



CUSTOMER OVERVIEW:

The New York City Department of Parks & Recreation represents over 30,000 acres of land, which includes properties like Coney Island Beach, Central Park, and community gardens. They also operate multiple athletic fields, playgrounds, basketball courts, tennis courts, recreational facilities, and historic monuments. Their goal is to create and sustain thriving parks and public areas for the residents of New York.



The Story

The New York City Department of Parks & Recreation needed to rebuild its Coney Island Boardwalk at Brighton Beach. The materials for the project needed to have safer, stronger properties while remaining environmentally friendly. NYC Parks wanted a material that obtained a traditional look and feel while maintaining the city's social responsibility on reducing deforestation.



“Recycled plastic lumber fared better during Superstorm Sandy and it has a much longer life expectancy in high-pedestrian traffic areas than hardwoods, which showed deterioration, warping, splintering, and mold within a few years.”

New York City Department of Parks & Recreation



The Challenge

Finding the best material to cover Coney Island Avenue and Brighton 15th Street was of the utmost importance. NYC Parks reviewed multiple materials from softwoods like southern yellow pine to domestic hardwoods like maple and oak and other materials like recycled plastic lumber and concrete. They evaluated these materials across a number of features including availability, lifecycle, the cost to build, and replacement cost. NYC Parks reviewed other boardwalks that had used similar materials for their analysis as well and found that within a few years, domestic hardwoods developed signs of deterioration, warping, splintering, and mold. Another factor for consideration was the substantial amount of materials NYC Parks would need to complete the project. Utilizing hardwoods could destroy over 6,000 acres of tropical rainforest and destroy 45,200 acres to reconstruct the boardwalk altogether. Due to these kinds of issues, NYC Parks would need to consider frequent repairs, closing down the area, and the extensive costs of doing so.



The Solution

After analyzing the available material options, NYC Parks determined recycled plastic lumber would be the best choice for rebuilding the Coney Island boardwalk. The estimated lifecycle for recycled plastic lumber is 20 years which provides a long-lasting solution that wouldn't need constant repairs. Plastic lumber also has similar aesthetics to wood and will not rot, deteriorate or splinter like traditional wood materials.



The Results

Recycled plastic lumber by Tangent has been durable, remained resilient, and continues to last through whatever environmental conditions may come its way. Recently, the Coney Island boardwalk endured the wrath of Superstorm Sandy and the material fared better than could have been expected.

Coney Island Boardwalk Reconstruction at Brighton Beach. Reconstructing the Coney Island Boardwalk at Brighton Beach : NYC Parks. (n.d.). <https://www.nycgovparks.org/about/whats-happening/coney-island-boardwalk-reconstruction-at-brighton-beach>.