SOLVENT CEMENTING FOR SCHEDULE 80 PVC

CARE AND CAUTION

Because cements and primer are flammable, care should be taken to avoid sparks, heat or open flame in both work and storage areas. Direct contact with eyes and skin should be avoided. Proper ventilation is mandatory when working indoors.

ENVIRONMENT

Temperature extremes are not conducive to good solvent cementing. Environments with temperatures of above 110°F or below 40°F should be avoided.

EQUIPMENT

Appropriate cement and primer, cutting and deburring tools, daubers with a minimum surface of one-half the pipe diameter, and pipe joiners for large-diameter pipe and fittings are available in the Ryan Herco catalog. They should be supplemented with natural fiber rags, gloves resistant to cement and primer, and natural fiber brushes for larger-diameter pipe and fittings.

PROCEDURE

1. Inspect pipe for a square, deburred cut and a 10°-15° beveled end. With a dry, clean rag, remove all foreign matter from the pipe and fitting surface to be welded. Check the dry fit for ¼-¾ of the socket.
2. Dissolve the inside socket of the fitting with appropriate primer by repeated strokes of a well-wetted applicator.
3. Dissolve the surface area of pipe in similar manner.
4. Apply a second application of primer to the inside socket of fitting; then immediately apply a generous amount of cement to the outside of the pipe. Cement applications to both pipe and fitting should be made while the primer is still wet.
5. Apply cement to the inside of the fitting. Here caution should be taken on the amount applied, since any excess will puddle inside the system and may cause a weakness.
6. Immediately apply a second application of cement to the pipe, and while both surfaces are still liquid, bottom the pipe into the fitting, rotating the pipe 90° if possible, and hold until the pipe will not "push out," normally less than 30 seconds.
7. Wipe any excess cement the from pipe and observe the set time and cure time charts below. Never test the system with air pressure. PVC and CPVC piping systems are not recommended for gaseous systems under pressure.

SETTIME FOR 3875 & 3675 CEMENTS FOR PVC SCHEDULE 80 PIPE AND FITTING JOINTS

30 minutes minimum at 60-100°F
1 hour minimum at 40-60°F
2 hours minimum at 20-40°F
4 hours minimum at 0-20°F

CURETIME FOR 3875 & 3675 CEMENTS FOR PVC SCHEDULE 80 PIPE & FITTING JOINTS

	Test Pressure for ½ – 1¼" Pipe		Test Pressure for 1½ – 3" Pipe		Test Pressure for 3½ – 8" Pipe	
Temp. Range During Cure	Up to 180 psi	180 to 370 psi	Up to 180 psi	180 to 315 psi	Up to 180 psi	180 to 315 psi
60-100°F	1 hr	6 hr	2 hr	12 hr	6 hr	24 hr
40-80°F	2 hr	12 hr	4 hr	24 hr	12 hr	48 hr
10-40°F	8 hr	48 hr	18 hr	96 hr	48 hr	8 days

CEMENT USAGE FOR PVC, CPVC

For estimating solvent cement needs, refer to this chart. Allow two joints for each coupling, three joints for each tee, etc.

No. of joints per inch:*	¼	3/8	½	¾	1"	1¼	1½	2	2½	3	4	5	6	8	10	12
Pint	150	150	130	80	70	50	35	20	17	15	10	8	—	—	—	—
Quart	300	300	260	160	140	100	70	40	34	30	20	16	8	3	—	—
Gallon	1200	1200	1040	640	560	400	280	160	136	120	80	64	32	12	10	6

*Each joint represents one socket in a fitting.