



CENTRO CERAMICO - BOLOGNA

CENTRO DI RICERCA E SPERIMENTAZIONE

PER L'INDUSTRIA CERAMICA

Accreditamento SINAL n. 0058

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Sede Decentrata

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VOC

Volatile Organic Compounds Emission of ceramic tiles manufactured by PORCELLAN Co LLC

As regards ceramic tiles manufactured by PORCELLAN Co LLC according to the **IEQ Credit 4.3**: "Low-Emitting Materials - Flooring Systems" of LEED Buildings Certification (Leadership in Energy and Environmental Design; LEED 2009 NC Rating System - USGBC),

It is stated that

- a) Ceramic tiles manufactured by PORCELLAN Co LLC, are obtained by an industrial process in which the firing phase is oxidant and it is performed at high temperature (ranging from 950°C to over 1200°C), depending on the type of product.
- b) During firing, in the presence of oxygen, any organic compounds in the ceramic product become oxidised (combustion), with consequent emission of combustion gases. This process can be considered completed in a range temperature from 450°C to 500°C. Above this temperatures, no organic compounds can be present in the fired material.
- c) It can be concluded that, after firing at these temperatures, ceramic tiles manufactured by PORCELLAN Co LLC:
 - are completely without VOC
 - won't give off VOC during their use, in any operating conditions.



Prof. Eng. Giorgio Timellini
Director