Intumescent products now available from Hempel

Up until now, intumescent coatings were missing from Hempel’s portfolio of protective coatings, but with the recent launch of intumescent coatings for passive fire protection of steel structures in cellulosic fires, including industrial halls, public buildings, stadiums, airports and supermarkets, Hempel can now supply the full range of protective products to its customers.

At present, the intumescent range includes two, one-component, solvent-borne acrylic coatings, HEMPACORE ONE for on-site applications and HEMPACORE ONE FD for off-site applications. Both coatings provide up to 120 minutes of fire protection in cellulosic fires.

The advantages of the Hempacore range, over existing products on the market can be simply summarised as:

- **Durability and Reliability**

  Durability and reliability are important properties for an intumescent coating as the products are expected to have a long lifetime yet still perform to their designed full fire rating in case of fire. The excellent durability of HEMPACORE ONE 43600 and HEMPACORE ONE FD 43601, compared to other commercial products on the market was confirmed in a set of tests carried out according to ETAG18-2 standard. This testing, designed to simulate resistance to outdoor exposure, included accelerated exposure to UV and extreme temperature changes and was carried out on panels with non-topcoated intumescent over a standard compatible primer. The HEMPACORE ONE 43600 product exhibited no degradation, whereas the alternative commercial products either displayed pinholes and cracking or microcracking, after testing, thus confirming that HEMPACORE ONE 43600 has superior durability performance when exposed to outdoor conditions.

- **Efficiency and Flexibility**

  Either for on-site application with HEMPACORE ONE 4300, or off-site application with HEMPACORE ONE FD 43601, greater than 1,000 um/coat can be easily applied with surface dry times of 15 minutes off-site or 30 minutes on-site application, saving valuable time during construction. In addition, both coatings are certified to provide up to 120 minutes of fire protection in cellulosic fires, as determined by official third-party fire tests. In terms of flexibility, the Hempacore products are compatible with a wide range of topcoats, so fewer choices are needed to meet all challenges. Although, Hempel recommends applying a topcoat for outdoor conditions, as real life exposure and scenarios may be different to the conditions in the accelerated exposure tests, although as the testing showed, the risk of effecting performance if exposed, is minimised.

According to Lars Risum, Business Development Manager for Passive Fire Protection at Hempel, “The introduction of Hempel’s intumescent range will be extremely beneficial for customers. Now they can get the full protection solution for steel structures from us, which will make the specification and application process easier.”

These two products are just the first offerings in Hempel’s new intumescent range, and both HEMPACORE ONE and HEMPACORE ONE FD, approved to the European standard EN13381-8, are available in Denmark, Sweden, Italy, Spain, Portugal, the UK, Greece, Turkey, the Netherlands, and Belgium and newly in Germany, Poland, France, Hungary, Czech Republic and Slovakia. Both products have the CE mark, which means they can be marketed within the European Union, without the need for further testing.