

**Case Study** Brewer's Hill Natty Boh (2004 /2005) <http://www.greenroofs.com/projects/pview.php?id=374>

Brewer's Hill Natty Boh project was one of the first green roofs in the Baltimore area with plastic containers, planters or so called modular green roof system. Growing media and plants are placed into a series of black plastic boxes (modules) and then placed directly or with an underlying protection fabric on the roofing membrane (waterproofing).



This is how the empty module looks like:

The 8 holes at the bottom drain the module which is simply filled with growing media.



This is how the modules looked like before they were shipped.



**GREEN ROOF TECHNOLOGY**  
DESIGNING THE EXTRAORDINARY

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Loading and shipping to the construction site:



Lifting to the roof top:



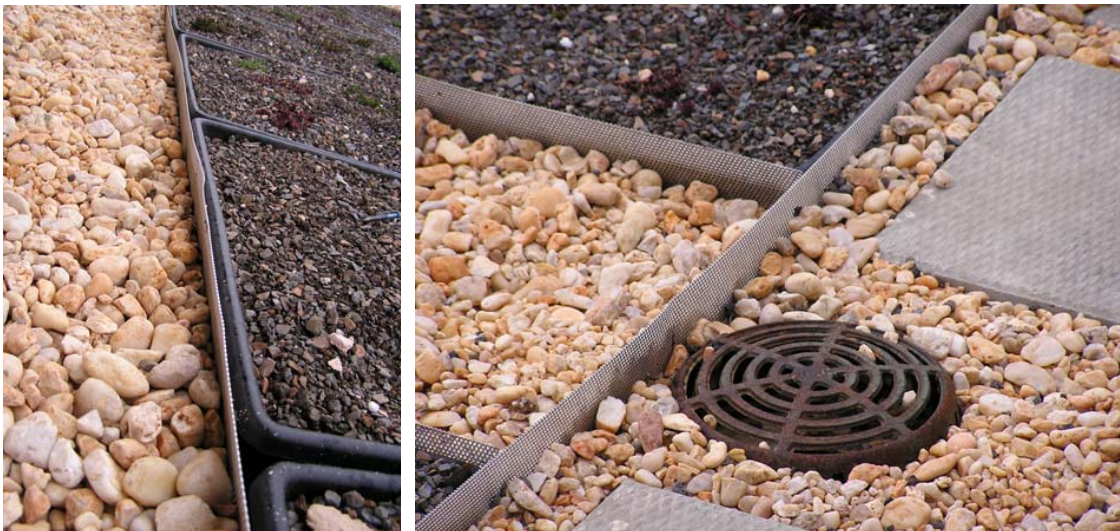
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After Installation:



Details after installation:



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One Year after installation:



Obviously some of the modules don't drain anymore and green roof plants suffer.



Open gaps and insufficient protection of the roof membrane.



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Aluminum edging falling apart and protection fabric not UV stable.



#### Planter Systems or Modular Systems:

- Double handling of materials e.g. growing media
- Heavy and difficult to move on the site.
- Hard to move after installation.
- Creating potential damage to the water proofing during installation and later movement.
- Visible borders boxes.
- Potential damage when maintaining.
- Lifespan of plastic is unknown.
- Unwanted plants (tree seedlings etc.) grow better in between the trays and out of the gaps.
- No reliable drainage (in and outside the box).
- No reliable detail solutions.
- Expensive and difficult to maintain.