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Project Public buildings



**HYPER
DESMO**
SYSTEM

BITUMEN MEMBRANE REFURBISHMENT
& PROTECTION SYSTEM

 **ALCHIMICA**
BUILDING CHEMICALS

Bitumen membrane refurbishment and
protection, St.John's Co-Cathedral, Malta.

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Project Description

St John's Co-Cathedral, the Roman Catholic cathedral dedicated to Saint John the Baptist, is one of the most impressive historical buildings in Malta and definitely a must-visit place of interest. It was built between 1572 and 1577 by the knights of Malta and it is well known as the "Crown Jewel of Valleta" because of the great interior/exterior baroque architecture and the great art pieces, like the Beheading of St. John, one of Caravaggio's masterpieces.

Apart from the fact that it is one of the finest examples of high Baroque architecture in Europe, it is worth mentioning that the cathedral contains nine richly decorated chapels on its two sides but also the cathedral has three clocks on one of its towers.

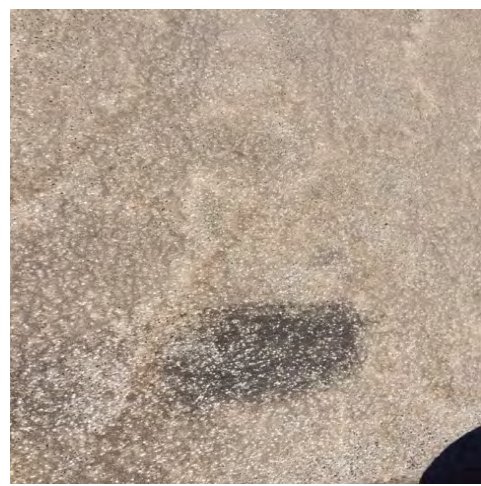


Project Requirements

Over the years 4mm reinforced bituminous membranes eventually protected the concrete roof. However, the membranes had started showing signs of deterioration and required repairs in some spots. The result of the exposure to intense elements such as fluctuating temperatures, strong sunlight and rain resulted in their aging and inevitably the harmful phenomenon of leakages that lead to substrate corrosion.

Given the importance of the monument and taking into account the sensitivity of a structure that is almost 500 years old, the application required a system that would offer advanced waterproofing performance, while being the least invasive solution, in order to not create any risks of damages while performing the works.

Based on the requirements, a seamless, fast curing liquid waterproofing application was needed as a roof repair solution. In that way, the project needed the non-humidity and water penetration of the roof deck, fire and mechanical resistance and an extended service life.



ALCHIMICA SOLUTIONS

ALCHIMICA's innovative and reliable solution for bitumen membrane refurbishment protection based on the HYPERDESMO® System is widely known as a top-quality solution that offers long life expectancy, low additional weight on the structure and high flexibility and elasticity in cold temperatures.

In order to solve the problem of leakages and renovate the building's roof the following system was applied, that provided high reflection and UV resistance, fully bondage to the substrate with detailed complexities, high elasticity and crack bridging even at low temperatures.

Local repair of the bitumen membranes with HYPERDESMO® -PB-1K

Primer application with UNIVERSAL-PRIMER-2K-4060

HYPERDESMO® applied reinforced with GEOTEXTLE-50

For solar reflectance HYPERDESMO-ADY-E in white color has been chosen for the final coat.







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