

# Comfortbatt®

Thermal Batt Insulation for  
Residential & Commercial Construction





# Superior building envelope performance by ROCKWOOL Insulation.



ROCKWOOL Comfortbatt® is a semi-rigid batt insulation designed specifically for exterior wood and steel stud applications in residential and commercial construction. Made from natural stone and recycled slag, ROCKWOOL stone wool is a high-density insulation that will fit snugly into wall cavities and will not slump over time. It also adds superior acoustical performance to wall assemblies and floors and can be used in acoustic applications required by building code.



## Fire-safe insulation for wall assemblies – won't burn or develop smoke

ROCKWOOL Comfortbatt® stone wool insulation is non-combustible as determined by fire tests ASTM E 136 and CAN4-S114. It will not develop smoke or promote flame spread, even when directly exposed to fire, as most other insulation materials will.

- Extremely high melting point of 1177°C (2150°F)
- Does not produce smoke or toxic gases in the event of a fire
- Excellent barrier against the spread of flames to help protect occupants and reduce property damage
- Eliminates the risk of insulation accidentally catching fire during installation
- Excellent Passive Fire Protection – Comfortbatt® can add up to an additional 15 minutes of fire protection to wall assemblies

Fire test performance		
CAN/ULC-S702-09	Mineral Wool Thermal Insulation for Buildings	Type 1, Complies
CAN4-S114	Determination of Non-Combustibility	Non-Combustible
ASTM E 136	Determination of Non-Combustibility	Non-Combustible
CAN/ULC S102	Surface Burning Characteristics	Flame Spread = 0 Smoke Developed = 0
ASTM E 84	Surface Burning Characteristics	Flame Spread = 0 Smoke Developed = 0
NBC 2010, Article 9.25.2.2	Insulation Materials	Conforms
CC <sup>MC</sup> Evaluation Listing	Master Format 07212: Mineral Wool Batt Insulation	12018-L



The Insurance Bureau of Canada (IBC) reference to NFPA 285: Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components has led to several rainscreen wall system manufacturers to test with ROCKWOOL cavity wall insulation. The use of Spray Polyurethane Foam insulation does not allow rainscreen manufacturers to meet this requirement.

## Performance Matters.

### Managing moisture in wall assemblies

Depending on your building codes and geographic location, a vapor barrier may be required when insulating exterior wall cavities. The use of a vapor retarder will limit the amount of water vapor that will move to the outside wall – reducing condensation in the wall assembly. ROCKWOOL Comfortbatt® will not absorb or retain water in the event that moisture does get into the wall assembly.

When insulation material such as fiberglass gets wet, it can absorb moisture, reducing R-value, and will slump or sag within the wall cavity. This can also create the risk of mold growth in the insulation. Comfortbatt® is made from inorganic stone and does not support mold or fungus growth, even when exposed to moisture. Comfortbatt® is also vapor permeable, meaning that it will not absorb water but if it does get wet, it will dry out and maintain its R-value.

### Better fit equals better wall performance

To ensure the labeled R-value is achieved, batt insulation in wood and steel stud wall cavities must be gap free and void free. Gaps and voids are most prevalent around electrical boxes, wires and pipes.

ROCKWOOL Comfortbatt® is produced at a slight over-thickness to ensure a friction fit within the wall cavity. The batts will stay in place and perform equally well in horizontal, sloped, dormer, vertical and overhead applications.

ROCKWOOL Comfortbatt®'s unique flexible edge ensures the semi-rigid batts compress and expand between studs and joists to eliminate slumping or sagging and conform to off-standard wood studs.

Higher-density batts reduce airflow within the wall cavity, reducing convective losses. This translates into a better-performing and more comfortable thermal wall.

Compliance & Specification > 2 lb/ft <sup>3</sup> 32 kg/m <sup>3</sup>		
R13/14/15	89 mm	2.8 kg/m <sup>2</sup>
R21/22/23	150 mm	4.8 kg/m <sup>2</sup>
R28/30	184 mm	5.9 kg/m <sup>2</sup>
R32	203 mm	6.5 kg/m <sup>2</sup>
R38	241 mm	7.7 kg/m <sup>2</sup>
Density	ASTM C 612-00 – 32 kg/m <sup>3</sup> (2 lb/ft <sup>3</sup> )	
Fire	CAN/ULC S102 Surface Burning Characteristics Flame Spread = 0 Smoke Developed = 0	
Moisture Resistance	ASTM C 1104 Moisture Sorption 0.03%	

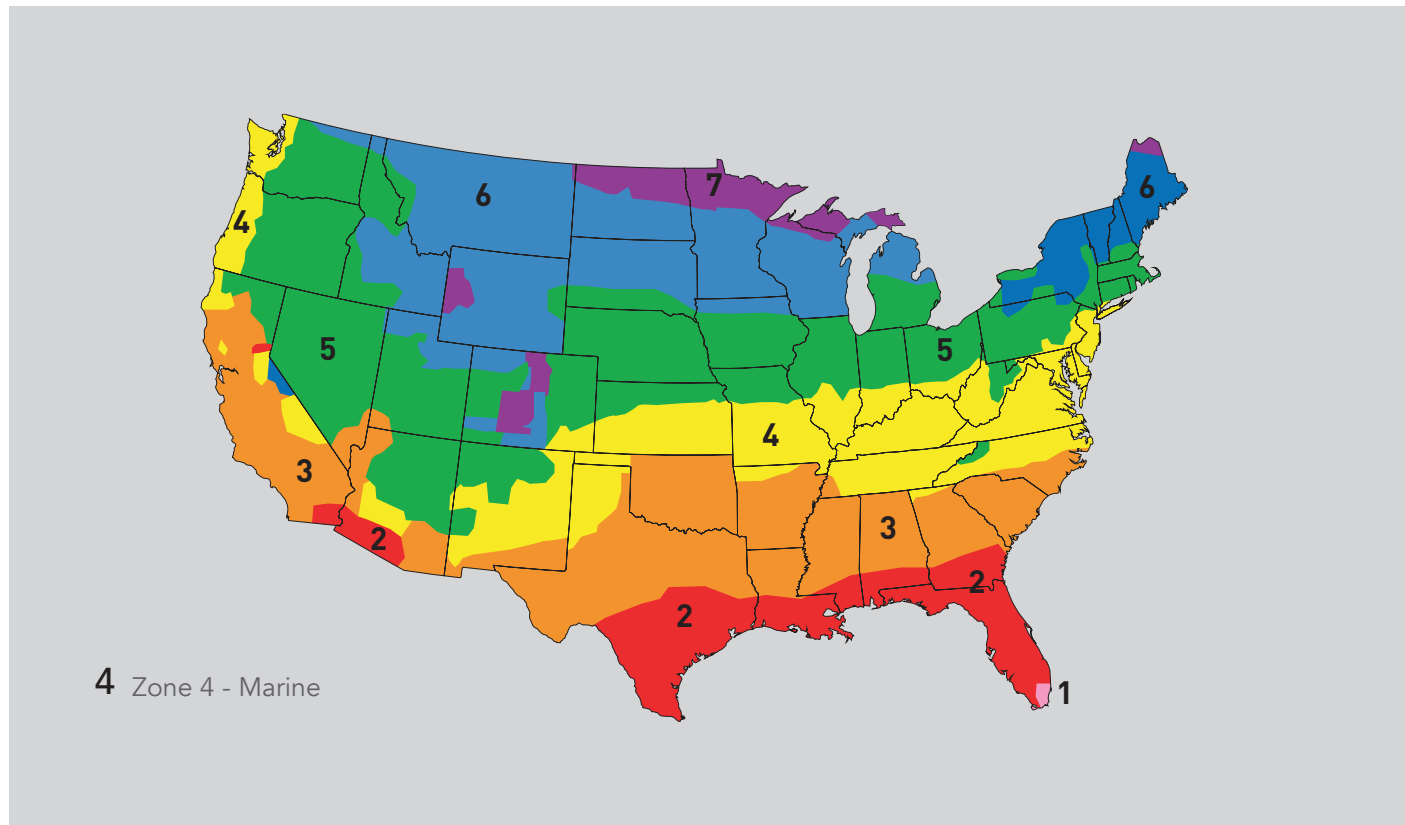
Studies have proven that wall assemblies with gaps and voids can result in 35% loss of the stated R-value. ROCKWOOL Comfortbatt®'s higher-density batts make it simple for precise cutting to ensure a fit without gaps and voids.



ROCKWOOL cuts quickly and accurately with a serrated knife, such as a bread knife, so you can easily achieve optimal fit around pipes, electrical boxes, wiring, ductwork and between studs and joists that are less than a standard width.



## Determining your climate zone and building code requirements.



In the northern states and Canada, chances are that building code mandates a vapor control layer be installed on the warm side of the insulation. A vapor control layer in northern climates helps to reduce the moisture diffusion through the wall assembly and through to the drywall.

Vapor control layers and barriers have different permeance levels measured in perms and depending on your building code you may need to install a vapor control layer with a specific perm rating. In Canada and some northern US states, a 6 mil polyethylene sheet is commonly used, but always check with your local building code for guidance.

### ASHRAE – history of R-value requirements

The American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) is an international society of technical individuals who provide knowledge to the building industry on heating, ventilation, air conditioning, and refrigeration (HVAC&R). The Society developed ASHRAE 90.1, an energy conservation

standard that provides the minimum requirements for energy-efficient buildings.

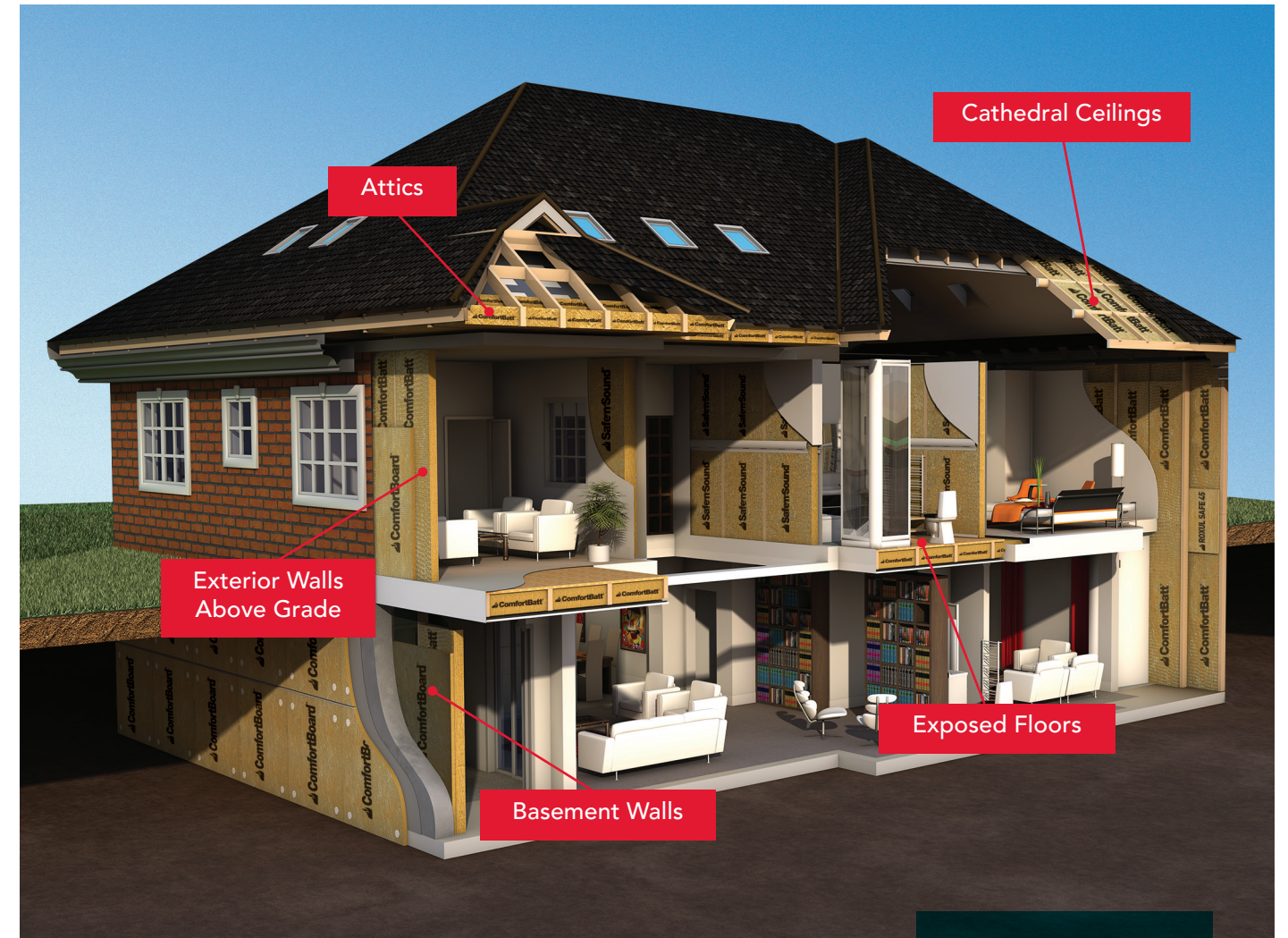
This standard, or an equivalent, is applied today in many states for commercial, government and high-rise building applications. In Canada, look to the National Building Code and refer to section A-5.3.1.2 for information on condensation and energy conservation standards.

### ASHRAE map of climate zones (above)

Every rating agency has its own maps that divide regions into thermal or climate zones to tailor codes and standards to what is appropriate for that particular region.

In Zone 1, Zone 2, Zone 3 and Zone 4 (except Zone 4 Marine), no vapor retarder is required on the interior surface of insulated wall and floor assemblies while in the northern states, some form of vapor retarder is likely code mandatory.

## Specifically engineered for use in all residential thermal applications.



### Environmental Benefits That Go Beyond Residential Homes

The GREENGUARD® Environmental Institute (GEI) is a non-profit organization that oversees the GREENGUARD Gold standards. The GEI's mission is to protect human health and quality of life through programs that improve indoor air that people breathe. GREENGUARD Gold Certification (formerly known as GREENGUARD Children & Schools Certification) offers stricter certification criteria, considering safety factors to account for sensitive individuals (such as children and the elderly), and ensures that a product is acceptable for use in environments such as schools and healthcare facilities. ROCKWOOL Comfortbatt® products are certified to this standard and are recognized by the United States Green Building Council's (USGBC) LEED® program.

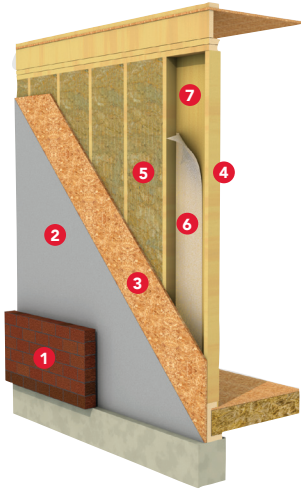
## Ideal applications for Comfortbatt® insulation.

The higher density of ROCKWOOL Comfortbatt® ensures a snug friction fit in the wall cavity. Note: A vapor retarder may be required in the wall assembly, depending on the geographical location of the building.

### The Comfortbatt® Residential Wall Assembly

(shown from outside to inside)

- 1 Cladding
- 2 Air Barrier
- 3 Sheathing
- 4 2" x 6" Wood Studs
- 5 5.5" Comfortbatt®
- 6 Vapor Retarder\*
- 7 Gypsum

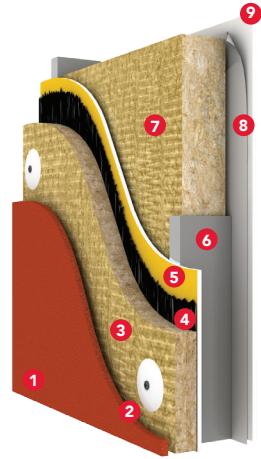


In addition to residential applications, ROCKWOOL Comfortbatt® is ideal as a component of the BEDR™ cavity wall system.

### BEDR Wall Components

(shown from outside to inside)

- 1 Terra Cotta Cladding
- 2 1" Air Space (1/2" minimum)
- 3 1"-2" CAVITYROCK® MD Insulation (R4.2–R8.4) or 2.5"–5" CAVITYROCK® DD (R10.75–R21.5)
- 4 Permeable Air Barrier
- 5 Exterior Gypsum Board
- 6 3.5" or 6" Steel Stud
- 7 3.5" or 6" Comfortbatt® Insulation
- 8 Vapor Barrier\*
- 9 5/8" Gypsum Board

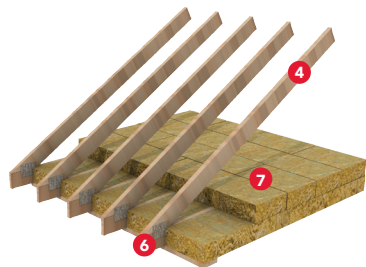
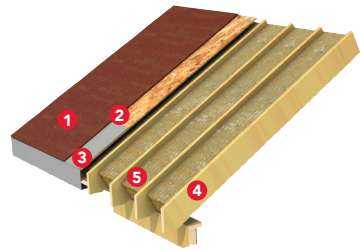


When insulating attics, use two layers of Comfortbatt® to achieve the required R-value. The bottom layer should run parallel to the joists and the top layer run in the opposite direction. For attics and cathedral ceilings, only a single layer of Comfortbatt® is required between the roof trusses.

### The Comfortbatt® Roof/Attic Assembly

(shown from outside to inside)

- 1 Shingles
- 2 Tar Paper
- 3 Sheathing
- 4 2" x 10" Roof Trusses
- 5 Comfortbatt® (R30/R32/R38)
- 6 Ceiling Joists
- 7 Comfortbatt® (R21/R22/R23 or R28/R30/R38) two layers running perpendicular



\*Check with your local building code for approved vapor barrier/retarder information.

## A range of Comfortbatt® products to suit all your building requirements.

R-Value	Available in Canada	Available in US	RSI Value	Stud/Joist Type	Thickness	Width	Length	Coverage Sq. Ft. (per bag)
Wood Stud								
R13	X	✓	2.28	Wood	3.5"	15.25"	47"	59.7
R13	X	✓	2.28	Wood	3.5"	23"	47"	60.1
R14	✓	X	2.47	Wood	3.5"	15.25"	47"	59.7
R14	✓	X	2.47	Wood	3.5"	23"	47"	60.1
R15	X	✓	2.64	Wood	3.5"	15.25"	47"	59.7
R15	X	✓	2.64	Wood	3.5"	23"	47"	60.1
R21	X	✓	3.70	Wood	5.5"	15.25"	47"	39.8
R21	X	✓	3.70	Wood	5.5"	23"	47"	37.5
R22	✓	X	3.87	Wood	5.5"	15.25"	47"	39.8
R22	✓	X	3.87	Wood	5.5"	23"	47"	37.5
R23	X	✓	4.05	Wood	5.5"	15.25"	47"	39.8
R23	X	✓	4.05	Wood	5.5"	23"	47"	37.5
R24	✓	X	3.87	Wood	5.5"	15"	47"	29.4
R24	✓	X	3.87	Wood	5.5"	22.75"	47"	29.7
R28	✓	X	4.92	Wood	7.25"	15.25"	47"	29.9
R28	✓	X	4.92	Wood	7.25"	23"	47"	30.7
R30	X	✓	5.28	Wood	7.25"	15.25"	47"	29.9
R30	X	✓	5.28	Wood	7.25"	23"	47"	30.7
R32	✓	X	5.64	Wood	8"	15.25"	47"	29.9
R32	✓	X	5.64	Wood	8"	23"	47"	30.0
R38	X	✓	6.69	Wood	9.5"	15.25"	47"	19.9
R38	X	✓	6.69	Wood	9.5"	23"	47"	22.5
Steel Stud								
R10	✓	✓	1.76	Steel	2.5"	16.25"	48"	86.7
R14	✓	X	2.47	Steel	3.5"	16.25"	48"	65.0
R14	✓	X	2.47	Steel	3.5"	24.25"	48"	64.7
R15	X	✓	2.64	Steel	3.5"	16.25"	48"	65
R15	X	✓	2.64	Steel	3.5"	24.25"	48"	64.7
R22.5	✓	✓	3.96	Steel	6.0"	16.25"	48"	43.3
R22.5	✓	✓	3.96	Steel	6.0"	24.25"	48"	40.4
R24	✓	✓	4.22	Steel	6.0"	16.25"	48"	43.3
R24	✓	✓	4.22	Steel	6.0"	24.25"	48"	40.4



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 more than 11,000 employees in 39 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 and offshore.

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