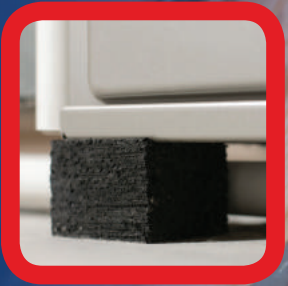


THERMO™

MANUFACTURING INC.



INNOVATIVE TECHNOLOGY FOR THE INSTALLATION OF HEATING & COOLING SYSTEMS

The Product that Built Our Company!

FIRE-RESISTANT THERMOPAN®

THE RESIDENTIAL PANNING STANDARD FOR NORTH AMERICA!

THERMO-PAN™ is a High Quality "no Noise" Sheet Metal Alternative for Constructing Return Air Ducts

- No duct noise
- Satisfied homeowners
- Excellent for open web trusses
- Lightweight and easy to install
- Will not sustain combustion
- Airspace created provides R-Value = 5
- No shop fabrication and no cut hands
- Four (4) precision pre-cut header sizes available

Made from Recycled Products :: MADE IN U.S.A. AND CANADA

PRODUCT	ORDER #	SIZE	PC/BOX
FR THERMO-PAN	16048	16" X 47.5"	25
FR THERMO-PAN	19048	19.5" X 47.5"	25
FR THERMO-PAN	22048	22" X 47.5"	25
FR THERMO-PAN	24048	24" X 47.5"	25
FR THERMO-PAN	32036	32" X 35.5"	25
FR THERMO-PAN	32039	39.5" X 32"	25

PRODUCT	ORDER #	SIZE	PC/BOX
FR HEADERS-STD.	16012R	16" X 12"	125
FR HEADERS-STD.	16016R	16" X 16"	125
FR HEADERS-I-JOIST	16017R	16" X 17"	125
FR HEADERS-I-JOIST	16019R	19" X 16"	125

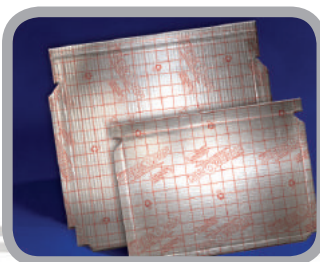
ULTRA FIRE-RESISTANT THERMOPAN®

Performance Tested
UL723 Test Standard

Look for these ETL® test values on every piece of Fire-Resistant Thermo-Pan®

FLAME SPREAD INDEX 15
SMOKE INDEX 5

CLASS 1 FIRE RATING



FLAME SPREAD
15
SMOKE INDEX
5

Made from Recycled Products
MADE IN U.S.A. AND CANADA

25 PC/PKG
FOR THE
CONTRACTOR

PRODUCT	ORDER #	SIZE	PC/BOX
STANDARD HEADER	16013	16" X 12"	125
STANDARD HEADER	16015	16" X 16"	125
I-JOIST HEADER	16018	16" X 17"	125
I-JOIST HEADER	16020	19" X 16"	125

PRODUCT	ORDER #	SIZE	PC/BOX
ULTRA FR THERMO-PAN	16050	16" X 47.5"	25
ULTRA FR THERMO-PAN	19050	19.5" X 47.5"	25
ULTRA FR THERMO-PAN	24050	24" X 47.5"	25

...And Continues to Build Our Homes!

THERMO CONNECTORS

THERMO-PAN PANEL CONNECTORS

- SAVES TIME
- ADD RIGIDITY

THERMO-CONNECTORS™ are molded polypropylene strips which easily connect THERMO-PAN™ panels.

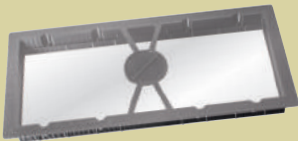


PRODUCT	ORDER #	SIZE	PC/BOX
PANNING CONNECTORS	16348	16"	500
PANNING CONNECTORS	19348	19.5"	250
PANNING CONNECTORS	22348	22"	250
PANNING CONNECTORS	24348	24"	250
PANNING CONNECTORS	32336	32"	250

THERMO-HVAC

Supply or Return Air Register **FLOOR-FRAME**

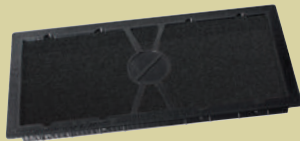
Patent Pending



WINDOWED

CLEAR FILM ALLOWS NO DIRT OR AIR

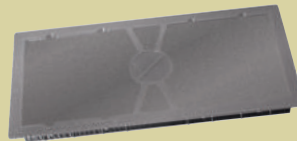
Order#	Size	PC/Box
21002	2.25x10	50
21202	2.25x12	50
21402	2.25x14	50
41002	4x10	50
41202	4x12	50
41402	4x14	50



FILTERED

ALLOWS CLEAN AIR FLOW

Order#	Size	PC/Box
21003	2.25x10	50
21203	2.25x12	50
21403	2.25x14	50
41003	4x10	50
41203	4x12	50
41403	4x14	50



WINDOWED & FILTERED

Order#	Size	PC/Box
21004	2.25x10	50
21204	2.25x12	50
21404	2.25x14	50
41004	4x10	50
41204	4x12	50
41404	4x14	50



- Add quality, safety and professionalism to your job.
- Keeps dirt out of system and basement.
- Saves labor costs.
- "No Step" safety marked.
- Easy to seal duct to floor and system.
- Makes installation a snap.
- Installation instructions on all bags.
- Fits all standard boots.
- Precision molded black polypropylene.

THERMO-FRAMES^{Patented™} Return Air Grille Wall Frames



STANDARD
ALLOWS UNFILTERED
AIR FLOW



STANDARD MAKES

Order#	Size	PC/Box
14610	12 x 6 (2) or 30x6(1)	50
14620	24x6	50
14630	30x6 or 14x6(2)	50
14830	30x8 or 14x8(2)	50

HART & COOLEY

Order#	Size	PC/Box
24610	12 x 6 (2) or 30x6(1)	50
24620	24x6	50
24630	30x6 or 14x6(2)	50

WINDOWED
CLEAR FILM ALLOWS
NO DIRT OR AIR



STANDARD MAKES

Order#	Size	PC/Box
14611	12 x 6 (2) or 30x6(1)	50
14621	24x6	50
14631	30x6 or 14x6(2)	50
14831	30x8 or 14x8(2)	50

HART & COOLEY

Order#	Size	PC/Box
24611	12 x 6 (2) or 30x6(1)	50
24621	24x6	50
24631	30x6 or 14x6(2)	50

FILTERED
ALLOWS CLEAN AIR FLOW



STANDARD MAKES

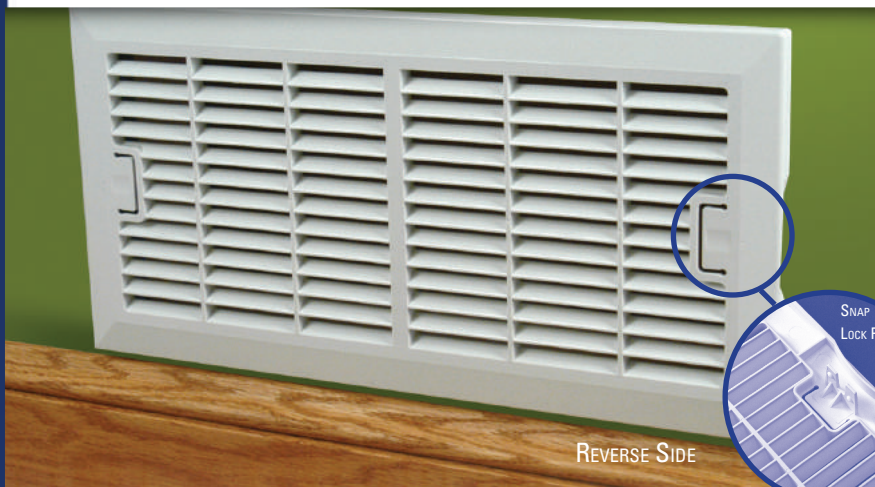
Order#	Size	PC/Box
14612	12 x 6 (2) or 30x6(1)	50
14622	24x6	50
14632	30x6 or 14x6(2)	50
14832	30x8 or 14x8(2)	50

HART & COOLEY

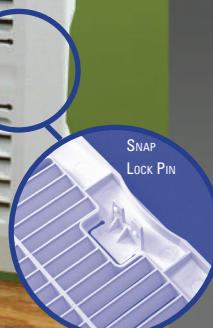
Order#	Size	PC/Box
24612	12 x 6 (2) or 30x6(1)	50
24622	24x6	50
24632	30x6 or 14x6(2)	50



6 CUSTOM SIZES
OF PRECISION MOLDED FRAMES
4 CUSTOM STYLES
TO SUIT YOUR NEEDS



REVERSE SIDE



SNAP-GRILLES^{Patented™}

FOR RETURN AIR FRAMES

PRODUCT	ORDER #	SIZE	PC/BOX
SNAP GRILLE	15146	15 7/8" X 7 7/8"	40
FRAME	14630	30" X 6" (OR 2-14x6)	50

10 PC/PKG
FOR THE
CONTRACTOR

**NO TOOLS OR SCREWS REQUIRED-
SIMPLY SNAP INTO PLACE!**

THESE STURDY PRECISION-MOLDED WHITE ABS GRILLES ARE DESIGNED FOR USE WITH STANDARD 1/2" OR 5/8" DRYWALL. THEY SNAP-FIT PERFECTLY INTO OUR THERMO-FRAMES™ — WHETHER USED AS A SINGLE (14" X 6") OR AS A DOUBLE (30" X 6") PLACED SIDE-BY-SIDE.



- COMPETITIVELY PRICED
- JUST DEPRESS TABS FOR EASY REMOVAL AND CLEANING. DISHWASHER SAFE.
- SAVE TIME, LABOR AND MONEY.
- PAINT TO MATCH ANY DECOR.
- NO RUSTING, NO CHIPPED METAL TO TOUCH UP.
- PRE-MARKED FOR SCREWS IF USED WITH OTHER BRAND FRAMES.

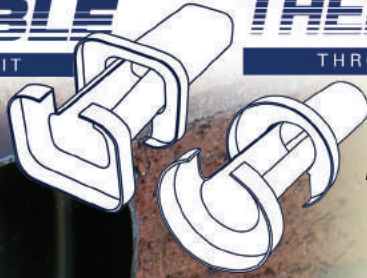
Thimble Kits - for Existing Exterior Line Sets

THERMO
RETROFIT-THIMBLE

RETROFIT THROUGH THE WALL LINE SET KIT

THERMO-THIMBLE

THROUGH-THE-WALL LINE SET KIT



The professional way to run your A/C line set & wire projects.

ThermoThimble is innovative...

- Stops line set snagging.
- Creates a permanent, air-tight seal through walls.
- High-density foam gaskets keep out air, insects & other pests.
- No ugly holes to patch.

Available
in **ROUND** and
RECTANGULAR
Styles.



PRODUCT	ORDER #	SIZE	PC/BOX
RETROFIT-THIMBLE KIT (RD)	44003	2 7/8" Dia. O.D. x 7" Lg.	20
RETROFIT-THIMBLE KIT (RD)	44006	4 7/8" Dia. O.D. x 7" Lg.	16
RETROFIT-THIMBLE KIT (REC)	44009	2 1/4" x 3 1/8" O.D. x 7" Lg.	20

PRODUCT	ORDER #	SIZE	PC/BOX
THIMBLE KIT (Round)	44002	2 7/8" Dia. up to 12" Wall	20
THIMBLE KIT (Round)	44005	4 7/8" Dia. up to 12" Wall	16
THIMBLE KIT (Rectangular)	44008	2 1/4" x 3 1/8" up to 12" Wall	20

THERMOSTAT-RUFF PLATE

Finally, there's a solution to mounting those unprofessional looking thermostat wires. The Thermo-Stat Ruff Plate™ eliminates inaccurate temperature readings and provides an airtight seal around the wires for accurate temperature control. It also provides space for the contractor's logo or business card.

Features...

- 6"x6" Size fits most all makes & models of thermostats
- Residential and commercial application
- For wood or metal studs
- Provides solid support for sub-base screws
- Keeps wire in middle of stud
- Easy right or left hand stud mounting

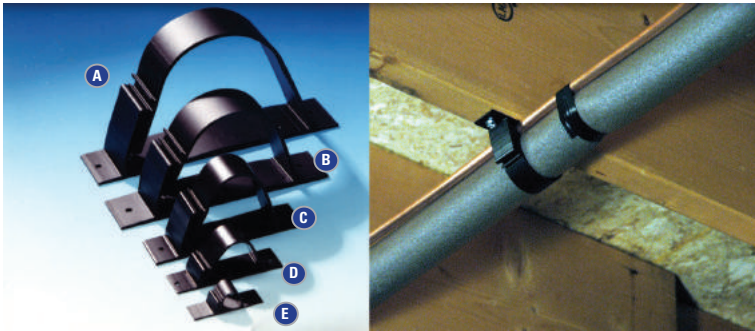


EZ Installation Supports and Better-than-Bricks Levelers!

SNAP-CLAMP[®]

PATENTED

UNIVERSAL MOUNTING BRACKETS



Give the quality, professional look to your job with just half the labor!

THERMO-SNAP CLAMPS™ are the low-cost solution to all your pipe mounting jobs. Pre-mounted brackets provide an easy one-man installation job that is literally a snap!

Made from Recycled Products

Multi-use adjustable Snap Clamp:

- A** Industrial
- B** Commercial
- C** Residential
- D** Mini
- E** Micro

PRODUCT	ORDER #	SIZE	PC/BOX
SNAP CLAMPS	41050	Micro : 7/16" OD	1000
SNAP CLAMPS	41075	Mini : 1" OD	1000
SNAP CLAMPS	41118	Residential : 1 1/2" OD	500
SNAP CLAMPS	41125	Commercial : 2" OD	250
SNAP CLAMPS	41150	Industrial : 3" OD	250

- Multi-use applications including copper, PVC and ABS pipes.
- Five heavy-duty sizes.
- UV protected.
- Maintenance Free - use indoors or out.
- Eliminates vibrations and noise call backs.
- Easy to re-open for an addition or custom adjustment.

THERMO-LEVELERS™

BETTER THAN BRICKS!

LEVELER BLOCKS ORDER #17525

- THERMO-TWIST™ leveler blocks twist to three different heights to level furnaces, electric heaters, air conditioners quickly and easily.
- Lightweight - better than bricks. Tested crushing strength - 5,000 lbs. per block. Water, weather and insect proof. Won't chip, crack, split or rot.

4 PC/PKG
FOR THE
CONTRACTOR

Vibration Pads



VIBRATION PADS ORDER #19525

- Perfect for residential, commercial and industrial use.
- Shim furnaces and condenser units... vibration-free!
- Made from pure polymer. Softer than THERMO-TWIST™ LEVELER BLOCKS.

PRODUCT	PRODUCT
LEVELER BLOCKS	VIBRATION PADS
# (17525)	# (19525)
1.75" X 2 X 2.25"	3/4" X 3" X 3"
25 PKS/BOX	25 PKS/BOX
20,000 lbs./Pack	500 lbs./Pack

More Products to Save Time and Money.

THERMO-BRACKETS

PATENTED

OUR MOST POPULAR PIPE HANGER



- Adjusts both horizontally and vertically to meet your needs.
- PVC bracket body prevents heat and noise transfer from ducts.
- No nails, comes ready-to-use

PRODUCT	ORDER #	SIZE	PC/BOX
THERMO BRACKET	01600	14.25"	250
THERMO BRACKET (Bulk)	01601	14.25"	250

THERMO-SADDLES

TM

HANG ROUND FLEX DUCT IN OPEN CEILINGS

- Eliminates pinching and compression of insulation, providing greater R-value and increased airflow.
- One size fits all – use individually or link together to fit any duct diameter.

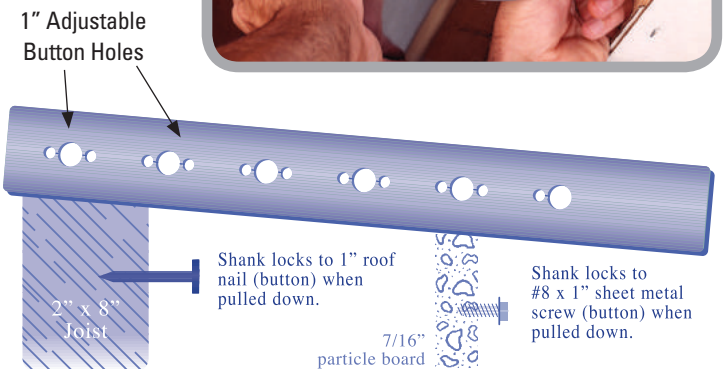


PRODUCT	ORDER #	SIZE	PC/BOX
FLEX DUCT SADDLE	10101	6" to 14"	250

BUTTON-LOK

TM

WORLD'S BEST HANGER STRAP



PRODUCT	ORDER #	SIZE	PC/BOX
BUTTON-LOK	10100	1" X 100'	25
BUTTON-LOK	10200	2" X 100'	10

THERMOSEALANT

High-Temp RTV Silicone Sealant

Thermo's High-Temp RTV Silicone Sealant is a one part, easy to use, non-slumping paste that cures to a silicone rubber when exposed to atmospheric moisture at room temperature. This product is engineered to provide a durable, watertight bond when exposed to continuous temperatures ranging from -80° to 500°F on a continuous basis – while maintaining its integrity at up to 600°F for intermittent time periods. Its unique formulation acts as both a thermal and electrical insulator as well, so it is ideal for sealing around heating elements.

Features...

- Approved in High Temperature Areas
- Non Sag Red Formula
- Insulates Electrically
- Up to 600 Degrees F
- Insulates Thermally
- Non Paintable

Applications...

- HVAC
- Fireplaces
- Furnace Vent Pipes
- Sealing Around Heating Elements
- Industrial Ovens
- Smoke Stacks
- Engine Parts

PRODUCT	ORDER #	COLOR	TUBES/CASE
THERMOSEALANT	60003	RED	12

RTV Silicone Sealant

Thermo's RTV Silicone Sealant is a one component, permanently flexible, RTV (Room Temperature Vulcanizing) mildew resistant silicone sealant that is the industry standard. The products tough chemical resistance makes it a worry-free solution for a wide range of applications. It provides excellent adhesion to sheet metal, aluminum, vinyl, glass, tile and cultured marble without the need for a primer. The product is engineered to cure rapidly when exposed to atmospheric moisture, to form a durable tight bond that contractors and installers count on.

Features...

- Weather Resistant
- Excellent Adhesion
- Permanently Flexible
- Easy to Gun, Easy to Tool
- Non-Sag & Slump
- Non Paintable

Applications...

- HVAC
- General Construction
- Kitchen & Bath
- Transportation
- Industrial

PRODUCT	ORDER #	COLOR	TUBES/CASE
THERMOSEALANT	15000	CLEAR	12
THERMOSEALANT	15001	WHITE	12
THERMOSEALANT	15002	BLACK	12
THERMOSEALANT	15004	ALUMINUM	12
THERMOSEALANT	15005	ALMOND	12
THERMOSEALANT	15010	TRANSLUCENT	12
THERMOSEALANT	15012	GREY	12



THERMOFOAM

Fireblock Foam Sealant

MULTIPURPOSE LOW PRESSURE ONE-COMPONENT FIREBLOCK POLYURETHANE FOAM SEALANT

Thermofoam Fireblock Sealant is a low pressure, one component, polyurethane foam sealant specifically designed and colored orange to seal annular spaces around ducts, plumbing penetrations, cables, and other penetrations between rooms and floors. A critical advantage of Thermofoam Fireblock Sealant is its ease of use and its effectiveness at blocking smoke and toxic gases. The foam sealant stops air infiltration by blocking air from entering/escaping through gaps which prevent the flames, smoke, and gases from spreading. The product is for use in Type V residential construction. Fireblock Sealants are not intended for use in hourly rated assemblies.

Product Uses...

- Sealing Duct Penetrations
- Sealing Plumbing Penetrations
- Type V Residential Fire Blocking
- Sealing Electrical Outlets
- Sealing Electrical Openings
- Sealing Through Stud Penetrations
- Sealing Baseplates
- Sealing Insulation Board Joints

PRODUCT	ORDER #	DESCRIPTION	TUBES/CASE
THERMOFOAM	30033	12 oz. Fireblock Straw Foam	12
THERMOFOAM	30192	24 oz. Fireblock Straw Foam	12
THERMOFOAM	30181	24 oz. Fireblock Gun Foam	12

Low Pressure Polyurethane Foam Sealant

Thermofoam is a low pressure one-component polyurethane foam sealant that is a moisture-cured, multipurpose sealant designed to seal and fill small cracks and voids, creating a tight barrier against noise, moisture and air infiltration.

Compared to standard cartridge type sealants, Thermofoam polyurethane foam sealants have excellent adhesion and expansion characteristics ensuring a complete and permanent air tight seal. Polyurethane foam sealants result in less waste on small jobs while having an economic impact on large jobs.

Product Uses...

- Sealing around HVAC Vents and Pipes
- Sealing Though the Wall Penetrations
- Sealing Insulation Board Joints
- Sealing Electrical Outlets
- Sealing Electrical Openings
- Sealing Plumbing Penetrations
- Sealing Through Stud Penetrations
- Sealing Baseplates
- Sealing Can Lights
- Air Sealing Attic

PRODUCT	ORDER #	DESCRIPTION	TUBES/CASE
THERMOFOAM	30002	12 oz. Standard Straw Foam	12
THERMOFOAM	30107	24 oz. Standard Straw Foam	12
THERMOFOAM	30115	24 oz. Standard Gun Foam	12



THERMO REFLECT™

THE NEXT GENERATION OF REFLECTIVE INSULATION.

This product has an inspector-friendly code certification strip on the product which identifies brand name and testing information... which means no hassles at the job site.

- 97% reflectivity
- Easy to install - Fiber free and environmentally friendly
- Impervious to mold, insects, and rodents
- Helps reduce heat loss through your duct surfaces
- Raises your cooling and heating efficiency
- Helps ensure better climate control and comfort
- R-6 with air-space, R-4.3 without air-space
- ASTM E84-Class 1/Class A fire rating approved
- ASTM C411-Passed

DUCT INSULATION

ITEM #	DESCRIPTION	SIZE	SQ. FT.
T12290-24-050	Reflective-Double Bubble-Reflective	24" x 50'	100
T12290-36-050	Reflective-Double Bubble-Reflective	36" x 50'	150
T12290-48-050	Reflective-Double Bubble-Reflective	48" x 50'	200
T12290-48-100	Reflective-Double Bubble-Reflective	48" x 100'	400
T12290-48-125	Reflective-Double Bubble-Reflective	48" x 125'	500
T12290-60-100	Reflective-Double Bubble-Reflective	60" x 100'	500
T12290-60-125	Reflective-Double Bubble-Reflective	60" x 125'	625



When Building Codes Require an R-8 Duct Insulation

When installed correctly these Thermo Reflect products can add a **R-8** to the insulation value of a duct system. With the recent concerns about fiberglass, now is the ideal time for many contractors to make the switch to **BIG 8** and other Reflect Products.

- Meets Class 1 / Class A fire rating approval
- Minimal space requirements
- Inhibits condensation, mold and fungi growth
- Approved vapor barrier protection
- Quick, safe & easy to install

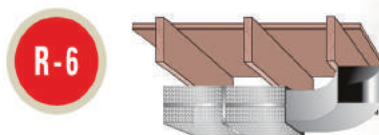
FLAME SPREAD
10
SMOKE INDEX
10

Performance Tested
UL723 Test Standard

ITEM #	DESCRIPTION	SIZE	SQ. FT.
2280-48-050	Foil-Bubble-Foil / Spacer	48" x 50'	200
2280-48-075	Foil-Bubble-Foil / Spacer	48" x 75'	300

R-8 with Air-Space : R-6 without Air-Space

Reflective duct insulation products make duct systems more energy efficient by 10 - 30%. This increases the overall comfort of a residence and results in significant savings to the homeowner.

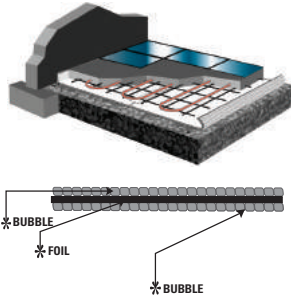


Radiant Heating and Barrier Insulation for In-Home Use.

ULTRA CONCRETE BARRIER FOIL (CBF)

Ultra CONCRETE BARRIER FOIL™ (CBF) is a layer of pure aluminum Foil sealed on both sides by industrial-strength polyethylene bubbles. This patented design protects the aluminum from lime in curing concrete, which deteriorates foil on-contact.

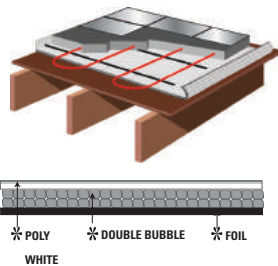
Can be easily installed over rough grade while significantly reducing slab heat loss.



ITEM #	DESCRIPTION	SIZE	SQ. FT.
T11620-16-125	Bubble-Foil-Bubble	16" x 125'	167
T11620-48-125	Bubble-Foil-Bubble	48" x 125'	500

ULTRA POLY BARRIER

Poly Barrier is a double layer of polyethylene bubbles bonded to a layer of 99% pure aluminum foil on one side, and a layer of white-polyethylene on the other side. Both Ultra and Standard grade products are approved vapor barriers. The Ultra grade offers a superior product thickness of 10 mil (versus 7 mil). Both Poly Barriers improve slab heat loss efficiency by 50%, directing heat up toward the living space.



ITEM #	DESCRIPTION	SIZE	SQ. FT.
T11320-48-125	Ultra Foil-Double Bubble-Poly	48" x 125'	500
T14320-48-125	Foil-Double Bubble-Poly	48" x 125'	500



NT RADIANT BARRIER FOR ATTICS

THERMO REFLECT ATTIC NT - reflects 97% of radiant heat transfer, protects the installed R-Value of attic insulation by controlling moisture and adds an additional r-5.4* to existing insulation. REDUCES ENERGY CONSUMPTION - because THERMO REFLECT ATTIC NT is made of highly reflective metallized aluminum, it creates a low-emissivity (low-e) surface to help reduce heat gain in the summer and heat loss in the winter.

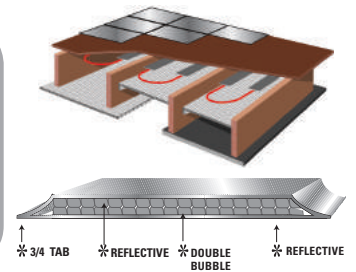


CHANNELS MOISTURE VAPOR AND ALLOWS FOR BREATHEABILITY - when vapor enters the attic from the living space, THERMO REFLECT ATTIC NT helps diffuse the vapor through its breathable membrane.

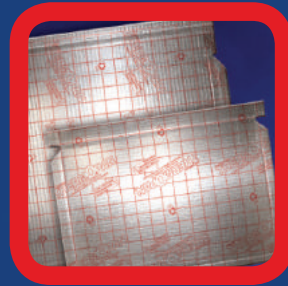
ITEM #	DESCRIPTION	SIZE	SQ. FT.
T14800-48-125S	Reflective-No-Tear Solid	48" x 125'	500
T14800-48-125P	Reflective-No-Tear Perforated	48" x 125'	500

BETWEEN JOIST INSULATION

When tubing is attached to the underside of the sub-floor, this is known as a below-deck or joist-space dry system. These systems don't affect floor height nor do they disrupt existing floor coverings, making them ideal for retrofit projects.



ITEM #	DESCRIPTION	SIZE	SQ. FT.
T12222-12-125	Reflective-Double Bubble-Reflective	12" x 125'	125
T12222-16-125	Reflective-Double Bubble-Reflective	16" x 125'	167
T12222-18-125	Reflective-Double Bubble-Reflective	18" x 125'	187.5
T12222-24-125	Reflective-Double Bubble-Reflective	24" x 125'	250
T12222-16-075	Reflective-Double Bubble-Reflective	16" x 75'	100
T12222-24-075	Reflective-Double Bubble-Reflective	24" x 75'	150



THERMO MANUFACTURING INC.

Canton, OH 44705

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U.S. & Canada Fax Toll Free: (888) 678-8711

www.THERMOPAN.com