

provide for a self-contained seat or bench. An overflow outlet prevents flooding the floor of the room. These showers are easy to keep clean, require less floor space than tubs, and have proved satisfactory in use.

One rule has been to provide at least as many useful closets as there are rooms in our houses. But let us hasten to add another rule: waste space on a plan is not labeled "closet" just because no other purpose can be found for it; in such cases you must sharpen your pencil—and your wits—and try another plan. Waste space is waste space no matter how much rationalizing you do or how euphoniously you misname it. For purposes of accessibility and to prevent waste and clutter, the majority of the closets are shallow and wide rather than deep and narrow.

An unusually generous but not lavish number of electric outlets have been provided in these houses. Their position is studied for utmost convenience and use rather than merely to make a blank wall space look busy. The type and placement of lamps is considered from the standpoint both of glare and of shadows that might interfere with kitchen work or placing a chair for comfortable reading.

The ceilings of T.V.A. houses are low, usually about seven feet four to six inches above the floor. This makes a definite saving in construction costs, causes the room to appear larger, and reduces heating bills, an unusually important item where electric heat is used. The casement windows are so placed that there is no dead air space above the windows.

Insulation is an important feature in T.V.A. houses. Rock or mineral wool for walls, insulation fiber board for ceilings and sometimes attics, and aluminum foil for floors are used to cut down heat loss during the heating season as well as to make the house more comfortable in summer. It is interesting to note that during last summer an extended series of temperature tests in

Norris houses showed that the attic spaces up under the roofs were about as cool as the rooms below.

The majority of houses have attics, and although the regular use of these for living purposes is considered secondary, narrow stairways are provided so that they may be easily accessible. Windows in the gables, and sometimes dormers, furnish light and ventilation—in fact many of the residents of Norris utilize the attics not only for storage but as studies, extra sleeping quarters, and the like.

The finish of T.V.A. houses is extremely simple and practical. They contain but few moldings and little "millwork." Some are plastered, but the typical wall treatment is a wide plank wainscot up to the window sills with plywood walls above and fiber insulation board for the ceilings. Practically all interior woodwork is given a "natural" finish. Floors are of native oak, stained, this being cheaper than first quality pine. Such parts as mantels and entrances are of plain but well-studied design and made of plain lumber and "stock" molding.

A novel and important departure from the usual methods of small house construction is seen in the cinder-block houses at Norris. In this group the walls, both exterior and interior, are of cinder concrete blocks. The floors are of precast concrete slab and joist construction with a smooth, colored surface finish similar to tile. The interior and exterior wall finish is of cement paint applied directly to the surface of the blocks. Roofs are of sheet metal painted to harmonize with the surroundings and insulated to reduce the passage of heat or cold. These houses are economical in first cost and upkeep and are virtually fire-proof. They are sanitary, easy to clean, slightly and homelike, and vermin and termite proof.

While all of the houses at Norris are of permanent construction, the T.V.A. com-