

Saskatoon Rebuild

Saskatoon, Saskatchewan, Canada



Plasti-Fab® EPS solutions cut utility bills for Saskatoon Rebuild

Contractor Brennen Mills has specialized in insurance contracting for nearly a decade, repairing homes damaged by fire and flooding as the owner of Saskatoon Fire and Flood. In 2015, a house fire rendered one Saskatoon residence damaged beyond repair. Working closely with the homeowners, Mills helped them design and build a new 2,144 sq. ft. home in its place that would be comfortable, energy efficient, and sustainable.

Mills' energy-efficient design started below the home's basement floor. He placed three inches of Plasti-Fab DuroFoam® insulation, an expanded polystyrene (EPS) beneath the concrete slab. DuroFoam insulation, with its closed-cell structure, resists moisture absorption and delivers a constant long-term thermal resistance (R-value).

"We insulate below the slab for the comfort factor," said Mills. "It keeps the basement floor a lot warmer."

For the below-grade walls, Mills selected the Advantage ICF System®. The Advantage insulating concrete forming (ICF) system provides a continuous layer of EPS insulation over the interior and exterior surface of the formed concrete wall. It offers superior thermal resistance and lower air leakage for improved energy efficiency.

"The intent was to make the home energy efficient," said Mills.

"Advantage ICFs are user friendly, they are available locally, and they create a great finished product."

Mills also installed two-inches of continuous DuroFoam insulation over the exterior of the home's above grade wood frame walls for added insulation and to reduce thermal bridging through the wood framing.

"The walls have spray foam insulation with DuroFoam insulation on the outside," said Mills. "The exterior insulation reduces the effect of the thermal bridging and creates a really energy-efficient wall."

By combining the thermal resistance of DuroFoam insulation and the Advantage ICF System, Mills constructed a home that exceeded the homeowner's expectations for both energy efficiency and thermal comfort.

"Brennen utilized Plasti-Fab EPS product solutions to build an excellent, energy-efficient home," said Plasti-Fab Sales Representative Wade McClelland. "The use of DuroFoam insulation above grade and the Advantage ICF System below grade created a perimeter of continuous insulation around the exterior of the home and really helped the homeowners save on energy costs."