



STAUF USA Perma-Flex System Case Study: Catering Trailer

STAUF USA's Perma-Flex resinous coating system was recently used in the renovation of a highly utilized catering trailer for food service of well-known restaurant. Perma-Flex is a pour in place floor covering / coating system that is suitable for both commercial and residential applications, and both indoor and outdoor applications. The multi-part system provides a moisture barrier as well as an impenetrable wear layer. Training, and knowledge of these types of floor coverings is required for installation.

Perma-Flex has many uses and functions, but is primarily used for high traffic and chemical resistant applications, which made it an easy selection for a busy catering trailer. There are several different products within the system which makes it adaptable to each unique installation. In this particular scenario, the customer wanted a solution for easy cleaning.



In the first step, a sealer – STAUF's VPU-155 S - was applied to all the plywood inside the trailer with a foam roller. This enables the second coat to stand up, and prevents penetration of the wood. This took 2 hours to properly dry before the next coat could be applied.

Stauf's ULC-500 Level-Seal with XCF ColorFast Tint in the #11 Fog shade was then applied to the sealed walls and floor of the trailer. This creates a waterproof barrier, and bridges any plywood joints. ULC-500 is an elastic urethane coating that dries in 4 hours, prevents spider cracks in the top coats, and absorbs high impact and abrasion abuse.



To give a smooth surface, the walls were then sanded with 120 grit sand paper using a hand sander, and a buffer with a 180 grit used screen was used on the floor. Once sanding was finished, everything was power vacuumed and then tacked off with damp rag of acetone to remove remaining dust before the next coat was applied.



Using a 3/8" nap roller, the walls were coated with a coat of Stauf's CCO-640, a fast-drying and UV stable base coat for outdoor applications. The XCF ColorFast #11 Fog colorant makes another appearance here as it is mixed in with the base coat. This coating dries quickly, so only enough product for the walls was applied. Once CCO-640 was applied to the walls, XPF color flakes were immediately broadcast. The flakes were spread to the consistency of the aesthetic desired by the customer, and would be held to the base coat as long as they were broadcasted before the base coat dried.



The same product, CC0-640 urethane base coat with the #11 colorant, was then used to coat the floor of the trailer. Spreading in smaller, 5 foot sections and broadcasting vinyl chips gave a more uniform spread of the flakes. Once fully flaked, a fine grade of silica was broadcast over that section of the floor. The entire surface was covered with the sand for added traction. When the flakes are spread first, the sand will not bond where the flakes are on the surface so you can still see the flakes in this coating. This will give much greater slip resistance by using sand in this coat. The coating and flakes were spread, and the sand was added until the floor area was finished. Once done, the layer dried for 1 hour before removing the extra sand.

Lastly, a coat of CCO-650, a heat and chemical resistant, UV stable clear top coat was applied with a foam roller. This coating encapsulates the walls and provides a beautiful top coat, highlighting the flakes and the colorant.



The Perma-Flex system will allow this trailer to be power washed inside for easy cleaning. The walls and floor are now heat and chemical resistant as well, and ready to take on a lifetime of all the wear and tear a busy catering business will throw at them.

STAUF Products used:

VPU-155 S

ULC-500 Level-Seal

XCF-11 Fog colorant

CCO-640 Exterior Urethane Base Coat

CCO-650 Exterior Urethane Top Coat

XTC-P texturing compound

XPF- #31 Air - polymer flakes