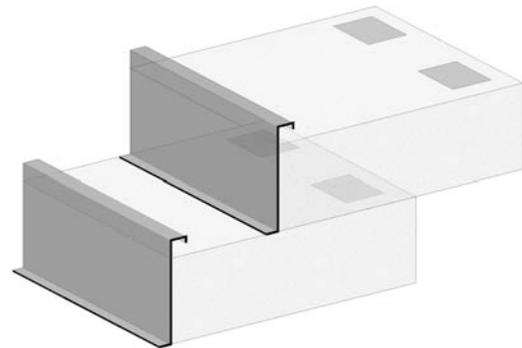


Innovative Durafill™ Geofoam based Stadium Savers provides a better tiered seating platform system



Durafill planks with facia screeds, stacked with connector plates

Project:

Stadium Savers is an innovative tiered seating platform system growing in popularity for a variety of applications such as movie theaters, auditoriums, school gymnasiums, churches and other tiered structures.

The Stadium Saver system can be adapted to any tiered seating specification, and is regularly used for either straight or radiused tiers, in both new construction and renovation projects.

Product:

The tiers are formed by stacking custom cut or contoured Durafill Geofoam blocks in the desired seating configuration, directly on a flat concrete or prepared subsoil floor. The blocks are stacked layer by layer until the entire tiered layout is formed.

Durafill is ultra lightweight expanded polystyrene (EPS) geofoam blocks with unmatched weight-to-strength load bearing and compressive resistance characteristics.

Project Participants:

Material System Provider Stadium Savers LTD
Dick Murphy – President
Bill Brunner – Director
Grand Rapids, MI

Durafill Geofoam Manufacturer Plymouth Foam Inc.
Doug Wehrwein – Senior Account Manager
Plymouth, WI

Application:

The entire Stadium Savers system consists of Durafill, a series of metal risers and brackets, a reinforcing mesh, and poured concrete. No special tools or welding are required. The process:

- The Durafill blocks are custom cut to the exact drawing specifications, clearly coded for exact placement within the configuration, stacked on the truck so that the first block off is the first block placed, and delivered to the site on the day that installation is to begin.
- The Durafill blocks are stacked in place and secured with connector plates.
- Metal risers or facia screeds are firmly affixed to the front vertical surface of the Durafill blocks, providing additional structural integrity and creating the horizontal forms on to which the concrete is poured. The risers can be of any height.
- Depending on the design, forms for stadium steps and handrails may be added.
- A layer of reinforcing mesh is often applied, and 4 to 6 inches of concrete is poured over the horizontal surface of the Durafill blocks, proceeding from the top row to the bottom.
- Once the concrete is dry and finished, any seats, bleachers or other attachments are affixed to the concrete and/or the metal facia screeds.

Timeframe:

The Stadium Savers system has been used for movie theater construction since 1997. In the last several years it has emerged as a leading option for other tiered seating projects, and now theaters are no more than half of all Stadium Savers projects.

Some of the prominent theaters that have used Stadium Savers include Alliance Entertainment, All Star Entertainment, American Family Entertainment Centers, B & B Theatres, Cinemark, Colorado Cinemas, Coming Attractions Inc., Goodrich Quality Theaters, MJR Theatre Services, Muller Family Theatres, and Premiere Cinemas



The Challenge:

Movie theaters, schools and any other platform seating projects, whether new construction or renovation, typically have tight budget parameters and limited timeframes in which to complete construction.

Stadium Savers has gained preference because it provides a tiered system of equal or greater structural integrity to alternative tiered seating platform systems, at less cost, with expedited construction timeframes.

Concrete-based methods such as dirt backfill, structural steel and stringers, precast concrete, uni-strut structural steel, and light gauge metal and metal studs all have specific benefits. None, however, install as quickly as Stadium Savers, and most are more expensive and involve far heavier materials.

In order to prepare a more competitive bid on tiered platform projects, contractors often substitute Stadium Savers for the method outlined in the specification. Once the merits of the Durafill geofoam system are reviewed, the substitution is usually accepted.

Performance

Stadium Savers and Durafill geofoam provide numerous benefits:

- Construction time is expedited to such a degree that, opposed to other systems, contractors typically install the tiers last, allowing tradesmen to install ceiling and mechanical fixtures from level ground without obstacles.
- The system involves far fewer parts, and requires no time or expense to form and pour the vertical concrete surface.
- Durafill provides a solid acoustical foundation rather than the hollow sensation created by metal stud systems, and equal or better structural integrity to all other systems.

- The Durafill specified in most jobs weighs no more than one pound per cubic foot, creating a significant weight savings. This can be especially valuable in minimizing the weight burden in seating spaces built above ground.
- In addition to the savings on labor, Stadium Savers delivers a 5-50% savings on materials over alternative systems.

Product Specs

- Durafill 15; 1.0 lb. nominal density per cubic foot
- 16 Ga. metal facia screeds
- The average new construction movie theater complex of 15 to 18 screens could use between 50,000 and 80,000 cubic feet of Durafill. This equates to 18 to 28 truckloads of Durafill delivered to the site "just-in time."
- For more information see www.stadiumsavers.com

Common Applications for Durafill Geofoam:

Durafill has very low density, good insulation, low hydraulic conductivity, and strength and deformation properties that complement soil behavior. It is suited for a wide range of geotechnical engineering applications including:

- Minimizing surface load burdens while maintaining compressive strength in a variety of building and renovation construction projects
- Lightweight fill for building and road construction on soft ground
- Roadway and runway sub-grade and foundation insulation
- Slope stabilization
- Retaining wall and abutment backfill: lateral pressure reduction
- Landscape design