

- A full line of conduits, elbows, fittings and adaptors are available in stock sizes from 3/4" (21 mm) through 8" (203 mm) and conduits are available in sizes 3/4" (21 mm) through 4" (103 mm).
- All our products are UL Listed, CSA Certified, NEMA compliant unless otherwise based on our own specifications and long industry experience. FRÉ® TriSeal™ gasketed joint design allows the installer to create a strong mechanical and watertight joint by simply driving the spigot end of the conduit into the inside tapered bell end of the next length of conduit - no time consuming heat welding, threading, gluing or solvent cementing is required.
- Low coefficient of friction and outstanding mechanical hardness for easy cable pulls with no burn through at elbows and/or joints.
- Low coefficient of thermal expansion and contraction means fewer expansion joints and reduces installation costs.
- The best corrosion resistance of any material on the market ensuring a long, maintenance free life.
- Value packed features: lower overall installation costs and virtually maintenance free system.

Key Product Features

LOW COST

Your right choice



FRE® Conduit systems

Low Installation Costs

- Light weight - one worker can easily carry 100 ft (30 m) of 4" (103 mm).
- Fast & Easy to handle - 19.68 ft (6 m) sections for reduced installation cost (<2" or 53 mm in 9.84 ft section or 3 m).
- No special skills necessary - mate spigot end to bell end, drive in for a strong watertight joint, no threading or solvent cementing necessary.
- Year round installation - FRÉ® conduit does not become brittle at low temperature and does not expand or sag during hot spells.
- Low coefficient of friction - FRÉ® exceptionally smooth hard interior allows longer cable lengths to be pulled, eliminating expensive conduits, manholes and joints.
- Utility studies tell us installation can run up to more than 50% of total system cost - FRÉ® will significantly reduce labor and overall installed costs.

Low maintenance Costs

- Rustproof, corrosion and chemical resistant - FRÉ® is much less susceptible to degradation from UV, moisture, solvents and chemicals so lasts longer than RMC and PVC.
- Round for pound no other conduit is as strong - FRÉ® exhibits outstanding compressive strength and impact resistance, it's less susceptible to mechanical damage than other systems.
- Made of thermoset fiberglass material, FRÉ® conduit systems maintain high mechanical strength in extreme temperatures.
- Should a cable fault occur, conductors will not fuse to the conduit or melt the conduit - FRÉ® provides easy removal and replacement of damaged cable.

a complete system



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FIBERGLASS PRODUCTS
SINCE 1958

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BELOW GROUND



FRE Composites manufactures a complete line of Below Ground Fiberglass Conduit products designed for either Direct Burial (DB) or Encased Burial (EB) applications as described in the National Electrical Code (NEC) and Canadian Electrical Code (CEC). UL Listed and CSA Certified, FRE® Below Ground Conduit system products are used the world over by power and telecommunications utilities as well as commercial and industrial markets as an economical and long-lasting alternative to PVC, HDPE and other types of rigid conduit.

ADVANTAGES

- Superior impact and crush resistance
- Rot and rodent proof
- Non-conductive, assuring a safe system
- Highest strength to weight ratio of any conduit
- Lightweight. A 19.68 ft. (6 m) section of 4" (103 mm) conduit weighs approx. 15 lbs. (7 kg.)
- TriSeal™ eliminates the need for adhesive, saving time and cost on field assembly

FEATURES

- Suitable for Direct Burial (DB) and/or Encased Burial (EB) applications
- Available in 3/4" (21 mm) through 8" (203 mm) diameters
- Complete line of fittings and adaptors
- Quick push-fit assembly (TriSeal™ one piece injection moulded urethane gasket)

ENGINEERING FEATURES

- TriSeal™ joint is watertight up to 50 Psi
- Conduit contains no chlorine, halogen or other toxic materials
- Temperature range from -40°F to +230°F (-40°C to +110°C)
- High temperature rating results in no cable fusion
- Low coefficient of friction. Smooth inner wall results in longer cable pulls without burn through and fewer manholes
- Chemical Inertness. Impervious to a wide spectrum of chemicals and fuels

ABOVE GROUND



FRE Composites' Above Ground Fiberglass Conduit system consists of conduits, fittings, conduit bodies and adaptors. It is designed to provide power, telecommunications and transit utilities as well as commercial and industrial markets with a reliable, easily installed carrier for exposed applications. UL Listed and CSA Certified, this system is designed for use above ground as described in the National Electrical Code (NEC) for non-hazardous locations and Canadian Electrical Code (CEC) Part 1. FRE® Above Ground Conduit system is a better, safer, more economical, and longer-lasting than PVC, Coated Steel and Rigid Galvanized Steel conduit.

ADVANTAGES

- Best corrosion protection of any conduit material
- Nonmetallic. Will not rust or corrode
- Fire resistant and non-toxic
- Non-conductive, assuring a safe system
- Thermal expansion rate is similar to RMC
- Simple push-fit assembly (TriSeal™ one piece injection moulded gasket) – no threading of joints required
- Low coefficient of friction. Smooth inner wall results in longer cable pulls with no burn-through
- A much more economical installation compared to PVC coated steel and RMC
- Light weight. A 19.68 ft. (6 m) section of 4" (103 mm) conduit weighs less than 15 lbs. (7 kg.)

FEATURES

- Suitable for indoor use (non-hazardous locations)
- Available in 3/4" (21 mm) through 8" (203 mm) diameters
- Complete line of elbows, fittings and conduit bodies
- Field bendable with hot box
- Special colors available upon request

ENGINEERING FEATURES

- Chemical Inertness. Impervious to a wide spectrum of chemicals and fuels
- Contains no chlorine, halogen or other toxic materials
- Temperature range from -40°F to +230°F (-40°C to +110°C)

HAZGUARD™



FRE Composites' HazGuard™ rigid nonmetallic fiberglass conduit system products were originally engineered to protect fiber optic cables. Ballistically tested under laboratory conditions, this system is proven to resist damage from small caliber, low velocity projectiles. Today, utilities, D.O.T.s, airports and telecommunication providers use our HazGuard™ conduit system products to protect all types of cable networks and distribution systems worldwide. All FRE® HazGuard™ conduit system products are designed to meet high mechanical requirements and advanced product longevity.

ADVANTAGES

- Hazardous locations (Class 1 Division 2)
- Suitable for physical damage location
- Highest strength to weight ratio of any conduit system
- Superior load bearing
- Lightweight. A 19.68 ft. (6 m) section of 4" (103 mm) conduit weighs less than 45 lbs. (20 kg)
- Fewer expensive hangers supports and inserts on bridge installations (high flexural strength)
- Nonmetallic. Will not rust or corrode
- Superior UV and weathering characteristics

FEATURES

- Suitable for physical damage locations, above ground and bridge applications
- Complete line of fittings and adaptors
- Available in 1" IPS (27 mm) and 8" IPS (203 mm) and 2" ID (53 mm) to 6" ID (155 mm) dimensions
- Bell and spigot joint for fast, easy installation
- Special colors available on demand
- Rigid nonmetallic fiberglass conduits are non-conductive, assuring a safe system

ENGINEERING FEATURES

- Chemical Inertness. Impervious to a wide spectrum of chemicals and fuels
- Contains no chlorine, halogen or other toxic materials
- Temperature range from -40°F to +230°F (-40°C to +110°C)
- Low coefficient of friction. Smooth inner wall results in longer cable pulls

BREATHSAVER®



FRE Composites' BreathSaver® Fiberglass Conduit system consists of conduits, elbows, fittings, and adaptors. Using a phenolic resin based matrix, it is designed to provide transit, utilities, and industry with a nonmetallic corrosion resistant, flame resistant, low-smoke, non-toxic conduit system that is suitable for high temperature installations. The FRE® BreathSaver® Conduit system products meets the most stringent industry requirements for safety. FRE Composites is the only manufacturer offering this innovative system.

ADVANTAGES

- Ideal for tunnels, subways and confined areas (vent shaft, steam tunnels)
- Emits no toxins or halogen (SMP 800C)
- Non-conductive, assuring a safe system
- Lightweight. A 19.68 ft. (6 m) section of 4" (103 mm) conduit weighs approx. 15 lbs. (7 kg)
- Nonmetallic. Will not rust or corrode
- Thermal expansion rate is lower than RMC
- Outstanding fire resistance (ASTM E84)
- A more economical installation

FEATURES

- Suitable for use indoors
- Complete line of fittings and adaptors
- Available in 1" to 1 1/2" IPS (27 mm to 41 mm) and 2" to 6" ID (53 mm to 155 mm) diameters
- No threading or masking of joints required
- Bell and Spigot joint for fast, easy adhesive assembly

ENGINEERING FEATURES

- Chemical Inertness. Impervious to numerous chemicals
- Contains no chlorine, halogen or other toxic material
- Temperature range from -40°F to +525°F (-40°C to +275°C)
- Class 1 fire rated (ASTM E84), NFPA 130 compliant, NFPA 502 compliant, FT4 rated (CSA)
- Low coefficient of thermal expansion and contraction resulting in fewer expansion joints

UNDERWATER



FRE Composites' Underwater Conduit system is a low priced alternative to expensive aerial and submarine cable. FRE® Underwater Conduit system will conform to crossing trench floors and can accommodate irregular trench profiles. Although flexible, FRE® Underwater duct can take the pressure of depths to one hundred feet (100 ft / 30 m). FRE® Underwater duct crossings don't detract from the natural beauty of marine areas, FRE® duct protects your cables, and unlike expensive aerial systems FRE® duct isn't damaged by ice and wind. FRE® duct's secure joint couplings, with the use of Bullnose Pulling Eyes, permit continuous lengths of duct to be pulled at one time, eliminating expensive coffer dams.

ADVANTAGES

- Flexibility and easy installation
- Lowest installation cost
- Excellent impact and compressive resistance

FEATURES

- Complete line of conduit from 2" ID (53 mm) to 6" ID (155 mm)
- Capacity to design to specific requirements up to 30" (759 mm) casing with innerducting system (Best Market Award 2002 - JEC Paris, France)
- All joints are spliced in continuous length on shore and pulled at once as a complete assembly
- Can be installed year round

ENGINEERING FEATURES

- Chemical Inertness. Salt water resistance
- Contains no chlorine, halogen or other toxic material
- Low coefficient of friction. Smooth inner wall results in longer cable pulls.