

Green Roof Project Fact Sheet

What is the East Middle School Green Roof and why is it being installed?

- The EMS Green Roof is an “extensive” (soil depth of less than 6”), modular, tray-based, vegetated roof system that is expected to reduce rain water run-off and Improve the thermal & acoustic insulation qualities of the roof.
- The project has been initiated and developed entirely by the East Middle School Global Impact & Awareness Club, a student club focused on improving the environment.
- The project is funded through a \$5,000 grant secured by the students from the American Forestry Association’s “Project Learning Tree” GreenWorks! program, funds from student councils throughout the Brownsburg Community Schools, matching funds from the district itself, and the generous in-kind donations of many groups and individuals.
- Students and adults are placing 196 trays, each 2’ square and 4 1/2” deep, in three groupings over the school’s Media Center. The total roof area covered by the system is 784 square feet. The existing roof membrane is protected by a woven mesh sheet, separating the roof membrane from the trays.
- The plants used in the trays are a mixture of sedums, a drought tolerant plant type that includes over 400 different species. Sedums store a comparatively large amount of water within their leaves. Once the plants mature, no irrigation is expected to be required.
- The modular tray system replaces a portion of the existing stone “ballast” originally installed as part of East Middle School’s roof system. A structural engineer has confirmed the capacity of the building to support the green roof system.
- The modular green roof tray system is being installed with assistance from the original roof system manufacturer and installer.
- Following the installation of the green roof system, monitoring equipment will be installed to verify the roof system’s impact on rainfall, temperature and other characteristics of the roof.
- Data from the green roof area will be compared with data from an adjacent and identical existing roof area to verify the impact of the Green Roof system.
- If data from this project verifies the expected impact of the green roof, significant costs may be saved in the construction of future school buildings through reductions in storm water systems, while simultaneously improving the environment.
- Later this school year a curricular program will be developed so that other students can learn how the Green Roof was developed and installed, and what impact the Green Roof has had on the environment around East Middle School.

Brownsburg East Middle School—Global Impact & Awareness Club

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The
East Middle School Global Impact & Awareness Club
appreciates the generous support of the following groups and
organizations in making this student-led project a reality:



GREENGRID®



Blackmore & Buckner Roofing, LLC

**Brownsburg Community
School Corporation**

**Brownsburg East Middle School
Parent Support Group**

Lynch, Harrison & Brumleve, Inc.

Tucker Water Express

**The many student and adult
volunteers that have donated their
time and effort on this project.**