

"Orgtekhlesstroi" Trust of the USSR Ministry of the Timber Industry had built by way of an experiment a single-apartment, three-room dwelling with walls consisting of a mixture of cement-and-shavings, in the settlement of the Luza House-Building Combine, Kirov Oblast'. The filler consisted solely of wood shavings derived from mechanical processing of coniferous species, and a binding agent - Portland cement and ordinary water. Not a single chemical additive was introduced into the mixture. The house has been used successfully for a period of five years.

A second attempt at using shavings was made in 1984 at the Oktyabrskii House Building Combine. There, in the production of wood concrete the particulate material was replaced by shavings from the joinery- and building materials shop. Again, the tests proved successful.

The completion of these and other studies made it possible to draw conclusions about the economic expediency of using shavings obtained from mechanical processing of wood as a filler for the production of double-cavity cement-and-shaving blocks.

In 1984 the first such wall block was manufactured under laboratory conditions by Trust specialists at the Oktyabrskii House Building Combine. The technology is extremely simple. It requires no costly equipment, high-temperature production cycles or chemical additives.

The production process is as follows. Dry wood shavings, cement and water are mixed in predetermined proportions in a forced action mixing machine. After this, the blocks are shaped in special molds by mechanical compaction. After being molded, they are stored in special trays, where they harden in 10 to 14 days under predetermined temperature and humidity regimes. They are stored in the open for a further 14 days, after which they can be shipped to the consumer. That is all there is to it.