

January 2012

## CAST CONCRETE

### DURABLE VERSATILE CONCRETE

Concrete is much more than the most widely used construction material on earth. Dispense with the mental image of a concrete sidewalk, a bridge abutment or curb, and replace it as an artist's medium which can be transformed into beautiful works of furniture and art.

Concrete is an engineered composite of cement, sand, aggregate and potable water. Specialty elements and color pigments can be added to the mix to achieve special properties and characteristics. From this highly versatile medium, Landscape Forms offers tastefully designed, high quality public space furniture, engineered to wear beautifully in the public eye.

### CONCRETE MIXTURE

**Binding material:** Type-I-II-V low sulfate cement with minimum 10% Fly Ash.

**Sand:** Washed, filtered and dried masons or concrete sand.

**Aggregate:** Washed and dried ½" and smaller crushed stone.

**Water:** Potable

### Design Strength

28-day compressive strength 6000PSI

### Weathering and Aging

The effects of the elements and the environment act to add character and drama to the surface of cast concrete as it ages.

### MAINTENANCE

Generally, cast concrete requires little to no maintenance from the effects of weathering and aging. Maintenance, however, may be performed using the following guidelines:

**Use of planters:** It is imperative that accumulated dead and decaying organic matter be removed from the soil surface on a regular basis. This material, especially in cold weather will be saturated and freeze preventing surface water from draining out the bottom of the planter. Surface water can freeze and expand applying enough force to break a concrete planter.

**General cleaning:** Never use carbon steel wire brushes as minute amounts of steel from the brush will be embedded into the concrete surface resulting in rust staining. Use natural stiff bristle brushes with clean potable water. This should be sufficient for most cleaning requirements.

For more intense cleaning, refer to the Care & Maintenance document.

**Graffiti:** Anti-graffiti sealers are not available due to their toxicity. To clean graffiti, determine what was used to deface the concrete surface. For spray paints, remove as much as possible mechanically with a stiff natural bristle brush. Never use mineral spirits as these will dissolve the paint and can carry it deeper into the concrete. Use a cotton cloth soaked with acetone to blot off the paint.

### COLORS AND FINISHES

Standard and special Davis colors are monolithic. It must be noted that if sandblasting is requested for concrete using any Davis colors, the effects of sandblasting will alter the appearance of any of the Davis colors from that on as-cast concrete.

## ULTRA HIGH PERFORMANCE CONCRETE

### OVERVIEW

Also known as UHPC, this type of concrete can achieve thinness, strength and exceptional durability. Cast concrete is different than UHPC.