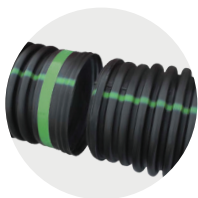


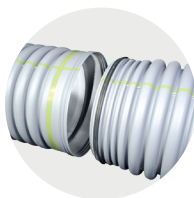
# N-12® & HP Storm: Corrugated Dual Wall Pipe Comparison

Engineers & regulators must weigh critical performance attributes to ensure long-term stormwater conveyance success. Advanced Drainage Systems, Inc. offers two industry-leading products, N-12 and HP Storm, to deliver superior performance in stormwater applications. The information below provides a side-by-side comparison so decision makers can choose the right solution with confidence.



## N-12 (HDPE)

- Smooth interior for efficient flow capacity
- Inline bell for streamlined installation process
- Inert material resists chemicals, abrasion & hot soils
- Lightweight design and long lay lengths improve installation efficiency and total installed cost



## HP Storm (PP)

- Improved safety factor for deep burials, traffic loading or variable soil & groundwater conditions
- Sanitary sewer joint performance
- Enhanced visibility during inspections
- Enhanced pipe stiffness

	N-12 (HDPE)	HP Storm (PP)
Pipe Material	High-Density Polyethylene (HDPE)	Polypropylene (PP)
Pipe Color	Black with ADS Green Stripe	Grey with ADS Green Stripe
Diameters Available	4"-60" (100-1500 mm)	12"-60" (300-1500 mm)
Lengths Available	13' & 20' (4 & 6 m)	13' & 20' (4 & 6 m)
Pipe Weight	4% vs. RCP (lb/ft)	4% vs. RCP (lb/ft)
Wall Profile	Dual wall - corrugated exterior, smooth interior	Dual wall - corrugated exterior, smooth interior
Manning's n	0.012	0.012
Corrosion Resistance	1.5 - 14 pH	1.5 - 14 pH
Joint Features	Reinforced inline bell & spigot	Extended reinforced inline bell & spigot (double gasket available regionally)
Watertight Joint Performance (per ASTM D3212)	Tested to 10.8 psi (74 kPa)	Tested to 15 psi (103 kPa)
Pipe Stiffness	Standard pipe stiffness in accordance with national standards	Up to two times greater pipe stiffness vs. HDPE
Recommended backfill materials (per ASTM D2321)	Class I, II, III	Class I, II, III, IV
Maximum cover	Varies with pipe diameter, backfill material and compaction. See Technical Notes 2.01 & 2.02.	Greater allowable burial depths and reduced soil compaction requirements. See Technical Note 2.04.
Minimum cover	1' (0.3 m) for 12"-48" (300-1200 mm) 2' (0.6 m) for 60" (1500 mm).	Same as N-12 but with greater resilience to live loading during construction when final grades may not yet have been achieved.

