

Case Study

Pennsylvania Presbyterian Medical Center



Details

Location: Philadelphia, PA
Description: 5,000 square yards of
Forest rx
Flooring Choice:
Forest rx Oiled Oak

Project Needs

Noise reduction
Ergonomic comfort
Aesthetically pleasing
Wayfinding and material
transitions to distinguished
spaces
State-of-the-art building materials

Project Benefits

Easy to maintain
Easy to install
Sustainable
Durable

Flooring in New Trauma Center Aims to Support Patients and Staff

The Pennsylvania Presbyterian Medical Center (PPMC) of the University of Pennsylvania Health System (UPHS) is one of the premier medical centers on the East Coast. Penn Medicine's Trauma Program alone treats more than 2,200 patients annually, who have life threatening injuries.

In an effort to support PPMC's commitment to patients, staff, and multiple missions of clinical care, the medical center spent three years creating a new trauma center. Beginning in 2012, PPMC began designing the Pavilion for Advanced Care (PAC).

With a diversity of involved stakeholders, the many needs of the staff and the patient required a flooring product that could effectively deliver safety for the patients, enhanced ergonomic benefits for the staff, and superior acoustic properties to assure a quiet healing environment.

Project designer, Colleen Harrington, with Ewing Cole, the architectural firm involved with this project, was tasked with specifying a

product based on four primary considerations: "Noise, a critical concern from the user and really focused on footfall and corridor activity generated noise," said Harrington. "Joint relief for the staff and ergonomics was a definite concern/objective. A wood look aesthetic and designing a warm, comforting space that was not institutional." And last, but not least, memory with respect to vertical deformation. "Indentation recovery from the weight of the beds" was important said Harrington.

The hospital selected 5,000-square-yards of Ecore Commercial Flooring's Forest rx for the patient bays, treatment areas, corridors, and nurses' stations. This product is manufactured by Ecore, a flooring manufacturer located less than 80 miles away in Lancaster, Pa.

Using Ecore's patented itstru technology, which fusion bonds a 5 millimeter Ecore recycled rubber backing to a vinyl surface, Forest rx reduces the risk of injury associated with falls.

"Force reduction tests have shown that the fall impact is reduced 16.9 percent (in accordance

with DIN 18032) when Forest rx is installed," said Mark Huxta, Director of Healthcare Sales for Ecore. "Because of the rubber backing, Forest rx offers an ergonomic solution, compared to other resilient floors."

When selecting the building materials for PAC, the hospital chose high contrast resources and pops of bright colors to help decrease patient and visitor anxiety. Color and material transitions were also utilized to distinguish between staff, patient, and family zones within the ICU patient rooms.

With regard to its acoustic benefits when using IIC tests (in accordance with ASTM E492 and E2179), Forest rx allows the most basic assemblies to exceed the strict IIC 50 building code requirements, reducing impact sound more than 20 decibels with no ceiling below. An undergraduate research study conducted by the University of Hartford's Acoustic Program in 2014 concluded that Forest rx is as quiet as carpet!

