1 Scope

This specification covers the general requirements of corrugated high density polyethylene drainage tubing for use in various land drainage applications.

2 Material

Pipe shall be manufactured from high density polyethylene resin, which shall meet or exceed the requirements of cell classification 324420C as defined in ASTM D3350. Resistant to a wide range of soil acidity: pH 1.25 to 14.

3 Joining Systems

The pipe shall be joined with snap, insert or split couplers.

4 Pipe Stiffness

Drainage tubing shall have minimum pipe stiffness of 210 kPa at 5% deflection when tested in accordance when tested in accordance with ASTM D2412.

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Ideal Subdrain Drainage Tubing

5 Hydraulics

The following Manning's 'n' values shall be used to calculate flow. See CPPA Technical Hydraulic booklet available from Ideal Pipe or the Plastics Pipe Institute.

I.D. mm	50 (2")	75 (3")	100 (4")	150 (6")	200 (8")
'n'	.016	.016	.017	.017	.018

6 Structural Design

Structural design shall conform to the industry accepted procedures found in the Corrugated Polyethylene Pipe Association's technical booklets from Ideal Pipe or the Plastics Pipe Institute.

7 Applicable Standards

ASTM F405. F667
OPSS 1840; 405

8 Options

Ideal drainage tubing is available with a variety of perforation patterns and engineered geosynthetic filters for different soil types.

9 Pipe Dimensions

Ideal drainage tubing is available in diameters from 50 mm (2") to 375 mm (15") and shipped in selective coil sizes, 50 ft. to 4000 ft. or length sections of 20 ft. Nominal pipe size is based on inside diameter of the pipe. See below:

TILE CALCULATOR									
Spacing (ft.)	20	30	33	40	45	50	55	60	66
Feet/Acre	2205	1470	1320	1089	981	872	799	726	660
M/Ha	1661	1107	994	820	739	657	602	547	497