SSA (sewage sludge ash) is resulting ash from the combustion of sewage sludge, and is a method employed at some water treatment plants in order to decrease volume and hygenize the sludge. Today, SSA is with a few exceptions landfilled. As cement production is responsible for app. 5% of the total global CO2 emission, the advantage of replacing cement with a secondary resource as SSA is obvious. The focus of previous conducted research has mainly been on the chemical, mechanical properties and environmental consequences attached to the use of SSA in construction materials. (Cyr et al., 2007) Thus, this present study has focused on both the aesthetical and technical aspects of using SSA as a supplementary cementitious material. The SSA, which was tested, was taken from the wastewater treatment plant Avedøre Spildevandscenter, Biofos sited in the Copenhagen area. This ash had a high content of Fe that gives a characteristic red colour. The process of grinding SSA has shown to improve the compressive strength of SSA-containing mortar (Donatello et al. 2010). Thus, in this study SSA was grinded in 6 different intervals ranging from 0 – 10 min, and then added to the mortar mix replacing 20% of cement. The experiment revealed that the colour of the SSA-containing mortar intensified as the time interval of the grinding process increased. Each of the 6 steps within the time interval provided an additional colour tone and generated a colour scale consisting of mortar samples ranging from greyish to a more saturated red brown colour. SSA shows potential for colouring concrete, and if the aesthetical aspects such as colour are taken into account at an early