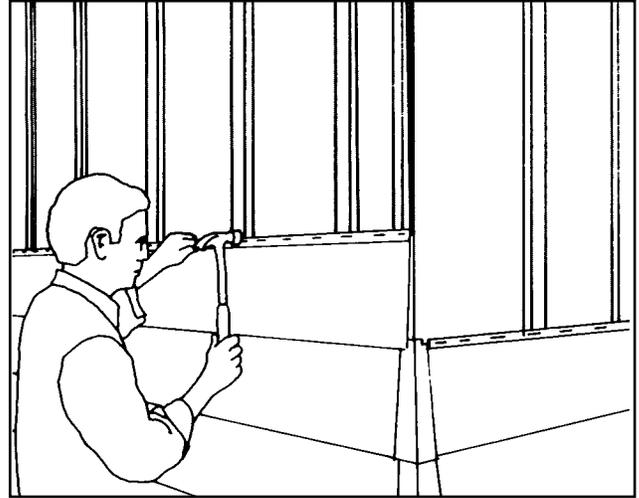


# Furring and Insulation Techniques

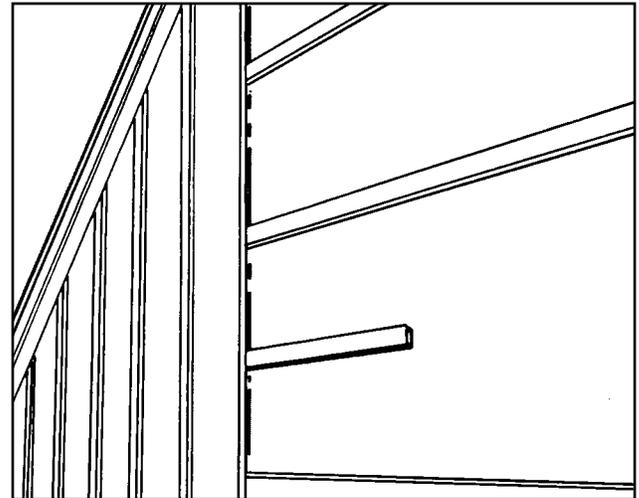
## Wood Furring

Furring is building out from the wall surface to provide a smooth even base for nailing on the new siding. Lath strips  $\frac{3}{8}$  inch thick are most commonly used. Lumbar strips 1' x 3' are often used over brick and masonry. Furring is not usually necessary in new construction, but older homes often have uneven walls, and furring out low spots, or shimming, can help prevent a wavy appearance to the siding installation. Furring should be installed vertically 16 inches on center for horizontal siding, and the air space at the base of siding should be closed off with strips applied horizontally. Window, door, gable, and cave trim may have to be built out to match the thickness of the wall furring.



## Vertical Siding

Furring for vertical siding is essentially the same as for horizontal siding, except the wood strips are securely nailed horizontally into structural lumber on 16 to 24 inch centers. When using 1" x 3" furring, again be sure to check what effect the additional thickness might have on trim situations.



## Aluminum Foil Underlayment

Aluminum reflector foil is a good insulator and can be used advantageously as an underlayment to siding. It may be stapled directly to the existing wall, or over  $\frac{3}{4}$ -inch furring strips to provide an additional air space and better insulation. Reflector foil for remodeling must be of the perforated or "breather" type to allow passage of water vapor. The foil should be installed with the shiny side facing the air space (outward with no furring, inward if applied over furring). Foil is generally available in 36 and 48 inch wide rolls. Nail or staple just before applying siding. When applying foil over furring, be careful not to let the foil collapse into the air space. Place foil as close as possible to openings and around corners where air leaks are likely to occur, and overlap side and end joints by 1 to 2 inches.



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## Underlayment Board

Underlayment board is often used instead of furring strips. It is available in large sheets and in accordion-fold panels and can be nailed or stapled to the old wall. Some versions are faced two sides with perforated aluminum (oil, which provides a considerable increase in insulation value. The core constructions vary from cellular kraft to polystyrene. The board should have a vapor permeance of at least 10 perms.

## Windows and Door Build-Out

Some trim build-out at windows and doors may be required to maintain the original appearance of the house when using furring strips or underlayment board. This is particularly true when using furring strips or underlayment board more than 1/2-inch thick. Thicker furring and underlayment generally provide added insulation value, and are usually a good investment for the homeowner, particularly if the home is uninsulated. When estimating the labor and materials required for installing furring and underlayment, be sure to include an estimate on window and door build-out. Longer siding nails will be needed to compensate for added thickness of insulation board.



## Undersill Furring

Building out below window sills is often required in order to maintain the correct slope angle if a siding panel needs to be cut less than full height. The exact thickness required will be apparent when the siding courses have progressed up the wall and reached this point.

## Undereave Furring

For the same reason, furring is usually required to maintain the correct slope angle of the last panel where it terminates at the eave. This panel usually has to be cut to less than a full height, thus requiring back-up furring and a special piece of trim for capping.

