

PVC Pipe Schedule 80

For Pressurized Water Distribution

Standard Reference: ASTM D 1785, NSF/ANSI 61 & 14



PVC Pipe

Schedule 80



Material

The PVC Schedule 80 (Polyvinyl Chloride pipe) is manufactured in compliance with the standard ASTM D1784 and Cell Class 12454 in diameters from ½" to 12" and nominal laying lengths of 10 feet and 20 feet. It is fabricated with a plain end, and is designed to be coupled with PVC cement.

Advantages

- ◉ Resistant to oxidation and corrosion
- ◉ Non-toxic and odorless
- ◉ Smooth interior walls with low frictional loss.
- ◉ Lightweight, and easy to install using solvent weld
- ◉ Long service time, with proper use
- ◉ Maintenance free

Applications

Schedule 80 PVC pipes are typically used for transporting potable water. However, these pipes are also used for distributing other pressurized liquids provided they are chemically compatible with PVC. It is intended for places where liquid temperature does not exceed 140 °F (60 °C), such as industrial, water treatment plants, mining and transortation of PVC compatible chemicals.*

*Contact Wavin technical services for PVC compatible chemicals.

Features

Sizes: ½" – 12"

Pressure rating: 250 psi to 850 psi; varies with diameter and temperature

Maximum temperature: 140 °F (60 °C)

Standard Reference: ASTM D 1785 Standard Specification for Polyvinyl Chloride Pipe, Plastic Pipe, Schedules 40, 80, and 120

Color: Dark Grey

Length: 20 feet | 10 feet

Type: Plain end pipe | Bell end available through special order



PVC Pipe Schedule 80

Nominal Pipe Size inches	Outside Diameter inches (mm)	Wall Thickness inches (mm)	Pressure rating at 73°F (22.77°C)	
			Psi	kg/cm²
1/2"	0.84 (21.3)	0.15 (3.7)	850	59.8
3/4"	1.05 (26.6)	0.15 (3.9)	690	48.5
1"	1.33 (33.4)	0.18 (4.6)	630	44.3
1 1/4"	1.66 (42.2)	0.19 (4.9)	520	36.6
1 1/2"	1.90 (48.3)	0.20 (5.1)	470	33.0
2"	2.38 (60.3)	0.22 (5.5)	400	28.1
2 1/2"	2.88 (73.0)	0.28 (7.0)	420	29.5
3"	3.50 (88.9)	0.30 (7.6)	370	26
4"	4.50 (114.3)	0.34 (8.6)	320	22.5
6"	6.63 (168.3)	0.43 (11.0)	280	19.7
8"	8.63 (219.1)	0.50 (12.7)	250	17.6
10"	10.8 (273.1)	0.59 (15.1)	230	16.2
12"	12.8 (323.9)	0.69 (17.5)	230	16.2

Table 1. External diameters, wall thicknesses and pressure rating for PVC Pipe Schedule 80.



Note: This PVC pipe used to transport potable water is evaluated in accordance with requirements indicated in the NSF 61 & NSF 14 standards.

Maximum Working Pressure Calculation

- ⦿ The pressure rating factors indicated in table 2 should be taken into account to adjust effective pressure at increased temperature. Multiply the pressure rating of the selected pipe at 73 °F, by the appropriate pressure rating factor to determine the maximum working pressure rating of the pipe at the chosen temperature
- ⦿ It is essential to follow the instructions for proper use, handling, storage and installation recommended by the manufacturer

Temperature °F (°C)	Pressure Rating Factor
73 (22.77)	1
80 (26.66)	0.88
90 (32.22)	0.75
100 (37.77)	0.62
110 (43.33)	0.5
120 (48.88)	0.4
130 (54.44)	0.3
140 (60)	0.22

Note: Please follow local plumbing or building codes for proper installation.
Warning: Do not use or test the products in this catalog with compressed air or other gasses.

Table 2. Pressure Rating Factor



Wavin is part of Orbia, a community of companies working together to tackle some of the world's most complex challenges. We are bound by a common purpose: To Advance Life Around the World.



Wavin operates a programme of continuous product development, and therefore reserves the right to modify or amend the specification of their products without notice. All information in this publication is given in good faith, and believed to be correct at the time of going to press. However, no responsibility can be accepted for any errors, omissions or incorrect assumptions.

Wavin 950 Winter Street, South Entrance 1st Floor, Waltham, MA 02451, United States | 5700 Côte de Liesse Montréal, QC H4T 1B1
Phone CAN 514-735-7585 / 1800-561-1169 | US 514-735-3632 / 1800-763-3632 | E-mail customer.service@orbia.com | wavin.us

© 2025 Wavin Wavin reserves the right to make alterations without prior notice. Due to continuous product development, changes in technical specifications may change. Installation must comply with the installation instructions.