



JP Specialties, Inc. / Earth Shield® Waterstop

Tech Tips 014

How to Effectively Seal Circular Concrete Joints

by David R. Poole, CSI, ACI

25811 Jefferson Avenue
Murrieta, CA 92562
T 19517637077
F 19517637074
davidp@earthshield.com
<http://www.jp-specialties.com>

[This video](#) illustrates the means and methods of effectively sealing circular concrete joints utilizing Earth Shield® waterstop products. Models are available for new construction and retrofit. Earth Shield® has solved a long-standing problem for engineered concrete structures with circular protrusions, such as columns, pipes, piers, and pilasters. The problem: how to permanently seal the concrete joint when cast-in-place concrete forms against an existing circular member. The solution: Earth Shield® Column & Pipe Fitting (part no. JP320LC1.XX* [*XX is the diameter in inches]) manufactured with a flexible, chemical-resistant polymer and stainless steel anchoring hardware. A single laborer on the job site can quickly install the column fitting and its associated fasteners. Just apply an epoxy gel bed to the existing surface; place the polymer ring into the epoxy gel bed; heat weld the single opening on the polymer ring using a waterstop splicing iron; and finally, complete the system with the stainless steel closure ring. The Earth Shield® system functions as an internal dam, centrally located within the cast concrete, to stop aggressive chemicals, solvents, and hot petroleum oils from penetrating the joint. By preventing the passage of hazardous liquids, the Earth Shield® Column Fitting provides facility owners, engineers, and contractors with the necessary EPA-mandated containment compliance (EPA Title 40 CFR 265.193). Of course, the system



JP Specialties, Inc. / Earth Shield® Waterstop

prevents the passage of water as well. The mechanical properties of the polymer and the tear-web design of the JP320L profile, enable the column fitting to function equally well in expansion (isolation) joints and construction joints.

Earth Shield® part no. JP540LC1.XX* [*XX is the diameter in inches] is a waterstop pipe boot designed to effectively seal the gap between pipes and the concrete cast against them. The pipe boot product is post-installed, so it retroactively seals leaky pipes.

25811 Jefferson Avenue
Murrieta, CA 92562
T 19517637077
F 19517637074
davidp@earthshield.com
<http://www.jp-specialties.com>

[Contact J P Specialties](#) to learn more.