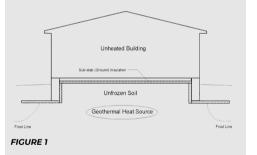
## **NEWSLETTER**

MONTHLY UPDATED INDUSTRY NEWS

## SAVING ENERGY AND CONSTRUCTION COST WITH EPS INSULATION

An FPSF foundation consists of a standard concrete slab with thicker edges sheathed in rigid-foam expanded polystyrene (EPS) or extruded polystyrene (XPS) insulation. Adding this insulation around the outside of a foundation directs building heat loss toward the foundation and takes advantage of natural geothermal energy. Heat loss through the building's foundation helps prevent the ground beneath from freezing and heaving. In combination with geothermal heat stores, an FPSF installation allows soil below the foundation to remain above freezing even in extreme winters. Insulating a slabon-grade can be expensive. Materials suitable for below-grade insulation is limited to rigid foam. While standard building codes typically require insulating values ranging from R-10 to R-15 detailing around the perimeter is generally weak. This may leave a significant thermal bridge through highlyconductive concrete exposed to the outside or the soil near the perimeter. For high-performance homes in cold climates, aim for insulating values between R-40 and R-50, which would require 6 to 10-inch thick insulation, depending on the material used. The insulation R-Value for your specific climate should be optimized through energy modeling. Be sure to place insulation under the entire slab including the footing. Most builders choose extruded polystyrene for below-grade applications because it is widely promoted. However, other options exist. Expanded polystyrene is acceptable when it has sufficient compressive strength for the application. EPS has the structural capacity to be placed below the footings. The slab edge has the most exposure and the greatest heat loss because it is exposed to the outside, making it a thermal bridge. Because thick insulation can be difficult to detail, edge insulation is often reduced to a depth of about two inches, leaving a significant source of heat loss. That should be avoided. One elegant solution uses insulating concrete forms (ICFs) for the foundation with thick layers of rigid insulation under the slab. If the energy model calls for more insulating value than the ICF provides, a layer of rigid insulation can be added. The best to place thermal insulation on the exterior surface of the foundation. Any exterior rigid insulation that shows above grade must be protected from physical damage and sun exposure. Flashing can be a troweled finish, sheet metal, or fiberglass panels. (see Figure 1)



## **PROJECT SPOTLIGHT**

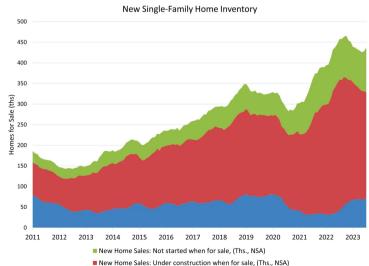






## **NAHB HOUSING TRENDS**

- Sales of newly built, single-family homes in July increased 4.4% to a 714,000 seasonally adjusted annual rate from a downwardly revised reading in June, according to newly released data by the U.S. Department of Housing and Urban Development and the U.S. Census Bureau.
- The pace of new home sales in July was up 31.5% from a year ago.
- New home sales were solid in July because of an ongoing housing deficit in the
  U.S. and a lack of resales stemming from many homeowners electing to stay
  put to preserve their low mortgage rates.
- Mortgage rates increased from 6.7% at the start of July to above 7% in August.
- New single-family home inventory in July was 437,000, up 4.8% compared to a year ago.
- Of the total home inventory, including both new and resale homes, 31% of homes available for sale are newly built.
- 17% of new home inventory was completed ready-to-occupy homes. This is up from approximately 9% from a year ago.
- The median new home sale price in July was \$436,700, down roughly 9% compared to a year ago. Pricing is down both due to builder incentive use and a shift towards building slightly smaller homes.
- Regionally, on a year-to-date basis, new home sales are up 5.0% in the Northeast, 1.0% in the Midwest and 3.5% in the South. New home sales are down 8.1% in the affordability-challenged West.



Office: 208-558-5200 info@monoslabezform.com www.monoslabezform.com

New Home Sales: Completed when for sale, (Ths., NSA)