



GE Silicones



GE Enduris* High Solids Roof Coating

Helps Protect Shopping Center In The **Wettest Place On Earth**

The Kauai Village Shopping Center - Kapaa, Kauai - The Hawaiian Islands

*Enduris is a trademark of Momentive Performance Materials Inc.

Case Study

Sealed, safe and ready to stand up to the world's wettest conditions

Kauai is one of the wettest places on Earth – and by 2018, years of heavy rain had taken its toll on The Kauai Village Shopping Center.

Water stains and multiple leaks throughout the building were having a real impact on the tenants. The building had become a patchwork of attempted repairs – with acrylic and fabric fixes to the majority of the walls. Despite these repairs, the building was letting water in from multiple places - even the recently applied modified bitumen roof was leaking, with attempted repairs failing to prevent water from seeping in.

Identifying the problem

To identify the problem, Beachside Roofing Hawaii, a Platinum Approved Applicator for GE Silicones products, was brought in to find a solution for a lasting repair.

A thorough inspection of the structure revealed a multitude of problems that were all contributing to the water intrusion. The metal coping was severely corroded and the metal flashings were rusty, while improperly sealed laps were allowing water to seep through the roof and walls. Dozens of field repairs to the roof had blistered and were failing, with water trapped below the surface in several areas around the roof. Multiple laps across the roof and on the walls were also compromised.



GE Enduris* Roof Coating to the rescue – major repairs

The Beachside Roofing Hawaii team got to work, starting with the walls. They first removed all of the severely corroded metal coping. Walls were repaired and coated with GE Enduris high solids Roof Coating to seal them. After this, new metal coping was installed, seated in places and sealed using GE Enduris Liquid Flashing for maximum protection.

After taking on the walls, they began work addressing the multitude of field blisters. The team used a moisture meter to identify areas of trapped water under the roof – before tearing open the wet areas to assess the damage.

Affected areas were then thoroughly heat dried and sealed water tight using a new modified bitumen granulated cap sheet. The final step was to check every single lap in the roof and the walls before thoroughly resealing every compromised lap prior to applying the GE Enduris Roof Coating.



The Kauai Village Shopping Center

Record rains hit

The first stage repairs were finished just in time!

Once the major problems had been addressed (but before the GE Enduris* Roof Coating was applied) devastating rains hit Kauai. Kauai is no stranger to rain – but this was no ordinary storm. An incredible 49” of rain fell in a single day, potentially a new United States record, and caused widespread disruption and serious damage to buildings across the island.

Thankfully, the newly repaired shopping center held strong - a testament to the quality of the workmanship (and the performance of the GE Silicones sealants). Just two leaks were found, on a single vertical wall – where water had penetrated through the acrylic coated fabric and into the building.

Final steps and long term protection – GE Enduris Roof Coating

Beachside Roofing provided the roof with the protection it needed to stand up to the elements for years to come.

The team started by base-coating the entire roof with GE Enduris Asphalt Bleed Blocker to prevent staining. Anchor plates were cleared of rust prior to sealing, with anchors flushed and resealed using GE Enduris Liquid Flashing. Scuppers were sealed on all sides to protect against water back up.

The team then applied an 80mm coating of GE Enduris 3502 High Solids Roof Coating to the laps to ensure watertight performance. Pipe bases were sealed using GE Enduris Liquid Flashing, and ponding areas were given additional protection with an extra coat of GE Enduris 3502 High Solids Roof Coating.



A job well done

Beachside Roofing Hawaii did a fantastic job in really challenging conditions.

The end result was outstanding, with the final inspection finding no unprotected points across the entire roof. The Kauai Village Shopping Center is now dry and protected, and the roof and walls are ready to stand up to some of the wettest, most challenging conditions on Earth for decades to come.

Now, the tenants and building owner can relax, in the security and peace of mind that comes from knowing the roof is watertight and warranted for the next 20 years.

It's another successful project made possible with the help of GE Enduris Roof Coating.

“This project is the best roof coating installation I have inspected”

DAN LOUIS

3rd Party Inspector with Hart Consulting Group, Inc



GE Silicones

The GE Silicones family of coating and sealant products are engineered with excellence to support the ever-inventive, increasingly demanding architecture found around the world.



Air & Water-Resistive Barrier Coating

Beneath the façade, above the rest.



Architectural Coatings

Protect and enhance the building surface.



Roof Coatings

Strong, lasting roof performance.



Insulating Glass Sealants

Seal in lasting performance.



Residential Glazing Sealants

Simple, snug, and secure.



Structural Silicone Glazing Sealants

The trusted bond that lets you explore new boundaries of building design.



Weatherseal Sealants

For strong, resilient building joints.

Coat & Seal. Protect & Restore.

GE Silicones are a family of coatings and sealants used to weatherproof, insulate, and strengthen every element of the building envelope. Roofs. Façades. Glazing. And more. We put advanced and trusted innovation to work on your project. Some of our 100% silicone formulas have been part of the world's most ambitious projects. Astronaut boots on the moon. Soaring glass skyscrapers. Structures that have remained snug and secure since the 1970s. And, we make it easy. GE Silicones building envelope solutions are simple to install, and offer resilient, long-lasting protection.

Ready to get started on your next project?

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