

## UNPUBLISHED REPORT 1964/03

### Ben Lomond granite

*by G. B. Everard*

Polished slabs of granite from Ben Lomond, submitted by J. Dunn to the District Architect have been examined with view to suitability for use as a veneer on the exterior of buildings.

The slabs consist of typical coarse grained granitoid rock made up of quartz, felspar, and ferromagnesian minerals. However, a series of parallel fractures spaced about  $\frac{1}{8}$ " apart appears in the quartz grains. These fractures have not affected the cutting and polishing of the slabs and the rough edges of the one slab submitted with uncut edges, seem to be independent of the parallel fractures in the quartz. The rock showed normal strength under compression. Felspar showed slight carbonation and occasional small points of effervescence were obtained with acid.

In thin section, undulose extinction and anomalous interference figures, showed that the quartz had been strained. Some breakdown of felspar was also visible, but not more than is commonly observed. Some slight alteration of ferromagnesian minerals to chlorite had also occurred.

In view of the fact the parallel fractures are in the chemically resistant mineral, quartz, and that the rock shows normal resistance to compression, and can be cut and polished without grains being detached and falling out, there is not sufficient evidence to indicate future abnormal surface failure under ordinary atmospheric conditions, and the material is therefore considered suitable for use as a veneer on the exterior of buildings.

*[25 February 1964]*