

12TH INTERNATIONAL BRICK/BLOCK Masonry CONFERENCE



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COMMENTS AND OWN EXPERIENCES ABOUT THE BLACK CORE FORMATION IN CLAY CONSTRUCTION MATERIALS

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ABSTRACT

The well-known "black core" defect which appears frequently in fired clayish construction materials has been object of wide investigation in the past. Processing conditions of the clay composition bodies as it is: the furnace atmosphere, composition of raw materials and temperature of firing are main responsible of the presence of this effect in bricks. Even more, the red-ox conditions in firing of iron componets is a critical factor in the production of the black core inside this type of construction materials. Starting grom an actual example several conditions have been tested in order to afford more information about the formation of this effect. By ussing XRD mineralogical and SEM/EDX analysis the results of mentioned experimentation is discussed.

