

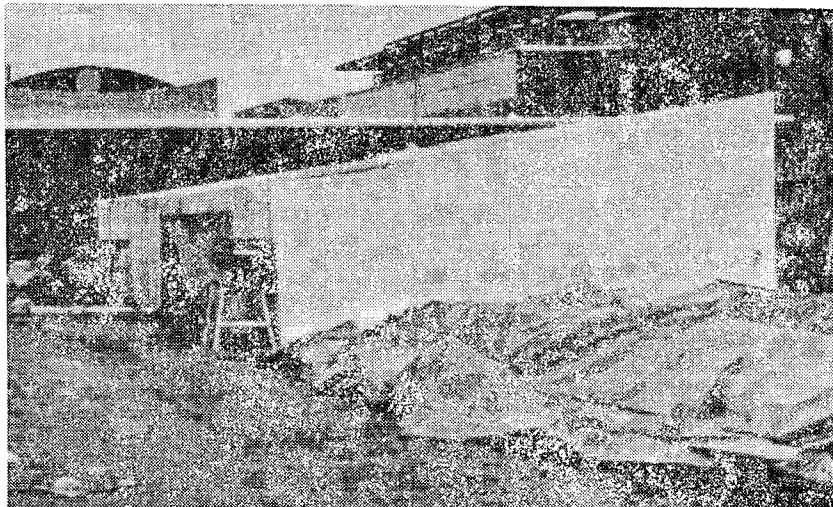


FIGURE 5

buckets, buggies, and, in some instances, wheelbarrows. Wood forms are widely used for their insulating value in holding the heat. When metal forms are used, more care is taken to warm the forms, and they are usually insulated with suitable coating to reduce heat loss during the critical period of curing.

As a general practice, columns, walls, and foundations are not enclosed and warmed with space heaters. Usually they are merely covered with insulating winter mats and allowed to cure.

This is not the case, however, with slabs and beams. They are usually covered over the top with insulating winter mats and plastic impregnated tarps and are heated by space heaters from below. This condition is continued for several days, depending on the mass of the section, and the temperature maintained.

Figure 6 shows a typical job-site concrete and mortar material storage and batching operation. Also shown is the building partially enclosed with plastic tarps; the interior is heated for the purpose of curing a recently poured concrete slab. Much less of this type of enclosure is needed in the usual buildings since they are normally masonry bearing wall systems where the exterior and interior bearing walls are in place and provide enclosure except for window openings. An example of this can be seen in Figs. 7 and 8, where the window openings are enclosed with polyethylene film and the central heating system is running to "dry out" the construction.

#### MASONRY

Masonry work in the "winter building" system offers very few problems. In general, the winter building system for masonry consists of: dry units, heated mortar, and minimum protection with covers or insulating winter mats.

**Brick.**—One important item that is required in all of the systems is the delivery and storage of brick to be dry and to remain dry until laid. For winter masonry work, units of higher than normal initial rate of absorption (suction) are permitted and, in some instances, recommended. The brick units are delivered dry to the project site. This is part of the supply agreements made early in the planning and scheduling of the project. The units are then stored in such a manner as to remain dry. There are several ways in which this is accomplished. In all instances, the brick are stacked on pallets that are raised off the ground. In Sweden, England, and Switzerland, for example, the stacks of brick are carefully covered with polyfilm or tarps weighted and tied to remain in place (see Figs. 9 and 10). However, the Danes use polyfilm covers that fit over one stack of brick on an individual pallet (see Fig. 11). In this manner, the pallets of units may be moved and distributed easily and still kept dry and protected.