

## Agriculture and Irrigation Solutions



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Contech products have been utilized on agricultural sites for decades. From ditch and canal solutions to low pressure water conveyance pipelines to general drainage needs, we have the right solution for your site.

## How We Can Help You Succeed

### Canal Solutions

- Technical support, product selection, engineered drawings, budgetary quotes

### Large Diameter Water Conveyance Pipelines

- DuroMaxx® Steel Reinforced PE pipe capabilities of diameters up to 120" and EletroFusion (EF) joint solutions

### Canal Bridge Crossings

- Precast three-sided CON/SPAN®, BEBO® or truss bridge structures
- Aluminum Box Culverts, MULTI-PLATE® structures

### Overhead Pipe Crossings

- Truss bridges

### Erosion Control, Protection and Stabilization

- ArmorFlex®, Pyramat®, Turf Reinforcements, A-Jacks®, Geogrid Stabilization and Geosynthetics

### General Drainage and Dewatering Solutions

- Pipe products: PVC, steel reinforced PE, corrugated steel and aluminum pipe with fittings and flared end sections (diameters range from 4" to 144"). Perforated dewatering solutions 4"+.



*DuroMaxx® SRPE pipe*

*Barker Ranch Irrigation Canal Piping  
West Richland, Washington*



*CON/SPAN® bridge system*

*State Route 173 at Big Pines Creek  
Lake Arrowhead, California*



*Turf Reinforcement Mat (TRM)*

*Subgrade stabilization and construction  
platforms*



*ArmorFlex® revetment system*

*Florida Power and Light Channel Repair  
Jensen Beach, Florida*

## DuroMaxx Steel Reinforced Irrigation Pipe

DuroMaxx steel reinforced irrigation pipe from Contech provides an effective and economical solution for water transmission used in irrigation canal enclosure lines. The combination of Pressure Rated Polyethylene Resin with steel reinforcing ribs provides exceptional long-term performance and design life.

### High Flow Rates

High flow rates are achieved with a smooth polyethylene waterway wall. Mannings "n" values will range between 0.011 to 0.013.

### Lighter Weight

DuroMaxx pipe is lightweight, often eliminating the need to use heavy construction equipment. As the two main cost drivers to install water conveyance products are manpower and machinery, DuroMaxx provides an opportunity to save in both, resulting in less overall spending.

### Steel Reinforced Watertight Joints

DuroMaxx's steel reinforced watertight bell and spigot achieves a level of performance that sets it apart from conventional pipe products. The DuroMaxx high performance (HP) joint is designed to meet, exceed and maintain the highest standards of performance when tested in accordance with ASTM D3212. The HP joint greatly exceeds ASTM's 10.8 psi requirement.

DuroMaxx has a unique welded coupler (WC) joint that provides even greater pressure performance and fast installation.

### Fittings

DuroMaxx pipe is available with a full range of fabricated fittings such as elbows, tees, wyes, slope junctions, access risers, venting and grate or structure connections. Both standard and custom fittings can be readily fabricated, which can result in fewer concrete structures and lower project costs.

### Sizes

Available in diameters from 30 to 120 inches and manufactured in standard lengths of 14 or 24 feet (inquire for custom length availability), DuroMaxx has fewer joints to assemble on site, resulting in faster installation rates for the contractor.

### 100-Year Gravity Flow Capabilities 50-Year Pressurized Service Period

Diameters (in)	9 Months	Continuous (50 years)
30-42	9.5 psi	6.75 psi
48-60	12.0 psi	8.5 psi
72-120	15.0-23 psi*	15.0 psi

\* The use of welded coupler (WC) joints may allow for higher pressure.

**DuroMaxx**  
STEEL REINFORCED PE TECHNOLOGY

### Key Advantages Begin with Efficiencies

- Durability of plastic with 100-year design life capabilities
- Strength of Steel Reinforcement PE
- High performance (HP) joints (15 psi per ASTM D3212) and welded coupler (WC) joints (30 psi per ASTM D3212).
- Diameter Range of 30" to 120"
- Fast Installations provide budget savings





*More than three miles of 54" and 60" DuroMaxx SRPE Pipe installed at Barker Ranch.*

## **Barker Ranch Irrigation Canal Piping**

### **West Richland, Washington**

- The Barker Ranch Irrigation Canal Piping is part of the Columbia River Basin Water Management Program and replaced three miles of an open-earth irrigation canal with a closed pipe system.
- Barker Ranch Ltd worked with J-U-B ENGINEERS, Inc. to find a pipe product that could handle 9 psi of seasonal pressure.
- DuroMaxx steel reinforced polyethylene (SRPE) pipe was chosen because it increased the installation production rate inherent with a bell and spigot pipe versus a solid wall welded pipe.
- Apollo Inc. installed over 3 miles of 54" and 60" diameter DuroMaxx pipe with HDB pressure rated polyethylene resins. After the project, an additional 1,500 linear feet of 30 inch diameter DuroMaxx was also installed.
- "The Barker Ranch project represents the kind of conservation we need in the Greater Columbia Basin to best make use of a finite resource. This project puts a large amount of water back into a critical reach of the Yakima River in perpetuity and is an example of how we can retool our existing systems to better manage water resources in the years to come."

## **Moon Street Drainage Improvements**

### **Albuquerque, New Mexico**

- The Moon Street storm drain in Albuquerque, New Mexico, is used to transfer stormwater from the South East Mesa to the AMAFCA I-40 Flood Channel. The City wanted a storm sewer product that was a functional, cost efficient alternative to reinforced concrete pipe (RCP).
- 96" diameter DuroMaxx Steel Reinforced Polyethylene (SRPE) was the chosen alternative to RCP because it was the only product that could provide the needed strength and durability.
- With strong 80 ksi steel reinforcing ribs and pressure rated polyethylene resin providing the durability, it was the ideal combination for the City.
- The light weight and fast installation resulted in tremendous installed cost savings over RCP.
- "The easier handling and installation of the large diameter 96" DuroMaxx storm drain pipe enabled us to increase productivity which translated directly to cost savings."



*96" diameter DuroMaxx SRPE Pipe installed in New Mexico.*

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