# Warner safer smarter



SheepRoll<sup>TM</sup>, SheepBatt<sup>TM</sup>, SheepRope<sup>TM</sup>, and SheepFill<sup>TM</sup> insulation are general purpose natural wool fiber products designed for use in loft, rafter, internal wall, and inter-floor applications. SheepRoll<sup>TM</sup>, SheepBatt<sup>TM</sup>, SheepRope<sup>TM</sup>, and SheepFill<sup>TM</sup> meet and surpass US building product standards for Thermal, Fire, Mold Resistance and Structural performance.

#### Why Sheep's Wool Insulation?

#### Warmer

- -Sheep wool insulation has a 10% greater insulating factor than many traditional glass fiber insulations.
- -Sheep wool is very hygroscopic; it is unique in that it generates significant heat as moisture is absorbed. The heat generated increases the dew point and thus reduces the risk of interstitial condensation.
- -Wool draws out moisture from the building and allows it to evaporate out of the building. It maintains its thermal performance even after abosorbing up to 30% moisture. Traditional mineral wool thermal performance can deteriorate by up to 50% with only a few percentage points of moisture absorption leading to increased condensation.

#### Safer

- -Sheep wool is unique in its ability to absorb and lock up toxic gases (sulpher dioxide, nitrogen dioxide, and formaldehyde). Man made insulations and exhausts can emit these gases.
- -Wool is safe to handle and install requiring no protective clothing or equipment and exhibiting no skin or repiratory problems typically associated with mineral wool products (VOC / Carcinogen warnings)
- -Wool is a Carbon sink; it actually locks up CO<sub>2</sub>- man-made insulations can pollute CO<sub>2</sub> during its manufacture.
- -Wool is naturally fire retardant resulting in higher ignition temperatures, low flame spreads, and ability to self extinguish.

#### **Smarter**

- -Sheep wool is truly sustaiable-a yearly clip of wool is available as a by product of the livestock farming process.
- -Natural resilient and strong yet can be torn by hand across direction to facilitate faster install times.
- -Wool fiber has a natural spring which ensures that the insulation doesn't compact over time (50+years) compared to mineral wool products that may compact and require topping after just 10 years.
- -Man made insulation currently can only be disposed of into landfills whereas sheep's wool insulation is 100% biodegradable and can be composted at the end of its life.
- -Wool insulation requires very low energy to manufacture (embodied energy), requiring 85% less energy compared to man-made insulation products.
- -Black Mountain sheep's wool isulation can potentially help earn several points in registered LEED projects.









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PHYSICAL PROPERTIES	<u>PERFORMANCE TESTS</u>	TEST METHOD*
SURFACE BURNING Characteristics	FLAME SPREAD Smoke development	ASTM E-84 / UL-723
FUNGI RESISTANCE	PASSED-NO GROWTH	ASTM C1388

<sup>\*</sup>Brochure for marketing purposes only, contact Black Mountain USA for test reports

Product Selection/ Technical Information									
Residential Construction Sized SheepRoll <sup>tm</sup>									
ITEM	ITEM DESCRIPTION		THICKNESS		WIDTH		LENGTH		CO ET DED DOLL
Number	DESCRIPTION	VALUE*	(INCH)	(MM)	(INCH)	(MM)	(FEET)	(M)	SQ. FT. PER ROLL
SR 100-001	Wool Insulation Roll	13	3.5	90	14.5	375	16	4.85	19.33
SR 100-002	Wool Insulation Roll	13	3.5	90	22.5	580	16	4.85	30.00
SR 100-003	Wool Insulation Roll	19	5.25	130	14.5	375	12	3.65	14.50
SR 100-004	Wool Insulation Roll	19	5.25	130	22.5	580	12	3.65	22.50

\*R-value tested in accordance to ASTM C518. Higher R values correspond to greater insulating power.

NOTE: CUSTOM SIZE ROLLS AND BATTS ARE AVAILABLE UPON REQUEST







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# PRODUCT SELECTION / TECHNICAL INFORMATION (CON'T)

# COMMERCIAL CONSTRUCTION SIZED SHEEPROLL<sup>TM</sup>

Item	DECCRIPTION	R	THICK	INESS	WID	TH	LENG	ТН	CO ET DED DOLL
Number	DESCRIPTION	VALUE*	(INCH)	(MM)	(INCH)	(MM)	(FEET)	(M)	SQ. FT. PER ROLL
SRC 100-005	Wool Insulation Roll	13	3.5	90	16.0	405	16	4.85	21.33
SRC 100-006	Wool Insulation Roll	13	3.5	90	24.0	610	16	4.85	32.00
SRC 100-007	Wool Insulation Roll	19	5.25	130	16.0	405	12	3.65	16.00
SRC 100-008	Wool Insulation Roll	19	5.25	130	24.0	610	12	3.65	24.00

\*R-value tested in accordance to ASTM C518. Higher R values correspond to greater insulating power.

NOTE: CUSTOM SIZE ROLLS AND BATTS ARE AVAILABLE UPON REQUEST



SHEEPFILL LOOSE FILL INSULATION

SHEEPROPE LOG HOME INSULATION



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#### PRODUCT SELECTION /TECHNICAL INFORMATION (CON'T) SHEEPROPE<sup>TM</sup> LOG HOME INSULATION **THICKNESS** WIDTH LENGTH PCS PER DESCRIPTION ITEM NUMBER PACKAGE VALUE\* (INCH) (INCH) (MM) (MM) (FEET) (M) **WOOL INSULATION**

2.0

51

4.0

102

38

11.52

12

6.5

ROPE

SHEEPFILL™ LOOSE FILL INSULATION (SF-001-1 SOLD BY THE LB)						
R-Value	Required Thickness (in)	LBS/SQ FT				
R-13	3.2	0.24				
R-14	3.5	0.27				
R-21	4.6	0.36				
R-22	5.5	0.42				
R-25	6.0	0.46				
R-30	7.3	0.59				
R-37	9.0	0.69				
R-38	9.3	0.71				
R-45	11.0	0.84				
R-49	12.0	0.92				

<sup>\*</sup>R-value tested in accordance to ASTM C518. Higher R values correspond to greater insulating power.



SRO-001-12









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<sup>\*</sup>R-value tested in accordance to ASTM C518. Higher R values correspond to greater insulating power.

COMPETITOR ANALYSIS							
FEATURES	Sheep Wool	Cotton	FIBERGLASS				
DOES NOT REQUIRE CARCINOGEN WARNING LABEL	YES	YES	NO				
NO VOC CONCERNS OR OFF GASSING ISSUES	YES	YES	NO				
100% sustainable	YES	NO	NO				
DOES NOT CONTAIN FORMALDEHYDE	YES	YES	NO				
REDUCES INDOOR AIR QUALITY ISSUES	YES	NO	NO				
ENVIRONMENTALY FRIENDLY	YES	YES	NO				
USES SAFE NATURAL FIBERS	YES	YES	NO				
SUPERIOR ACOUSTIC PROPERTIES	YES	YES	NO				
REQUIRES LESS ENERGY TO Manufacture	YES	NO	NO				
EASY TO HANDLE / INSTALL	YES	NO	NO				
EASY/SAFE TO CUT (TIME SAVER FOR INSTALLERS)	YES	NO	NO				
NO ITCH/SKIN IRRITATION	YES	YES	NO				
NO PROTECTIVE CLOTHING REQUIRED	YES	YES	NO				





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# **CORPORATE AFFILIATIONS:**

BLACK MOUNTAIN USA IS A PARTICIPATING MEMBER OF THE FOLLOWING INSTITUITIONS/ORGANIZATIONS:









# **LEED CREDITS**

BLACK MOUNTAIN USA'S SHEEP WOOL PRODUCTS SAVE ENERGY AND CAN BE CONSIDERED AN INTEGRAL PART OF ANY LEED PROJECT. THE FOLLOWING CREDITS CAN BE POTENTIALLY CLAIMED IN ALL 9 CURRENT LEED VERSIONS:

#### **ENERGY & ATMOSPHERE:**

- -MINIMUM ENERGY PERFORMANCE
- -OPTIMIZE ENERGY PERFORMANCE

## MATERIALS & RESOURCES:

- -BUILDING REUSE
- -MATERIALS REUSE
- -RAPIDLY RENEWABLE MATERIALS





# **INDOOR ENVIRONMENTAL QUALITY:**

- -LOW EMITTING MATERIALS
- -THERMAL COMFORT-DESIGN

BLACK MOUNTAIN USA'S SHEEP WOOL MAY ALSO CONTRIBUTE TO THESE SPECIFIC LEED REQUIREMENTS:

# LEED FOR EXISTING BUILDINGS-OPERATIONS & MAINTENANCE

- -MINIMUM ENERGY EFFICIENCY PERFORMANCE
- -OPTIMIZE ENERGY EFFICIENCY
- -MINIMUM INDOOR AIR QUALITY PERFORMANCE
- -INDOOR AIR QUALITY BEST MANAGEMENT PRACTICE
- -REGIONAL PRIORITY

#### **LEED FOR SCHOOLS:**

-MOLD & MILDEW CONTROL



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#### **COSHH/MSDS** data sheet

Black Mountain sheep wool insulation is a natural fibre material, not known to cause any health & safety issues. The following information provides details for any questions that might be asked.

#### ■ Product

Sheep wool insulation is a general purpose thermal insulation for buildings and structures.

#### **■** Material Content

Black Mountain insulation contains

Thorlan IW 1%
Polyester Mesh 1%
Wool 98%

#### Hazardous information

The product is classified as non hazardous to health or the environment.

#### **■** First Aid Measures

If the product comes into eye contact with any person handling the material it is advised to rinse with water. The product is safe to touch and cannot be inhaled however in the unlikely event of ingestion; it is advised to drink water.

If any adverse reaction is experienced from any of the above, seek medical assistance.

#### **■** Fire Fighting Measures

Black Mountain sheep wool insulation is fire resistant; however some packaging materials may be flammable.

Suitable extinguishing media – water, CO<sup>2</sup>, foam, or dry chemical.

#### Accidental Release Measures

No special precautions necessary. Sweep or vacuum loose material and use a dust mask if there is a significant level of dust present at site.

#### ■ Handling and Storage

Care should be exercised when handling sharp tools or working at heights. Product should be stored in a dry area before use.

#### **■** Regularity Information

Non hazardous.

#### ■ Personal Protection / Exposure Control

Respiratory - if working in an existing dusty space use of face mask EN 149 Class FFP1 or FFP2 is recommended. No protective equipment is necessary for skin, hands and eyes.

#### Physical and Chemical Properties

Appearance - grey textured colour.

Chemical - natural organic material.

#### Stability and Reactivity

Avoid oxidizing materials.

#### Toxicological Information

No known health or toxicological hazards.

#### Ecological Information

Wool fibres are biodegradable and have no negative impact on the environment.

#### Disposal Considerations

Sheep wool insulation can be recycled, incinerated for additional energy or composted to biodegrade.

#### ■ Transport Considerations

Classified as non-hazardous for transport.

#### Other Information

If you have any questions please contact <a href="mailto:sales@blackmountaininsulationusa.com">sales@blackmountaininsulationusa.com</a> We recommend that a workplace risk analysis is conducted, especially when working at heights.

#### Manufactured by

Black Mountain Insulation Ltd, Tir Llwyd Industrial Estate, Rhyl, Denbighshire, LL 18 5JA United Kingdom

Black Mountain reserves the right to amend product specification at any time in the future without notice.



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