



Reference report **Aachener Cathedral, Aachen**

**Test area Aachen Cathedral**

Designing clean entrances.

**EMCO**

**Building:** Aachener Dom, Germany  
**System solution:** emco **MARSCHALL**, emco **Clean Off**  
**Year installed:** 2020/2021  
**Partner:** F.D. Beissel Fussbodentechnik, Aachen



## Test area Aachen Cathedral

**Aachen Cathedral was founded over 1200 years ago and is therefore an integral part of the history of Europe and the emergence of Germany. Built by Charlemagne as the Aachen royal palace chapel, this sacred building has witnessed the coronations of German kings over many centuries. It has become a famous place of pilgrimage and grown into a heterogeneous complex of buildings which today is one of the main attractions of the area of Aachen.**

In 1978, Aachen Cathedral became only the second building ever to be granted World Heritage status and remains a popular tourist destination today for both believers and historians, attracting hundreds of thousands of visitors every year.

To keep the dirt brought in by visitors to a minimum and to protect the structure as an asset, the emco 3-zone cleaning system was fitted in the entrance area. The special case of the Aachen Cathedral: The Aachen Textile and Flooring Institute (TFI) designated our 3-zone cleaning system a test area. From July 2020 to August 2021, the number of visitors was recorded and the dirt levels were determined in the **emco MARSCHALL Original** (side entrances), **emco MARSCHALL Premium**

(main entrance, or Wolf's Door, and the vestibule), and **emco Clean Off** (at the base of the stairs). Over the observation period, **423,218** people passed through the entrances. TFI employees cleaned the entrance mats every week to determine the dirt levels and scanned the material to document changes in appearance.

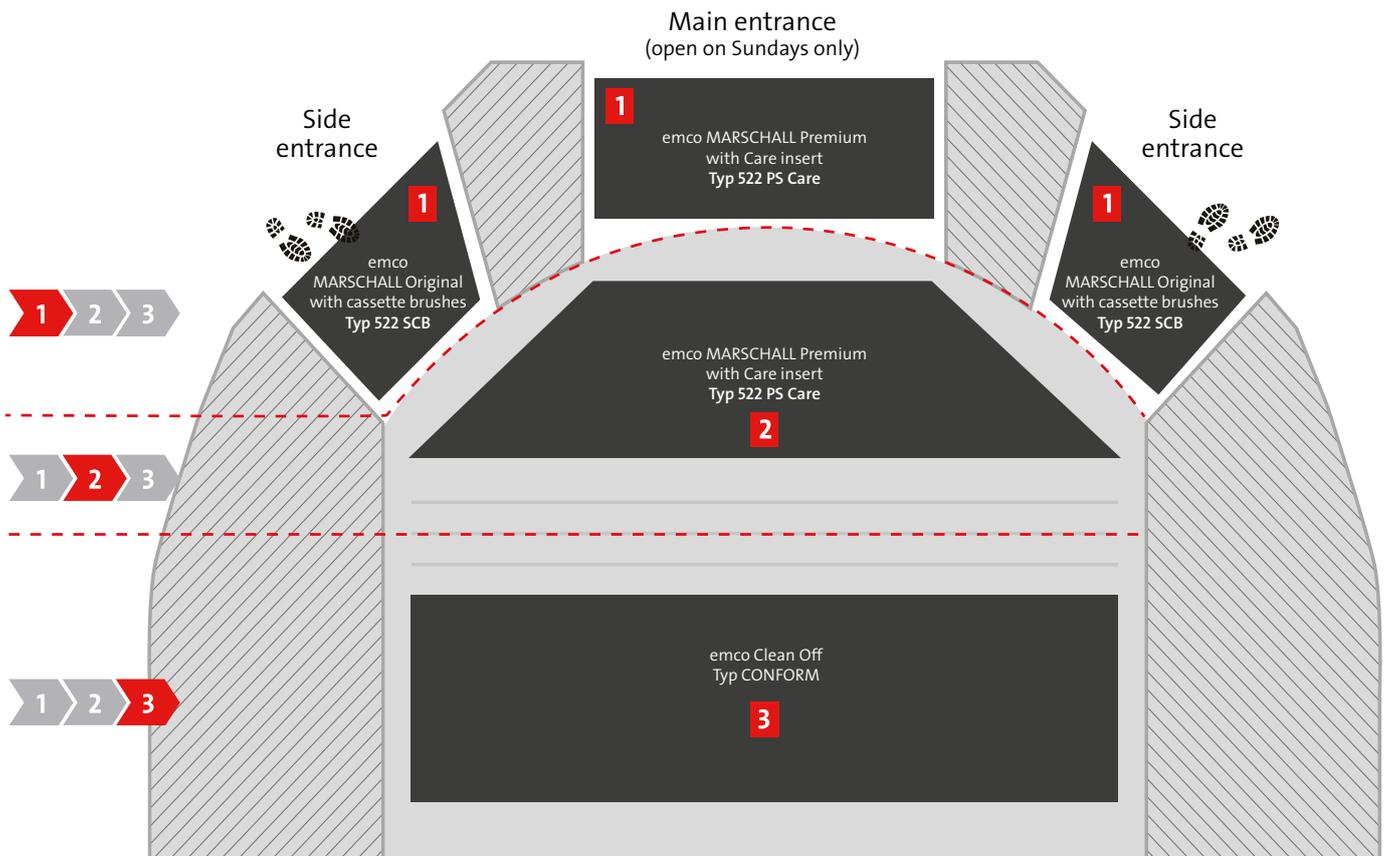
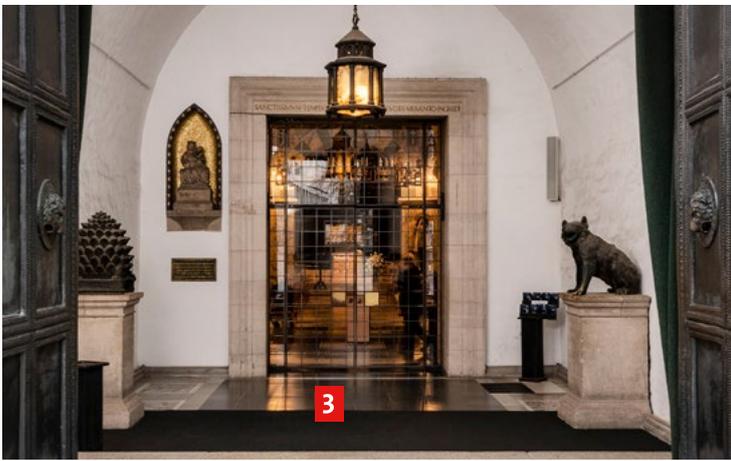
Due to the pandemic, specific routes were set up in the entrance area which influenced the dirt uptake. On average, the mats in the side entrances and exits (Zone 1) absorbed 275 g via the insert each month; in Zone 2 it was 144 g and in Zone 3 121 g. In total, the entrance mats therefore absorbed 540 g of dirt each month. However, the test did not take into consideration the dirt that could also be captured by the profile spacing.

To summarise, the findings showed that it would have been possible to reduce the quantity of dirt and moisture in Zone 3 to an even greater extent. This would have assumed that Zones 1 and 2 had been extended to improve the absorption of dirt over a longer distance. However, it was not possible to do this in the west entrance due to the configuration of the building. The detailed test report is available from [bau@emco.de](mailto:bau@emco.de)

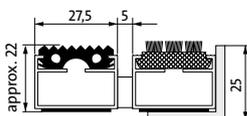
„Aachen Cathedral is lifetime's work for the cathedral master builder – it is a site that must be maintained for future generations.“

Helmut Maintz, Cathedral Master Builder since 2000

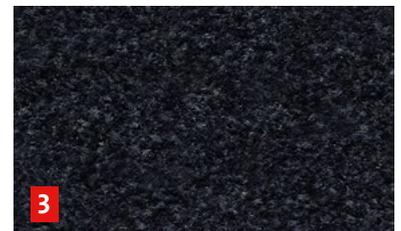
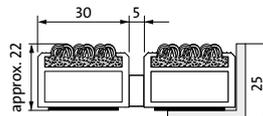




emco **MARSCHALL** Original  
**Typ 522 SCB**  
Cassette brushes black,  
rubber insert



emco **MARSCHALL** Premium  
**Typ 522 PS Care**  
with Care insert



emco **Clean Off**  
**Typ CONFORM**  
anthracite  
Material: 1/8' tufted velour 100%  
polyamide ECONYL®



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