TECHNICAL BULLETIN

USE OF ROOF WATER RUNOFF

Homeowners may want to use their roof water runoff for various domestic or household purposes. Asphalt shingles, including those containing algae-resistant copper granules, may be considered safe in terms of groundwater and leachate contamination (State of Washington Research Study – Roofing Materials Assessment[1]). In addition, the 3M Company has conducted studies showing the quantity of copper released from a roof containing copper granules is "minimal in concentration, and no adverse effects to the environment are anticipated from its use."[2] However, all roofs, regardless of the materials used, collect contaminates from the environment that may render the runoff water unfit for human consumption. These contaminates may be airborne dirt and dust, fecal remnants from birds, squirrels, or other animals, etc.

Numerous programs have been conducted over the years to study the quality of rainwater from roofing, and in particular, asphalt roofing shingles. One such study, from Rutgers Agricultural Experiment System[3], found that the use of rainwater met most water quality standards, both state and federal, except for E. coli standards. For this reason, Malarkey Roofing Products® recommends roof water runoff not be used for watering gardens.

In the event homeowners decide to move forward, there are instructions on the internet, including the Rutgers study that give guidelines for treatment of the water with chlorine bleach before use. Most recommendations found online also advise the treated water not be applied to plants, but to use drip irrigation or a similar system where water is applied directly to the soil. Testing for E-coli may be required for community or school gardens. It may not be practical for individual households to test for E-coli.

Contact Malarkey Technical Services with questions at (800) 545-1191 or (503) 283-1191, 7:00 am to 5:00 pm, Pacific Time, or email us at malarkey.technicalinquiries@amrize.com.

[1] https://fortress.wa.gov/ecy/publications/documents/1403033.pdf
[2] 3M Products Environmental Data Sheet Scotchgard™ Algae Resistant Roofing System, 2004
[3] https://extension.rutgers.edu/sites/default/files/pubs/fs1218.pdf

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