The Chicago O’Hare International Airport welcomes tens of millions of travelers through its doors each year. It is a major midwestern transportation hub and the third busiest airport in the United States. Due to the high visitor volume, airport personnel must take constant measures to keep their terminals clean.

During the design of United Airlines’ Terminal 1 at O’Hare, project architects chose PediTred®, a heavy-duty architectural grid system from Construction Specialties. PediTred was specified because of its ability to trap dirt, debris and moisture at the door, plus its aggressive scraping and drying capabilities that could keep the airport’s interior floors clean and safe. Unlike similar entrance grids on the market, PediTred has a 360-degree rollback capability, which eliminates the need to lift heavy grid sections for debris removal, a prominent pain point for many airports like O’Hare.

Chicago O’Hare International Airport, shown above, hosted 36 million boarded passengers in 2015.

PediTred At-a-Glance

- Static coefficient of friction: 0.70+
- Rolling load capacity: 1,000 lbs./wheel
- Trapping storage: high capacity
- Scraping ability: carpet, abrasive insert most effective
- Drying shoes: carpet, abrasive insert most effective
- LEED® IEQ Credit 5 Contribution: Yes
- LEED® MR Credit 4 Contribution: Yes
- Cradle to Cradle Certified™ Silver: Yes

PediTred is known as the industry’s strongest architectural entrance grid, with a sturdy design capable of withstanding rolling loadings up to 1,000 pounds per wheel. This unique feature made PediTred the ideal product because it could stand up to the daily barrage of heavy traffic from pedestrians and their luggage, plus the strain from large equipment like scissor lifts and security machinery. Architects were also impressed by PediTred’s tread insert and color options, which allowed them to select materials that complemented the existing décor.

However, an alternate product was substituted for PediTred during construction and installed in its place. Though this substituted product was visually like PediTred, it lacked the most important features, such as a high rolling load capacity and rollback capabilities. The substituted product began to fail less than a year after Terminal 1’s grand opening. The strain from constant foot traffic and heavy materials took its toll on the substitute grids, causing significant damage and bending to the tread rails and creating a serious tripping hazard (shown below).

After evaluating the damage and reviewing the architect’s original requirement, airport personnel made the decision to remove all substituted grids and replace them with the originally-specified CS PediTred. Many years later, PediTred is still standing up to heavy rolling loads and foot traffic and functioning effectively at Chicago O’Hare International Airport.