

SPECIFICATIONS

D. R300 (formerly "RS") Perimeter Recirculation System

A factory fabricated radial curved perimeter overflow system consisting of a PVC covered stainless steel overflow channel and integral filtered water supply channel according to the details shown on the project drawings shall be supplied around the entire perimeter of the pool. The system shall conform exactly to the pool walls, matching the design radius requirements continuously around the perimeter. **Field fabricated sections, or mitered straight sections, shall not be acceptable.** The system shall be the R300 Perimeter as manufactured by Paddock Pool Equipment Co., Inc., of Rock Hill, South Carolina, US Patent #D515,183.

D.01 Anchorage

The entire perimeter overflow system section shall be anchored to the pool structure with commercial quality threaded stainless steel rods (or U-bars, if shown on the drawings) installed as shown on the plans and fastened to the pool reinforcing steel, thus forming a continuous perimeter section. These anchors shall be placed at the corners and on a maximum of 4-foot centers around the pool.

D.02 Filtered Water Supply Channel

The filtered water return tube shall be fitted with **variable sized nylon jet inlet nozzles placed in a continuous "V" notch formed into the perimeter.** The channel shall be formed in such a way to create a continuous rounded ninety degree angle where the bottom face of the gutter system meets the interior pool wall. **Inlets placed in the channel by any method other than inside a "V" notch as described above may result in erosion of the plaster finish below and shall not be acceptable. A stainless steel finish flange attached to the bottom of the face of the gutter system may result in an exposed edge that is harmful to swimmers and shall not be acceptable.** Inlets shall be spaced not more than 36" on center around the entire pool perimeter except where expressly deleted. These inlet jets shall be installed so as to provide a stream of filtered chlorinated water on a fixed 45° angle directed toward the bottom of the pool. The filtered water supply conduit shall be machine welded using the TIG process by the manufacturer in his plant and pressure tested prior to shipment. Field welded pressure conduits shall not be acceptable.

D.03 Overflow Channel

The main overflow channel shall be fitted with jet flow nozzles to provide a constant stream of filtered chlorinated water in the channel to prevent any stagnation or build-up of dirt, as shown on the plans. All areas of the gutter shall be accessible for inspection and cleaning. The overflow channel shall be covered by a protective grating formed of extruded PVC sections comprised of 5/8" wide, 1" deep extruded I-beam ribs placed **perpendicular to the pool perimeter** for maximum efficiency in quelling waves. The top shall be serrated to create a non-skid surface. The open area of the grating shall not be less than 32%. The grating shall be white unless otherwise specified on the plans.

D.031 Surge Weirs (optional)

Surge control weirs shall be installed in the perimeter overflow system as shown on the drawings. They shall be located to provide a surface cleaning action when the water level is below the perimeter overflow system lip during periods of non-use. The weir gate shall close automatically as the water level in the pool rises, thus allowing the pool to be operated at rim level for competition without flooding the overflow channel. The system specified provides for automatic closing of surge weirs for rim flow operation without raising the water level in the perimeter channel, thus providing minimum perimeter surge containment of approximately 5 gallons per foot of perimeter to prevent momentary surcharging of the perimeter overflow system channel and to provide capacity for wave entrapment and quelling during competition. *The surge control weirs shall be responsive only to changes in water level within the pool.* Weirs responsive only to changes in water level in the perimeter overflow channel shall not be acceptable. The flow through each weir shall be designed to be 50 GPM.

The system specified provides "in-pool" surge capacity of one gallon per square foot of pool surface area and quiescent surface cleaning in a manner which permits water displaced by bathers and their dynamic surge to remain within the pool structure.

D.04 Materials

The R300 Perimeter sections shall be fabricated entirely from Type 316L stainless steel. The 1 1/2" X 3/16" angle anchors and all stiffener brackets shall be stainless steel.

D.05 Tile (optional)

Unglazed ceramic 1"x1" chemical resistant mosaic tile (American Olean, or equal) shall be permanently affixed to exposed surfaces of the installed steel perimeter as shown on the drawings by a field technician trained and certified by the manufacturer. Tile color shall be white unless otherwise specified by the Owner. Tile installation shall be the responsibility of the manufacturer of the stainless steel perimeter for the purpose of quality control.

D.06 Accessories

The perimeter system shall be fitted with stainless steel converters, jet wash fittings, surge weirs, and lane line anchors as necessary to achieve proper performance and design. Quantities, locations, and descriptions shall be as shown on the plans.

D.07 Guarantee

The equipment manufacturer shall guarantee in writing that if the system is operated in accordance with written instructions given and accepted by the Owner, it will perform in complete accord with the specifications.

D.08 Installation

All work covered under this section shall be performed by an authorized licensee of the manufacturer or by the manufacturer acting as a subcontractor to the Pool Contractor. All installation is to be performed by a welder with at least five years experience in the field welding stainless steel recirculating systems. Strict procedures for welding, brushing, blending, testing, and cleaning shall be provided by the manufacturer. The pool contractor shall perform all required grouting and caulking of the R300 Perimeter as shown on the plans.

D.09 Engineering Services

The pool contractor shall supply the services of a competent and experienced field engineer to test and inspect the completed installation, place it in operation, and give operating instructions relative to its care and use.

NOTE: These specifications shall also describe the smaller R200 Perimeter. If the Tile option is selected, material shall be Type 304L. For clarity, specifiers should designate models with Tile as R300-T or R200-T.