

## FULLY SOLID WASTE ALKALI-ACTIVATED RECYCLED CONCRETE AND PREPARATION METHOD THEREFOR

### ABSTRACT

5        The present invention relates to the technical field of building materials, and particularly to a fully solid waste alkali-activated recycled concrete and a preparation method therefor. The concrete includes the following raw materials in parts by weight: 360-500 parts of blast furnace slag, 180-400 parts of recycled concrete, 90-270 parts of recycled red brick, 40-90 parts of silica fume, 30-90 parts of phosphogypsum, 240-370 parts of iron tailing sand, 350-420 parts of  
10 recycled concrete coarse aggregate, 200-400 parts of alkali activator, 10-30 parts of polycarboxylate superplasticizer, 20-50 parts of sodium tetraborate decahydrate, and 300-500 parts of water. In the present invention, through the precise proportioning and functional synergy of each component, a fully solid waste concrete solution with excellent mechanical properties, durability, construction performance and economy is provided, which has broad application  
15 prospects in the fields of green building and solid waste resource utilization.

FIG. 1