



CMP PERFORATION GUIDE

PERFORATIONS PER ASTM A760, A762 AND B745

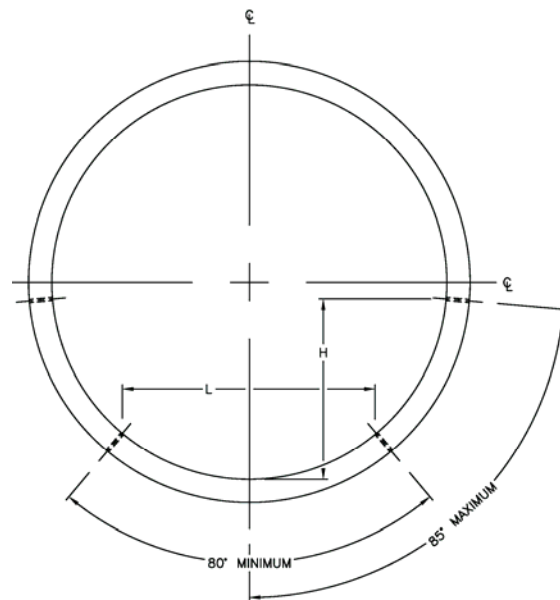
CLASS 1 PERFORATIONS (STANDARD OR PARTIALLY PERFORATED PIPE)

Class 1 perforations are for pipe intended to be used for subsurface drainage. As such, the pipe maintains an unperforated segment above the invert to serve as a flow channel. Unless specified otherwise, perforations shall conform to Class 1.

Perforations have nominal diameters of $\frac{3}{8}$ " arranged in rows parallel to the axis of the pipe with one perforation in each row for each corrugation.

Rows of perforations are arranged in two equal groups placed symmetrically on each side of a lower unperforated segment corresponding to the flow line of the pipe.

Diameter, D (in)	Total No. of Rows	H _{max} (in)	L _{min} (in)
6	4	2.8	3.8
8	4	3.7	5.1
10	4	4.6	6.4
12	6	5.5	7.7
15	6	6.9	9.6
18	6	8.3	11.5
21	6	9.7	13.4
24 and up	8	0.46D	0.64D



Corrugation Inlet Area (using $\frac{3}{8}$ " perforations)

1½" x ¼"	3.53 in ² /ft (6", 8", 10")
2½" x ½"	2.98 in ² /ft (12"-21"), 3.98 in ² /ft (24" and up)
3" x 1"	3.53 in ² /ft (all available diameters)
5" x 1"	2.12 in ² /ft (all available diameters)

CLASS 2 PERFORATIONS (FULLY PERFORATED PIPE)

Class 2 perforations are for pipe intended to be used for subsurface disposal of water, but may also be used for subsurface drainage. Perforations around the entire periphery of the pipe allows both infiltration and complete exfiltration (i.e. disposal into the ground). The common use of Class 2 perforations is for pipe used in groundwater recharge systems.

Class 2 perforations provide a minimum inlet area of 3.3 in²/ft. Thirty perforations ($\frac{3}{8}$ " diameter) per square foot of surface area satisfies this requirement.