

Pipe A-35

PVC Schedule 40 Pressure Pipe



PVC Schedule 40 Pressure Pipe features make it ideal for use in numerous industrial, commercial, municipal and residential applications. Like SDR pressure pipe (see page A-24) Schedule 40 has a built-in long term pressure safety factor of 2 to 1. However, unlike SDR pressure pipe which has a specific pressure rating in all sizes, Schedule 40's maximum pressure rating (figured at 72.4°F) varies with each size (see Pipe Selection Chart on A-36). Pressure ratings for transmitting warmer or cooler liquids can be determined using the "Conversion Chart ..." shown on page A-36. The maximum recommended temperature for Schedule 40 PVC is 130°F.

PVC Schedule 40 pipe and fittings can be joined using solvent cements.

CAUTION: Do not use plastic pipe and fittings for compressed air or gas.

Features:

- Resistance to corrosion and abrasion
- Resistance to many chemicals†*
- Smooth bore for improved flow characteristics
- Low cost installation
- Lightweight and flexible
- Non-toxic, NSF approved for use in drinking water

Specifications and Approvals:

- ASTM D-2665 specification for PVC plastic drain, waste and vent pipe.
- ASTM D-1785 specification for potable water.
- ASTM D-1784 specification for Type 1, Grade 1 PVC material used in the manufacturing of this pipe.
- NSF approved for drinking water use.

† For a complete list of chemicals contact your local Team EJP sales office.

* Polar solvents such as ketones, some chlorinated hydrocarbons and aromatics have damaging effects on PVC.

Applications:

Industrial and Process Piping

- Swimming pool piping
- Plant water supply and distribution lines
- Drainage and effluent piping
- Cooling water systems
- Vacuum piping
- Rainwater leaders for buildings
- Piping in fish hatcheries, aquariums, zoological and biological buildings
- Well casings and dewatering lines
- Chemical and wash water systems for photographic laboratories
- Acid products handling for refineries, metalworks and plating plants
- Bleach, die and acid lines in textile mills
- Tailing and slurry lines in mines, smelters and fertilizer plants

Pulp and Paper

- Alum and caustic handling
- Chlorine dioxide, chlorine and chlorine alkali plant-piping
- Wash water piping and lagoon systems

Food Processing

- Brine and seawater distribution in fish plants
- Brine systems in meat packaging plants
- Piping for dairy, canning and beverage industries

Water and Sewage Treatment

- Alum and ferric chloride handling
- Chlorine injection systems
- Piping in lagoons and settling ponds
- Piping in pressure sewers

Irrigation

- Golf courses
- Greenhouses
- Housing and commercial properties
- Agriculture

NOTE: DWV Cellucore pipe is not rated for pressure

PVC Schedule 40 Pipe Selection Chart

NOM. SIZE	FEET PER LENGTH	OUTSIDE DIAMETER	WALL THICKNESS	POUNDS PER FOOT	PRESSURE RATING PSI @ 73.4° F	PRODUCT NUMBER	
						BELLED END	PLAIN END
½"	20	0.084	.109	.161	600	73000	—
¾"	20	1.050	.113	.214	480	73005	—
1"	20	1.315	.133	.317	450	73010	—
1¼"	10	1.660	.140	.430	370	73016	73016 1
	20					73015	—
1½"	10	1.900	.145	.520	330	—	73018
	20					73020	—
2"	10	2.375	.154	.690	280	—	73024
	20					73025	—
2½"	20	2.875	.203	1.105	300	73030	—
3"	10	3.500	.216	1.430	260	—	73033
	20					73035	—
4"	10	4.500	.237	2.040	220	73044	73042
	20					73040	—
6"	20	6.625	.280	3.580	180	73045	—
8"	20	8.625	.322	5.500	160	73050	73051
10"	20	10.750	.365	7.690	140	—	73055
12"	20	12.750	.406	10.170	130	73062	—

NOTE: Not all pipe sizes are available at all Team EJP locations; call for availability. See Section B for PVC Schedule 40 Pressure Fittings, cement and primer.

Conversion Chart For Pressure Ratings At Various Temperatures

TEMPERATURE °F	60°	70°	73.4°	80°	90°	100°	110°	120°	130°
CONVERSION FACTOR	1.15	1.04	1.00	.95	.90	.75	.65	.60	.50

Temperatures For PVC Schedule 40 Pipe

Assembly Information:

- Use a good grade of PVC pressure rated cement* which meets ASTM standard D-2564.
- Cut pipe to desired length with pipe cutters, hacksaw or crosscut saw.
- Ream pipe both internally and externally to remove burrs and ragged edges.
- Before making solvent weld joint be sure all joining surfaces are free of dirt, dust, water and oil.
- The use of a primer before the application of PVC cement is recommended.
- Apply primer to both joining surfaces.
- Immediately apply a smooth coat of cement to the joining surfaces.
- Immediately insert the pipe or spigot end into the full depth of the fitting or socket.
- Turn pipe ⅛ to ¼ turn in the socket to insure an even spread of cement.
- Hold firmly in position for a minimum of 30 seconds to keep the pipe from backing out of the fitting or bell.
- Allow newly assembled joints to carefully set before installation or backfilling:
 - 30 minutes @ 60-100°F • 1 hour @ 40-60°F
 - 2 hours @ 20-40°F • 4 hours @ 1-20°F
- It requires approximately 24 hours for the solvent cement joints to thoroughly cure. The system should not be put under working or test pressure until 24 hours has elapsed.

* Solvent cements should be stored in a cool place except when actually in use. These cements have a limited shelf life and inventories must be constantly rotated.