



# Passive House has become the world's leading standard in energy efficient construction.

The goal of Passive House standards is to construct a home that requires very little energy to achieve a comfortable temperature year-round, making conventional heating and air conditioning systems unnecessary.



For example, in the United States, a house built to the Passive House standard results in a building that requires space heating energy of 1 BTU per square foot

compared with about 5 to 15 BTUs per square foot for a similar building built to meet the 2003 Model Energy Efficiency Code. This is between 75% and 95% less energy for space heating and cooling than current new buildings that meet today's U.S. energy efficiency codes.

Although different countries, and even different regions in those countries can have different standards to meet the Passive House certification, these five criteria cover the basics:

#### SPACE HEATING DEMAND

Not to exceed 15 kWh annually or 10W (peak demand) per square meter of usable living space.

#### SPACE COOLING DEMAND

Roughly matches the heat demand with an additional allowance for dehumidification.

#### PRIMARY ENERGY DEMAND

Not to exceed 120 kWh annually for all domestic applications per square meter of usable living space.

#### AIRTIGHTNESS

Maximum of less than one air change per hour at 50 Pascals pressure.

#### THERMAL COMFORT

Thermal comfort must be met for all living areas year-round with not more than 10% of the hours over 77 degrees Fahrenheit.

As part of its focus on building a sustainable home, Deceuninck North America is very familiar with the Passive House standards. When Westeck, a North American manufacturer that produces doors, patio openings and windows for the custom home market, sought help in creating a Passive House certified window, Deceuninck was ready to collaborate on a solution.



Deceuninck developed a Revolution XL™ Tilt & Turn Passive House Edition window. This window offers high thermal and acoustical performance as well as compression seal technology, which delivers exceptional resistance to air and water infiltrations. It is ideal for the remodeling, replacement and new construction markets.

As energy efficiency standards continue to rise in construction of new homes, finding ways to further improve product lines has moved from being a nicety to a necessity.

## deceuninck

### COMMERCIAL

*Deceuninck Commercial is a unique performance-based alliance of window and door manufacturers that commands both precision capabilities and commercial project expertise. The group leverages their commercial market business model behind the power of Deceuninck, a global leader in PVC window and door development.*

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