



**PRESERVE GRANULATED ROOFS
WITH ELASTOMERIC ROOF COATING**



ITW Polymers Sealants North America

Granulated Roofing—Inexpensive and Popular

Granulated roofing was standard long before energy efficiency and extended longevity were issues. Factory-managed granulated roofing is used as the top or exposed layer in many built-up roofing systems. It is relatively inexpensive and quite popular.

Granulated roofing is available in different weights, from thin-roll roofing for homes to thick 90 pound cap-sheet for commercial roofs. The product is basically an asphalt binder with scrim reinforcement and colored mineral granules of 30-50 mils embedded into the top asphalt surface.

These granules are intended to add UV protection to the asphalt binder and color to the roof. Granulated roofing is found on both standard built-up roofs (BURs) and on some modified-bitumen asphalt roofs. This type of roof is popular because of its lower installed price (particularly the non-modified type) and because no further finishing is required once the rolls are installed.

Solar Destruction: The Down Side of Granulated Roofing

- Granulated roofs reflect very little solar energy. White granules are the most reflective color but reflect only about 20%-30% of the solar energy that strikes it; red and gray granules reflect even less.
- Granulated roofs tend to be hot in summer and capture heat that will radiate into the structure below, increasing cooling costs.
- The roof dries out because of the heat that is absorbed and the unprotected asphalt around the granules. Over time granules are released from the surface. The rate of granule loss increases, exposing ever more asphalt to solar destruction.
- As the amount of free granules increases, wind and water push them into piles in low areas on the roof. Here the granules may slow down water drainage and cause moisture to be held against the roof surface for prolonged periods, increasing the weathering damage to the surface.
- Once a granulated roof is worn out, it typically requires an expensive tear-off and replacement.



Increase the Energy-Efficiency and Longevity of a Granulated Roof

Elastek® elastomeric roof coatings can solve the problems of a granulated roof if the roof has remaining service life.

- Coating the roof will make it an energy efficient “cool roof.” (*Note: Due to the grainy surface, coated granulated roofs are slightly less reflective than smooth built-up roofs.*)
- Granules will be significantly more securely anchored for the long term. Even when the surface coating wears away, granules will still be secured.
- Applying Elastek® elastomeric coatings will help to seal lap seams and other problem areas and strengthen the roof membrane. Use Elastek® 105 Super Seal and PolyTek fabric.
- Tear-off can be deferred for many years.
- Coating a granulated roof changes it from a heat island to a sustainable, renewable roof—cleanable and easy to re-coat.
- Energy efficiency can be renewed time and again by simple recoating of the roof.
- The cost/benefit analysis would be very dramatic.
- A coated roof will ease stress on air conditioning units, extending their service life.

Granulated Roof Coating Tips and Techniques

- Thoroughly clean the roof.
- Depending on the age and porosity of the existing roof system, more coating may be required to achieve the proper mil thickness for warranty. A minimum measurable final thickness of 20 mils DFT is required to qualify for a material warranty.
- If spraying, the first coat should be back-rolled to work coating into the roof surface.
- An asphalt emulsion can be used as an economical, pore-filling primer. If used, asphalt emulsion must be allowed to cure for 1-2 weeks in warm weather, then rinsed and allowed to thoroughly dry prior to application of elastomeric coatings. Care must be taken to coat the black emulsion before the sunlight raises the surface temperature above 115°F.

Note: New roof systems must be allowed to properly cure before coating can be successfully applied. Curing time can vary from 30 to 180 days, depending on type and manufacturer.

More Information

For more information about preserving granulated roofs, contact us toll-free at 1-877-ELASTEK. More information about roof coating and the recommended application procedures to follow for optimal performance can be found on our website, www.elastek.com.