

Quality building is their forte

THE company Wearne Bricks is based in of Bethlehem and manufactures concrete bricks.

Both their "block-making" machine and curing chambers are technologically advanced in producing the finest quality of bricks.

Their "block-making" machine, produced by Pan Mixers South Africa, has a capacity of 120 000 stock bricks per day.

Concrete for all applications is produced – from foundations for RDP houses to structural and pre-cast concrete for sports stadiums.

Their strength levels range from 10 MPa tot 70 MPa, and is easily modified to each client's exact specifications. Concrete is delivered to the client's site by mixer trucks, ready for

placing.

Wearne Bricks can be used for any application – from decorative paving to twenty-storey buildings.

WG Wearne Ready-mixed Concrete division is an active member of the South African Ready-Mix Association (Sarma), and meets the SABS 878 code of practice for the production of ready-mixed concrete, as well as the relevant SABS 1200G and SABS 0100 specifications.

They are the third largest overall, ready-mix concrete supplier in South Africa.

Their 14 plants are strategically located, from the Free State through to the Limpopo Province to service their clients' needs.

PROBLEMS of pop-outs and associated iron staining on unplastered clinker ash/cement brick walls in Windhoek after a particularly wet season were investigated in a study by the National Building Research Institute, Council for Scientific and Industrial Research. The photo above was taken in the Eastern Free State. This problem has been found to be common in towns such as Bethlehem, Paul Roux and Fouriesburg. The problems were found to be due to sulphurous nodules in the bricks. The nodules were the result of the burning of pyritic fragments in the coal used as fuel for the local power station, which produced the clinker ash used in making the bricks. The nodules before expansion were found to be distinctly zoned, with centres consisting of free sulphur, amorphous to poorly crystalline iron sulphides (pyrite, marcasite and pyrrhotite) and unburned carbonaceous material, enveloped by a red-coloured zone of iron oxides which was in many cases surrounded by a silicate zone. In the presence of water the iron sulphides and sulphur became oxidized to iron sulphates and sulphuric acid. A resultant large increase in volume caused the pop-outs. The sulphuric acid dissolved iron oxides in the adjacent zone, enveloping the centre zone which, when free water was available, resulted in severe iron staining in the area around the pop-out. – Article by: G.



Davies & R. E. Oberholster, <http://qjeh.lyellcollection.org/cgi/content/abstract/21/4/361>



RDP houses across the Eastern Free State are falling apart. Above is one of the homes in Bohlakong where the problem of "pop-outs" is prevalent.