

# BELZONA CREATES "SMOOTH RIDE" EXPANSION JOINT

ID: 6363

**Industry:** Buildings & Structures  
**Application:** FPA-Floor Problem Areas  
**Substrate:** Concrete and Steel  
**Products:** \* Belzona 2211 (MP Hi-Build Elastomer) ,  
\* Belzona 4111 (Magma-Quartz) ,  
\* Belzona 4411 (Granogrip) ,

**Customer Location:** North Carolina, USA  
**Application Date:** August 2016

## Problem

Significantly, this damage results from poorly engineered expansion joints, which are unable to withstand the increased point load stresses deriving from equipment fitted with hard, small-diameter wheels. The hospital required a solution to fix the the failing expansion joint for the long term.



## Photograph Descriptions

- \* 1. Excavation of the damaged expansion joint ,
- \* 2. Concrete repaired around the expansion joint using Belzona 4111 ,
- \* 3. Application of flexible Belzona 2211 ,
- \* 4. Completed restoration of expansion joint ,

## Application Situation

The hospital expansion joint had failed and the raised edge was presenting a trip hazard, as well as promoting the accumulation of dirt and residue.

## Application Method

Application was carried out in accordance with Belzona System Leaflets FPA-5, FPA-6 and FPA-8. After excavating the original expansion joint the concrete nosings were rebuilt with Belzona 4111. After inserting backer rod into the joint, Belzona 4411 incorporating aggregate was applied over the surface of the Belzona 4111 to provide a slip reduction system either side of the expansion joint. Finally, Belzona 2211 was used to fill joint itself to create a highly elastic seal.

## Belzona Facts

Maximised throughout the US under the name of the 'Smooth Ride' project, this application has been implemented by the Belzona Carolina Distributor. Applications completed by Belzona Carolina date back to the beginning of the millennium and during this period, thousands of linear feet of expansion joints have been rejuvenated in hospitals throughout the US. The intention of the

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ISO 9001:2015  
Q 09335  
ISO 14001:2015  
EMS 509612

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“Smooth Ride” project is to eliminate the bumpy ride suffered by patients and mobile equipment stemming from damaged expansion joints. In addition, the repair eliminates the tripping hazard from failing joints, whilst simultaneously removing the issue of dirt and residue accumulation found with traditional joint installations.

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