Technical Data and Specifications for Pre-cast Concrete Tables, Benches, Snuffers, Waste Receptacles, Bollards, Tree Grates, Drinking Fountains, Bike Racks, Planters, and all Custom Projects.

Part 1 – General

- A. **Description :** Factory Designed and Fabricated Pre-cast Concrete Site Amenities.
- B. **Manufacturer:** Petersen Concrete Leisure Products Division of Petersen Mfg. Co., Inc. 2471 Hwy. 30 P.O. Box 664 Denison, IA. 51442 Watts (800)332-7540.
- C. **Warranty :** Petersen Mfg. Co., Inc. Provides a Two- Year Limited Warranty on all Petersen Pre-cast Concrete Products.
- D. **Delivery :** All Pre-cast Products Purchased From Petersen Mfg. Co., Inc. Will be Shipped Via Petersen Mfg. Co., Inc. Trucks Or Other Approved by Petersen.
- E. **Handling :** Products Shall be Packaged so as to be Protected from Usual Movement During Storage and Shipment By Factory Trained Employees. All Products will be Stretch-wrapped on Custom Pallets Unless Noted by Petersen Mfg. Co., Inc.

Part 2 – Products

- A. **Quality Control :** Petersen Mfg. Co., Inc. Maintains at all times a Program as Herein Outlines so as to Insure that All Pre-cast Meets or Exceeds All Requirements as Specified Under Physical Requirements.
- B. **Testing :** Concrete Shall be Tested by ASTM Certified Workmen. All Pre-cast Shall Have a Minimum Compressive Strength of 5,000 P.S.I. at 28 Days of age when Tested by means of 6" x 12 " Cylinder Molds ASTM C 39.
- C. Materials :
 - 1. **Cement** All Cement Shall be Type I-III Portland ASTM C150 or White Lehigh Type I ASTM C 150
 - Color All Color Additives Shall Be Liquid Color and Must be mixed thoroughly Per Batch so as to Remain Uniform Throughout as Approved by Owner or Specifier in Accordance with Manufacturer's Recommendation.
 - 3. Air Entrainment Air Must Be Tested and added as Necessary to meet a Minimum Requirement of 4% and a Maximum Level of 6% Air ASTM C 231, C 173..
 - 4. **Super Plasticizers** Plasticizers Must Be Added so as to Allow Molds to Be Filled with Minimum Slump ASTM C 143.
 - 5. **Gravel** Sand and Rock Must be Clean and Free of Iron Oxides and Must be Conveyed From Storage to Production so as to Not Separate and Deplete.
 - 6. Water Water Must Be Clean, Drinkable, and Between 50-70 Degrees.

D. Fabrication :

- 1. **Drawings** Shop Drawings with Dimensions, General Construction Component Parts, Anchoring Details and Installation Instructions are Required for Approval.
- 2. **Forms** The Forms for the Pre-cast Units Shall be Constructed of Metal or Fiberglass, and Designed to Withstand Casting Pressures Without Distortion.
- 3. **Inserts** All Concrete Anchors, Inserts, Bolts, etc. will be Placed and Secured in the forms as Required for the Attachment and Handling of the Units. These shall be Clamped or Secured so as to Hold them in Position During Production.
- 4. **Reinforcing** Reinforcing Steel Shall Conform to ASTM 615 for Rebar, and Deformations shall Conform to ASTM M 0305.
- 5. **Casting** Face Mix Must be Provided for full Unit Depth. Forms Must be Clean and Free of Debris. Forms to be vibrated as they are Filled to Eliminate air Pockets and Bug holes.
- Curing Pre-cast Units Freshly Poured and Troweled Must be Protected from Loss of Surface Moisture and Cold Temperatures with Thermal Blankets and/ or Plastic. All Pre-cast Units Must be Cured in Identical Conditions.
- Physical Characteristics All Exposed Surfaces are treated to Remove the Surface Matrix and Expose the Aggregate Produced by Chemical Retardant or Sandblasting. All Pre-cast shall have Water-repellent Sealer Treatment Applied in Strict Accordance with Manufacturer's Specifications.
- 8. **Tolerances** All Tolerances Shall be Within 1/8" of Specified Dimensions, Designed for Structural Analysis and Calculation.

Part 3 – Execution

A. Installation :

- 1. Comply with Manufacturer's Written Installation Instructions.
- 2. Inspect Units Upon Arrival for Damage. Notify Petersen Mfg. Co., Inc. of any Damaged or Missing Items.
- 3. Units Should Be Installed on a Clean, Level Surface. Units Should be set Plumb and Square Within Allowable Tolerances.
- 4. Pre-cast Units Shall be Installed by Petersen or Acceptable Installer.
- 5. Units to be Anchored in Accordance with Manufacturer's Recommendations.

B. Cleaning:

1. Wash and Rinse in Accordance With Manufacturer's Recommendations.

C. Resealing:

1. Reseal Using Petersen Mfg. Co., Inc Recommended Sealer and Follow in Strict Accordance of Manufacturers Instructions.

Petersen Concrete Leisure Products Division of Petersen Mfg. Co., Inc. 2471 Hwy. 30 P.O. Box 664 Denison, IA 51442 800-832-7383