Solvent Cements Technical Solvent Cemented Joints - Initial Set Schedule, Cure Schedule and Cement Usage Table



The following are basic guidelines and may require adjustment according to application or installation conditions. Certain specialty cements, such as FlameGuard[®] FS-5, may have different instructions for specific application conditions. Consult appropriate installation instructions for details.

INITIAL SET SCHEDULE: The Initial set schedule is the necessary waiting period before handling newly assembled joints. After initial set, the joint will withstand the stress of a normal installation. In damp or humid weather allow 50% more set time.

Average Initial Set Schedule For Spears® PVC/CPVC Solvent Cements

Temperature Range	Pipe Sizes 1/2" to 1-1/4"	Pipe Sizes 1-1/2" to 2"	Pipe Sizes 2-1/2" to 8"	Pipe Sizes 10" to 15"	Pipe Sizes 15"+
60°-100°F/16°-38°C	2 minutes	5 minutes	30 minutes	2 hours	4 hours
40°-60°F/5°-16°C	5 minutes	10 minutes	2 hours	8 hours	16 hours
0°-40°F/-18°-5°C	10 minutes	15 minutes	12 hours	24 hours	48 hours

JOINT CURE SCHEDULE: The Joint cure schedule is the necessary waiting period before pressurizing newly assembled joints. Follow the schedule carefully. In damp or humid weather or chemical applications, allow a minimum of 50% more cure time.

Average Joint Cure Schedule For Spears® PVC/CPVC Solvent Cements

Relative Humidity 60% or Less	Cure Time Pipe Sizes 1/2" to 1-1/4"		Cure Time Pipe Sizes 1-1/2" to 2"		Cure 1 Pipe S 2-1/2"	Sizes	Cure Time Pipe Sizes 10" to 15"	Cure Time Pipe Sizes 15"+
Temperature range during assembly and cure periods	Up to 160 psi	Above 160 to 370 psi	Up to 160 psi	Above 160 to 315 psi	Up to 160 psi	Above 160 to 315 psi	Up to 100 psi	Up to 100 psi
60°-100°F/16°-38°C	15 min	6 hrs	30 min	12 hrs	1-1/2 hrs	24 hrs	48 hrs	72 hrs
40°-60°F/5°-16°C	20 min	12 hrs	45 min	24 hrs	4 hrs	48 hrs	96 hrs	6 days
0°-40°F/-18°-5°C	30 min	48 hrs	1 hour	96 hrs	72 hrs	8 days	8 days	14 days

Average Number of Joints PER QUART of Spears® Cement*

Pipe Diameter	1/2"	3/4"	1"	1-1/2"	2"	3"	4"	6"	8"	10"	12"	15"	18"	20"	24"
Number of Joints	300	200	125	90	60	40	30	10	5	2-3	1-2	3/4	1/2	7/16	5/16

* The number of joints listed are an estimation and should be used as a general guideline only.



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	NOMINAL INCH AND CORRESPONDING NOMINAL MILLIMETER PIPE SIZES																	
in.	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
mm.	15	20	25	32	40	50	65	80	100	160	200	250	300	350	400	450	500	600

SPEARS [®] APPLICATOR SELECTION GUIDE For proper solvent cement welding of pipe and fittings, the cement applicator must be no less than half the size of the pipe											
DAUBERS	Pipe Diameters										
DAUBERS	1/4"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	3"			
3/8" Dauber	•	•	•								
1/2" Dauber			•	•							
5/8" Dauber				•	•						
3/4" Dauber					•	•					
1-1/4" Dauber							•	•			
ROLLERS & S	WABS		SIZE		FOR PIPE DIAMETERS						
3020			3" Rol	er	3" - 6"						
6020			4" Rol	er	3" - 8"						
7020			7" Rol	er	6" +						
5520			4" Rol	er	6" +						
6520			6" Rol	er	6" +						
4020			4" Swa	ab	6" +						
5020			4" Swa	ab	3" - 8"						
4520			4" Swa	ab	6" +						

PRODUCT SHELF LIFE									
Spears [®] Products	Shelf Life	Spears [®] Products	Shelf Life						
Primers / Cleaners	3 years	CPVC Solvent Cement	2 years						
PVC Solvent Cement	3 years	ABS Solvent Cement	3 years						

NOMINAL INCH AND CORRESPONDING NOMINAL MILLIMETER PIPE SIZES