



# SURE-SEAL<sup>®</sup>

STORMWATER  
RETENTION SYSTEM



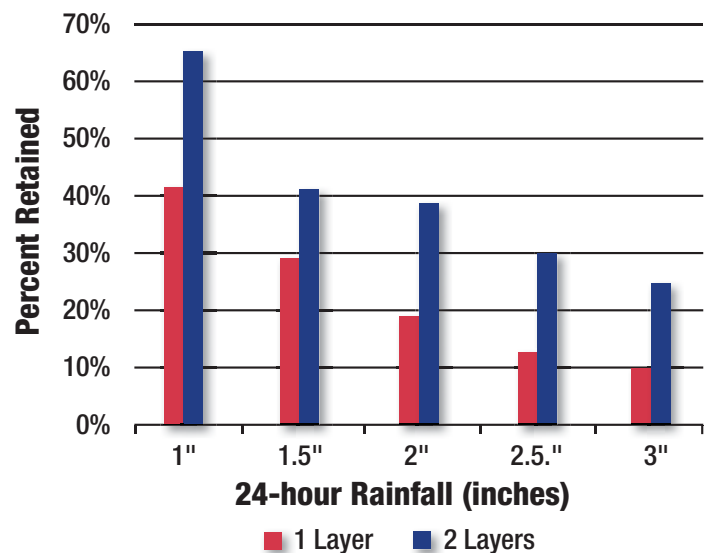
## Carlisle's Stormwater Retention System

Stormwater management is a growing concern among building owners, especially in urban environments where many stormwater and sewer systems are outdated and unable to handle heavy rain falls. A Ballasted Stormwater Retention roof system from Carlisle can retain up to 70% of the water from a 24-hour rain event, offering building owners and developers an economical alternative to costly stormwater collection basins and associated land requirements.

During a heavy, one-inch rainfall, over 6,200 gallons of water would fall onto a 10,000 ft<sup>2</sup> roof. Carlisle's Ballasted Stormwater Retention System using two layers of moisture retention mat could retain up to 67%, or 4,177 gallons. This provides serious relief to local stormwater and sewer systems, while only adding a little over 3 lbs of weight per square foot of roof area.

## Benefits of a Carlisle Stormwater Retention Roof System:

- Retain as much as 70% of the water from a 24-hour rain event
- Easy to install
- Cost effective
- Environmentally friendly
- Ballast can be reused in reroofing applications
- EPDM membrane is 100% recyclable
- Can contribute toward five(5) possible LEED<sup>®</sup> credits



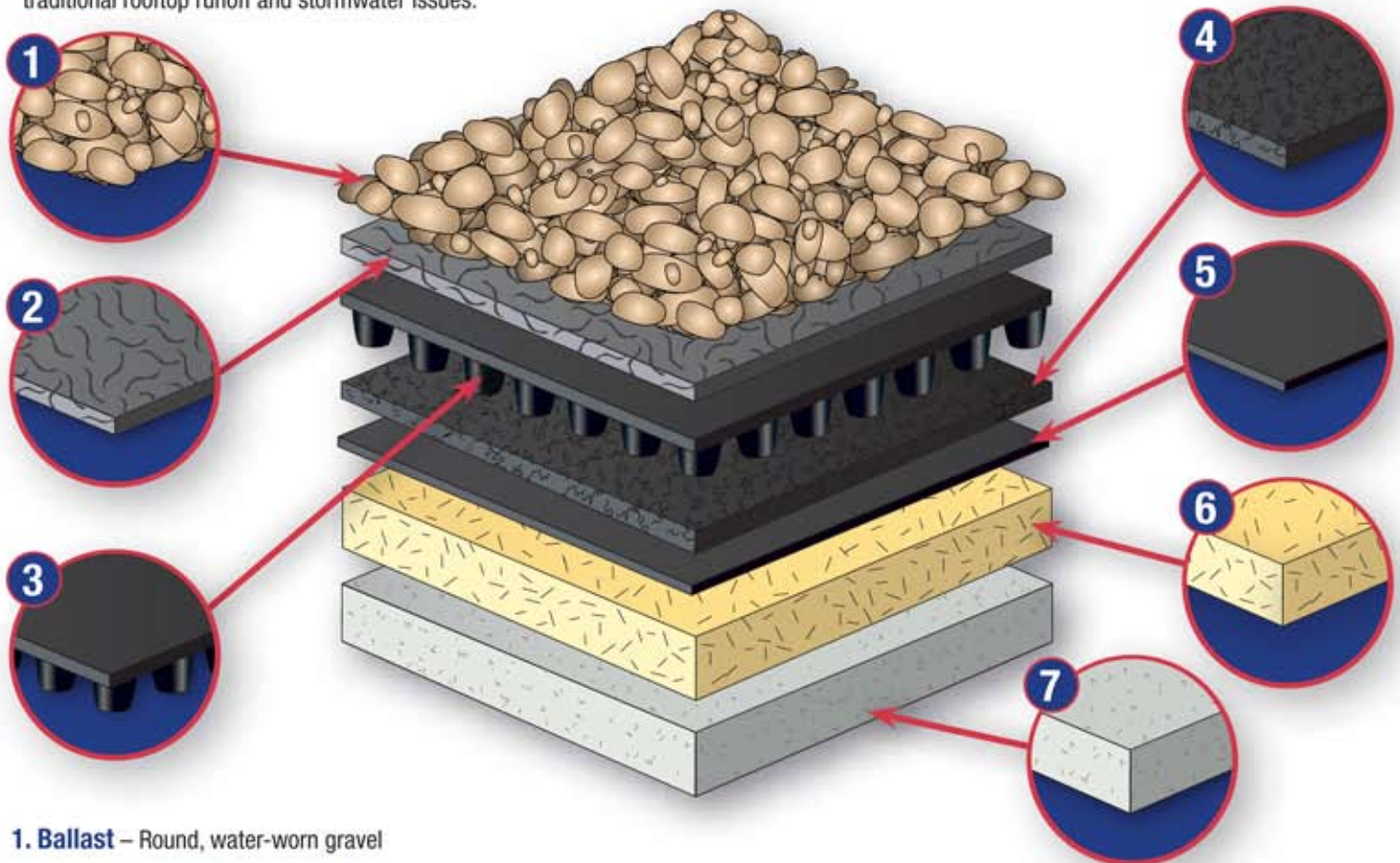


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## Carlisle's Ballasted Stormwater Retention System Components

Carlisle's Ballasted Stormwater Retention roofing systems consist of proven materials that have a record of providing long-term performance and protection. When combined into a comprehensive system, these individual components create a dependable, long-lasting solution to traditional rooftop runoff and stormwater issues.



**1. Ballast** – Round, water-worn gravel

**2. Carlisle Moisture Retention Mat** – A nominal 0.3"-thick mat composed of needle-punched, recycled synthetic fibers, designed to retain moisture. Carlisle Moisture Retention Mat is available in 12' x 60' rolls.

**3. Carlisle MiraDRAIN® GR9200 Drainage Board** – A high-performance retention/drainage composite consisting of a three-dimensional, high-impact polystyrene core with pierced holes. The lightweight drainage composite is available in 4' x 50' rolls.

**4. Carlisle Protection Fabric** – Carlisle Protection Fabrics are extremely tough non-woven polypropylene fabrics designed for use as protection courses over Carlisle waterproofing membranes. All Carlisle protection fabrics are available in 40" or 150" widths by 200' lengths.

**5. Carlisle Sure-Seal® EPDM Membrane** – Available in a variety of thicknesses, lengths and widths, Sure-Seal EPDM membranes may be used for both new and reroofing applications. Carlisle also offers 36 different EPDM membranes with Factory-Applied Tape (FAT™) for improved performance and more cost-effective installations.

**6. Carlisle Polyisocyanurate Insulation** – Featuring the highest initial R-value per square foot of any roofing insulation, Carlisle's polyiso can help building owners drastically reduce their energy costs. Carlisle offers both flat and tapered polyiso boards in various thicknesses, making it an ideal choice for virtually any roofing project.

**7. Approved Roof Deck** – The building structure must be capable of withstanding the total weight of the specified system, as well as construction loads and live loads, in accordance with all applicable codes.

### Investing in Roofing Solutions for Over 45 Years

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