



## CARE & MAINTENANCE OF PRECAST CONCRETE

Precast concrete products, in general, require little or no maintenance. They are strong, durable, and resistant to the elements. While other materials can begin to deteriorate and lose strength over time the strength of precast concrete will actually increase with time.

### IMPACT

Care should be taken to protect precast concrete products from impact as it can be chipped, especially at corners and edges. Skateboards, skates, bikes, landscaping and lawn care equipment may cause this type of damage. If chips do occur, patch kits can be purchased from E&C Precast Concrete, Inc.

### FIRE, WEATHER, CHEMICAL RESISTANCE, AND WARRANTY

Precast concrete is noncombustible and does not lose its structural capacity in elevated temperatures. It is well suited to all types of weather conditions and will not degrade from exposure to sunlight; however, a sealer is recommended where there are significant freeze/thaw cycles. Precast concrete is resistant to most substances; still no material is completely immune to attack from aggressive chemical agents. It is recommended that a penetrating sealer be used to guard against ice-melt products commonly used on sidewalks and streets in the winter months. Since most sealers wear off over time, they need to be reapplied periodically.

Three common ice melting ingredients can chemically attack concrete: ammonium sulfate, magnesium chloride and calcium chloride. Surface damage can also result from a natural process called the freeze/thaw. Ice melting chemicals increase the number of freeze/thaw cycles and can also double the rate of expansion during freezing. Concrete less than one year old is particularly vulnerable to freeze-thaw cycles. Careful selection of ice melting chemical blends and the application of a sealer prior to any snow will help protect the concrete. Recommended sealer is Tmak CS 110. This is a penetrating, invisible sealer that is non-toxic and only requires application every 3-5 years.

*We warranty our product against material and manufacturing defects for a period of one year. We cannot however warranty against spalling, usually caused by freeze/thaw or a chemical reaction due to salting. Damage caused by salt or other ice melting compounds cannot be covered under warranty regardless of whether or not a sealer was applied.*

### COLOR AND FINISH

Integral colors are economical to use because they are mixed straight into the concrete at the plant facility. In addition, integral colors are permanent and do not require periodic refinishing like applied finishes do. Colors are made with pure, concentrated pigments specially treated for mixing into concrete. They are lightfast, alkali-resistant, weather-resistant, and formulated to give long-lasting appeal to concrete. As with any natural material some variation in appearance is a normal design feature of concrete. It is normal for the color of concrete to lighten as it cures so allow at least 28 days for this process to occur. Colored product is more difficult to patch and the patch may not be an identical match. There is no guarantee on an identical match.

Exposed aggregate is obtained by the use of a chemical retarder which affects the cement mortar portion of the concrete. The aggregate is not damaged or changed by this exposure method. The retarder keeps the surface from completely curing so that it can be brushed/power washed off revealing the aggregate. Appearance will therefore vary to some degree with surface orientation and aggregate shape.

Typical tolerance criterion for the acceptability of a colored, etched, or exposed aggregate concrete product requires that the finished surface shall present a pleasing appearance with no obvious imperfections other than minimal color and texture variations when viewed in typical lighting with the naked eye at a 20 foot distance.

### CLEANING

Should precast concrete surface become dirty, it can be scrubbed with a soft fiber brush, using a mild detergent and water. Pre-wet the surface, scrub, and then thoroughly rinse with clean running water. Do not use acids or prepared cleaners without checking with E&C Precast Concrete, Inc.

### ENVIRONMENTALLY FRIENDLY

After water, concrete is the most used material on Earth. It is non-toxic, environmentally safe, and composed of natural materials. Concrete is completely recyclable. It is non-hazardous, however caution should be taken when cutting or grinding concrete. See MSDS prior to any cutting or grinding.