

Zoopoxy – The Right Choice for Foam Hard Coats.

Foam makes an ideal substrate for sculptural elements for all kind of architectural applications. Foams offer not only the benefit of being very lightweight, but foams are very easy to form and shape. Then there is the need to provide a finished protective “hard coat” surface to add durability and at times additional texture to the finished product. Hard coats are available in many formulations from paint type coatings, to cementitious and also polymer type coatings of which there are more than a few choices as well. The most common polymer hard coats are epoxy, urethane or polyester based.

Our Zoopoxy Hard coats were specifically developed as hard protective coatings for all types of foam substrates and offer many features and benefits over cementitious hard coats.

- *Superior Adhesion
- *Superior Durability
- *Superior Impact Resistant
- *Waterproof
- *Paintability
- *Non-toxic
- *Zoopoxies are Green!

The biggest advantage of using Zoopoxy over cementitious hard coats is adhesion to the foam substrate. Part of the challenge is there is a wide diversity of foam types and densities and the different types can present different challenges for the hard coats ability to bond. Urethane foam are the most stable foam and also offers a wider variety of densities that can be tailored to the end use demand of the sculptural element. Polystyrene foams can be the most challenging due to their porous beaded composition and relatively weak surface structure. Cementitious coatings are water-based and cements rely on the wetness of the coating to “soak in” and penetrate the substrate and foams inherently do not allow this to happen. Epoxies on the other hand have the ability to both chemically and mechanically attach to the foam surface and will always be the superior choice when adhesion is a prime consideration.

Epoxy Hard Coats are far more durable than cementitious hard coats in their ability to provide crack resistance, are waterproof, resist expansion/contraction, are freeze/thaw resistant and chemical and solvent resistant. Mil for mil epoxies will outperform cement based hard coats.

Zoopoxies are waterproof and often used as a waterproof barrier in underwater, water holding structures such as ponds and pools and are superior to cementitious coatings which are porous and not a good choice where constant water exposure is a concern.

Paintability is another often overlooked feature in that our Zoopoxies are epoxy based and almost all primer coats in the coating world are epoxy based due to their far superior ability to bond to a variety of surfaces including foam substrates.

Zoopoxies are non-toxic and the preferred choice when the hard coat is to be in or around animal, reptile or aquatic species.

*Zoopoxies are Green! Polygem is committed to providing the most environmentally friendly choice for sculptural hard coats both with choices for the ingredients and the packaging of our Zoopoxy product line!