WELD-ON®

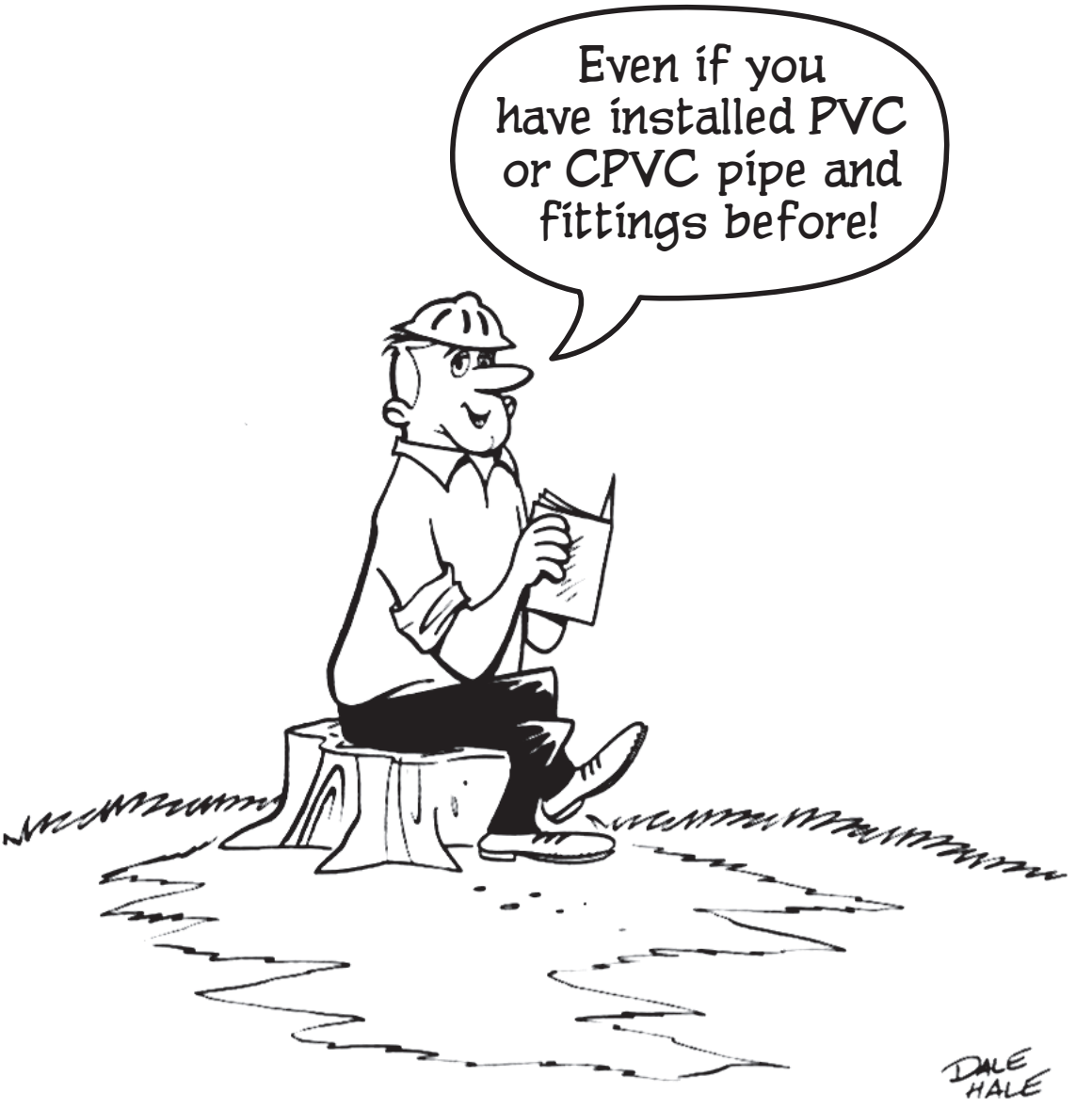
PRESENTS...

SOLVENT CEMENT WELDING

PVC & CPVC

PLASTIC PIPE and FITTINGS

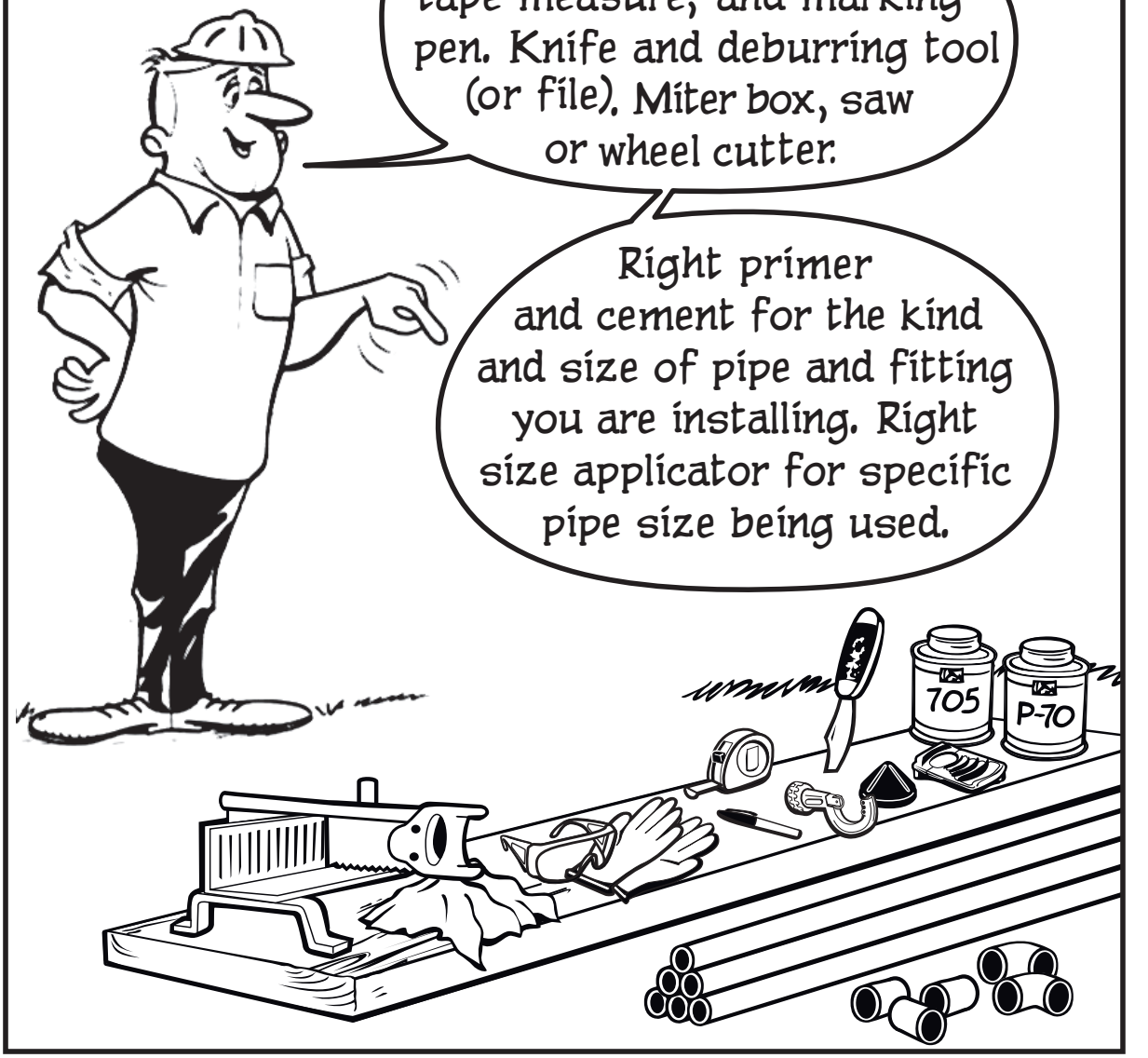
READ THIS BOOK AND FOLLOW DIRECTIONS ON CANS

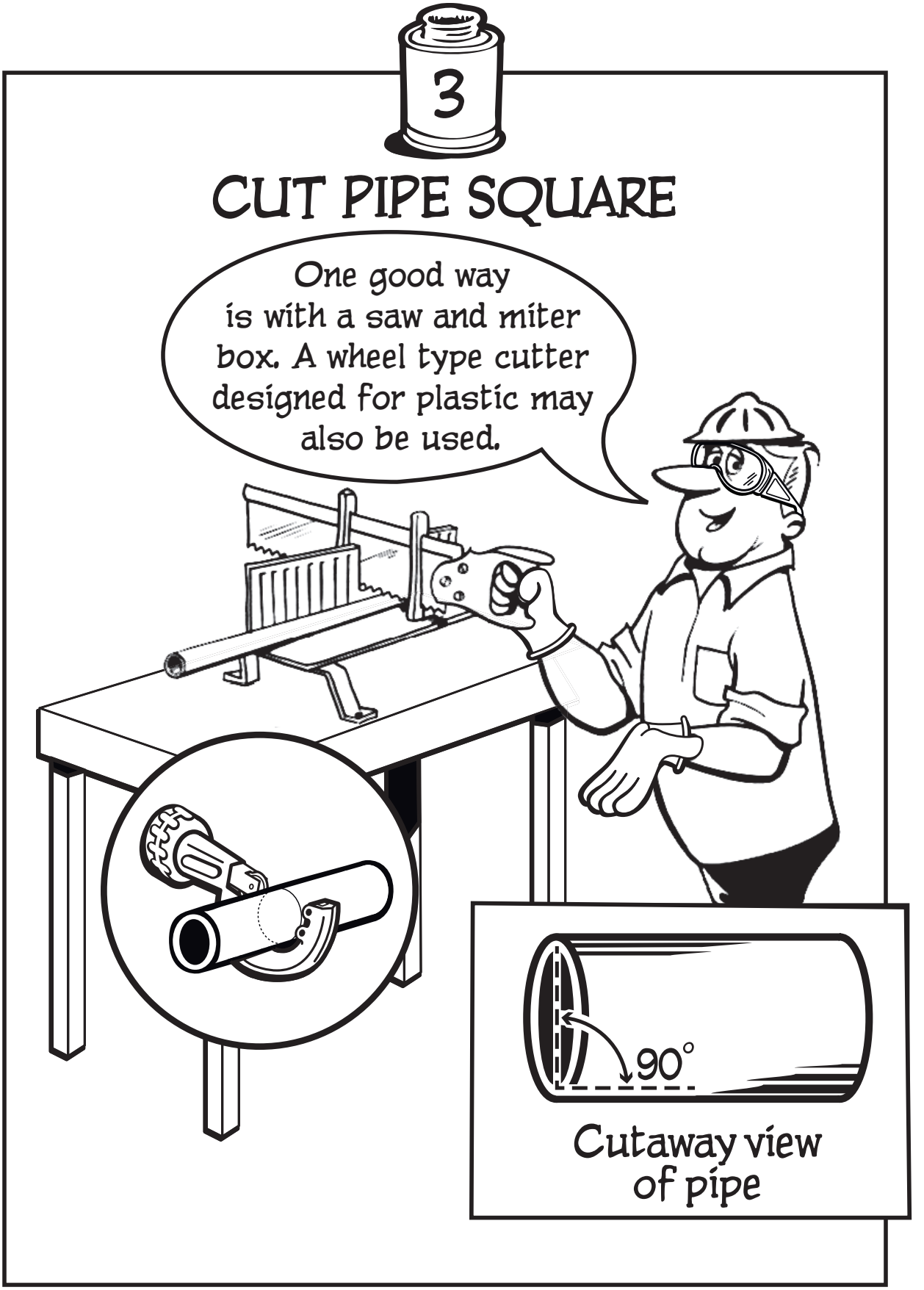


ASSEMBLE MATERIALS NEEDED

Safety glasses and gloves. Clean rags, tape measure, and marking pen. Knife and deburring tool (or file). Miter box, saw or wheel cutter.

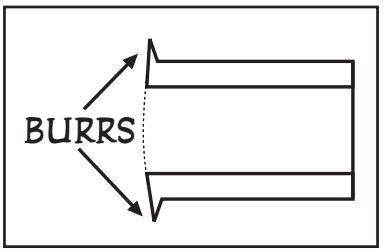
Right primer and cement for the kind and size of pipe and fitting you are installing. Right size applicator for specific pipe size being used.



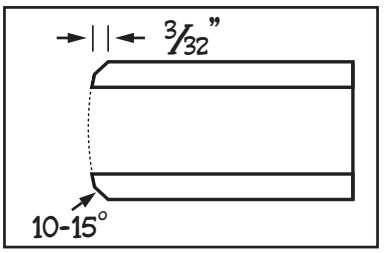

3
CUT PIPE SQUARE
One good way is with a saw and miter box. A wheel type cutter designed for plastic may also be used.
90°
Cutaway view of pipe

REMOVE BURRS
with a file or deburring tool

BEFORE



AFTER

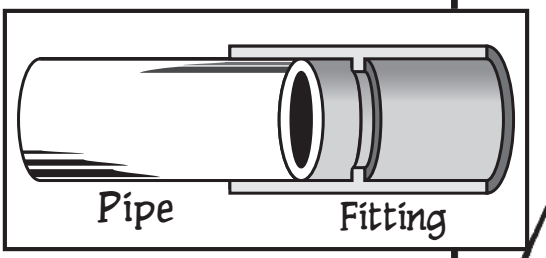


CLEAN PIPE WITH RAG

CHECK DRY FIT

Fitting should go over end of pipe easily but become tight about 1/3 to 2/3 of the way on. A good fit can be assured of by using pipe and fittings that meet applicable ASTM standards and code approvals.

1/3" to 2/3" interference fit

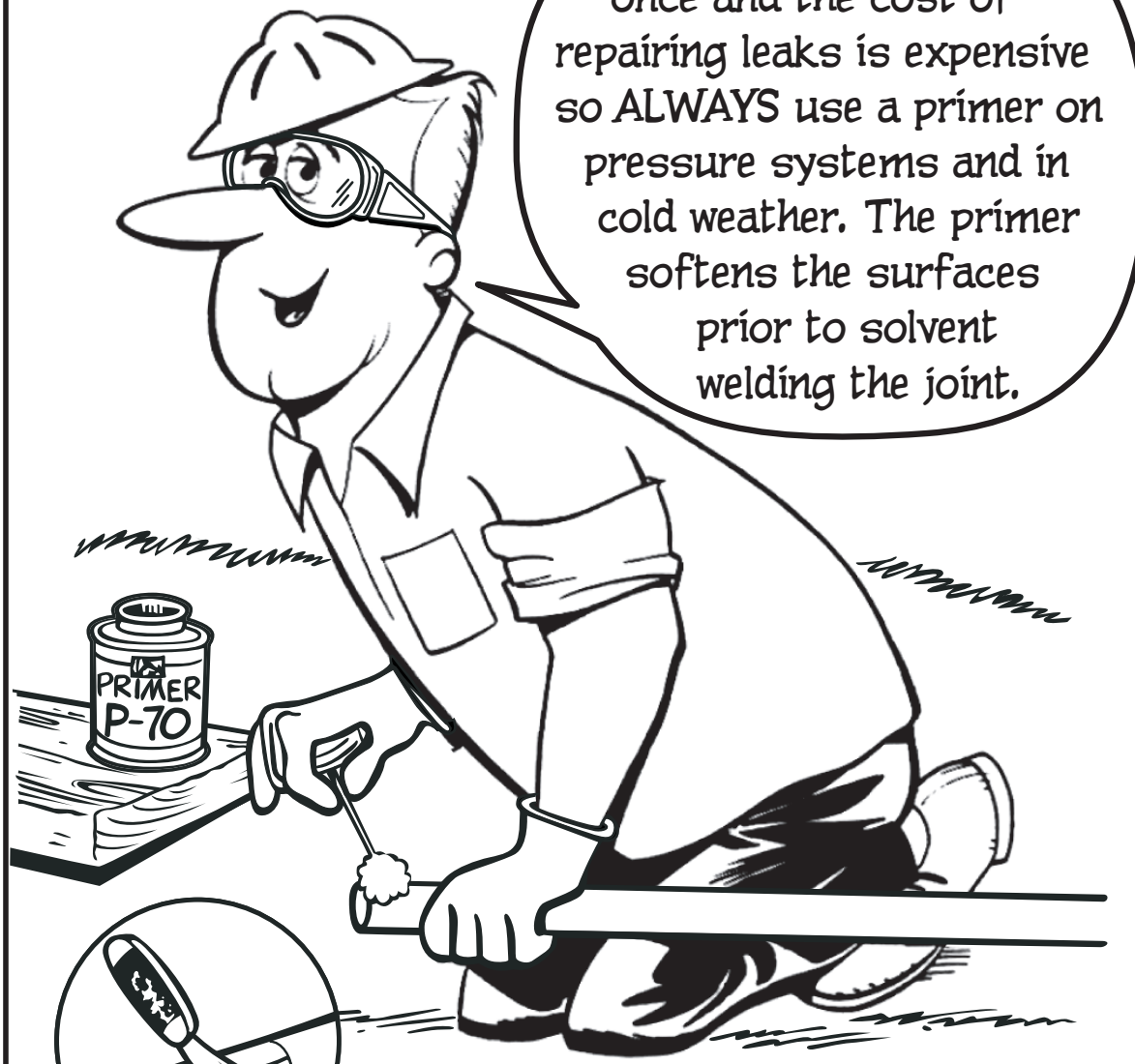


Now you are ready to solvent weld. Turn the page and read on...

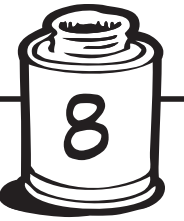
APPLY WELD-ON® PRIMER

to fitting...then pipe...and to fitting again

I skipped this step once and the cost of repairing leaks is expensive so ALWAYS use a primer on pressure systems and in cold weather. The primer softens the surfaces prior to solvent welding the joint.



Check primer penetration and softening of the joining surface.



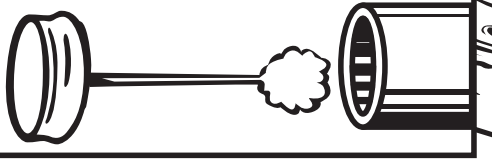
APPLY WELD-ON® CEMENT
WHILE PRIMER IS STILL WET...

Apply cement to pipe with proper applicator, then a thin coat in the fitting, then pipe again...

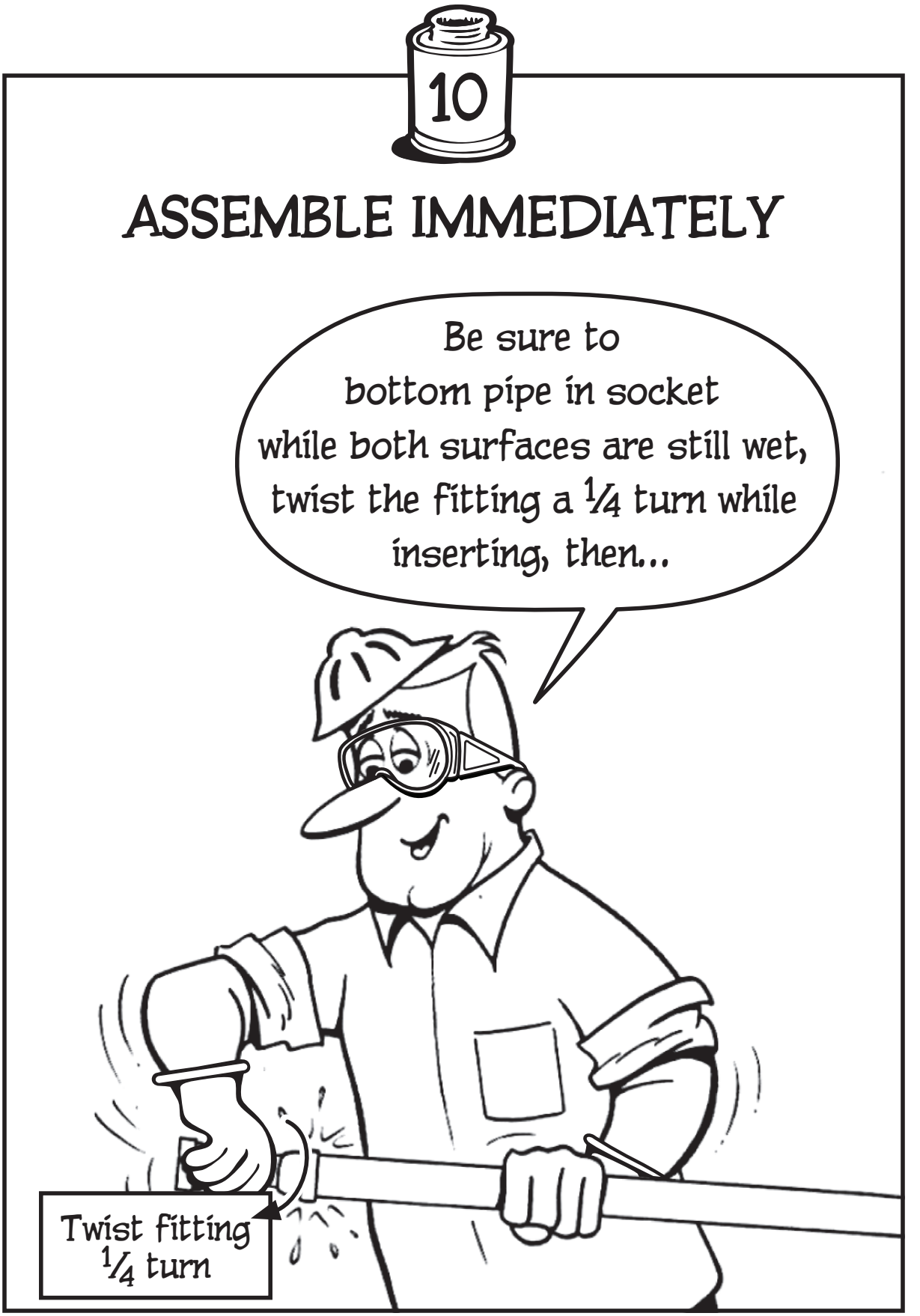
Keep applicator in cement between applications... Keep can closed when not in use.

(10) Rotations Minimum

You should use an applicator at least 1/2 the size of the pipe.

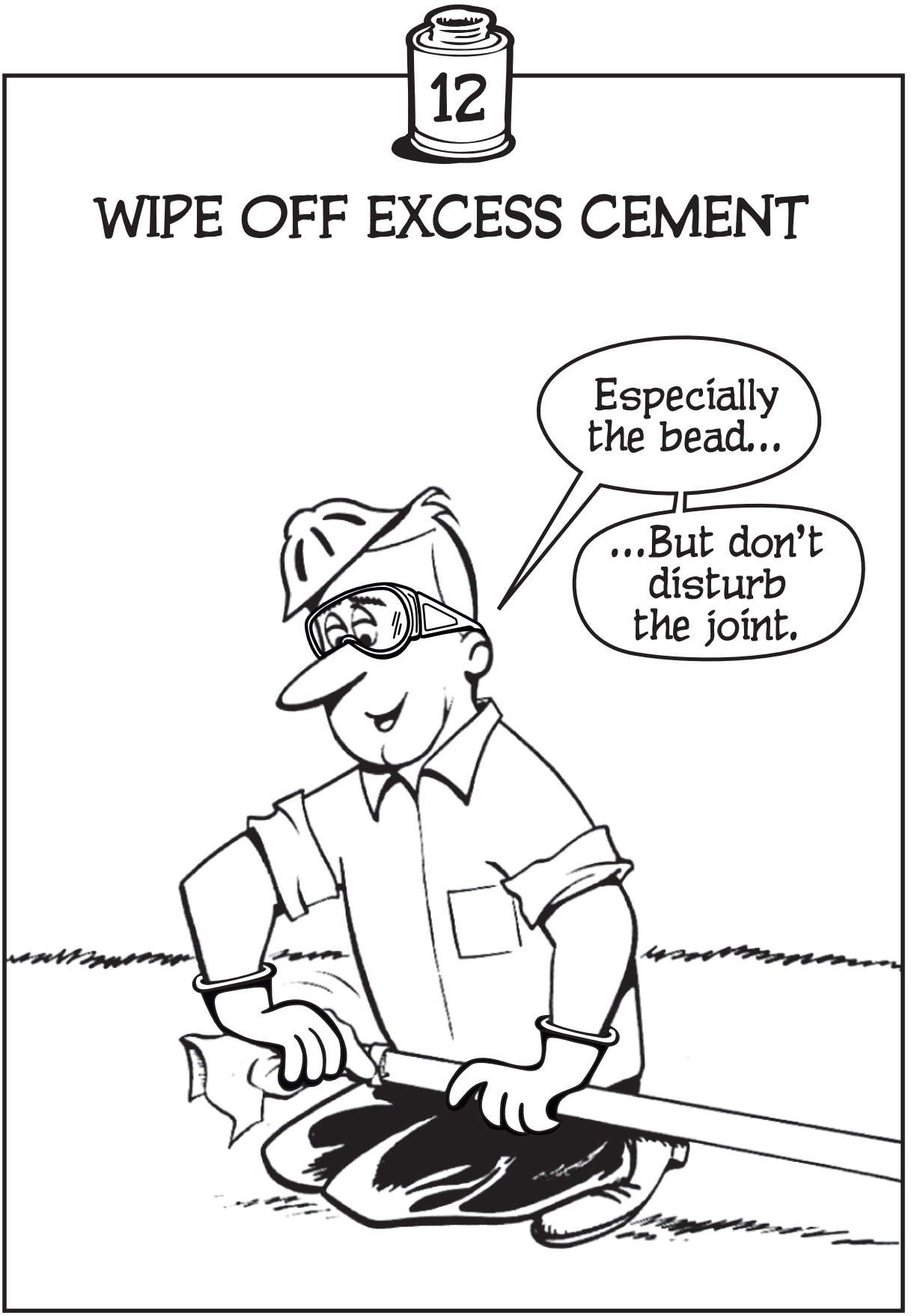


WORK QUICKLY WHILE APPLYING CEMENT


10
ASSEMBLE IMMEDIATELY
Be sure to
bottom pipe in socket
while both surfaces are still wet,
twist the fitting a ¼ turn while
inserting, then...
Twist fitting
¼ turn

...HOLD
FOR ABOUT 30 SECONDS TO AVOID PUSHOUT

*refer to large diameter solvent welding video at www.weldon.com/technical_support


12
WIPE OFF EXCESS CEMENT
Especially the bead...
...But don't disturb the joint.

WAIT BEFORE DISTURBING

For recommended set times,
see set schedule on page 22.


14
PUT IN DITCH CAREFULLY
...And carefully means DON'T KICK IT IN!

15

SNAKE PIPE IN DITCH

16

SHADE PIPE WITH BACKFILL

CURE PERIOD WILL DEPEND ON...

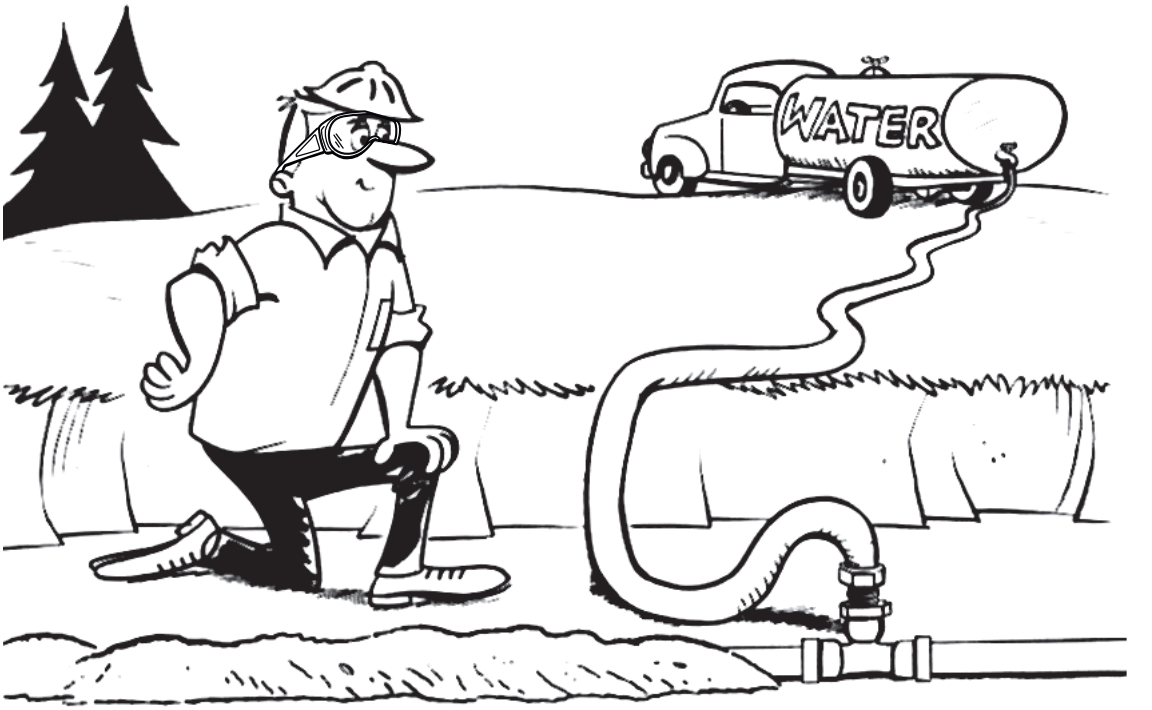
1. Thickness of cement
2. Pipe Diameter
3. Air temperature / humidity
4. Dry joint tightness

For recommended cure times,
see cure schedule on page 22.

REMEMBER...

LONGER SET AND CURE PERIODS are required for larger diameter pipe, slow-drying cements, loose fit joints, chemical applications and in damp or humid weather conditions.

BRING PIPE TO ABOUT IT'S OPERATING TEMPERATURE BEFORE TESTING & BACKFILLING

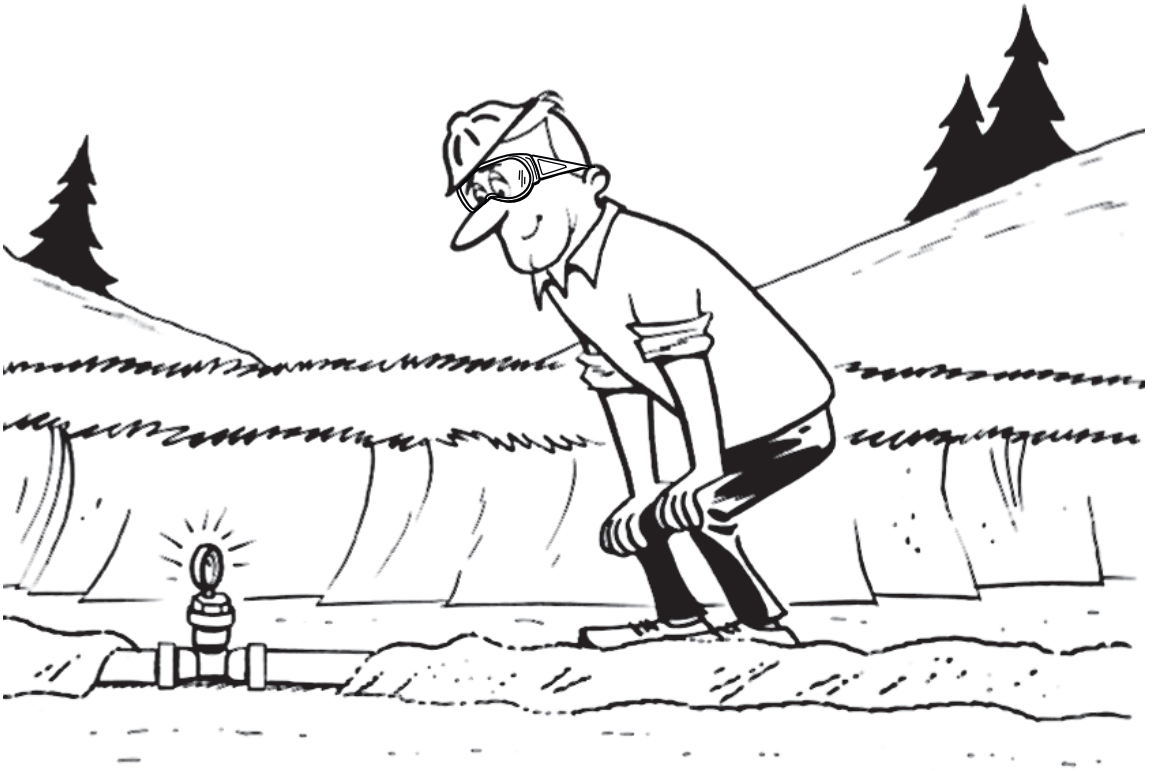


This can be done by...

1. Shading with backfill
2. Filling with water at about operating temperature
3. Letting it stand overnight

HYDROSTATIC PRESSURE TEST

...with water only, do not test with compressed air or gas.



CONGRATULATIONS! If you've followed instructions correctly, the joints are solvent welded and the piping system is ready to use. Pat yourself on the back for a job well done.

THINK SAFETY. WORK SAFELY.

- ✓ Cement and primer are flammable. Keep them away from sparks, heat, flame and other sources of ignition.
- ✓ Do not smoke, eat, or drink when using solvent cement and primer.
- ✓ Work in well ventilated area. Avoid breathing the solvent vapors. Wear NIOSH approved respirators when working in area with inadequate ventilation.
- ✓ Wear proper protective equipment (safety glasses and gloves).
- ✓ Keep container closed when not in use. Store cement and primer according to directions on the label.
- ✓ When in doubt, read the product SDS and technical data sheet for more information.

DANGER: Weld-On® products must never be used in PVC and CPVC systems being used or tested by compressed air or gases.

AVERAGE INITIAL SET SCHEDULE FOR WELD-ON® PVC/CPVC SOLVENT WELDS*

Temperature Range	Pipe Sizes ½" to 1¼"	Pipe Sizes 1½" to 2"	Pipe Sizes 2½" to 8"	Pipe Sizes 10" to 15"	Pipe Sizes 15" +
60°-100°F	2 minutes	5 minutes	30 minutes	2 hours	4 hours
40°-60°F	5 minutes	10 minutes	2 hours	8 hours	16 hours
0°-40°F	10 minutes	15 minutes	12 hours	24 hours	48 hours

Note: Initial set schedule is the necessary time to allow before the joint can be carefully handled. In damp or humid weather allow 50% more set time.

AVERAGE JOINT CURE SCHEDULE FOR WELD-ON PVC/CPVC SOLVENT WELDS*

Relative Humidity 60% or less	Cure Time Pipe Sizes ½" to 1¼"		Cure Time Pipe Sizes 1½" to 2"		Cure Time Pipe Sizes 2½" to 8"		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	15 min	6 hrs	30 min	12 hrs	1½ hrs	24 hrs	48 hrs	72 hrs
40°-60°F	20 min	12 hrs	45 min	24 hrs	4 hrs	48 hrs	96 hrs	6 days
0°-40°F	30 min	48 hrs	1 hour	96 hrs	72 hrs	8 days	8 days	14 days

Note: Joint cure schedule is the necessary time to allow before pressurizing system. In damp or humid weather allow 50% more cure time.

*These figures are estimates based on testing done under laboratory conditions. Field working conditions can vary significantly. This chart should be used as a general reference only.

AVERAGE NUMBER OF JOINTS/QT. OF WELD-ON WELD**

Pipe Diameter	½"	¾"	1"	1½"	2"	3"	4"	6"	8"	10"	12"	15"	18"
Number of Joints	300	200	125	90	60	40	30	10	5	2-3	1-2	¾	½

**These figures are estimates based on our laboratory tests. Due to the many variables in the field, these figures should be used as a general guide only.

WELD-ON®

WE TAKE IT SERIOUSLY...

We hope you benefit from our lighthearted approach to a serious subject. we do take it seriously. The quality of the solvent welded joint determines the effectiveness of the plastic pipe system as a whole. For this reason, we offer data sheets, booklets, an installation video, installation training and qualification seminars as a complete educational package to those who take good joining techniques as seriously as we do.

For more information, contact us at:

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CERTIFIED QUALITY MANAGEMENT SYSTEM ISO 9001 2008

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