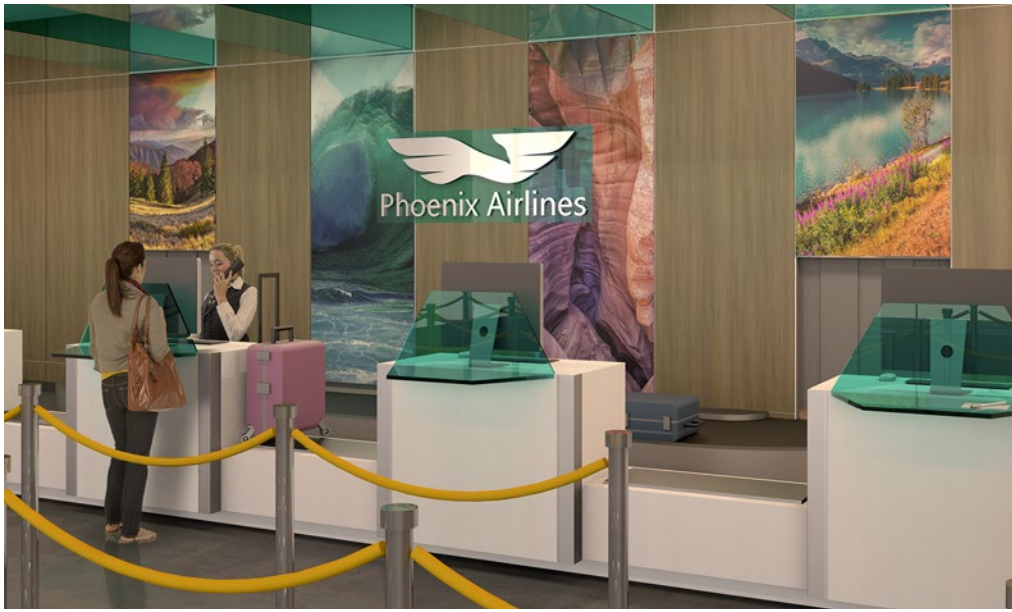
About 62 percent of prospective college students reported basing their college decision on the appearance of the buildings and landscape.[1]

To create a hospitality-like environment, educational facilities are beginning to incorporate materials and elements from nature. Simulated woodgrains can be used to provide a natural feel while maintaining a level of durability higher than that of real wood. Graphic wall protection can be used for added visual interest as well as for branding the school, whether incorporating a school name and mascot or identifying concentrated learning areas.



Atlanta International Airport experiences roughly 9 million passengers each month.[2]

A transportation center is another type of facility that experiences incredible traffic volume. Plus, each person in the center is usually carrying luggage or pushing strollers, while staff are transporting passengers and equipment on shuttle carts. Baggage claim areas are often neglected spaces, and receive noticeable damage from forcibly moving luggage. Graphic wall protection is also ideal in a transportation hub to provide clear direction of where passengers should go.



In addition to the main structural walls of these buildings, many of them also contain welcome areas with desks, medical stations, food kiosks and cafes. These locations can use rigid sheet, corner guards and crash rails, even for partial height walls.

Other buildings to consider wall protection application include **banks, government and military facilities, sports arenas and laboratories**.

LEVELS OF IMPACT

Deciding where to place wall protection within a building can be challenging. It's important to first consider what regularly goes through the facility like carts for various uses (for example, mobile classrooms, laundry, mail, food and luggage). Additionally, portable carts for hospital procedures or sports equipment in schools and gymnasiums, can be pushed against or into a wall, causing extensive damage. **Knowing where these objects regularly hit will help determine where the protection should be placed.**

Crash rails are built for different amounts of impact while feature rails withstand lighter impact from chairs and other comparable objects. These are normally more decorative and found in common rooms and lounges. Crash rails, also known as bumper guards, are thicker and designed to keep items further from the wall while withstanding more frequent and intense impacts. If you have objects traveling through the building at different heights, a double crash rail can catch the varying impacts. Rub strips can be placed flush with the wall surface, preventing scraping. To prevent corner destruction, corner guards can be placed at any height where damage frequently occurs.

For rigid sheet wall protection, there are differing thicknesses available, including .040", .060" and .075". These options will provide significantly more protection from damage than Type II commercial wall covering. Wall panels are an even more durable option for protecting walls as they are considerably thicker, and are typically available from 3/8" to 2".

The material selected for the protective wall covering also plays a role in the level of durability. Real wood offers the lowest level of protection, and is best used in areas with low traffic. Real metal provides a higher level of protection and can provide a sleek and stylish appearance. Simulated woods and metals are an acceptable alternative in areas of high-traffic where the aesthetic value of the material is desired. These more durable materials can be made from a highly-engineered, PVC-free polymer that is specially designed to withstand high impact.

Curves and radiuses tend to play a big role in architecture. Wall protection needs to be able to bend beyond the standard 90 degree angle or straight line to be applied to a curved wall or column. Graphic wall protection can be used around a column to create unique design elements, such as imitating a marble column in a high-end space or even creating a whimsical tree in a youth area. Certain handrails can be specified for wide or tight wall radiuses, some capable of as little as a 3" radius, depending on the material used.

Going beyond the curve, handrails can even be formed at custom angles on the horizontal plane which should be used for ramps and transitions, ensuring mobility and stability for those who rely on it.

Elevators and their surrounding lobby areas can also benefit from wall protection, as walls in these spaces are often damaged from consistent contact with passengers, carts, wheelchairs and more. Protective surfaces placed within the elevator cab and in the surrounding lobby area can help prevent unsightly damage.

Some products, such as wall panels, are durable and contribute to an aesthetically pleasing space. Wall panels can be used with images and in different colors, patterns and configurations. These design elements can be carried between the elevator area and the remainder of the facility for a cohesive design. Since elevators are inspected frequently, material selection is incredibly important as there are necessary code, weight and fire rating requirements that must be met.

Please refer to ASME and local building codes to ensure that elevator finishes meet all building and safety standards.

UNIQUE HANDRAILS

In addition to standard handrail models used in healthcare facilities, some specialty handrails are designed to accommodate specific facility needs. These handrails must withstand the unique demands of the patients using them. **Behavioral health handrails** need to be ligature resistant to promote safety. **Bariatric handrails** are designed to provide superior support when leaned or pulled on.

Though handrails are most frequently installed at ramps and in hallways, **handrails should also be located near a patient's bed and bathroom to reduce falls.** These handrails, called grab bars, can be placed horizontally or vertically and are strong enough to withstand a person pulling themselves up from a seated position.

Learn more about these unique handrails.

SURFACE CONSIDERATIONS

Considering surface textures is a component of ensuring patient, visitor and staff safety in a healthcare facility, especially with the risk of contracting a Healthcare Associated Infection (HAI), an infection that people can acquire while they are receiving treatment for another condition.

The Centers for Disease Control and Prevention reported that in 2011, there were an estimated 722,000 HAIs in acute care hospitals. Additionally, about 75,000 patients with HAIs died during their hospitalizations.[3]

Touch points can be **hotspots for germs and bacteria** that can manifest as HAIs. Choose surfaces that are bateria-resistant, easier to clean and can withstand daily wear and tear. These surfaces can also assist with reducing the risk of HAIs. Along with keeping people's health in mind, the perceptions of patients and visitors should be taken into account during the selection process. This can mean the difference between a glowing review and a scathing one.

Patient perception of your hospital's cleanliness may impact their overall view of your facility. Your attention to detail when it comes to cleanliness will send the message loud and clear that your staff truly cares about patients and their safety—and it's likely that the patient satisfaction rating will reflect your efforts.[4]

Footnotes:

1. https://news.wsu.edu/2005/09/02/landscaping-counts-when-students-pick-their-schools/
2. http://www.atl.com/business-information/statistics/
3. http://www.cdc.gov/hai/surveillance
4. http://www.healthdesign.org/insights-solutions/coming-clean-link-between-perception-cleanliness-and-patient-satisfaction

Construction Specialties

Acrovyn® has been the preferred wall protection brand for nearly 50 years, providing a PVC-free and easy to clean option for interiors. Handrails, corner guards, crash rails and rigid sheet are available in a variety of solid colors as well as simulated woods and metals. Real woods and metals are also offered for many of our products. Consider Acrovyn Protection for high-traffic areas such as corridors, elevator cabs, lobbies, seating areas and more.

For questions or more information about our interior wall protection products, call 800.233.8493 or visit www.acrovyn.com.