

## Solvent Welding Instructions for ABS, PVC, & CPVC-CTS FlowGuard Gold® Pressure & DWV Piping Systems

### Scope

The solvent welding procedure detailed herein applies to all NIBCO® ABS-DWV, PVC-DWV, PVC, and CPVC-CTS pressure piping systems including molded fittings and valves. Belled-end pipe and sewer pipe can also be joined in this manner. NIBCO TECHNICAL SERVICES is available for additional solvent-welding guidance and recommendations.

### Joining Equipment and Materials

- Cutting Tool
- Rags (non-synthetic, i.e., cotton)
- Deburring Tool
- Cement and Primer Applicators
- Applicator Can or Bucket
- Purple Primer
- Solvent Cement
- Tool Tray
- Notched Boards

### TYPES OF CEMENT

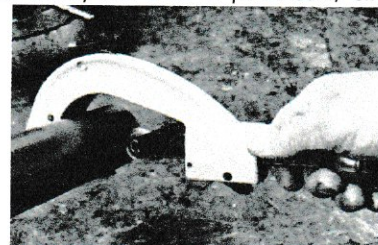
- PVC Solvent Cement - Light Duty Industrial Grade is for use with all Sch. 40, DWV and SDR pipe through 6".
- PVC Solvent Cement - Heavy Duty Industrial Grade is for use with all Sch. 80 and SDR pipe through 6".
- PVC Solvent Cement - Extra Heavy Duty Industrial Grade is for use with all PVC pipe 6" and larger.
- ABS Solvent Cement - For use in joining Sch. 40, SDR, and DWV pipe through 12" size.
- CPVC-CTS, Orange Colored Solvent Cement is for use with all sizes of Copper Tube Size tube and fittings.
- Purple Primer is for use with all PVC and CPVC pipe/tube and fittings.

NOTE: Do not take shortcuts - follow instructions completely.

### PIPE/TUBE PREPARATION

#### 1. Cutting

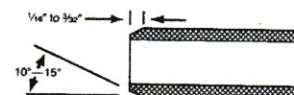
Plastic pipe/tube can be easily cut with a powersaw, circular saw, band saw, or handsaw. For best results, use a fine-toothed blade (16-18 teeth per inch) with little or no set (maximum 0.025 inch). A circumferential speed of about 6,000 ft./min. is



suitable for circular saws; band saw speed should be approximately 3,000 ft./min. Carbide-tipped blades are preferable when quantities of pipe/tube are to be cut. To insure square-end cuts, a mitre box, hold-down, or jig should be used. Pipe or tubing cutters can be used for smaller diameter pipe/tube when the cutting wheel is specifically designed for plastic pipe.

#### 2. Deburring and Beveling

All burrs, chips, filings, etc., should be removed from both the pipe/tube I.D. and O.D. before joining. Use a knife, deburring tool, or a half-round, coarse file to remove all burrs. All pipe/tube ends should be beveled to approximately the dimensions shown below for ease of socketing and to minimize the chances of wiping the solvent cement from the I.D. of the fitting as the pipe/tube is socketed:



The beveling can be done with a coarse file or a beveling tool such as that manufactured by Reed Manufacturing Company, Erie, Pennsylvania.

### FITTING PREPARATION

Prior to solvent welding, all fittings and couplings should be removed from their cartons and exposed for at least one hour to the same temperature conditions as the pipe/tube in order to assure that they are thermally balanced before joining.

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