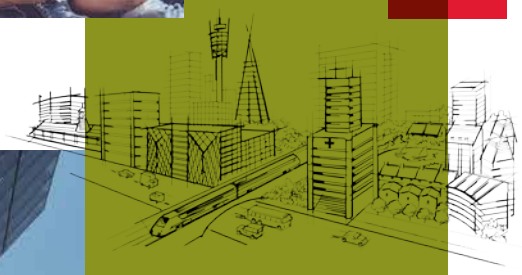
ROCKWOOL™

ROCKWOOL Solutions for Hot/ Humid Climates

DOE Climate Zones 1,2 & 3



What is a Hot/Humid Climate?

The climate of the southern States – typically considered hot and humid – can be characterized by high rainfall, high humidity and high temperature. This climate sees little fluctuation over the course of a single day or throughout the course of a year.

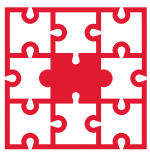
What makes these buildings different?

Intense Solar Radiation and Vapor Drive

High solar radiation combined with hot, humid outside air increases potential for inward vapor drive. Where vapor impermeable coatings and/or membranes are used on the warm (exterior) side of the assembly, vapor barriers installed on the cold (interior) side of the assembly should be avoided to prevent condensation (moisture accumulation) within the wall. Since ROCKWOOL insulation is vapor permeable, it can be installed on the interior side of the assembly, and still allow for good drying potential.

Increased Potential for Mold/Mildew Growth

Humid conditions cause greater concern for mold or mildew growth in buildings. This can lead to the deterioration of assemblies and harm to the health of occupants. ROCKWOOL insulation products are inorganic and do not absorb moisture, minimizing the potential for growth.



Reduced Energy Consumption and Environmental Comfort

Insulated assemblies increase interior temperature stability, resulting in decreased energy consumption. ROCKWOOL products are easily cut and do not slump or sag, resulting in continuous and consistent performance.

Fire Resistant

ROCKWOOL Stone Wool Insulation is made from fire-resistant materials, and will not contribute to the spread of fire or smoke.

Installing ROCKWOOL on the interior side of an assembly, where non-combustible materials are desired, is ideal to enhance fire safety provisions.

Codes and Standards

Climate Zone (Representative City)	1 (Miami, FL)		2 (Houston, TX)		3 (Atlanta, GA)	
IECC Standard Year	**2009**	**2012**	**2009**	**2012**	**2009**	**2012**
Mass Walls	NR*	R5.7ci	R5.7ci	R5.7ci	R7.6ci	R7.6ci
Metal Framed	R13	R13 + R5ci	R13	R13 + R5ci	R13 + R3.8ci	R13 + R7.5ci

Note: This chart is adapted from the IECC Standards for 2009 and 2012 for commercial, above-grade walls for illustration purposes. Consult local building codes for applicable standards. (*NR means No Requirement.)

Mass Wall – Tilt-Up Construction

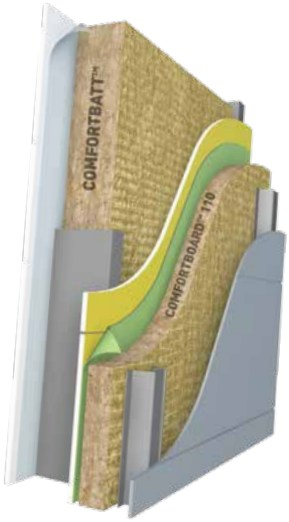
COMFORTBOARD™ 110 is a rigid mineral wool board used in continuous insulation assemblies. COMFORTBOARD™ 110 is available in 1", 1.25", 2", 2.5" and 3" thicknesses to meet design requirements in the southern United States.
Its high rigidity lends itself to creating an effective layer of continuous insulation.

COMFORTBOARD™ 110 provides an R-value of R4/inch to help meet thermal requirements for continuous insulation.

Steel-Frame Construction

COMFORTBATT® Steel Stud is a light-density batt insulation for steel stud applications. COMFORTBOARD™ 110 and COMFORTBATT® Steel Stud together as a system creates an excellent insulating system in a steel-framed construction. COMFORTBATT® SS is available in 2.5", 3.5", 6" and 7.25" thicknesses in order to meet your design requirements.

COMFORTBATT®, which has an R-value of R4/inch, can assist in meeting minimum thermal code requirements while providing a vapor permeable interior layer.



Wood-Frame Construction

COMFORTBOARD™ 80 is a rigid mineral wool board insulation used in wood frame continuous insulation assemblies. COMFORTBOARD™ 80 is used in wood framing to create a protective, continuous insulation. COMFORTBOARD™ 80 is available in 1.25", 1.5", 2", 3", 4" and 5" thicknesses to meet code and energy requirements in a number of climate zones and assemblies.

COMFORTBOARD™ 80 provides R4/inch thermal performance and can meet continuous insulation requirements for wood stud applications.

Mass Wall – Brick and Cavity Insulation

ROCKWOOL CAVITYROCK® products are semi-rigid stone wool insulation boards designed for exterior cavity wall and rainscreen applications, and are compatible with numerous cladding attachment systems. CAVITYROCK® is available in thicknesses from 1" to 6" in half-inch increments.

CAVITYROCK® provides R4.3/in to help improve the energy performance of the building.

ROCKWOOL

At the ROCKWOOL Group, we are committed to enriching the lives of everyone who comes into contact with our solutions. Our expertise is perfectly suited to tackle many of today's biggest sustainability and development challenges, from energy consumption and noise pollution to fire resilience, water scarcity and flooding. Our range of products reflects the diversity of the world's needs, while supporting our stakeholders in reducing their own carbon footprint.

Stone wool is a versatile material and forms the basis of all our businesses. With approx. 10,500 passionate colleagues in 38 countries, we are the world leader in stone wool solutions, from building insulation to acoustic ceilings, external cladding systems to horticultural solutions, engineered fibres for industrial use to insulation for the process industry and marine & offshore.

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