



Enduris™ Roof Coatings and Cool Roof Coatings

Working in a Collaborative Partnership to keep Roofs in The Netherlands Cool & Energy Efficient

Restore Confidently with Silicone

Increased environmental temperatures and high energy prices is a combination that results in hotter summers and increased cost of air conditioning. To counter this double challenge, roof-coatings are commonly utilized. White, highly reflective coatings not only keep the building cool, but they also act to concentrate the reflected sunlight onto solar panels installed on the roof-tops, increasing their overall energy yield.

There are many roof-coating solutions on the market, but when it comes to longevity, silicone-based roof-coatings have a clear edge. Silicone is inherently durable and permanently flexible. Unlike acrylic, polyolefin, asphaltic and carbon-based polymer chains, silicone is UV stable, offering the excellent long-term performance against weather and atmospheric conditions. The entire Enduris roof coating system is made from 100% silicone, allowing it to expand and contract at the same rate, helping prevent leaks that may result in mold, mildew, wood rot and rust. Restoration completed using Enduris Silicone Roof Coating can add decades to the life of a roof at a fraction of the cost of full roof replacement. It can make a real difference to the internal temperature and comfort of the building – and can result in energy savings and reduced carbon emissions from HVAC system usage.

Application Expertise to Maximize Benefits of Silicone Technology

However, these benefits can be realized to their fullest capacity only when the Enduris coating is properly installed, which requires a high degree of skill from a coatings applicator. In what follows, we discuss 3 real-world case studies from the Netherlands in which the application expertise of our partner, Cool Roof Coatings, synergized with the best-in-class product properties of Enduris to deliver long-lasting comfort and energy savings to the building occupants.



The unique properties of silicone provide Enduris Roof Coating with an array of benefits, including:

- High-solids formulation
- Waterproof
- Excellent durability
- Outstanding elongation
- One-coat application
- Limited VOC



MBO Techniek | Amersfoort, NL

Daily temperature fluctuations and long-term UV at MBO Techniek, an intermediate vocational school, experienced heat buildup issues from its aged roof. Students at the school were affected by the heat during classes and exams. The bitumen surface of the roof was at the end of its lifespan, and the building needed a full restoration.

Enduris™ 3502 Roof Coating was chosen for the project for its cool roof and UV-resistant properties, and Bitumen Bleed Blocker was used to address the strong bitumen bleeding that was occurring. The coating was applied to the 4175 m² roof surface and, even during the installation, the cooling effects were already noticeable inside the building.

Aprisco | Zaandam, NL

Aprisco was in need of a full roof restoration to solve heat buildup issues for its tenants. A photovoltaic (PV) system of solar panels was also scheduled to be installed, so the roof restoration had a tight deadline for completion.

The Enduris Roof Coating system was chosen due to its ability to be installed quickly and effectively, in addition to the proven history of the GE brand of silicones. The reflective and UV-resistant properties provided additional performance benefits for the building's PV system. Enduris 3503 and 3502 Coatings were applied to the 7.300m² aged bitumen roof and, due to product benefits such as primerless adhesion and one-coat application, the process was finished before the project deadline.



PV-solutions by Soleila & Vindo Solar

Husa Logistics | Veendam, NL

Husa Logistics needed a cost-effective solution to restore their 3 aged bitumen roofs and seal 110,000 linear meters of seams, roof edge, walls and details to prepare for the installation of a photovoltaic (PV) system of solar panels. A unique, customized spray technique was used to seal this expanse of roof seams, which needed to be complete by a deadline so the PV installation could begin. Enduris 3502 was used for 7.610m², and Enduris 3503 for 16.500m².

The Enduris Roof Coating system was chosen due to its ability to be installed quickly and effectively. The silicone roof coating is permanently flexible, allowing it to expand and contract across seams in the roof with weather fluctuations. Additionally, the proven history of the GE brand of silicones was preferred over competitor products. The coating was applied and completed before the deadline and a new application method is now available for restoration projects.

To summarize, a seamless, stable and energy-efficient coating, if applied in a suitable manner, can dramatically extend roof life expectancy, delaying the need for a costly, time-consuming replacement project. For over 50 years, professionals have trusted our silicone products to deliver durable, long-lasting building solutions that are easy to apply and fast to cure. Thus, an Enduris roof coating system continues to offer a fast, efficient and economical alternative to roof replacement.

Contact us at [gesilicones.com](https://www.gesilicones.com)

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