

# HUNTSMAN

BUILDING SOLUTIONS



**FOR A DRY  
AND DURABLE  
EXTERIOR  
FOUNDATION**



20% Recycled  
Product

## **EXTERIOR FOUNDATION**

CLOSED-CELL SPRAY FOAM

A stable and watertight building envelope is difficult to achieve when weather such as rain, snow and ice are impacting your foundation. Issues such as cracks, water infiltration and wood rot undermine the best building structure.

## PRODUCT FEATURES

- High thermal performance means lower energy costs
- Perfect seal eliminates leaks and water damage
- Quick installation saving time on the project
- Good adhesion means it will not sag or move over time
- Suitable for all building types
- Will not support mold or fungal growth
- Durable and will not deteriorate over time
- Continuous barrier prevents water infiltration
- Resistant to flood damage <sup>1,2</sup> and can stay in place after a flood

With an insulation value of  $\lambda=0,025$  w/mK, Heatlok HFO can easily meet the insulation requirements for both residential and commercial construction. The product is sprayed on the exterior and provides fully adhered, continuous insulation in one application. There are no seams to tape, no gaps to fill and no boards to glue in place. Heatlok HFO expands 30 times its liquid volume in 5 seconds and seals the entire foundation. Heatlok HFO was tested below grade and the study concluded that the product retains all of its properties and does not absorb water over time.



The ideal time and most effective way to insulate and waterproof the foundation is from the exterior while excavating an existing foundation and before backfilling a new foundation.



# AND RENOVATION

In new buildings, insulation is often installed from the interior. Yet the foundation can easily be accessed from the exterior and insulated on its cold side, below grade, before backfilling, which is the preferred method of insulating a below grade foundation. Existing homes often have to be excavated to waterproof the foundation as a result of water infiltration. Heatlok HFO can be sprayed on the entire surface of the foundation and even cover the footing to create a slope towards the drain. Applying Heatlok HFO directly to the concrete, blocks or stone is recommended, depending on the type of foundation.

However, Heatlok HFO is not a waterproofing product, so applying a polyurea, bituminous coating or drainage membrane directly on the foam is recommended in areas where water accumulates or the water table is above the footings.



*Bituminous coating applied directly over the foam.*



*Drainage membrane that will be lifted in front of the foam as the soil is backfilled.*

## **WHEN AN OLD FOUNDATION IS EXCAVATED, IT IS THE IDEAL TIME TO INSULATE FROM THE EXTERIOR WITH HEATLOK HFO SPRAY FOAM.**



*Heatlok HFO is ideal for insulating old concrete or stone foundations from the exterior.*

## FINISHING THE ABOVE-GRADE PORTION

What about the above-ground portion of the foundation? Many options are available but one option is to install a structure (Z-bars are recommended) on the above-ground portion of the foundation only. This must be done before applying Heatlok HFO. Once the insulation work has been completed, we recommend installing a light-cement board on the Z-bars. A finish is then applied over the light-cement board once the backfilling has been completed to provide the desired appearance.



*Example of the above-grade portion of the foundation during construction.*



*Final Result.*

## FOR A DRY AND DURABLE EXTERIOR FOUNDATION

Put on the market in 2019, Heatlok HFO is made with approximately 20% recycled and renewable content. Huntsman Building Solutions has recycled over 1 billion plastic bottles to date. Heatlok HFO's installation does not generate any waste on the job-site and is delivered in liquid form, in returnable or recyclable containers.

## REFERENCES:

1. Technical Bulletin 2, Flood Damage - Resistant Materials Requirements. FEMA, August 2008
2. Severe Weather and Closed-Cell Spray Foam: A Better Building Technology, Honeywell