



Aeternum





Long-term lasting is the main aspect to consider when a wooden substrate has to be coated for exterior use. The weather, smog, sunlight and micro-organisms present in nature cause a slow, but inexorable deterioration of a natural material like wood, which, if used to produce doors, windows, shutters, frames, garden furniture, and decking, etc. must be duly protected.

The choice falls on water-borne products for this purpose, since they are able, in comparison to solvent-based products which were mainly used in the past, to effectively protect the structure of the wood and reduce the emission of polluting agents into the atmosphere.

By using the range of water-borne products by SIRCA, an Italian manufacturer of wood coatings renowned worldwide for their quality, the beauty and quality of the wood is effectively enhanced.

The coatings are like a garment, whose quality and characteristics can effectively enhance the wood that has to be coated. To reach this goal, SIRCA has developed a series of products that are exceptionally smooth to the touch, transparent, extremely resistant to colour fading and highly protective of the cellular structure of the wood.

The Sirca R&D laboratory has developed an exceptionally long-lasting coating system, called Aeternum, including coating products which, when duly applied according to specific coating system, guarantee an extreme durability of the coated substrate for up to fifteen years.

Sirca has worked for many years with the best-known and renowned manufacturers in the sector, looking daily for new solutions and developing cutting-edge products to meet the constant demands of the market for quality and durability.

Ten years ago, Sirca undertook a development process of its own exterior coating products, working together certified laboratories, such as CATAS, to test the quality of its coating products and their duration over time.

The verification protocol for an exterior coating system includes strict chemical and physical tests carried out in external CATAS laboratories on samples of liquid paint, taken without notice from Sirca's production site, and on coated substrates painted with the coating system under certification.

This development path has led to CATAS WKI Premium certification of the water-based exterior clear system, AETERNUM, achieved by applying a single coat of tinted impregnating agent and a coat of 300 wet microns of thixotropic, tinted topcoat.

This certification is recognised Europe-wide and includes strict and stringent tests to achieve it. Convinced of the technical performance of this special coating system, Sirca extended the exposure times to accelerated and natural ageing of the Aeternum system and it was rewarded with the CATAS WKI Premium Plus certification.

The harsh chemical and physical tests were carried out in parallel, as required by the certification, both in the CATAS laboratories in Italy and in the laboratory of the Wilhem Klauditz Institute (WKI) in Germany. The two institutes, jointly issued the CATAS WKI Premium and CATAS WKI Premium Plus certificates, at the end of the internal tests and after one year and two years, respectively, of outdoor exposure of the coated substrates in natural conditions. Neither institute detected any anomalies or discontinuity of the coating film, certifying the high quality of Sirca exterior, water-borne products.

SIRCA AETERNUM

Extreme Long Lasting

The quality and the long lasting of the Sirca Aeternum range have been tested in extreme weather conditions, thanks to the AETERNUM programme which includes direct exposure of the coated joineries in different countries of the world, featuring very different weather conditions.

Sirca has exposed its coating systems to harsh weather conditions in Europe, South America, Russia, the Middle East and the Far East, where, for the last five years, have been severely stressed Sirca's special coatings.

The response of Sirca coating system is exceptional. The products used, with no maintenance whatsoever, protect the joinery like an armour, preserving its appearance and integrity.

To complete this programme, the Sirca R&D laboratory, thanks to the most advanced instrumentation of analysis and tests combined with an in-depth knowledge of the sector, has subjected the same coating systems to more stringent tests in terms of accelerated ageing, adhesion to the substrate, surface hardness, abrasion resistance and light fastness.

The result of this development project has led to guaranteeing Sirca Aeternum coating system up to fifteen years.

In support of this, the Sirca R&D laboratory has carried out internally artificial ageing tests by subjecting the Aeternum coating system to 4.064 hours of UV light exposure.

The results are surprising. The Aeternum system, the one in the central part of the picture above, resists and changes considerably less, compared to the two substrates of the same type of wood in systems of similar coatings of two Sirca's competitors.

Moreover, the Sirca's competitors coating systems have shown significant changes in gloss level and developed a superficial whitish layer; instead, the Sirca Aeternum coating system kept its technical and aesthetic characteristics virtually unchanged.



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