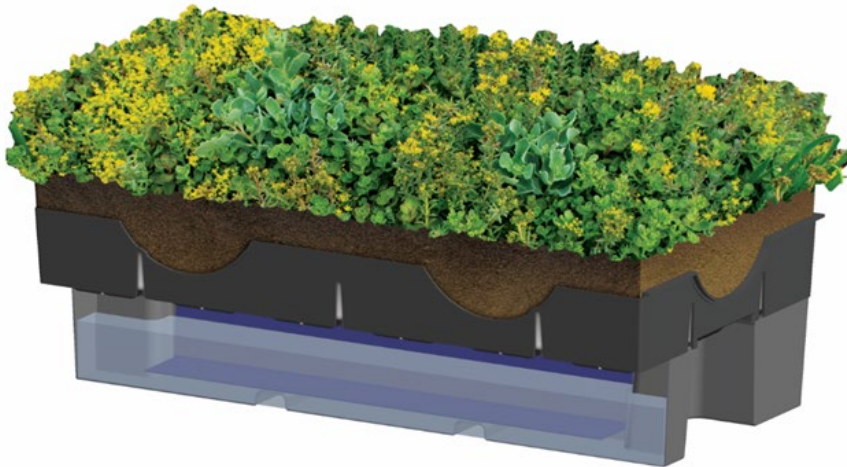




## RoofBlue® RETAIN™ Saves Water and Enhances Plant Growth!



RoofBlue®  
RETAIN™

During 2021, Dr. Brad Rowe's study quantified RoofBlue® RETAIN™'s effectiveness with stormwater retention. This year we tested vegetated modules of different depths with and without RoofBlue® RETAIN™. We compared plots of modules-only vs. modules + RoofBlue® RETAIN™, with and without irrigation (irrigation applied **only** when wilting was observed at 8 am, and only at moisture holding capacity of each module type. The field test took place in Western Michigan from May – October of 2022.

### RoofBlue® RETAIN™ Findings:

For plots that were irrigated, we observe that the use of RoofBlue® RETAIN™ led to:

- **Lite** (50% reduction in irrigation)
- **Standard** (78% reduction in irrigation)
- **Deep** (43% reduction in irrigation)

We found between 37-123% increase in biomass for non-sedums (grasses and forbs) depending on the module used. And for the **lite** modules we found 42-57% increase in sedum biomass.

Plant growth for the grasses and forbs in particular were higher in the plots with RoofBlue® RETAIN™. The **standard** and **deep** modules that were not irrigated showed the biggest percent increases in plant growth when RETAIN was added.

### Unirrigated

### Irrigated



**Lite module system.** Left panel is unirrigated. RETAIN showed 57% increase in sedums and 50% increase in non-sedums. Right panel is irrigated. RETAIN showed a 42% increase in sedums and 101% increase in non-sedums.

### Unirrigated

### Irrigated



**Standard module system.** Left panel is unirrigated. RETAIN showed 1% increase in sedums and 78% increase in non-sedums. Right panel is irrigated. RETAIN showed 12% decrease in sedums and 37% increase in non-sedums.

### Unirrigated

### Irrigated



**Deep module system.** Left panel is unirrigated. RETAIN showed 35% decrease in sedums and 123% increase in non-sedums. Right panel is irrigated. RETAIN showed 25% decrease in sedums and 39% increase in non-sedums.

\*The decrease in sedum biomass is attributed to the crowding out of sedums by non-sedum plants

These promising results in Western Michigan show that RoofBlue® RETAIN™ has the potential to lower irrigation requirements, while increasing plant growth in your upcoming roofing project!

