

Deeper, Richer Colors for Pavers

DURA PROTECT™ improves the optical properties of concrete pavers and slabs.

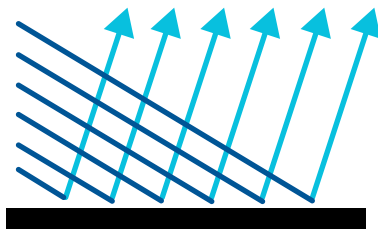
DURA PROTECT™ is a proprietary inline paver treatment that enhances the optical properties of concrete pavers and slabs to produce deeper, richer, longer-lasting colors.

How It Works

Concrete surfaces are naturally rough, which scatters light and makes colors appear dull or washed out. DURA PROTECT™ fills in surface roughness, reducing diffuse reflection and increasing specular (mirror-like) reflection. This creates more vibrant, true-to-tone colors (e.g., actual reds instead of pink/orange). It is not a sealer and does not create a glossy or wet look.

Fade & Wear Protection

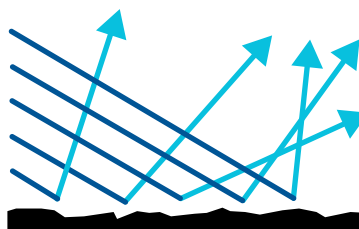
UV rays cause photodegradation, breaking down color bonds and leading to fading. DURA PROTECT™ contains UV protection to reduce fading and maintain color intensity for years. It helps preserve surface integrity by protecting against mechanical wear, acid rain, and environmental exposure.



SPECULAR REFLECTION

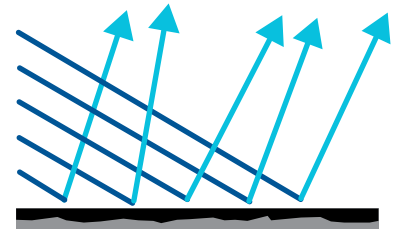
When we look in a highly polished mirror we see our reflection because mirrors reflect almost all incoming light in a parallel orientation, with very little scatter.

This highly focused reflection is called “specular reflection” and is often used to describe the highlight or glare visible on a brightly lit or shiny object.



DIFFUSE REFLECTION

When a rough concrete surface is dry and not polished, much of the incoming light is scattered and can overwhelm the reflected color. The net effect is that the surface may appear light and washed out no matter from what angle it is viewed.

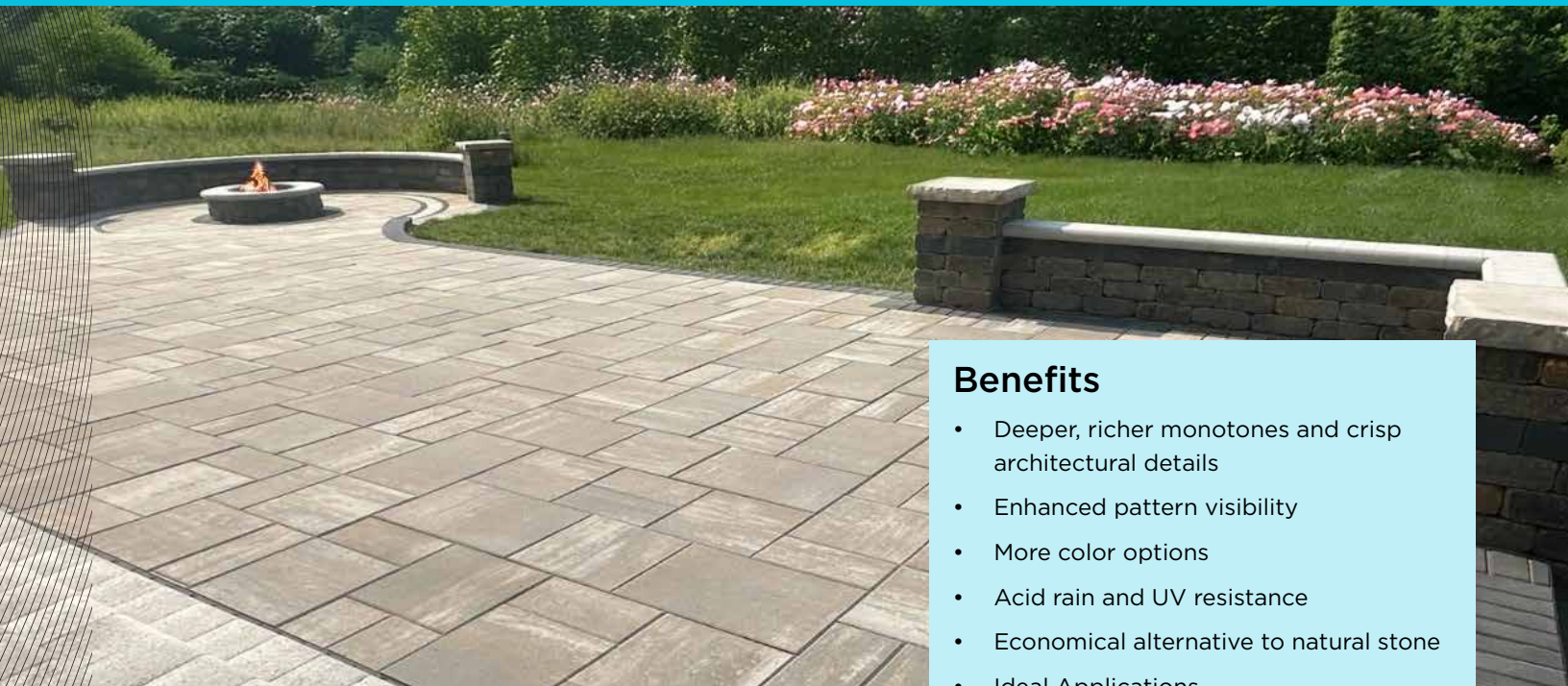


DURA PROTECT™ REFLECTION

DURA PROTECT™ works to fill in surface roughness. This reduces diffuse reflection and increases specular reflection on the concrete surface, resulting in deeper, richer colors.

DURA PROTECT™ is not a sealer, and does not create a glossy or wet look on the surface.

In short, DURA PROTECT™ enhances and protects paver color by improving light reflection and providing built-in UV protection, resulting in longer-lasting, more vibrant concrete surfaces. Applied during manufacturing and cured into the concrete matrix, so it won't wash off under light to moderate abrasion.



How Long Does DURA PROTECT™ Protection Last?

DURA PROTECT™ is applied during the production process and cured into the concrete matrix so it will not wash or wear off under light and moderate abrasion. When applied to pavers that meet ASTM C140 requirements, **DURA PROTECT™** will last for years. **DURA PROTECT™** may be abraded off by vehicular traffic, so it is not recommended for this purpose.

Benefits

- Deeper, richer monotonies and crisp architectural details
- Enhanced pattern visibility
- More color options
- Acid rain and UV resistance
- Economical alternative to natural stone
- Ideal Applications
- Outdoor kitchens and living spaces
- Roof decks, pool decks, plazas, and parks
- Custom hardscape and architectural landscape projects
- Contemporary designs requiring vibrant colors

Protection from Fading

Concrete fades when exposed to ultraviolet radiation from sunlight. The technical term for color fading is photodegradation. Light absorbing color bodies, called chromophores, are present in pigments and dyes. The color(s) we see are based upon these chemical bonds and the amount of light that is absorbed in a particular wavelength. Ultraviolet rays can break down the chemical bonds which results in less light of the color being reflected. To our eye the color then looks less vibrant. **DURA PROTECT™** contains powerful UV protection that reduces fading - no more tired looking pavers!

Pigments are an important contributor to paver colors, however it is not pigment fading that causes many color failures. Pigment particles are held in the cementitious and fine aggregate paste blend that binds the coarser aggregates together. Over time, through mechanical wear (such as foot or vehicular traffic) and chemical wear (acid rain, acid based cleaners or freeze thaw exposure), the fine particles on the surface of the paver may be worn away leaving a dusty residue and larger uncolored aggregates exposed, causing the paver to look faded.

Good quality pavers with high strength and low absorption will retain surface and color integrity over time. Integral admixtures combined with color enrichment systems can help to raise paver quality and preserve color depth and hues.