

USEFUL INFORMATION FOR INSULATION PRODUCTS

Specifications and Guidelines

Insulation decreases energy costs and increases the building's comfort level. Insulation priorities are the attic, under floors above unheated spaces, exterior walls, around walls in a heated basement or unventilated crawl space, and on the edges of slabs-on-grade.

Insulation products are made of polystyrene, polyurethane, fiberglass, mineral wool, cellulose, cork, etc.; they come in foam boards, bulk, blown and loose fill.

R-value is a measure of thermal resistance of a material in terms of heat transfer caused by conduction and convection.

The tests that are used to show the R-factor of insulation may not correspond to the installed R-value; for example, insulation will lose much of its effectiveness with excessive moisture and a 4% void area will cause up to 50% increase in heat loss.

It is highly recommended to place insulation under the heating elements.

It is also important to know the thermal transmission properties of the floor covering. When higher thermal resistance is applied on the radiant floor, compensate by placing higher R-value insulation under the heating elements with a ratio of 4 to 1.

Insulation on floors must be strong and stiff. Consult manufacturer for deflection/load characteristics and for maximum allowable live and dead load limits. Check that the product and installation procedure is approved by code for the application.

When installing the heating elements under the subfloor, between joists, place the the insulation snug under the elements with no air gap.

WARNING

STEP Warmfloor™ must not be in direct contact with any conductive material (e.g., wire mesh, aluminum foil, etc.) and aggressive solvents or acids.

Company	Phone	E-mail
Extruded Polystyrene Foam		
Dow (Styrofoam)	800-441-4369	www.dowbuildingmaterials.com
Owens Corning (FoamulaR)	800-438-7465	www.owenscorning.com
Wedi	877-933-9334	www.wedicorp.com
ProPanel 1/4"	877-783-7832	www.warmfloor.com
Expanded Polystyrene Foam		
NOFP (The Barrier)	800-339-4850	www.nofp.com
Cork		
WE Cork	800-666-2675	www.wecork.com
Polyurethane		
Healthier Choice	800-872-8426	www.healthierchoice.com