

HDPE Fire Protection Pipe

AWWA C906 Grade PE100 Pipe for Underground Fire Mains

Product Overview

AWWA C906-certified HDPE pipe for underground fire-suppression mains, hydrant supply lines and high-rise riser systems. Red-stripped black HDPE for instant identification by emergency crews. Retains 100% of design flow capacity for 100 years — no tuberculation, no internal scale, no corrosion.

Technical Specifications

Parameter	Specification
Material grade	PE100 / PE4710 (AWWA C906 listed)
Diameter range	DN 100 – DN 1600 mm (4 in. – 65 in.)
Pressure class	DR 9 (250 psi) to DR 21 (100 psi)
Colour	Black with 4 longitudinal red identification stripes
Joining	Butt fusion · Flanged transitions to ductile-iron hydrant tees
Hydrant compatibility	Stub-end + flanged adapter to standard DI hydrants
Internal roughness	Smooth bore — Hazen-Williams C = 150
Service life	100 years (per AWWA C906 hydrostatic design basis)

Typical Applications

- Underground fire-suppression distribution mains
- Hydrant supply lines (urban and industrial site)
- High-rise commercial / residential fire risers
- Industrial facility fire-water loops
- Refinery and petrochemical fire-water networks
- Airport apron and runway fire mains

Standards & Certifications

AWWA C906

NSF/ANSI 61

ASTM F714

FM Approval (on request)

Why Primepoly

Real factory, not a trading company. Primepoly operates a fully-owned PE / PVC pipe and fitting factory in Zhengzhou, Henan — ISO 9001 quality plan, in-house QC lab, full hydrostatic test and material qualification on every production batch.

Documentation that clears consultant review on first submission. Every shipment carries the mill certificate, batch resin certificate, third-party inspection report (SGS / BV available) and the destination-specific compliance documents (WRAS / NSF 61 / SASO / PVOC / etc.).

Engineering support on every order. Our application engineers respond to technical queries within one working day. For distributor and project customers we send installer training to site for the first shipment.

Request a quotation

Send DN / SDR / length / destination port to sales@primepolypipes.com — engineering team responds within one working day with FOB or CIF pricing.