IBHS CERTIFICATION

One of our key missions is to design an affordable home for middleclass families that will be resilient to natural disasters. The IBHS FORTIFIED construction standards are geared toward designing buildings in just this way. The FORTIFIED standards define the natural perils for our site area to include floods, high winds, winter weather and wildfires.

FORTIFIED for Safer Living®

A program of the Insurance Institute for Business & Home Safety

Before consulting the FORTIFIED checklists, the site and building location met all criteria. We decided early in the design process that The Montage should provide a safe and livable shelter during extreme weather conditions along with many other important dynamics. We designed The Montage with the seventh generation concept in mind. Therefore, providing a structure that is particularly resistant to current climate standards and conditions expected in the future.

Flood hazards are defined as the first natural disaster that The Montage is susceptible to. The location of The Montage is identified by FEMA Flood Map as flood zone C, which is an area of minimal flooding. This allowed Montage Builder – Northern Forest to continue with plans to create a visitability home, which is accessible to people with physical impairments. We were able to keep this key element to our visitability goal by sloping the grade along with other landscape alterations.

Wind hazards are the second natural risk factor for The Montage. The FORTIFIED for safer living standards are geared more for sites along the coast that are susceptible to hurricane winds. The projected location of The Montage is so far from hurricane hazards and within an area of relatively low wind speeds, FORTIFIED designed wind speed (FDWS) = 110 MPH. With that being said and keeping in mind the main goals of Montage Builders – Northern Forest, The Montage is already designed to withstand high wind speeds. All window and doors are Anderson A-series, which are both energy efficient and weather resistant. Additionally, the team decided to fully sheath The Montage with ½" OSB sheathing for raking strength. Also, Montage Builders – Northern Forest decided early that there would be four inch on center spacing and H-clips on the roof for maximum resistance to uplift.

The third natural risk is winter weather. Due to existing and projected escalating winter weather conditions in the Syracuse area, Montage Builders – Northern Forest was sure to make The Montage very resilient to winter weather conditions. Starting with the strong moisture barrier on the roof, the team included all FORTIFIED winter weather requirements before consulting the checklist. Montage Builders – Northern Forest made sure to place the heat source in the basement that is within the conditioned space. Furthermore, all attic doors were treated as exterior doors and are properly sealed with gasketed weather strips. Also in the attic, all penetrations were properly sealed and insulated. FORTIFIED for safer living requires that all recessed lights be properly insulated, but the only recessed lights that were included in the design of The Montage are located in the ceiling of the first floor and therefore within the thermal envelope and do not require any insulation. Finally, all pipes are located within interior walls.

The fourth and final natural risk determined for our site location is wildfire. The FORTIFIED for safer living wildfire checklist rates The Montage site location at moderate risk. All downspouts and gutters are aluminum, thus non-combustible. The Montage does not have any fireplaces or propane appliances; therefore we do not need to worry about the location of these hazardous materials. All mesh covers for the attic and sub-floor vents are non-combustible and corrosive-resistant to comply with FORTIFIED Wildfire requirement for moderate, high, and extreme wildfire levels. The driveway is designed to be twelve feet wide with a clearance of 13.5 feet to provide easy access for fire trucks.

To view the relevant fortified checklist please refer to the supporting documentation folder.