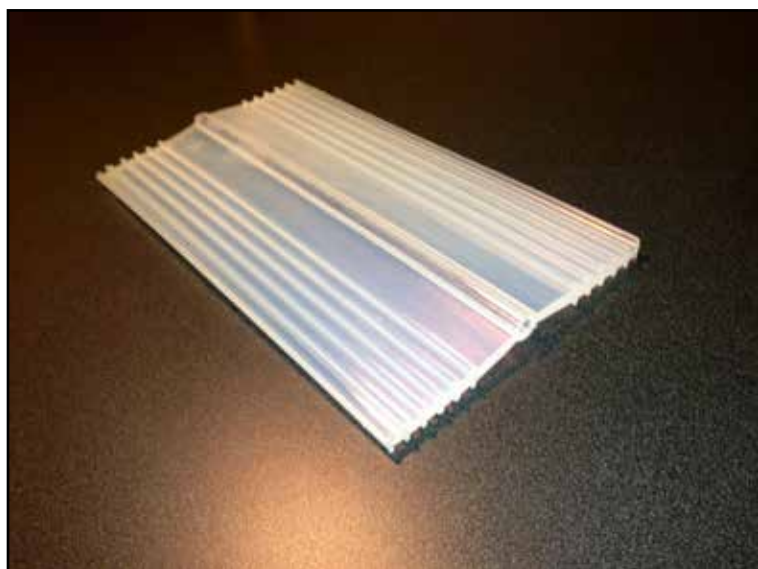




EARTH SHIELD® HDPE copolymer

Waterstops for Fuel, Petroleum, & Other Hydrocarbon Applications



Earth Shield® HDPE Waterstop offers the “clear advantage” for fuel containment, including diesel and ASTM oils.

Our newest product — Earth Shield® HDPE Waterstop — is a specialized thermoplastic copolymer that is ideally suited for hot petroleum oils, diesel fuel, aromatic hydrocarbons, industrial solvents, and other aggressive, non-polar fluids that would cause significant softening and swelling of other waterstop polymers.

Earth Shield® HDPE Waterstop is available in all the same shapes and profiles as our industry-leading, chemical resistant, Earth Shield® TPV polymer.



Earth Shield® Chemical Resistant Waterstop
Phone: 800-821-3859; 951-763-7077
Fax: 951-763-7074

www.earthshield.com



J P SPECIALTIES, INC.

Earth Shield® High Density Polyethylene (HDPE) Waterstop Basic Use

Earth Shield® HDPE Waterstop is used as a fluid-tight diaphragm, embedded in concrete, across and along the joint, for primary and secondary containment structures. Earth Shield® Chemical Resistant Waterstops are ideally suited for fuel, oil, and other hydrocarbon applications.



Unlike polyvinyl chloride (PVC) waterstop, Earth Shield® waterstop contains no plasticizer, stabilizer, or filler to leech out when exposed to chemicals, fuels, and aggressive industrial fluids.

The superior chemical resistance of Earth Shield® HDPE Waterstop is enhanced by the use of a ribbed centerbulb configuration, which is available in a 4, 6, and 9-inch width. This provides for greater mechanical bonding with the concrete and a barrier against migration of liquid flow around the waterstop. The ribbed centerbulb style also allows for joint movement and may be used in above or below grade applications. Additional shapes are available for retrofit, extreme expansion, stainless steel and base seal applications.

Typical Applications

- *Primary and secondary containment*
- *Refineries*
- *Mining facilities*
- *Fueling areas*
- *Chemical factories*
- *Liner applications*

Installation

Install Earth Shield® HDPE Waterstop in all concrete joints. Waterstop should be centered in, and run the extent of the joint. All changes of directions should be prefabricated (see Shop Made Fittings), leaving only butt-welding for the field. If installing in an expansion joint, keep center bulb unembedded to allow it to accommodate movement as designed. Use optional factory installed brass eyelets (or #3 hog rings)

and tie wire to secure waterstop to reinforcing steel to avoid displacement during the concrete pour. Splice straight lengths of waterstop, and Shop Made Fittings to straight lengths, with an ST-10® In Line Waterstop Splicer with the iron temperature set to 380°F to 410°F.

More detailed installation instructions can be found in our Standard 3-part Specifications.

Technical Assistance

Qualified technical assistance is available during any phase of your construction project.

Specifications

Standard 3-part Specifications are available at our website in Microsoft® Word and Adobe® PDF format, and upon request in printed and a variety of computer word processor formats. Call our Technical Sales Staff for additional help with your specification.

Suggested Proprietary Short Form Guide Specification Section 03150 (Master Format 2004 – 03 15 13)

HDPE Chemical Resistant Waterstop

Waterstop indicated in drawings and specifications for contraction (control), expansion and construction joints shall be Earth Shield® HDPE Chemical Resistant Waterstop Part No. #####

[Designer insert appropriate part number here] as manufactured by JP Specialties, Inc.; Murrieta, CA 92562; Phone 951-763-7077

1. *High Density Polyethylene (HDPE) Waterstop shall conform to EPA Title 40 CFR Section 265.193. The suitability of the waterstop for a specific application should be determined by specific testing for that particular requirement per ASTM D471. Project-specific certification to be provided by the manufacturer.*
2. *No equals or substitutions allowed.*

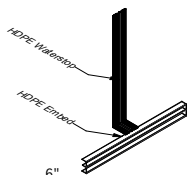
Available with factory installed brass eyelets. The eyelets provide for a convenient and durable tie-off point for wire tying the waterstop to the steel reinforcement prior to the concrete pour. JP Specialties installs the brass eyelets at 12" centers, between the last two ribs, to provide maximum resistance and rigidity to the poured concrete weight.

Note to specifier: To add factory installed brass eyelets to your Earth Shield specification, simply precede the specified part number with "EY". Example: If you are specifying PE636 and want the optional eyelets, call out part number EYPE636.

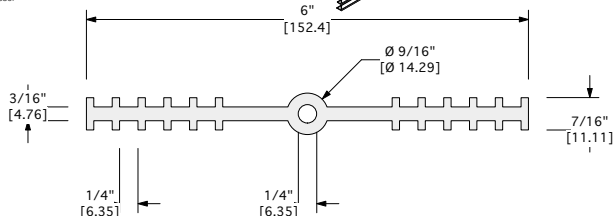
Earth Shield high density polyethylene waterstop can be heat welded to many commercially available hdpe liners, T-locks, and embeds.

*Consult with Earth Shield Technical Support to perform sample weld prior to purchase.

Additional profiles are available



Typical Physical Properties
 Spec Gravity .941
 Tensile Strength 4000 psi
 Ult. Elongation 750%
 Hardness 90A
 Brittleness -148°F
 Softening 154°F



Suggested Short Form Spec

Flexible Waterstop

Waterstop indicated in drawings and specifications for contraction (control), expansion and construction joints to be Earth Shield® Polyethylene (PE) Part No. PE636 as manufactured by JP Specialties, Inc. - 25811 Jefferson Avenue, Murietta, CA 92562 - Phone 888-836-5778; International 951-763-7077; Fax 951-763-7074; Web www.earthshield.com; E-mail davidp@earthshield.com

1. Certified resistance to fuel, diesel fuel, and jet fuel.
 2. No equals or substitutions allowed.

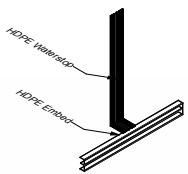
JP Specialties, Inc. / Earth Shield® www.jp-specialties.com phone 800-821-3859 international 951-763-7077 fax 951-763-7074			
TITLE 6" RCB PE Waterstop			
PART NUMBER PE636	DRAWN BY DRP	DATE 06/11	
CAD FILE NAME PE636	APPROVALS	SIZE A	

Property	Test Method	Required Results
Specific Gravity	ASTM D792	.941
Shore A Hardness (5 sec.)	ASTM D2240	90±3 at 25°C (77°F)
Tensile Strength	ASTM D412	4,000 psi
Ultimate Elongation	ASTM D412	750%
Softening		154°F
Brittle Point	ASTM D746	-100°C (-148°F)
Chemical Resistance	ASTM D471	Meet or exceed specific testing standards for contained fluids as required by Owner and certified by Manufacturer

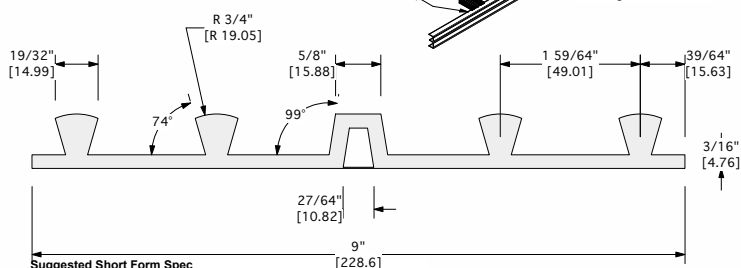
Earth Shield high density polyethylene waterstop can be heat welded to many commercially available hdpe liners, T-locks, and embeds.

*Consult with Earth Shield Technical Support to perform sample weld prior to purchase.

Additional profiles are available



Typical Physical Properties
 Spec Gravity .941
 Tensile Strength 4000 psi
 Ult. Elongation 750%
 Hardness 90A
 Brittleness -148°F
 Softening 154°F



Suggested Short Form Spec

Flexible Waterstop

Waterstop indicated in drawings and specifications for contraction (control), expansion and construction joints to be Earth Shield® Polyethylene (PE) Part No. PE211 as manufactured by JP Specialties, Inc. - 25811 Jefferson Avenue, Murietta, CA 92562 - Phone 888-836-5778; International 951-763-7077; Fax 951-763-7074; Web www.earthshield.com; E-mail davidp@earthshield.com

1. Certified resistance to fuel, diesel fuel, and jet fuel.
 2. No equals or substitutions allowed.

JP Specialties, Inc. / Earth Shield® www.jp-specialties.com phone 800-821-3859 international 951-763-7077 fax 951-763-7074			
TITLE 9" Base Seal PE Waterstop			
PART NUMBER PE211	DRAWN BY DRP	DATE 03/13	
CAD FILE NAME PE211	APPROVALS	SIZE A	

Earth Shield® HDPE Waterstop can be heat welded to polyethylene liners and their associated embed anchors.

Other Profiles Available
 Visit Earth Shield® on the Web at www.earthshield.com for all our other available profiles



Availability

National and International Warehouses

Earth Shield® Chemical Resistant Waterstop is readily available from a variety of sources:

- **Preferred Regional Stocking Partners** — *We are partners with some of the very best Concrete Accessories Distributors in the world. All our preferred partners have large stocking inventories and are factory trained to provide the utmost in on-site assistance.*
- **Distributor Sales** — *Earth Shield® can be special ordered from many distributor sales channels throughout the world.*
- **Factory Direct** — *Earth Shield® may be contacted directly for project quotation and product purchase (call 800-821-3859).*
- **Web Store** — *Earth Shield® products can be ordered directly on our web store at <http://waterstop.enstore.com>*

Services

- **Project and Product Certification** — *We assist the Design Engineer and Project Owner with individual project and product certification. When you specify our waterstop, you can be assured it is the correct product for your application.*
- **Take-off Assistance** — *For the Contractor.*
- **Shop Drawings** — *3-D isometric and 2-D CAD details are available to assist the project.*
- **On-site waterstop welding certification class** — *\$500.00 flat fee*
- **On-site waterstop installation assistance** — *\$1,000.00 per day*
- **Telephone and Web-based assistance** — *Always FREE*

Distributed by:



Visit Earth Shield® on the Web at
www.earthshield.com

Earth Shield® Waterstop Limited Warranty

JP Specialties, Inc. warrants to the Buyer that this product is new and will be free from defects and will perform as represented in writing subject to the two (2) following conditions: First, the application of the product and the concrete construction practices used in the application are in accordance with JP Specialties, Inc. recommendations; and, Second, the Buyer has selected the proper product for the specific application required.

Any information supplied in good faith by JP Specialties, Inc. with respect to its products is believed to be correct. JP Specialties, Inc. Makes no representation or warranties, expressed or implied, as to the accuracy or completeness of such information.

The exclusive remedies of the Buyer and the limit of the liability of JP Specialties, Inc. from any and all losses or damages resulting from the use of this product shall be either full refund of the purchase price to the Buyer of this product or the replacement of the quantity of product purchased by the Buyer at the discretion of JP Specialties, Inc.

All supplied testing data has been performed by independent testing laboratories.

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