

ONCE THE BUILDING BLOCKS OF THE DONOS:

Adobe Does a Comeback

By Bob Loeffelbein

DID you ever get paid for making mud pies?

There's a concern in Escondido doing it, though it's not quite so simple as that.

From the time of the Babylonians, more than 5,000 years ago, to the days of the early California missions, in many parts of the world the only easily accessible building material was soil in one form or another. The most common weakness in this form of construction was its susceptibility to moisture.

The early California missions, constructed of adobe, were protected against this moisture with plaster. The old haciendas of Mexico and the southwest United States had large porches to divert moisture, as well as the plaster for added protection.

Then 17 years ago Standard Oil of California perfected an oil additive of petroleum asphalt to waterproof adobe soil.

THUS, TODAY, modern adobe is indistinguishable from the rough-hewn appearances of the original. Yet it has become the driest building material known, except for metal and glass. Nothing can equal it for insulating qualities. Adobe resists fire, heat, cold, vibration and sound, without additional insulation. Termites and dry rot are unknown, and maintenance is nearly nil.

Unless desired for decorative purposes, plaster is no longer necessary as adobe covering either inside or out. To bond the blocks together the builder can use cement mortar, plastic cement, hydrated lime and plaster sand, or a mixture of soil and

binder from which the blocks themselves are made.

Further research and experimentation have resulted in a chlorinated rubber base paint that is nearly a permanent covering. Use of wrought iron and stained glass and glazing of kitchen and bathroom walls have recently added to the old Spanish look of permanence and peacefulness in housing developments, country clubs, office buildings and other constructions. Some places are even using slab-placed flooring, with colorful carpeting, wood parquet or mission tiles overlaid.

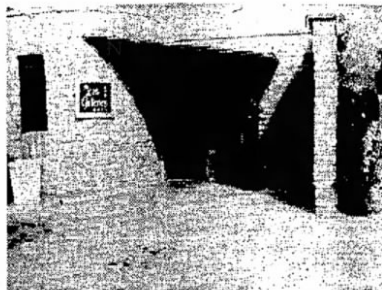
IN SPITE OF all these advantages of adobe, there are only two fully qualified companies producing these blocks in the entire state. These are located at Fresno



"Mother hen" machine lays 20 adobe blocks at a setting. Blocks then "cure" in the sunshine.

(Hans Sumpf Co.) and the Adobe Block Company in Escondido.

Such construction firms as Weir Brothers in Escondido are currently pushing the popularity of adobe. They have built Adobe Villas, a plush apartment complex with pool and putting green adjoining their own pleasant Spanish style offices, and



This art gallery at Escondido is a good example of how new adobe blocks are employed.

have a second already on the drawing boards. Other adobe building is going on in Fresno, Calabasas, Ontario and Murieta. The blocks are being used for a golf clubhouse, horse barns, a mortuary, a major office complex, a Masonic Hall, a group of

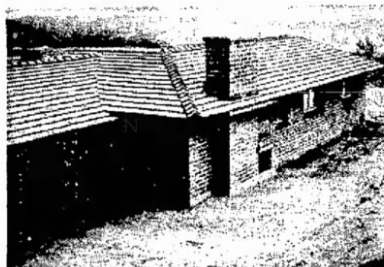
before the binding agent was discovered, have successfully withstood earthquakes and lesser elements for more than a century in Southern California holds no sway over building inspectors. For example, recent quakes at Tehachapi raised havoc with all types of building materials except adobe. The Public Works buildings, so constructed, remained in good shape.

To look at an adobe "plant" is to see an ankle-deep dust plot of some 50 acres, stacked with thousands of adobe blocks.

A skip loader scoops up the dust (for the block-making plant is set up right on top of a plot of adobe land) and piles it onto a conveyor belt leading to the mixing pot. A second worker mixes this dirt with the oil binder into an adobe mud pie mix. A jitney-type dump truck shuttles back and forth between the funnel loader on this mixing pot and the brick "laying" machine. The "mother hen" laying machine rolls out heavy paper sheeting under itself, trips a specified amount of the adobe mix into a kind of oversized ice-cube tray. After smoothing, the dividers in the tray are lifted, cutting the mass into a "set" of bricks, and the machine moves on to lay another set. No pressure is used to form the bricks.

There are four sizes of blocks made, from the smallest 4x4x16 up to the 4x12x16 "economy size." The machine lays 4,500 blocks in an average day. The blocks then take a sun bath for two to six weeks, depending on size. This is for "curing." Costs run, again according to size, \$110 to \$195 per thousand blocks.

Which seems quite high for mud pies, but not for earthquake-proof building blocks!



White mortar sets off the blocks in building above. New process gives blocks permanency.

health spa buildings, as well as many smaller uses such as retaining walls, sidewalks and barbecues.

Probably the main reason adobe isn't used more in buildings is the Uniform Building Code in use by many cities and counties throughout the Western states. The Los Angeles County Building Code permits adobe construction for both residential and commercial buildings, but Section 2405 states, for example, that masonry of unburned clay units (adobe) shall not be used in any building more than one story in height. John F. Lewis, Principal Structural Engineer in the County of Los Angeles Building and Safety Division for the County Engineer, states that adobe use is "apparently limited currently for other economical or other practical reasons."

THE FACT THAT a d o b e dwellings, constructed even

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