**Queen Mary 2**

More than 30,000 square meters of Sika’s sound-reducing flooring systems were installed - Sika® Cufadan® PK-90 viscoelastic systems in combination with Sika® Cufadan Litosilo® ultra-lightweight floating flooring.

_Superlatives based on quality:_ The Queen Mary 2 is the most expensive (CHF 1.2 billion) and at 345 meters in length and 72 meters in height, the biggest passenger ship ever built in the world. Its 17 passenger decks, 1310 cabins, 2000 bathrooms, five swimming pools, athletic facilities, bars and restaurants allow for a recuperative change of pace in passengers’ lives. Some 80 000 bulbs light up their evenings and 2500 kilometers of cable make electricity available throughout the vessel.

This much-admired marvel, the flagship of Britain’s Cunard Line (Carnival Group), cuts not only through the seas at top speeds of close to 30 knots (55 km/hr), but assures voyagers utmost comfort in shuttling between Europe and America. Planning the vessel took alone one million work hours; much of that time was devoted to noise reduction, a decisive element of comfort. Comprehensive tests conducted by the shipyard showed that this challenge could best be met with flooring systems from Sika. Sika® Cufadan PK®-90, a viscoelastic flooring system, is specifically designed to dampen vibration and reduce structure-borne noise in low-frequency ranges. Such vibration-induced noise is traceable for example to engines, pounding waves, heating, ventilation, and air conditioning systems.

Loud noises in higher frequencies like howling wind, music or loud voices also pierce the atmosphere. Airborne noise is reduced by Sika® Cufadan Litosilo® floating floor systems.

The combination of these two Sika flooring systems dampens and reduces the transmission of noise over the entire frequency range. Moreover, Sika flooring is weight-saving, fire-retarding and allows for a simpler ship construction. Sika’s competence in bonding and sealing is evident throughout the ship. 6000 square-meters of teak decks and 2000 square-meters of tiles were bonded with Sikaflex®-298 and Sikaflex®-291. Moreover, Sika’s direct glazing technology, involving Sikaflex®-296 and Sikaflex®-295 UV, maximizes views, thus providing a pleasant flood of light while enhancing structural performance of the glass installations. That’s how Queen Mary 2 has turned into a superlative also for Sika: The company’s experience and sophisticated technologies make a major contribution to passenger comfort. They will have peace and quiet in the 8000-book library and the opportunity to fully enjoy their trip on the queen of the oceans.

_Courtesy of Adhesives.org_