

# Installation:

**Please note:** For installing self sealing AP Armaflex SS, refer to p.19.

## Sweat fittings on new pipe

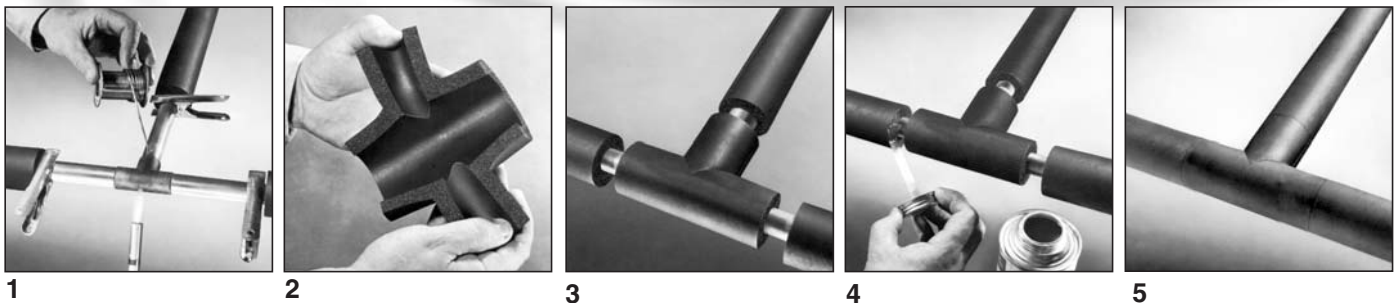
1. Before fitting is soldered, push the Armaflex back on the tubing, and hold in place with clamps applied to the tubing. To avoid damage to the insulation, tubing and fitting temperatures must not exceed the upper use limit of 220°F. Remove clamps after fitting has been soldered and has cooled. Note that sweat fittings are insulated with the same size Armaflex as used on the tubing.

*Note: Apply clamps to tubing, not to Armaflex. Insulate heavy bronze fittings with fitting covers fabricated and applied as directed under screwed-type fittings below. The solvent in 520 and 520 BLV Adhesive is flammable, so take precautions during soldering. Always close the container tightly when not using; keep it away from heat or sparks. (Read the cautions on the label.)*

2. Fabricate fitting cover from properly miter-cut pieces. After adhesive has dried, carefully

slit the fitting cover. See Section 4 on page 7, Fabricating Fitting Covers.

3. Snap fitting cover in place over the fitting.
4. After the line has been tested, apply brush coating of 520 or 520 BLV Adhesive to all joint surfaces.
5. Allow the adhesive to dry until dry to the touch but tacky under slight pressure before joining surfaces.



6. Armaflex is slipped over the line and butted tightly against the fitting.

7. Fabricate fitting covers from miter-cut pieces of Armaflex. Slit the completed cover, and snap it in position over the fitting. (Fitting cover should overlap the pipe insulation by at least one inch.)

8. After the line has been tested, complete the application by cementing the slit joint of the fitting cover with 520 or 520 BLV Adhesive. When adhesive has become tacky to the touch, press the joint firmly together. Also, cement the 1" overlap with 520 or 520 BLV Adhesive by forcing the brush between the two surfaces.

## Screwed fittings on new pipe

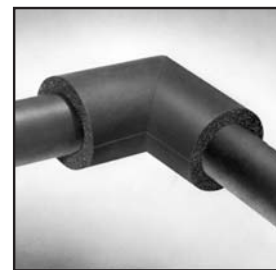
Insulate screwed fittings with sleeve-type fitting covers made up from Armaflex Pipe Insulation having an inside diameter large enough to overlap the insulation on the straight piping next to the fitting by at least 1". See chart on page 8 for sleeving sizes.



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### 2. Armaflex on new piping: the slip-on method

The slip-on method is used when you can insulate new piping before it goes up or while it's being connected.

1. All you do is slip the pipe insulation over the pipe or copper tubing. The inside surface of Armaflex Pipe Insulation is coated with a powdered lubricant, making it easy to slip the insulation over the pipe.

*(note: Small amounts of powdered lubricant may enter open ends of pipe or tubing. This dust must be kept out of refrigeration systems. Plug open ends of pipe before slipping on Armaflex Pipe Insulation.)*

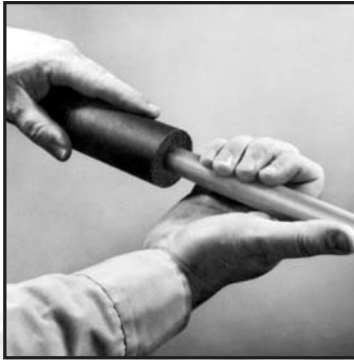
2. Since Armaflex tubing is flexible, it will follow bends in tubing and can be slipped right over bent tubing, 45° sweat ells, and couplings.

3. At 90° sweat ells, cut the insulation, and butt against each side of the fitting. A fitting cover will be installed later over these fittings. See Section 4 on page 7, Fabricating Fitting Covers.

4. Use a length of Armaflex as long as or slightly longer than the section of piping to be covered. **NEVER STRETCH ARMAFLEX.**

5. Apply brush coating of 520 or 520 BLV Adhesive to both butt ends to be joined, since this is a contact-type adhesive.

6. Allow the adhesive to set until dry to the touch but tacky under slight pressure before joining surfaces.



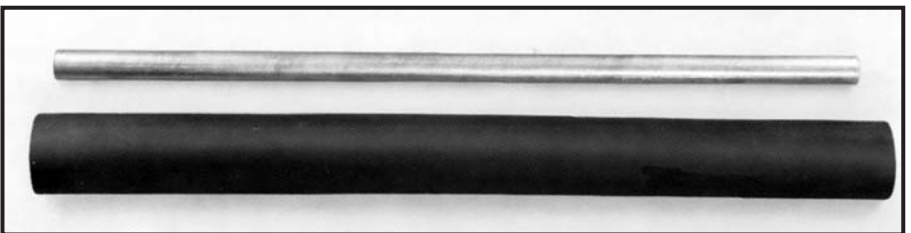
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# Installation:

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## 3. Armaflex on existing piping: the snap-on method

The snap-on method is used when pipe or copper tubing is insulated after it has been installed and connected.

### Armaflex pipe insulation

1. With unslit tubular Armaflex Pipe Insulation, use a sharp knife to slit the Armaflex lengthwise on one side. For oval tubes, slit on flat side only.
  2. Snap the insulation over the pipe.
  3. Brush-coat both slit surfaces with Armaflex 520 or 520 BLV Adhesive alternating sides for even drying time. Push the insulation down over pipe to hold adhesive-coated surfaces apart while the adhesive dries.
  4. Allow the adhesive to dry until dry to the touch but tacky under slight pressure before joining surfaces. Test with back of fingernails as shown.
- 520 or 520 BLV Adhesive bonds instantly on contact, so pieces must be put together accurately. Press joints together firmly, making sure that you get a bond all the way through the joint, not just at the outer edges.
5. If the insulation should become stuck to the pipe after applying adhesive, break the insulation loose by running a finger down the pipe as shown in the illustration.

6. When the adhesive has air-dried, apply moderate pressure to entire joint to assure a vapor-tight bond.
7. In double-layer work when using the snap-on method, apply Armaflex with side and end joints staggered where possible.



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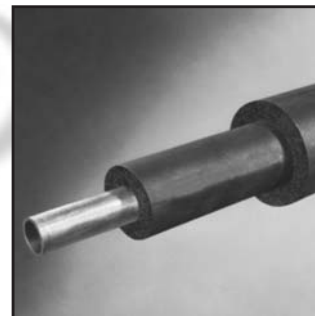
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When hot-water piping is being insulated, allow a minimum of 36 hours before circulating hot water into insulated lines having adhesive-bonded slit seams.

Before using 520 or 520 BLV Adhesive, read the precautionary information printed on the can label. (Also see "520 or 520 BLV Adhesive" submittal sheet)



## Installation:

### 4. Fabricating fitting covers

This section includes:

- a. Using miter boxes, pg 8
- b. Using Armaflex Sheet on pipes, pgs 9 & 10
  - b.1. Armaflex Templates, pg 11
  - b.2. Yield of Armaflex Sheet, pgs 11-12
- c. Armaflex Sheet on 90° Elbows, pg 13
- d. Armaflex Sheet on Flanged Valve Fitting Covers, pgs 14-15

Use unslit Armaflex when making up covers for fittings. Make up a group of covers at one time instead of cutting and assembling each one as you come to it.

#### Sweat and screwed fittings

On sweat fittings, use the same size Armaflex for covers that you use to insulate the tubing.

On screwed fittings, make up fitting covers from Armaflex with an inside diameter large enough to overlap the insulation on the pipe next to the fitting. Make the fitting cover long enough to overlap pipe insulation by a minimum of one inch on each side. (See sleeving sizes on page 8.)

#### Large-size pipes

On large-size weld pipes (3" IPS and above) and screwed iron pipes (2", 2-1/2" and 3"), fitting covers can be made from Armaflex Sheet Insulation. Armaflex Sheet is available in 36" x 48" sheets or 4'-wide rolls in a variety of thicknesses and lengths. Fitting covers for

Victaulic Couplings can also be made from Armaflex Sheet Insulation. Sheets can be cut easily and accurately, using a sharp knife and a template. (See page 11 for template size and pattern number.)

#### Tight joints mean a trouble-free job

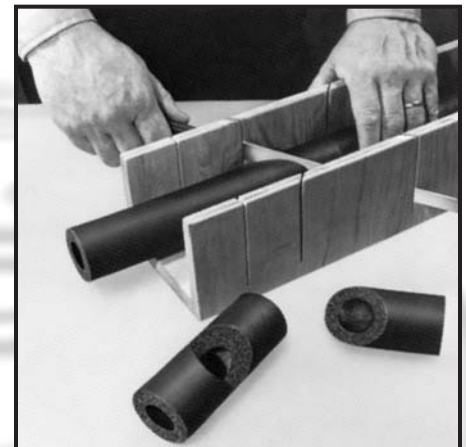
*Important: Use Armaflex 520 or 520 BLV Adhesive only.*

Armaflex 520 or 520 BLV Adhesives are vapor-retarder adhesives developed for use with Armaflex Insulations. Use it properly, and you'll have joints that stay tight.

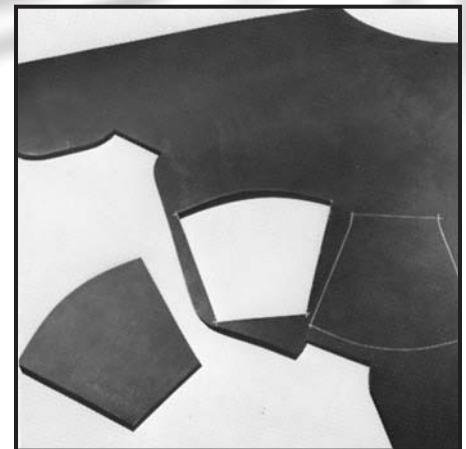
#### Tools for making fitting covers

1. Miter Box: A sturdy miter box and a knife can do most large-size pipe fittings up to 5" IPS. The miter box can also be used on smaller-size pipe fittings.
2. Sheet Templates  
For screwed iron pipe fittings 2", 2-1/2" and 3" IPS and for long-radius weld iron pipe fittings 3" IPS to 10" IPS, use Armaflex Sheet Templates. These sheet templates take all the guesswork out of insulating 45° ell, 90° ell, and tee fittings. Available from Armacell, each template set comes with complete application instructions. (See pages 11-12 for details.)
3. Armaflex Sheet Templates are also available to make fitting covers for Victaulic Couplings. The fitting cover templates are available for pipe sizes from 3/4" IPS to 12" IPS.

4. Use carton template on the side of all 6' tube cartons, to make fitting covers for 45, 90, ells, tees.



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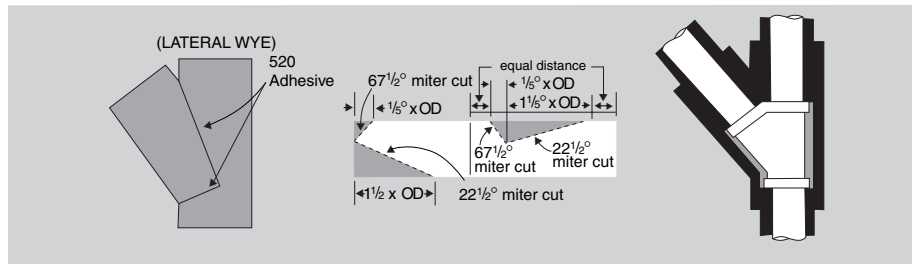
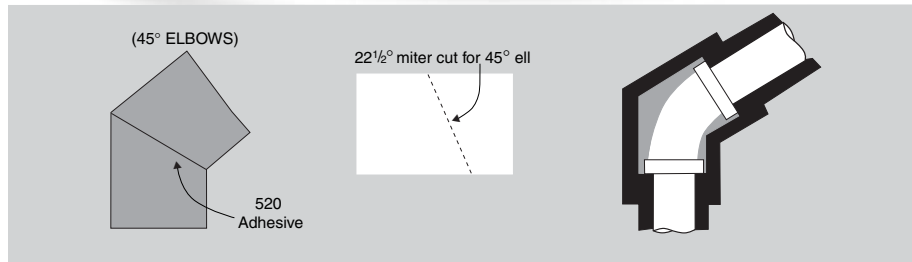
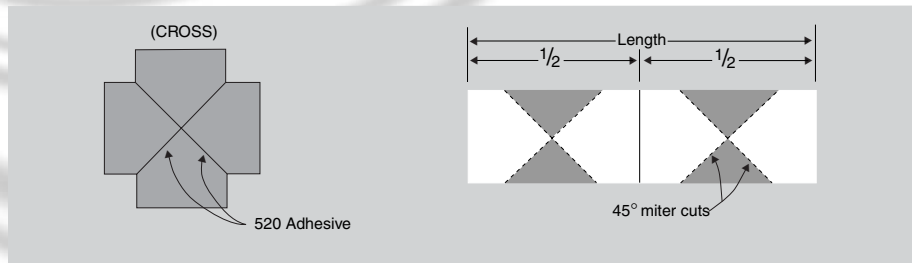
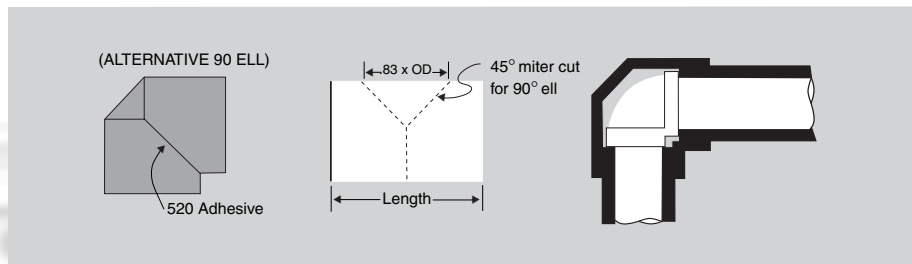
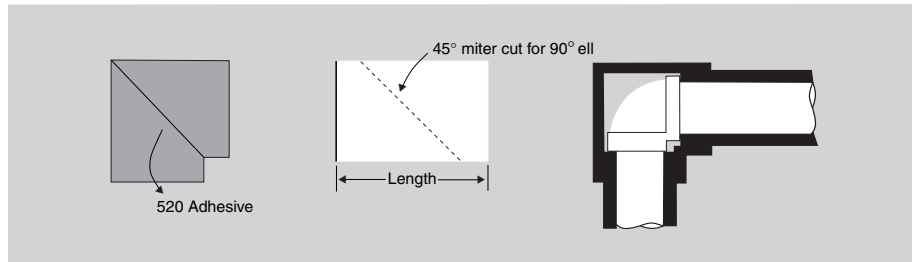
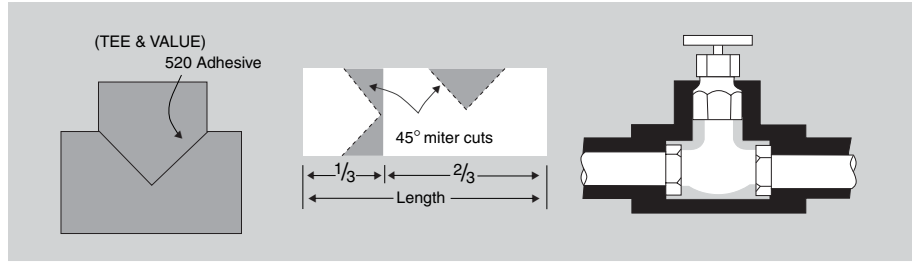
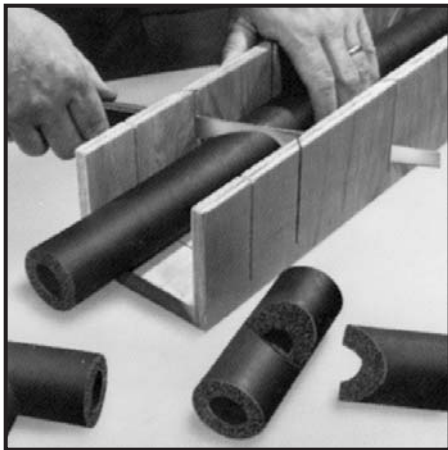


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# Installation:

## 4.a. Using miter boxes

1. Use a sharp, non-serrated edge knife. Note the long knife length shown in photo.
2. On smaller pieces of Armaflex Pipe Insulation, brace the piece to be cut with your hand as illustrated. This will insure a clean and accurate cut.
3. The illustrations show sleeve-type fitting covers. The same fabrication steps may be used for copper tube fittings.



ARMAFLEX SLEEVING SIZES						
Armaflex Insulation Sizes (in.)	Copper Tubing		Nom Iron Pipe Size (in.)	Sleeving Sizes†		
	Nom Size (in.)	OD Size (in.)		Nom 3/8" Wall (in.)	Nom 1/2" Wall (in.)	Nom 3/4" Wall (in.)
3/8 ID	1/4	3/8	—	1-1/8 ID	1-3/8 ID	1-5/8 ID
1/2 ID	3/8	1/2	1/4	1-3/8 ID	1-3/8 ID	1-1/2 IPS
5/8 ID	1/2	5/8	3/8	1-3/8 ID	1-5/8 ID	2-1/8 ID
3/4 ID	5/8	3/4	—	1-5/8 ID	1-1/2 IPS	2 IPS
7/8 ID	3/4	7/8	1/2	1-5/8 ID	1-1/2 IPS	2 IPS
3/4 IPS	—	—	3/4	1-1/2 IPS	2-1/8 ID	2-1/2 IPS
1-1/8 ID	1	1-1/8	—	1-1/2 IPS	2-1/8 ID	2-1/2 IPS
1-3/8 ID	1-1/4	1-3/8	1	2-1/8 ID	2 IPS	3-1/8 ID
1-5/8 ID	1-1/2	1-5/8	1-1/4	2 IPS	2-1/2 IPS	3-5/8 ID
1-1/2 IPS	—	—	1-1/2	2-1/2 IPS*	3-1/8 ID	3-5/8 ID
2-1/8 ID	2	2-1/8	—	2-1/2 IPS*	3-5/8 ID*	4-1/8 ID*
2 IPS	—	—	2	3-5/8 ID*	3-5/8 ID	4-1/8 ID
2-5/8 ID	2-1/2	2-5/8	—	3-5/8 ID*	4-1/8 ID*	4 IPS*
2-1/2 IPS	—	—	2-1/2	—	4-1/8 ID	4 IPS
3-1/8 ID	3	3-1/8	—	—	4 IPS*	5 IPS*
3-5/8 ID	3-1/2	3-5/8	3	—	5 IPS*	5 IPS*
4-1/8 ID	4	4-1/8	3-1/2	—	5 IPS*	Sheet
4 IPS	—	—	4	—	Sheet	Sheet

†Based on average wall thicknesses developed from factory tolerances.  
 \*May require cutting.  
 \*Available Nom 1/2" or Nom 3/4" thickness only.