

DECEMBER 2009

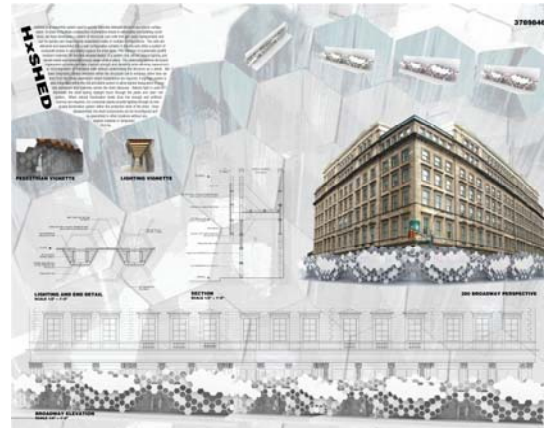
AENA is proud to present the entry for the 2009 urbanSHED International Design Competition. The goal of the competition was to challenge the design community to create a new standard for sidewalk shed design and develop a prototype for New York City.

AENA presented *HxShed*, a scheme based on a modular system composed of structural cast cells that are easily transported and quickly and economically assembled onsite. The pre-fabricated nature of the *Hxshed* makes the design of the shed flexible and allows for multiple configurations that are site specific. The cell configuration is reinforced by a secondary structural system that is built with composite planks and supports the vertical loads of the shed and also protects pedestrians from possible construction debris.

The selection of sustainable graffiti resistant materials for the cells allowed the design of a system that maximizes natural lighting and avoids waste and excessive energy usage while in place. The underlying beehive structural organization provides nature inspired strength and durability while allowing replacement or reconfiguration of individual cells without undermining the structure as a whole.

Natural light is used to illuminate the shed during daylight hours through the plank and open cell system but when natural illumination levels drop an artificial source located within the protective deck of the shed is activated and provides lighting through an integrated illumination system. Signage was also incorporated within the cell and plank system to allow lighted designation of property addresses and business names the shed obscures. Once disassembled, the shed components can be reconfigured and re-assembled in other locations without any wasted material or temporary shoring.

In order to help *green the city*, AENA created planted elements within the structural cells to enhance the pedestrian experience and foster an improved urban environment for those that utilize our public infrastructure. Enhancing quality of life in the City and achieving sustainability goals were the primary design principals behind our proposal. Our modular approach allowed a practical and economical solution that could be assembled in varied site conditions and re-used to achieve the goals we established for our submission and that we apply to all of our work.



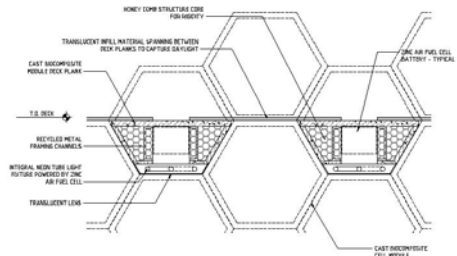
Presentation Board.



Front Elevation.



Vignettes.



Detail.



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