



4: A swath of EPDM roofing material is caulked in place to allow pipes to pass through the air/vapor barrier.

or moisture absorption. Air Krete is worth looking into. Also, the company is seeking approval for Air Krete's use in fire stops and fire walls, a move that could open many possibilities in commercial and multi-family construction.

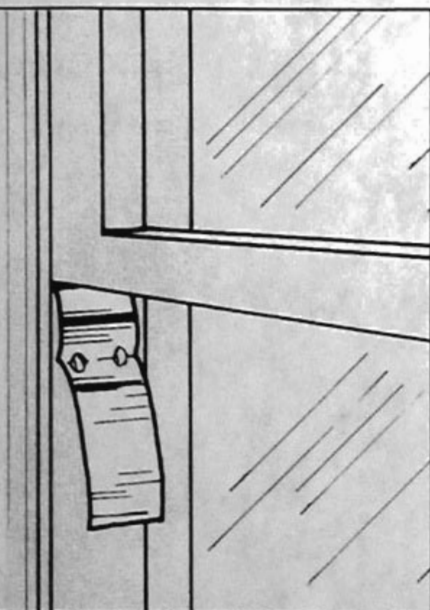
Their most recent introduction, Fast Forms, lends itself to sunspace construction or other small slab-on-grade jobs where you want to get the backhoe and mixer in and out in a hurry. Fast Forms come in 4x8 foot sections that lock together with dovetail keys and special corners. The foam forms are engineered to work without rebar in normal soils with typical loads. Concentrated point loads go on special pier forms that fit to the standard sections. After pouring, the forms are left in place to insulate the slab perimeter.

Because the forms are left in the ground, the trenches need only be 18 to 24 inches wide and can be backfilled as soon as the forms are set. Footing, slab, and wall are poured monolithically, so only one concrete delivery is required. The foam helps the concrete cure well by retaining the heat and water of hydration. The insulation also helps in cold-weather pours.

The forms cost about \$10.40 per lineal foot, but they save on concrete and labor. A possible drawback is that the forms are



3: These polystyrene foundation forms stay in place to insulate after the monolithic slab and foundation wall is poured.



2: The dirt-cheap Quiki window control keeps the window sash in place after you've cut the cord.

an R-value of 3.9 per inch. Produced on-site from three components plus water, it installs much the same way as does urea-formaldehyde (UF) foam. When it dries, it is lightweight and crumbly.

According to the company, wet Air Krete will flow in and seal the smallest crevices in a wall, but sets up quickly—within 20 seconds. Because Air Krete hydrates like concrete, it gives off less water than UF when drying. Independent testing shows the product shrinks less than 0.25 percent and is virtually fireproof. Air Krete is currently undergoing testing for water-vapor permeance and water absorption. Because it has over 80-percent closed cells, company president R. Keen Christopher expects it to be similar to UF or expanded polystyrene foam in its reaction to water—that is, it should be a moderate vapor retarder and a slow absorber of water.

Air Krete is available only through licensed installers. Doing a good job, says Air Krete installer Erwin Grimes, is not difficult but requires a close watch of the equipment. On a good day, he says, a three-man crew can put in 14,000 board feet. Cleanup is easy since the raw materials are water-soluble.

Prime applications of Air Krete include brick cavity construction and block cores. For wood-frame walls, Air Krete will get tough competition from fiberglass and cellulose. They can be blown in for half the cost of Air Krete, which usually installs for \$1.25 to \$1.50 per square foot in a 2x4 wall. But if high R-values are needed or if you are concerned about settling, fire-resistance,

## 2: Double-Hung Hassles

Weathersealing an old double-hung window is no one's idea of a good time. Retrofit contractor Tom Buckley found a cheap and simple device that makes it more palatable—the Quiki window control available from Holmes & Hemphill (6186 Olson Hwy., Golden Valley, Minn. 55422 (800)328-2281). This 40-cent steel spring installs against one side of the window sash and allows you to get rid of those decaying sash cords and nasty weights. This allows you to insulate the big leaky spaces on either side of the window.

To complete the window retrofit, Buckley's crews install plastic V-strips along the bottom sash, at the meeting rail, and against the parting stops between the house-interior faces of the stops and the lower sash. Squished between the stop and the sash, the V-strip is not prone to fall out and helps the window slide smoothly.

The top sash is usually caulked in place. When was the last time you opened the top sash of a double-hung?

## 3: Foam Foundation Forms

The folks at Branch River Plastics keep coming up with imaginative uses for the expanded polystyrene they manufacture.