Choosing Coatings for Clay Bricks

Clay masonry units, or clay bricks as they are usually referred to, are typically formed through pressing or extrusion, and are commonly used to construct either interior or exterior walls. Extruded bricks are the most common type and typically result in a denser product, while pressing tends to produce a smoother and more accurately shaped brick.

Painting clay bricks can present a unique challenge due to the alkalinity of the mortar used to hold the bricks in place. The following guide is based on information found in MPI's Level 2A Architectural Painting course and provides best practices for specifying coatings for clay brick.

Conventional Latex Finishes

- It is important to use an alkali-resistant primer when specifying any latex coating system over clay bricks. The mortar used to hold the bricks in place are highly alkaline and can cause the applied coating to fail.

- Conventional latex coating systems are often used on clay brick in residential, light industrial and commercial applications. Latex coatings are generally preferred over alkyd systems due to their resistance to alkali, yellowing, and cracking, while exhibiting greater exterior durability and color retention than conventional alkyd systems.

High Performance Latex Finishes

- High Performance Acrylic and Waterborne Light Industrial coatings may be used for residential, commercial and light industrial locations in high traffic areas. These coatings show better resistance to physical and chemical exposure than conventional latex systems. These systems are typically used in areas where greater gloss and color retention is required under more aggressive exposure environments.

Specifying Finishes

- Since most bricks are relatively rough, a flat finish is typically specified to hide the surface imperfections on the face of the brick.

- Low-sheen finishes can minimize surface imperfections and roughness while providing improved resistance to dirt retention and surface marking.

- A semi-gloss finish will result in a highly cleanable surface but will also highlight small surface imperfections and therefore should be reserved for smooth surfaces.

Water Repellents

- Clear water repellents provide protection from wind-driven rain while maintaining the natural color of the bricks. Clear water repellents are available in both paintable and non-paintable formulations.

- Non-paintable water-repellent coatings can only be recoated with the same type of product, while paintable water-repellent products offer more versatility for future coating systems as they can be successfully recoated with a range of conventional pigmented paints.