

Museum of European and Mediterranean Civilisations (MuCEM)

Marseille, France



View of MuCEM

The Project

Built on the shores of the Mediterranean Sea, the new 65€ million Museum of European and Mediterranean Civilisations (MuCEM) in Marseille has been designed to deliver exceptional resistance to the challenging and aggressive coastal conditions. Faced with salt water exposure, high water tables and fluctuating temperatures, over 5,000 m² of Grace Construction Products' Preprufe® waterproofing membrane proved the perfect solution to provide watertight protection from below the ground up.

Designed by architects Rudy Ricciotti and Roland Carta, and built by Dumez Sud + Freyssinet Sud-Est (VINCI Construction France), MuCEM sits on reclaimed land at the entrance to Marseille's historical harbour – between a 17th century fort and former cruise terminal. A spectacular 15,000 m² cube covered with a latticework reinforced UHPC concrete shell, it is the first national museum exclusively located outside the French capital and marks the year of Marseille as the European Capital of Culture.

Selection of Waterproofing

Due to its coastal proximity, structural engineers SICA and Lamoureux & Riciotti required a comprehensive waterproofing system which would protect the slab from water ingress, provide protection from salt and sulphates in the ground and preserve the lifespan of the structure. Preventing water penetration and migration around the foundations, the application of Preprufe® will protect the development and its collection and expositions many years to come.

Due to its coastal proximity, structural engineers SICA and Lamoureux & Riciotti required a comprehensive waterproofing system which would protect the slab from water ingress, provide protection from salt and sulphates in the ground and preserve the lifespan of the structure. Preventing water penetration and migration around the foundations, the application of Preprufe® will protect the development and its collection and expositions many years to come.

Preprufe® is an advanced membrane system which offered the safest and most reliable waterproofing option. Designed with synthetic adhesive layers, Grace's patented Advanced Bond Technology™ enables concrete to aggressively adhere to Preprufe®, forming a unique intimate seal which prevents any water migration between the waterproofing and the structure, substantially reducing the risk of leaks.

No other system on the market protects a substructure from the harmful effects of water, vapour and gas better than Preprufe®. It can also be applied on wet concrete and is immediately trafficable after installation, which makes for fast and easy installation. To complete the project's comprehensive waterproofing specification, Grace supplied its Bituthene® LM asphalt-modified liquid membrane to provide a continuous waterproofing barrier system between the concrete slab and diaphragm walls.

Preserving and protecting cultural buildings is essential for future generations which is why the successful application of Preprufe® at MuCEM perfectly demonstrates the importance of specifying a geomembrane which is fit for purpose, economically and environmentally sustainable and delivers waterproofing performance like no other system on the market.

PRODUCTS USED

Preprufe® 300R
Bituthene® LM

CREDITS

Client: French Ministry of Culture
Architect: Rudy Ricciotti and Roland Carta
Contractor: Dumez Sud + Freyssinet Sud-Est
(VINCI Construction France)
Structural Engineers: SICA and Lamoureux & Ricciotti

www.graceconstruction.com

Grace Construction Products Limited Ipswich Road Slough Berkshire SL1 4EQ United Kingdom
Tel +44 (0)1753 490000 Fax +44 (0)1753 490001

Adcor and Servitite are registered trademarks of W R Grace & Co.-Conn.

The information given is based on data and knowledge considered by GRACE to be true and accurate and is offered for the user's consideration, investigation and verification only. Since the conditions of use are beyond our control we do not warrant the results to be obtained. None of these statements, recommendations or suggestions shall constitute a warranty, guarantee, representation or statement of similar legal nature. No statement, recommendation or suggestion is intended for any use which would violate or infringe statutory obligations or any rights belonging to a third party. This data sheet should be checked against the latest version available from the local GRACE Representative or the GRACE website. The information contained in the latest data sheet supersedes all previously published editions. Visits to site by GRACE personnel do not constitute supervisory responsibility.

These products may be covered by patents or patents pending. Copyright 2015. Grace Construction Products Ltd 06/15

GRACE