

## **Properties & Support Spacing for PVC Pipe**

Where PVC conduit is to be supported by hangers or pedestals at intervals, the distance between supports shall be small enough to avoid excessive sag of the conduit.

Recommended support spacing and tabulated properties of PVC pipe are shown in the following Table.

<b>SCHEDULE 80 PVC</b>					
Nominal size	O.D. – inches	Average I.D. inches	Minimum Wall Thickness inches	Pounds per 100 ft	Support Spacing-feet
½"	0.840	0.526	0.147	21.3	4.5
¾"	1.050	0.722	0.154	28.9	4.5
1"	1.315	0.936	0.179	42.4	5
1¼"	1.660	1.255	0.191	58.6	5.5
1½"	1.900	1.476	0.200	71.1	5.5
2"	2.375	1.913	0.218	98.4	6
2½"	2.875	2.290	0.276	150.0	6.5
3	3.500	2.864	0.300	201.0	7
4	4.500	3.786	0.337	293.8	7.5
5	5.563	4.768	0.375	407.8	8
6	6.625	5.709	0.432	561.0	9
8	8.625	7.565	0.500	852.2	9.5

Spacing shown is set for a 100° maximum temperature.

The physical properties of PVC material are:

E = 410,000 psi

Tensile Strength = 7300 psi at 78°F

Working Stress in Bending = 4.0 ksi

Temperature coefficient = 0.035" per 100°/ft

## **Commentary**

The Table was taken from the July 2005 WSDOT Bridge Design Manual. The values were obtained from ASTM D1785 and Harvel Plastics.

## **Revisions:**

June 2006 Added new article.

Oct 2023 Renumbered article from A2.5 to A2.3

Deleted Schedule 40 PVC data since only Schedule 80 PVC is utilized.