



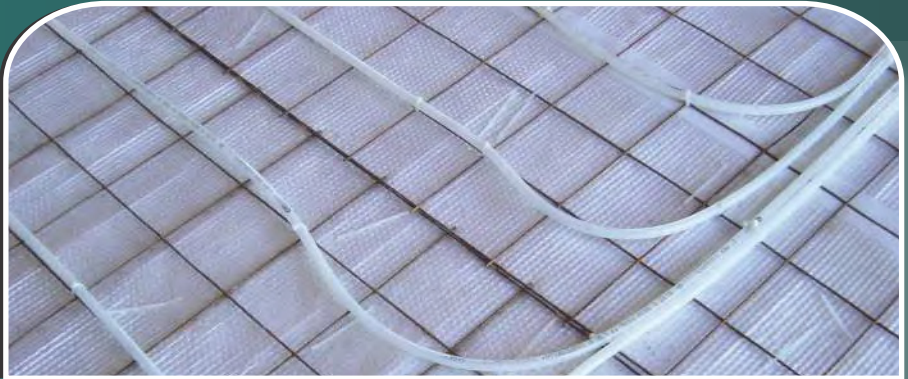
Ultra CBF Concrete Barrier Foil (1620 Series)

Applications:

- Insulating Under Concrete Slabs
- In-Floor Radiant Heating
- Beneath Concrete Over-Pours
- Edge-Slabs and Expansion Joints
- Outside Foundation Walls
- Snow Melt Systems
- Under Carpet

Benefits:

- Reduces Radiant Heat Loss Making Floors Warmer and more Comfortable
- Multi-Layer Vapor and Radon Barrier (14.2 mil)
- Cost-Effective Alternative to Rigid Foam Insulation
- Improves Efficiency of In-Floor Radiant Heating Systems
- Saves Energy Usage and Utility Costs
- Easy to Form around Obstructions and Conforms Easily to Uneven Grades
- Installs Easily Over any Grade
- Withstands Job Site Traffic



Ultra CBF is an outstanding reflective insulation and puncture-resistant vapor barrier. Ultra CBF is composed of a single layer reflective sheet, laminated between two layers of ultra-strong polyethylene bubble (up to 140 psi).

Ultra CBF is the ultimate under-slab insulation. It provides exceptional thermal value and a strong, permanent vapor and radon barrier. Ultra CBF typically costs less than 2" rigid PE board insulation. Ultra CBF is easier to handle, cut, and install than rigid foam insulation, yet has nearly six times the compression strength.



FEATURES **BENEFITS**

Reflective Sheet Inner Layer

- Reduces Radiant Heat Loss
- Redirects Radiant Heat Energy Back to Living Area
- Saves Energy Usage and Lowers Heating Costs
- Extends Life of Heating System
- Faster Reaction Time for Radiant Floor Heating

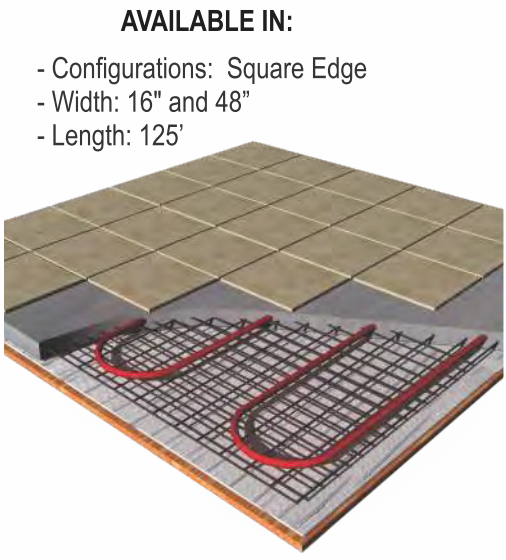
Multi-Layer Vapor and Radon Barrier (14.2 mil)

- Provides Continuous Thermal Break below the Slab
- Keeps Underground Moisture Away from Slab
- Durable and Long-Lasting Polyethylene
- Superior Puncture Resistance and Tear Strength
- Outstanding Vapor and Radon Barrier
- Can also Insulate the Edge-Slab and Outside of Foundation

Lightweight, Flexible Materials

- Simply Unroll, Overlap, and Tape the Seams
- Easy to Cut and Configure around Obstructions
- Ideal for Edge-Slab Insulation and Expansion Joint (Easily Folds Upward at Perimeter Footing)

PRODUCTS **SPECIFICATIONS**



Physical Properties	Test	Value
NOMINAL THICKNESS	—	5/16"
WEIGHT	—	1.16 oz / sq. ft.
TEMPERATURE RANGE	ASTM C411	-50°F to 180°F
EMISSION	ASTM C1371-04A	43%
REFLECTIVITY	ASTM E903	57%
COMPRESSION STRENGTH	ASTM D751	140 psi
TENSILE STRENGTH	CAN/CGSB - 51.33-M89	21.13 lbs/sq. in.
DEFLECTION	ASTM 1621	<10% under 0.5 PSI
PUNCTURE RESISTANCE	—	85 lbs/sq. in.
WATER VAPOR PERMEABILITY	ASTM E96, ONGC 51.33-M89	<0.01 Perms
RESISTANCE TO FUNGI & BACTERIA	ASTM C1338	DOES NOT PROMOTE GROWTH
LINEAR SHRINKAGE	—	NONE
FLEXIBILITY	CAN/CGSB - 51.33-M89	NO CRACKING

Warranty, Specific Applications and Installation Guides can be found on our Applications Manuals or at www.rfoil.com

More Benefits

- Strongly Bonded to Resist Delamination
- Sealed Seams Provide a Consistent Insulation
- Will not deteriorate over time
- Aluminum Radiant Barrier Permanently Protected from Corrosive Ground Elements, such as Lime and Soil Alkaline



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 Email: sales@jtgmuir.com • Website: jtgmuir.com



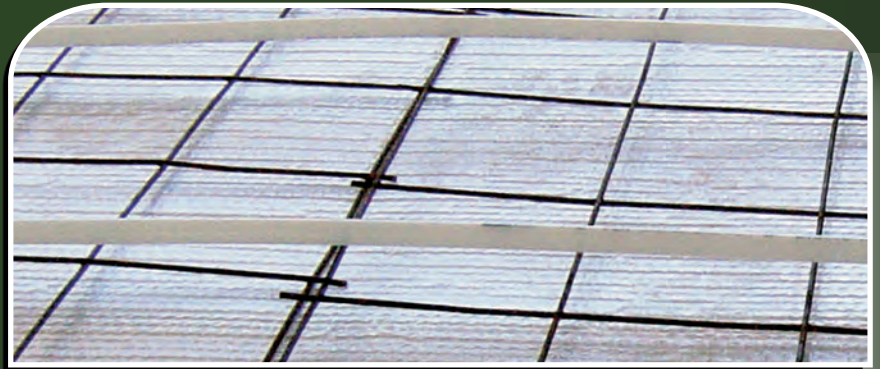
Concrete Underpad (Standard & Ultra) (4320 and 4620 Series)

rFOIL™ Applications:

- Insulating Under Concrete
- Slabs
- Beneath Concrete Over-Pours
- Edge-Slabs and Expansion Joints

rFOIL™ Benefits:

- Reduces Radiant Heat Loss through Floors
- High-Strength, Multi-Layer Vapor and Radon Barrier
- Cost-Effective Alternative to Rigid Foam Insulation
- Improves Efficiency of In-Floor Radiant Heating Systems
- Reduces Slab Reaction Time at System Startup
- Saves Energy Usage and Utility Costs
- Easy to Form around Obstructions
- Installs Easily Over any Grade
- Withstands Job Site Traffic



rFOIL™ Standard and Ultra Concrete Underpad are an outstanding reflective insulation and puncture-resistant vapor barrier. They are composed of a double layer of high-strength polyethylene bubbles sandwiched between one layer of metalized foil, and a layer of clear polyethylene.

rFOIL™ Standard and Ultra Concrete Underpad provides exceptional thermal value and a strong, permanent vapor and radon barrier. They are cost-effective alternative to rigid foam insulation, and are always installed with the clear side facing upwards.



PATENTED

(See website for details)

www.rFOIL.com



Concrete Underpad (Standard & Ultra) (4320 and 4620 Series)

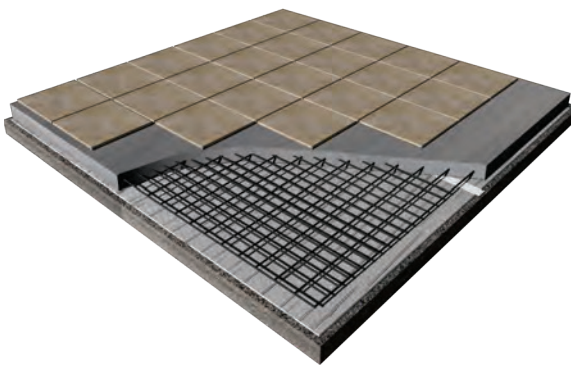
FEATURES BENEFITS

- | | |
|--|--|
| <p>Reflective Metalized Foil Facing
(installed facing down)</p> <p>Clear Polyethylene Facing</p> <p>Multi-Layer Bubble Core</p> <ul style="list-style-type: none"> - Concrete Underpad is a <u>8.4 mil</u> multi-layer bubble core - Ultra Concrete Underpad is a <u>11 mil</u> multi-layer bubble core <p>Lightweight, Flexible Materials</p> | <ul style="list-style-type: none"> - Reduces Radiant Heat Loss - Redirects Radiant Heat Energy Back to Living Area - Saves Energy Usage and Lowers Heating Costs - Extends Life of Heating System - Faster Reaction Time for Radiant Floor Heating <ul style="list-style-type: none"> - Unaffected by Lime and other Corrosive Chemicals, often Found in Concrete. <ul style="list-style-type: none"> - Provides Continuous Thermal Break below the Slab - Keeps underground moisture away from slab - Durable and Long-Lasting Polyethylene - Strong Puncture Resistance and Tear Strength - Outstanding Vapor and Radon Barrier - Can also Insulate the Edge-Slab and Outside of Foundation <ul style="list-style-type: none"> - Just Unroll, Overlap, and Tape the Seams - Easy to Cut and Configure around Obstructions - Ideal for Edge-Slab Insulation and Expansion Joint (Easily Folds Upward at Perimeter Footing) |
|--|--|

PRODUCTS SPECIFICATIONS

AVAILABLE IN:

- Configurations: Square Edge
- Width: 48" - Length: 125'



Physical Properties	Test	Concrete	Ultra Concrete
NOMINAL GAUGE	ASTM D751	8.4 mil	11 mil
FIRE RATING	ASTM E84-09	CLASS 1 / CLASS A	
EMISSIVITY	ASTM C1371-04A	0.04	0.04
REFLECTIVITY	ASTM E903	0.96	0.96
WATER VAPOR PERMEABILITY	ASTM E96	0.42 Perms	0.42 Perms
RESISTANCE TO FUNGI & BACTERIA	ASTM C1149	DOES NOT PROMOTE GROWTH	
PLIABILITY	ASTM C1224-03	NO CRACKING	NO CRACKING
BLEEDING AND DELAMINATION	ASTM C1224-03	NO BLEEDING OR DELAMINATION	
CORROSIVENESS	ASTM D3310-00	PASSES	PASSES
COMPRESSION	CAN/CGSB 4.2	70 PSI	90 PSI
FIRE RATING - FULL ROOM BURN	NFPA 286	PASSES	PASSES

Specific Applications and Installation Guides can be found on our Applications Manuals or at www.rfoil.com

More Benefits

- Warmer, More Comfortable Floors
- Conforms Easily to Uneven Grades
- Strongly Bonded to Resist Delamination
- Sealed Seams Provide a Consistent Insulation



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