ABSTRACT

ENGINEERED SELF-CLEANING CEMENTITIOUS COMPOSITES

The present invention relates to a cementitous composite specifically engineered to possess self-cleaning abilities while maintaining their unique strain-hardening behaviour and the preparation of the said composite. The cementitious composite comprises a hydraulic cement, a plurality of fibers, in particular polyvinyl alcohol fibers wherein the ratio of the plurality of fibers to the hydraulic cement is in a range from 1 to 3% by volume; a self-cleaning agent, in particular nanoparticulate titanium dioxide (TiO_2) wherein the weight ratio of the self-cleaning agent to the hydraulic cement is in a range from 0.01 to 1.

No Suitable Figure