

A man wearing a red BlazeMaster hard hat and safety glasses is looking directly at the camera. He is holding a roll of orange protective gear. The background is dark and industrial.

BlazeMaster®
FIRE SPRINKLER SYSTEMS

INSTALLATION

BEST PRACTICES POCKET GUIDE

CONGRATULATIONS ON CHOOSING BLAZEMASTER® FIRE SPRINKLER SYSTEMS

Congratulations on choosing BlazeMaster Fire Sprinkler Systems, the world's most specified nonmetallic fire sprinkler system. If you've used BlazeMaster Pipe & Fittings before, you know how easy it is to work with and install; if this is your first time using it, you'll be pleasantly surprised at how light and flexible it is and how quickly it can be installed.

We've put together this Best Practices Guide to help installers. This doesn't replace the manufacturer's installation instructions, but is a list of do's and don'ts that can be helpful in the field.





INSTALLATION BEST PRACTICES

Pipe and Fittings Storage and Handling

- ▶ Keep pipe and fittings in original packaging until needed.
- ▶ Avoid exposing pipe to direct sunlight for long periods of time. Cover pipe with opaque tarp if stored outside.
- ▶ Do not use pipe whose color has faded due to prolonged sunlight exposure.

Solvent Cement Best Practices

- ▶ Wear proper protective clothing, including gloves and safety goggles while using solvent.
- ▶ Provide ventilation or NIOSH-approved respirator if necessary.
- ▶ Use proper solvent cement and follow application instructions.
- ▶ Store between 40°-110°F (4-43°C) or as specified on label. Do not store near heat, sparks, open flames or other sources of ignition. Keep containers closed and covered.
- ▶ Do not smoke, eat or drink while using.
- ▶ Keep solvent cement away from skin, eyes and clothing.
- ▶ Do not use solvent cement that has exceeded its shelf life or has become gelled or discolored. Shelf life is two years after the date on the bottom of the can.



Solvent Cement Cold Weather Applications

Store bulk quantities in location above 40°F (4°C). If solvent cement gels:

- ▶ Bring it into a warm environment (60°-90°F or 16°-32°C) and allow to sit for 24 hours.
- ▶ Do not artificially heat.
- ▶ Shake vigorously before use.

Cutting and Joining

- ▶ Cut pipe squarely, using ratchet cutter, wheel-type plastic tubing cutter, power saw or fine-tooth saw.
- ▶ Deburr inside/bevel outside of pipe.
- ▶ Test fit the pipe.
- ▶ First apply cement to outside of pipe.
- ▶ Apply cement (without dipping back into the can) to inside of fitting socket. On sizes 1¼" (32mm) and larger, dip cement and apply to pipe again.
- ▶ Insert pipe end into socket while rotating pipe a quarter turn. Hold 30 seconds.

Finishing Touches

- ▶ Do not use Teflon tape and thread sealant simultaneously.
- ▶ Install sprinkler head after sprinkler head adapter has been solvent welded. Make sure the waterway is not obstructed. Then install the sprinkler head.
- ▶ Allow for movement due to expansion and contraction, particularly if installing in cold weather.

Using Ratchet Cutters

- ▶ Use ratchet cutters only at 50°F (10°C) or higher.
- ▶ Make sure blades are sharp.





CURE SCHEDULES

Follow manufacturer's recommended cure times prior to pressure testing.

TABLE 1

225 psi (1552 kPa) Test Pressure (maximum) Ambient Temperature During Cure Period (Use this table for all cut-ins)			
PIPE SIZE	60°F to 120°F (16°C to 49°C)	40°F to 59° (4°C to 15°C)	0°F to 39°F (-18°C to 4°C)
¾ (20 mm)	1 hr.	4 hrs.	48 hrs.
1" (25 mm)	1½ hrs.	4 hrs.	48 hrs.
1¼" & 1½" (32 & 40 mm)	3 hrs.	32 hrs.	10 days
2" (50 mm)	8 hrs.	48 hrs.	Note 1
2½" & 3" (65 & 80 mm)	24 hrs.	96 hrs.	Note 1

TABLE 2

200 psi (1379 kPa) Test Pressure (maximum) Ambient Temperature During Cure Period			
PIPE SIZE	60°F to 120°F (16°C to 49°C)	40°F to 59° (4°C to 15°C)	0°F to 39°F (-18°C to 4°C)
¾" (20 mm)	45 mins.	1½ hrs.	24 hrs.
1" (25 mm)	45 mins.	1½ hrs.	24 hrs.
1¼" & 1½" (32 & 40 mm)	1½ hrs.	16 hrs.	120 hrs.
2" (50 mm)	6 hrs.	36 hrs.	Note 1
2½" & 3" (65 & 80 mm)	8 hrs.	72 hrs.	Note 1

TABLE 3

100 psi (690 kPa) Test Pressure (maximum) Ambient Temperature During Cure Period			
PIPE SIZE	60°F to 120°F (16°C to 49°C)	40°F to 59° (4°C to 15°C)	0°F to 39°F (-18°C to 4°C)
¾" (20 mm)	15 mins.	15 mins.	30 mins.
1" (25 mm)	15 mins.	30 mins.	30 mins.
1¼" (32 mm)	15 mins.	30 mins.	2 hrs.

Note 1: For these sizes, the solvent cement can be applied at temperatures below 40°F (4.5°C), however, the sprinkler system temperature must be raised to a temperature of 40°F (4.5°C) or above and allowed to cure per the above recommendations prior to pressure testing.

Follow manufacturer's instructions on pressure testing. Fill lines slowly and bleed the air from the system prior to pressure testing.



Compatibility Notice

CPVC pipe can be damaged by contact with chemicals contained in some construction products, such as:

- ▶ Edible oils
- ▶ Petroleum or solvent-based sealants
- ▶ Lubricants or firestop materials
- ▶ Glycol-based antifreeze
- ▶ Insulated wire
- ▶ See FBCSystemCompatible.com for complete list

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