

# CASE STUDY

## High Performance Homes



### PROJECT OVERVIEW

#### PROJECT

Residential Home in Seattle's Jackson Place Neighborhood

#### BUILDER

Dwell Development

#### LOCATION

Seattle, WA

#### RESULTS

Post-Leakage: 0.22 ACH50

Achieved a 45 HERS index pre-solar (30% better than code). Reaching .22 ACH is now easy and affordable.

## Dwell Development is Reinventing Housing, & Using AeroBarrier to Achieve 0.22 ACH50

Seattle is famous for homegrown companies that reinvent and disrupt industries, such as Starbucks and Amazon. Now, Dwell Development is reinventing housing and using AeroBarrier in the process.

Seattle's Jackson Place is the location of a single-family sustainable new build, by Dwell Development, called King Street. The lot is the site of a home built in 1929, and the location is within walking distance of downtown, the Seattle streetcar, Beacon Hill, and Amazon headquarters.

A trend for the neighborhood, developers generally scrape a lot and build five or six townhomes. Anthony Maschmedt, Principal of Dwell Development says, "Rather than be like everyone else and scrape the entire lot, we chose to preserve the existing home and build a single-family home where the garage was located." Scraping the entire lot and building multiple units may lead to greater profits, says Maschmedt, "from an economic standpoint other builders are going to say we are leaving money on the table, and we



AeroBarrier is the top project that I've seen in the past ten years for making these homes healthy and more energy efficient. It means faster projects. It means saving money. But also it means better homes. It will literally change the marketplace.

**Tadashi Shiga** – Owner  
*Evergreen Certified*

**AEROBARRIER®**  
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probably are. But we look at the big picture. We look at the neighborhood and its people. We are looking at it from a community standpoint and the right thing to do.”

While other builders in Jackson Place tear down existing homes and replace them with multiple units, Maschmedt is doing the opposite. This sort of contrarianism is a common theme for Dwell. The Dwell motto is, ‘always lead, always challenge, always stride to do more.’ For the past ten years, this is exactly what Maschmedt and his team have done.

## The Decade of Dwell Development

Since 2008, Dwell has built over 200 homes. Since the beginning, Maschmedt’s business model could be labeled that of a contrarian; “If everyone is selling vanilla ice cream, we are going to sell chocolate, we will stay true to our motto and differentiate,” says Maschmedt.

In 2008, and determined to build the most high-performance home, Maschmedt contacted Tadashi Shiga from Evergreen Certified. During the real estate crisis of 2008, Shiga left his brokerage to launch a leading home performance firm in the Northwest, providing services that include energy rating, third-party verification, and energy modeling. Shiga and Maschmedt shared a passion for sustainable development, both choosing the niche at a time when it was not popular.

During this early period, Maschmedt challenged Shiga to research innovative technologies and energy efficient design strategies, helping to create what we today know as Dwell Development – homes that are reclaimed modern and emphasize innovation and thoughtful design. That’s when Maschmedt and Shiga discovered AeroBarrier.

## Certifications, Ratings, and Performance

King Street achieved a 45 HERS Index pre-solar (30% better than code). Shiga says the superior energy efficiency is accomplished with innovative wall systems, thermal barrier strategies, hybrid water heating, .28 U-value windows, and advanced envelope sealing technology.

The advanced sealing technology is accomplished by using AeroBarrier, making a 0.22 ACH50 easy and affordable, with no disruption to the construction schedule. With the addition of a 7kWh solar array, King Street achieved zero energy. After the initial success of AeroBarrier on the King Street project, Dwell has used the sealing technology on all of its houses.



AeroBarrier is the most important product that a [builder] trying to meet passive house standards could use. It eliminates all of the guesswork.

**Anthony Maschmedt** – Principal  
Dwell Development