PC Pipe LLC

PPI-APPROVED PLANT · SAN LUIS POTOSÍ

HDPE FOR DATA CENTERS

APPLICATION CUT SHEET

361-362-9033

FM fire pipe, power and fiber conduit, and buried cooling — sized from 2" to 65", fabricated to the drawings.

FM PIPE

Underground fire service

FM-approved HDPE for the private fire main on a data center campus. Heat-fused, fully restrained, and immune to the wet soil under cooling towers. Flow stays available because the bore does not tuberculate.

- Site fire loop around the data hall and support buildings
- Private main from the city connection, tank, or fire pond
- Hydrant leads and hose-valve laterals
- Underground lead-in to the building riser, with a listed transition
- Red stripe for identification. Install to NFPA 24.

HDPE CONDUIT

Power, fiber, and telecom

Smooth-wall conduit for the duct banks that feed a hall. Black with orange or red stripes. Coils from 500 to 10,000 ft, or 50 ft sticks on the larger diameters. ASTM D3035 and F2160.

- Medium-voltage duct banks from the substation to the building
- Redundant A and B power pathways, with spare ducts for the next hall
- Fiber entrance and the campus backbone between buildings
- Telecom, carrier, security, and BMS laterals
- HDD crossings under roads and live yards. SDR 11 to 21.

CHILLED WATER

Buried supply and return

Campus mains from the central plant to the halls. Fusion joints stay closed through settlement. Pre-insulate where soil heat gain has to be held down.

CONDENSER WATER

Tower and cooler runs

Yard piping between chillers, cooling towers, and dry coolers. Treated water and wet soil are where coated steel spends its maintenance budget.

MAKEUP AND PROCESS

Raw, well, and potable

Feeds into the cooling plant and domestic service. NSF/ANSI 61 compound where the line is potable. Firewater is a separate, listed FM run.

GLYCOL LOOPS

Freeze-protected circuits

Outdoor and buried loops on ethylene or propylene glycol. Low thermal conductivity versus steel, and the same fusion joint as the rest of the yard.

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FM PIPE · CONDUIT · YARD PIPING

SPECIFYING NOTES

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FM PIPE ON THE CAMPUS

Where it goes

Private fire main, the site loop, hydrant leads, and the underground lead-in to the riser. Above-ground sprinkler and standpipe piping inside the hall stays on a listed metallic or CPVC system.

Why FM HDPE

A fused main has no gasket to weep under a cooling tower. No coatings, no cathodic protection, no tuberculation. Design flow is still there at year 30.

What we need

Fire-flow demand, residual pressure, loop length, and the AHJ's pressure class. We match diameter and wall, and fabricate elbows, tees, and flange adapters to the drawings.

Identification

Black pipe with a red stripe so the fire loop is obvious in a crowded duct bank corridor.

CONDUIT ON THE CAMPUS

Where it goes

High-, medium-, and low-voltage power, fiber, telephone, and computer-network pathways. Direct burial, duct bank, and HDD.

How it is made

Smooth internal and external wall. Standard controlled OD from 2" to 12". Specials out to 65". Black with orange or red stripes; other colors on request.

How it ships

Coils of 500 to 10,000 ft, diameter dependent, so a power feeder has fewer couplings. Larger diameters in 50 ft sticks. SDR 11, 13.5, 15.5, 17, 19, and 21.

Why it lasts

Corrosion-proof in wet or acidic soil, low coefficient of friction for long pulls, rodent resistant, service life greater than 50 years. Joined by butt fusion, electrofusion, or mechanical couplings.

YARD PIPING, NOT THE RACK

Specify HDPE

Buried chilled water, condenser water, makeup, glycol loops, storm and intake. Custom fittings from matching stock.

Confirm with the EOR

Pressure class against pump head and surge. Insulation on a 42–50°F buried supply. Restraint at every transition to steel or a valve.

Leave HDPE out

Headers over active server rows, rack-level and direct-to-chip loops, and clean-agent suppression inside the hall.

Plant range

2" to 65". PPI-approved plant. ISO 9001 and ISO 14001. Virgin resin. Drop-ship to the site.