

Qualicer 2016 "Call for papers"

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### **Refurbishment of shopping mall floors**

The public walkways in shopping malls present difficulties not found in most floor refurbishment projects, as Mall owners wish to avoid any loss of access for their tenants and customers as this could result in claims for lost trading.

Therefore, tile refurbishment systems that can be implemented overnight, and allow public access during the day are attractive.

However, floors that have sometimes been in service for decades have usually deteriorated and present as difficult substrates that require repair or even removal before any new tiles can be installed.

This paper looks at low dust, rapid setting tiling systems that incorporate crack suppression mats that allow pedestrian access the morning after tiles are laid can be used to address the public access issues.

As mall floors present with particular "in-service" conditions that see them classified somewhere between commercial and industrial use, particular attention must be paid to aspects such as bond strength and the ability to withstand regular light wheel loading.

The flooring refurbishment system examined in this paper involves tiling over the existing flooring using rapid setting systems, it focuses on providing a new, long term and serviceable ceramic flooring that is installed after hours so as to involve minimal disruption to the public and tenants. It sets out a system, with special inspection points that minimise cracking of tiles at movement control joints. In brief, the system describes how the floors of some malls in Australia have already been re-furbished, it covers:

- a) Public and worker safety
- b) Hazard management
- c) Public and tenant access
- d) Assessment of the current floor as a substrate
- e) Tile and flooring system selection
- f) Surface preparation and dust minimisation
- g) Tenancy line detailing
- h) The installation of crack suppression mat
- i) Special tile and movement joint installation
- j) Interim protection and access programs
- k) Grouting
- l) Maintenance and post hand-over procedures

A generic scope of works is included to assist in the development of site specific specifications.