Many of the products you specify look great when first installed, but over time they can become scuffed or scratched from everyday wear and tear. This has been especially true of poke-thru devices, which are ideal for bringing connections to the floors in open spaces. Most poke-thru covers have a powder coat finish, but that can become worn down over time especially in high traffic areas. This is why Legrand is introducing the new Durable Finishes line of poke-thru device covers with brushed and/or plated finishes that last 4x longer than standard powder coat finishes.

There are several factors that can impact how long a cover finish will last. An ideal layering of metals is key. It’s important to select an optimal base substrate with finishes that adhere well to it. Beyond that, there are also protective coatings applied on top of the finishes that can enhance its durability.

All of these were considered when designing the Durable Finishes for the Evolution™ Series Poke-Thru Devices. While some of the claims about how long these finishes last may seem too good to be true, the Durable Finishes were rigorously tested to ensure they would outperform standard options and other finishes the industry can offer. We adjusted the thicknesses of each plating layer until we saw the best results. Beyond that, we also added an extra heavy-duty protective clear coating over the finish. While most poke-thru device covers utilize a lacquer for this protective layer, we chose a clear powder coat that only enhances the toughness of our multi-layered plating. The combination of these layers creates a material that lasts significantly longer than any one alone.
As a result, Durable Finishes can last up to 4x longer than standard powder coat finishes. Furthermore, clear powder coat is 3x more durable than lacquer when applied to industry standard finishes.

To evaluate the durability of these covers, we conducted an in-house test that determined the exact moment wear and tear began to show. By using a Taber Industries Heavy Duty Linear Abraser with a 2” x 2” 3M Type A Very Fine Scotch-Brite™ pad, we were able to simulate the wear a cover would endure when it’s installed in a high traffic area.

The test was administered in 50 cycle intervals. At the end of each interval, the sample was inspected. During the inspection, the test setup was not disrupted. Several samples of a given finish were tested to normalize for variations in the manufacturing process. Competitors’ covers were also tested under the same conditions. Using these test parameters, Evolution Durable Finishes were able to withstand over 1000 cycles: 2x the amount of cycles than competitors’ plated covers.

Using the Taber Industries Heavy Duty Linear Abraser and a Tungsten Carbide 0.040” conical tip, a load was applied to the covers to witness scratching of the surface. The scratch test was performed over a 2 inch length of the cover. Failure is defined as the moment when the substrate material is exposed. No load was added onto the Load Arm to begin the test, then the load was increased until failure was observed. For powder coated finishes, failure occurred at 6 lbs (2.7 kg). For the plated finishes, failure occurred at 10 lbs (4.5 kg). Therefore, plated finishes are more scratch-resistant than powder coated finishes.

Many facilities find their poke-thru devices start looking worn down too quickly, long before the device itself needs replacement. Avoid frequent complaints and replacements by upgrading to Durable Finishes for the Evolution Series. Choose strong covers for your strong reputation, and keep customers happy well into the future.