



# NEW GREEN WALL IN CHICAGO'S LAKEVIEW NEIGHBORHOOD FEATURES A 4,740-SQUARE-FOOT PROJECT AND USES HARVESTED RAINWATER

BY AMBER PONCE AND DAVID AQUILINA

Big development projects in dense urban areas bring big challenges, especially in historic areas of a major city. Local residents and business owners often have concerns about how the scope and style of a project might affect the character of their neighborhood.

There are rules and regulations to follow. Novak Construction faced these challenges in the re-development of the historic Ashland-Belmont-Lincoln intersection in the Lakeview neighborhood of Chicago, where they constructed a building for a new 75,000-square-foot Whole Foods Market store. A LiveWall green wall proved to be important for helping Whole Foods' new Midwest flagship location fit into the neighborhood.

"The living wall represents what Whole Foods is all about: organic, natural, and intimately tied to the neighborhoods we serve. It complements both the new landscaping added outside the store as well as the area's existing landscape," said Nick Aholec, construction project manager, Midwest Support Office, Whole Foods Market.

The 10-foot high green wall totals 4,740 square feet, and is divided into three sections. The north section is 251 feet long, the south section is 179 feet long, and the west section is 44 feet in length. The LiveWall system's modular planters, which are high-impact, UV-resistant, architectural quality moldings, were manufactured in a custom brown color to harmonize with the building's exterior. Based on an analysis of the anticipated patterns of sun and shade on the different sides of the building, a customized plant selection was developed for each section from a palette of seven different perennials. In total, the green wall contains more than 5,000 plants.

The City of Chicago traditionally has been skeptical about outdoor green walls and reluctant to approve them. Many green wall systems confine plants to small pockets or pouches with limited amounts of growing medium. In Chicago's hot summers, they dry out quickly, increasing the need for irrigation, which local city officials consider a waste of water.

In contrast, LiveWall grows and sustains plants in modular planter boxes engineered to provide significant growing medium. With more growing medium, LiveWall retains more water, reducing irrigation requirements.

LiveWall installations start with attaching its vertical furring tracks on the building wall. They provide a framework for fastening the other components that form the system. They also establish air space between the wall and the system for ventilation. Horizontal aluminum rails, with conduits that bring water to each planter box, are affixed to the tracks. The molded modular planter boxes then slide into place along a slot in the rails. Finally, separate liner inserts, reusable plant containers with growing medium and pre-grown nursery plants, drop into the planter boxes. For outdoor installations, the system uses precisely metered spray nozzles for irrigation to water plants much like natural rain.

The Whole Foods green wall is combined with an underground system that captures and stores stormwater from the rooftop. Water flows from the roof drains down into three Vortex filters, and the clean water is then gravity fed into a cistern and used to irrigate the green wall. This innovative solution enabled the project to meet the city's stormwater management requirements and add the green wall.

"The neighborhood got a beautiful vertical landscape," said Michael Berkshire, green projects administrator for the City of Chicago. "And it uses rainwater, not city water, for irrigation."

This green wall provides an exceptional amenity for the building and the neighborhood while conserving potable water. Facing three directions, it will yield valuable information about plant adaptability and survivability in the Chicago climate for years to come.

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*For more information see the youtube video at: <https://www.youtube.com/watch?v=8OfYrFxFuM&feature=youtu.be>*

"THE NEIGHBORHOOD GOT A BEAUTIFUL VERTICAL LANDSCAPE, AND IT USES RAINWATER, NOT CITY WATER, FOR IRRIGATION."

- MICHAEL BERKSHIRE

## PROJECT SUMMARY OUTLINE

- › NAME OF OWNER: Novak Construction Company
- › NAME OF PROJECT: Lakeview Whole Foods Market
- › INSTALLATION DATE: March 2017
- › NUMBER OF PLANT VARIETIES: 7
- › NUMBER OF PLANTS: 5,130
- › PLANT PALETTE: Perennials
- › SIZE IN SQ FT: 4,740
- › DIMENSIONS: Three sections North, South and West... North: 251' x 10', South: 179' x 10', West: 44' x 10'
- › SLOPE IN DEGREES: Zero
- › WALL ORIENTATION: North, South, and West
- › LIGHTING: Outdoor Natural Light
- › PARTICIPANTS OF RECORD:
  - OWNER, DEVELOPER, GENERAL CONTRACTOR: Novak Construction Company
  - TENNANT: Whole Foods Market
  - ARCHITECT: Gensler
  - GREEN WALL MANUFACTURER: LiveWall
  - PLANT SUPPLIER: LiveWall
  - INSTALLER: Classic Landscape, LTD
  - MAINTENANCE: Intrinsic Landscaping