



# TECHNICAL DATA SHEET

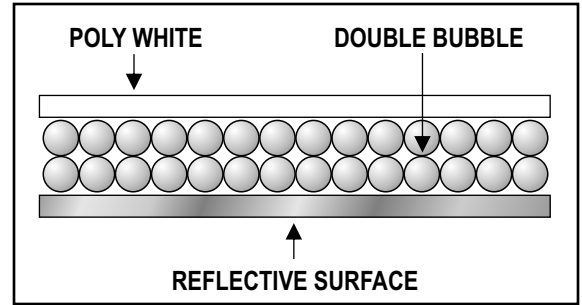
## POLY - REFLECTIVE INSULATION

www.rFOIL.com

### Product Description:

rFOIL™ Reflective Bubble Insulation is a single or double layer of polyethylene bubbles, sandwiched between a highly reflective surface and a white polyethylene sheet. It is ideal for many residential and commercial building applications, including walls and ceilings.

Adding rFOIL™ Reflective Bubble Insulation to your construction project improves the insulation value of the building envelope and significantly increases its energy efficiency. As well, all products in this line are classified as Class 1 / Class A in accordance with the ASTM-E84 fire test standard.



### Stock Sizes Available (Rolls):

Size	48" X 125'	72" X 102'	72" X 125'
Part No.	2510-48-125 2512-48-125 2513-48-125 2520-48-125 2522-48-125 2523-48-125	2512-72-102 2513-72-102 2522-72-102 2523-72-102	2521-72-125 2520-72-125

### Features:

- Class 1/Class A Fire Rating
- Neat, washable white polyethylene surface
- Double bubble provides an effective thermal break
- 97% Reflectivity for optimal thermal performance
- Radiant and vapor barrier all-in-one
- Available in Square Edge, Quick-Seam or Tab Two

### Applications:

- Metal Buildings (roof, walls)
- Residential Wall Cavities
- Post Frame Buildings

Physical Properties	Test	Reflective / Double Bubble / White Poly
NOMINAL THICKNESS	—	5/16"
WEIGHT	—	1.25 oz / sq. ft.
TEMPERATURE RANGE	ASTM C411	-50°F to 180°F
FIRE RATING	ASTM E84	CLASS 1 / CLASS A
THERMAL RESISTANCE	ASTM C1224	R-6.6 to R-15.2 (Horizontal & Downwards)
EMISSIVITY	ASTM C1371	0.03
REFLECTIVITY	ASTM E903	0.97
WATER VAPOR PERMEABILITY	ASTM E96	<0.01 Perms
RESISTANCE TO FUNGI & BACTERIA	ASTM C1338	DOES NOT PROMOTE GROWTH





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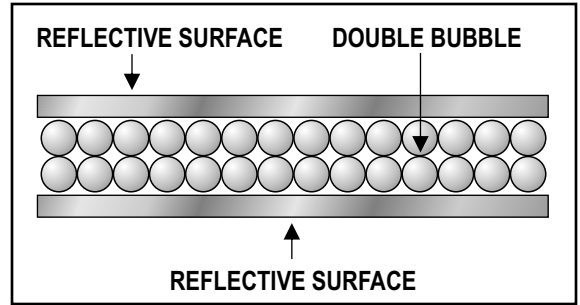
## REFLECTIVE INSULATION

www.rFOIL.com

### Product Description:

rFOIL™ Reflective Insulation is a double layer of polyethylene bubbles, sandwiched between two highly reflective aluminum surfaces. This product has been specifically designed for insulating commercial and residential building assemblies, reducing the amount of radiant heat transfer.

Typical system R-values incorporating rFOIL™ Reflective Insulation, range from R-6.6 to R-15.2, and all products in this line are Class 1 / Class A in accordance with the ASTM E84 fire test standard. In addition to increasing the thermal resistance of a building envelope, all rFOIL™ bubble-core products are approved vapor barriers.



### Stock Sizes Available (Rolls):

Size	48" X 125'	72" X 125'	72" X 102'
Part No.	2210-48-125 2212-48-125 2220-48-125	2220-72-125	2222-72-102

### Features:

- Class 1/Class A Fire Rating
- Unaffected by moisture & controls condensation
- Double bubble provides an effective thermal break
- 97% Reflectivity for optimal thermal performance
- Radiant barrier and vapor barrier all-in-one
- Available in Square Edge or Tab Two format

### Applications:

- Crawlspace
- Basement Insulation
- Residential Insulation
- Cathedral Ceiling

Physical Properties	Test	Reflective / Double Bubble / Reflective
NOMINAL THICKNESS	—	5/16"
WEIGHT	—	1.25 oz / sq. ft.
TEMPERATURE RANGE	ASTM C411	-50°F to 180°F
FIRE RATING	ASTM E84	CLASS 1 / CLASS A
THERMAL RESISTANCE (SYSTEM)	ASTM C1224	R-15.2 (Heat Flow Down)
		R-15.2 (Horizontal Heat Flow)
EMISSIVITY	ASTM C1371	0.03
REFLECTIVITY	ASTM E903	0.97
WATER VAPOR PERMEABILITY	ASTM E96	<0.02 Perms
RESISTANCE TO FUNGI & BACTERIA	ASTM C1338	DOES NOT PROMOTE GROWTH





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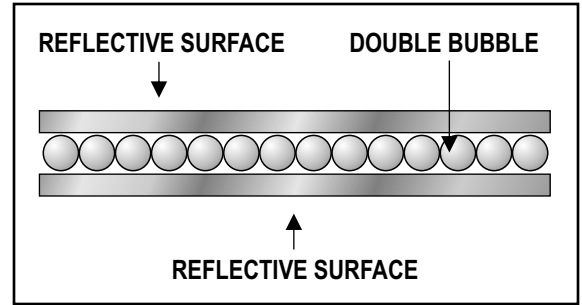
## rFOIL286™ - Fire Retardant Insulation

www.rFOIL.com

### Product Description:

rFOIL286™ reflective insulation is a 1/4" thick layer of polyethylene bubbles, bonded to - and sandwiched between - two highly reflective surfaces, or a reflective surface and a white polyethylene sheet.

rFOIL286™ is specifically designed for applications that require code compliance for exposed insulation. Not only does this product meet Class 1 / Class A requirements according to ASTM E84, but it also passes the NFPA 286 full room burn test. This is the ideal insulation for metal buildings and other structures where the insulation may be exposed.



### Stock Sizes Available (Rolls):

Size	<b>48" X 125'</b>	<b>72" X 102'</b>	<b>48" X 125'</b>	<b>72" X 102'</b>	<b>48" X 125'</b>
Part No.	6272-48-125	6272-72-102	6273-48-125	6273-72-102	6572-48-125

Size	<b>72" X 102'</b>	<b>48" X 125'</b>	<b>72" X 102'</b>
Part No.	6572-72-102	6573-48-125	6573-72-102

### Features:

- Available in Tab Two or Quick-Seam
- Approved vapor barrier protection
- Ideal for exposed insulation applications
- Passes NFPA 286 full room burn test!
- Insect and rodent resistant
- Inhibits the formation of mold, mildew, and fungi

### Applications:

- Metal Building Walls
- Metal Building Retrofit
- Mini-Storage Insulation

Physical Properties	Test	Reflective / 1/4" Bubble / Reflective
NOMINAL THICKNESS	—	1/4"
WEIGHT	—	0.78 oz / sq. ft.
TEMPERATURE RANGE	ASTM C411	-50°F to 180°F
FIRE RATING - SURFACE BURN	ASTM E84	CLASS 1 / CLASS A
FIRE RATING - FULL ROOM BURN	NFPA 286	PASSES
EMISSIVITY	ASTM C1371	0.04
REFLECTIVITY	ASTM E903	0.96
WATER VAPOR PERMEABILITY	ASTM E96	<0.01 Perms
RESISTANCE TO FUNGI & BACTERIA	ASTM C1338	DOES NOT PROMOTE GROWTH
TENSILE & ELONGATION	ASTM D882	Machine 69 lbs / sq. in. (173%)
TENSILE & ELONGATION	ASTM D882	Transverse 57 lbs / sq. in. (194%)





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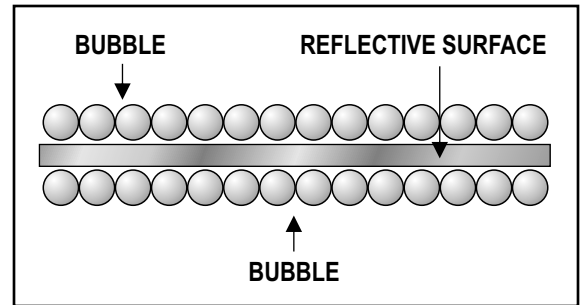
## ULTRA (CBF) CONCRETE BARRIER FOIL

www.rFOIL.com

### Product Description:

rFOIL™ Ultra CBF is a patented under-concrete insulation product, comprised of a highly reflective aluminum sheet, sandwiched between two layers of industrial strength polyethylene bubbles. This unique design protects the reflective surface from corrosive chemicals, and ensures that an airspace is maintained for optimum thermal performance.

Installing Ultra CBF can result in noticeably warmer floors, faster slab response times and reduced BTU consumption of radiant heating systems. Sealing seams with rFOIL™ White Poly Tape ensures a uniform insulator and vapor barrier.



### Stock Sizes Available (Rolls):

Size	<b>48" X 125'</b>	<b>16" X 125'</b>
Part No.	1620-48-125	1620-16-125

### Features:

- Can easily be installed over rough grade
- Superior bubble strength withstands jobsite traffic
- Methane, radiant and vapor barrier all-in-one
- Helps direct radiant heat into the living space
- Can easily be formed around plumbing, wiring etc.
- Installation is quick, safe and easy

### Applications:

- Radiant heating in a concrete floor
- Duct wrap for below-grade HVAC
- Radiant heating with a subfloor
- Radiant heating in a snowmelt

Physical Properties	Test	Reflective / 1/4" Bubble / Reflective
NOMINAL THICKNESS	—	5/16"
WEIGHT	—	1.35 oz / sq. ft.
TEMPERATURE RANGE	ASTM C411	-50°F to 180°F
FIRE RATING	ASTM E84	CLASS 2 / CLASS B
COMPRESSION STRENGTH	—	140 psi
FLEXIBILITY & PLIABILITY	TAPPI T512	No Cracking or Delamination
BURSTING STRENGTH	ASTM D751	180 psi
THERMAL RESISTANCE	ASTM C236*	R-3.8*
WATER VAPOR TRANSMISSION	ASTM E96	<0.02 Perms
RESISTANCE TO FUNGI & BACTERIA	ASTM C1338	DOES NOT PROMOTE GROWTH

\* ASTM C236 modified to demonstrate the radiation effect of reflective foil on reducing the energy input at the room-side of the Guarded Hot Box.





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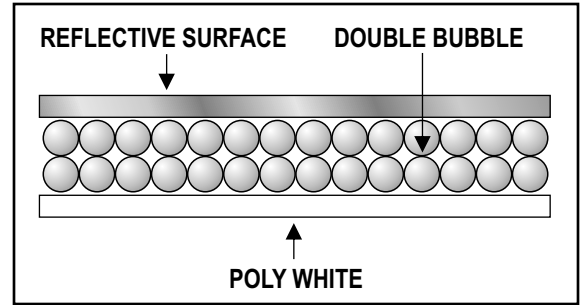
## CONCRETE UNDERPAD

www.rFOIL.com

### Product Description:

rFOIL™ Concrete Underpad consists of a double layer of polyethylene bubbles, sandwiched between an aluminum surface, and a white polyethylene sheet. It is ideal for many under-slab insulation applications, as a protective film is applied to the aluminum surface - virtually eliminating the risk of corrosion.

Using rFOIL™ Concrete Underpad in your construction project can improve the efficiency of radiant heating systems and significantly decreases heat loss to the ground below.



### Stock Sizes Available (Rolls):

Size	48" X 125'	72" X 125'	96" X 125'
Part No.	4320-48-125	4320-72-125	4320-96-125

### Features:

- Protective coating over aluminum surface
- Reduces heat loss to the ground below
- Quick, safe and easy to install
- Double bubble provides an effective thermal break
- Approved vapor barrier
- Available in 500, 750, and 1000 sq. ft. rolls.

### Applications:

- Radiant heating applications
- Under-slab insulation

Physical Properties	Test	Reflective / 1/4" Bubble / Reflective
NOMINAL THICKNESS	—	5/16"
WEIGHT	—	1.25 oz / sq. ft.
TEMPERATURE RANGE	ASTM C411	-50°F to 180°F
FIRE RATING	ASTM E84	CLASS 2 / CLASS B
LINEAR SHRINKAGE	—	None
PLIABILITY	CAN/CGSB 51.33	No Cracking
TENSILE & ELONGATION	ASTM D882	57 lbs./in <sup>2</sup> / 194%
WATER VAPOR PERMEABILITY	ASTM E96	<0.01 Perms
RESISTANCE TO FUNGI & BACTERIA	ASTM C1338	DOES NOT PROMOTE GROWTH





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## rFOIL™ TAPES

www.rFOIL.com

### Product Description:

rFOIL™ TAPES are made of a special UV metalized polypropylene film, with a high tack acrylic adhesive. These tapes can help maintain a complete seal in radiant barrier systems and are resistant to moisture, flame spread and smoke generation. High temperature resistance makes rFOIL™ TAPES ideal for use in heat repelling applications.



### Available Configurations:

rFOIL™ TAPES can be obtained with either a metalized aluminum surface or a durable white poly surface. The acrylic adhesive was specially formulated for excellent performance at sub-freezing temperatures, without compromising ease of application.

### Stock Items:

#### FOIL TAPE

#### WHITE POLY TAPE

Size	3" X 150'	2" X 150'	2" X 30'		3" X 150'	2" X 150'
Part No.	15213	15212	IK00011		15853	15852

### Features:

- Pressure-sensitive acrylic adhesive forms a bond that strengthens with time
- In exposed applications, rFOIL tapes help create a seamless finish to interior walls and ceiling
- Maintain a continuous vapor barrier and constant insulator

### Applications:

#### WHITE POLY TAPE

#### ALUMINUM (FOIL) TAPE

- Seam sealing & repair of any POLY Barrier rFOIL™
- Sealing seams in all under-concrete applications
- Seam sealing of any FOIL-faced insulation
- Repairing radiant barrier rips and tears

Physical Properties	FOIL TAPE	WHITE POLY TAPE
THICKNESS	3.0 MILS (0.003")	3.0 MILS (0.003")
ADHESION	40 oz. / in.	40 oz. / in.
PEEL	98 oz. / in. width	16 oz. / in. width
BACKING	UV Metalized Polypropylene	UV Metalized Polypropylene
ELONGATION	140%	140%
TENSILE STRENGTH	30 lbs. / in.	30 lbs. / in.
APPLICATION TEMPERATURE	-10°C to 50°C	-10°C to 50°C
TEMPERATURE RESISTANCE	-40°C to 140°C	-10°C to 100°C
ADHESIVE	Acrylic	Acrylic

