

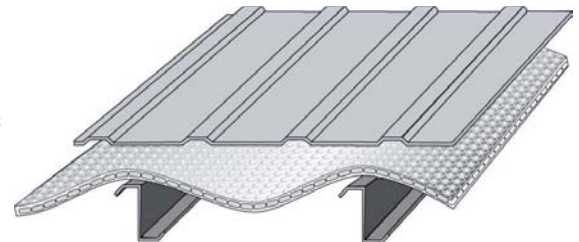


## METAL BUILDING ROOF APPLICATION

- Ideal insulation for metal frame building applications
- Quick and easy to install, and adds R-value
- Reduces heat loss, and heat gain all year round
- Can block up to 97% of radiant heat transfer

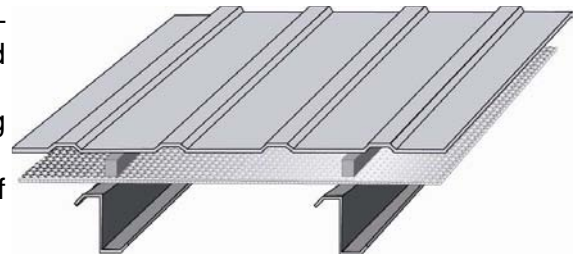
### INSTALLATION METHOD #1 – Drape Method

1. Begin attaching TVM Reflective Insulation by first applying double-sided tape on the C or Z channels.
2. Unroll the product, allowing it to sag between channels creating a 3/4" air space.
3. Apply TVM tape to seams, or use the Quick Seam tab if available.
4. Attach metal roofing as usual – creating an enclosed air space between insulation and the wall covering itself.



### INSTALLATION METHOD #2 – Purlin Method

1. Beginning at end purlin, attach TVM reflective insulation – double-sided tape can be used if necessary to temporarily hold the product in place.
2. Unroll the reflective insulation, pull tight, and continue mounting product to purlins.
3. Apply TVM reflective tape to seams or use Quick Seam tabs, if they are available.
4. Attach 3/4" – 1" strapping overtop of the insulation.
5. Attach metal roofing as per usual method, creating an enclosed air space between roofing and insulation.



### SUGGESTED PRODUCTS FOR THIS APPLICATION:

- |                       |   |
|-----------------------|---|
| REFLECTIVE INSULATION | ▶ 2200 or 2500 series - available in various dimensions |
| TVM REFLECTIVE TAPE   | ▶ 15213 (reflective), 15853 (white poly)                |

\*Check local building codes for compliance before installation. This installation sheet is intended solely to illustrate the proper location and placement of TVM's Reflective Insulation products in specific construction applications. They are not intended to illustrate proper construction methods – which is ultimately the responsibility of the builder or contractor. The installation instructions are only recommendations relating to the location and placement of TVM's Reflective Insulation products, and TVM Building Products makes no claims that these construction systems are universally accurate.

\*\*All warranties and performance estimates are void if TVM Reflective Insulation products are used in exterior applications, or in non-enclosed systems or buildings.

\*\*\*Exercise caution when using TVM Reflective Insulation products near and around electrical wiring and devices.

PLEASE SEE OUR TERMS & CONDITIONS FOR ALL WARRANTY INFORMATION  
CUSTOMER SERVICE and SALES

TOLL FREE: 1.888.699.1645

Phone: 1.814.269.9674

Fax: 1.814.269.4683

Email: customerservice@tvmi.com



www.tvmi.com





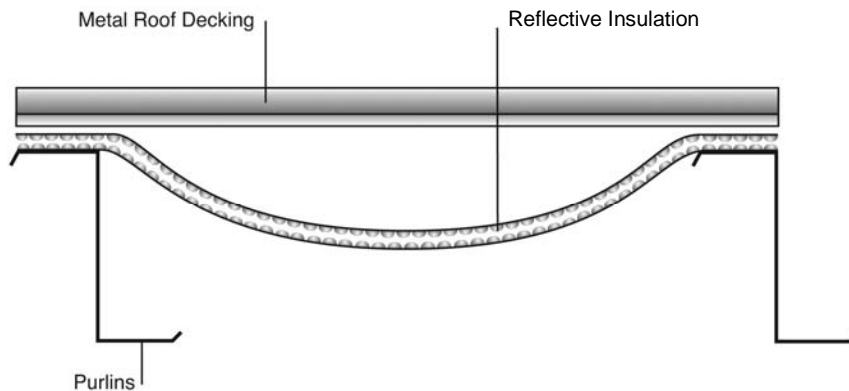
## METAL BUILDING ROOF: R-10

- Ideal insulation for metal frame building applications
- Quick and easy to install, and adds R-value
- Reduces heat loss, and heat gain all year round
- Can block up to 97% of radiant heat transfer

### INSTALLATION METHOD

---

1. Starting at the ridge, unroll TVM insulation perpendicular to the purlins.
2. Using 1 ¼" self-tapping screws, attach end of roll to ridge (screws spaced 8" apart).
3. Continue installing insulation towards roof's edge, allowing the insulation to sag approximately ¾" between purlins.
4. Unroll the second roll of insulation as in step 1, and attach the two sections together using the Quick Seam tab (if applicable), or TVM tape.
5. Install first course of metal roofing section, in accordance with the manufacturer's instructions.
6. Repeat steps 1-5 for the remainder of the roof.



### SUGGESTED PRODUCTS FOR THIS APPLICATION:

---

- |                       |   |
|-----------------------|---|
| REFLECTIVE INSULATION | ▶ 2200 or 2500 series - available in various dimensions |
| TVM REFLECTIVE TAPE   | ▶ 15213 (reflective), 15853 (white poly)                |

\*Check local building codes for compliance before installation. This installation sheet is intended solely to illustrate the proper location and placement of TVM's Reflective Insulation products in specific construction applications. They are not intended to illustrate proper construction methods – which is ultimately the responsibility of the builder or contractor. The installation instructions are only recommendations relating to the location and placement of TVM's Reflective Insulation products, and TVM Building Products makes no claims that these construction systems are universally accurate.

\*\*All warranties and performance estimates are void if TVM Reflective Insulation products are used in exterior applications, or in non-enclosed systems or buildings.

\*\*\*Exercise caution when using TVM Reflective Insulation products near and around electrical wiring and devices.

CUSTOMER SERVICE and SALES

TOLL FREE: 1.888.699.1645

Phone: 1.814.269.9674

Fax: 1.814.269.4683

Email: customerservice@tvmi.com



www.tvmi.com



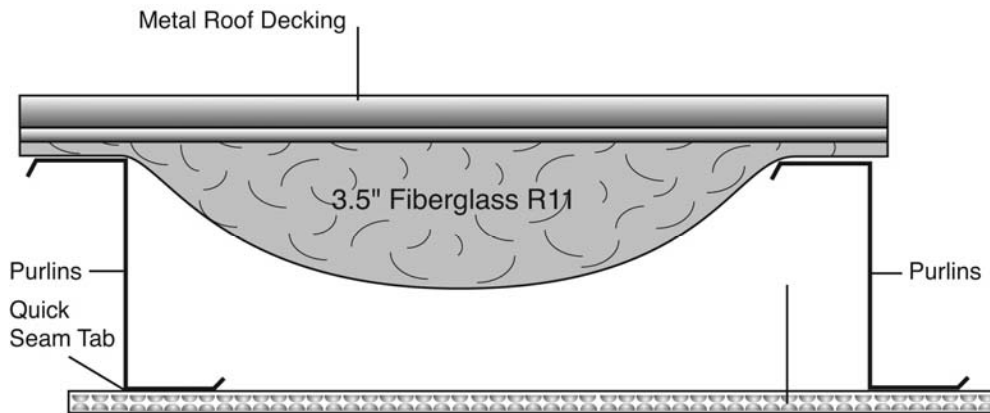


## METAL BUILDING ROOF: R-19

- Ideal insulation for metal frame building applications
- Quick and easy to install, and adds R-value
- Reduces heat loss, and heat gain all year round
- Can block up to 97% of radiant heat transfer

### INSTALLATION METHOD

1. Install 3.5" of mass insulation (R-11), and metal roofing as usual.
2. Working from the inside of the building, fasten one end of TVM insulation to the ridge using 1 ¼" self-tapping screws spaced 8" apart.
3. Unroll the insulation and attach to each purlin using 1 ¼" self-tapping screws, 8" apart.
4. Continue installing insulation across the purlins working your way to the end of the building. To prevent buckling, pull the insulation material tight between purlins.
5. Install the remaining rolls of insulation in accordance with steps 1-4.
6. Seal all seams and joints using the appropriate TVM tape (white or reflective).



### SUGGESTED PRODUCTS FOR THIS APPLICATION:

- |                       |   |
|-----------------------|---|
| REFLECTIVE INSULATION | ▶ 2200 or 2500 series - available in various dimensions |
| TVM REFLECTIVE TAPE   | ▶ 15213 (reflective), 15853 (white poly)                |

\*Check local building codes for compliance before installation. This installation sheet is intended solely to illustrate the proper location and placement of TVM's Reflective Insulation products in specific construction applications. They are not intended to illustrate proper construction methods – which is ultimately the responsibility of the builder or contractor. The installation instructions are only recommendations relating to the location and placement of TVM's Reflective Insulation products, and TVM Building Products makes no claims that these construction systems are universally accurate.

\*\*All warranties and performance estimates are void if TVM Reflective Insulation products are used in exterior applications, or in non-enclosed systems or buildings.

\*\*\*Exercise caution when using TVM Reflective Insulation products near and around electrical wiring and devices.

CUSTOMER SERVICE and SALES

TOLL FREE: 1.888.699.1645

Phone: 1.814.269.9674

Fax: 1.814.269.4683

Email: customerservice@tvmi.com



www.tvmi.com



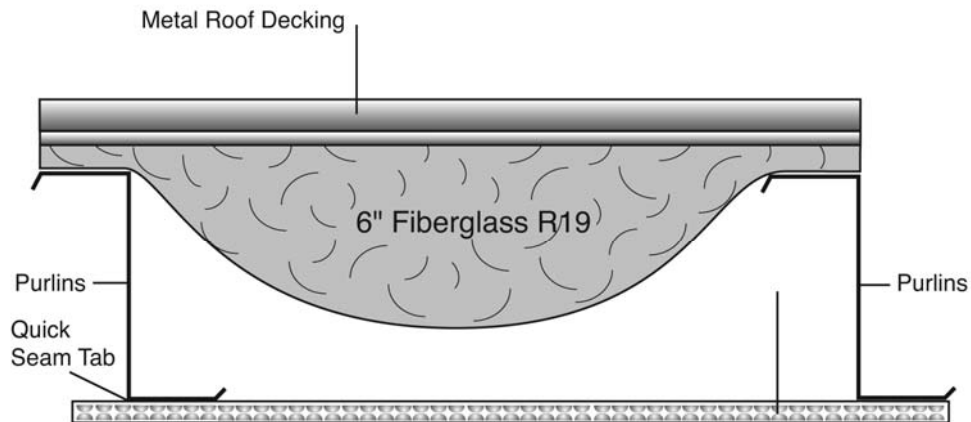


## METAL BUILDING ROOF: R-30

- Ideal insulation for metal frame building applications
- Quick and easy to install, and adds R-value
- Reduces heat loss, and heat gain all year round
- Can block up to 97% of radiant heat transfer

### INSTALLATION METHOD

1. Install 6" of mass insulation (R-19), and metal roofing as usual.
2. Working from the inside of the building, fasten one end of TVM insulation to the ridge using 1 ¼" self-tapping screws spaced 8" apart.
3. Unroll the insulation and attach to each purlin using 1 ¼" self-tapping screws, 8" apart.
4. Continue installing insulation across the purlins working your way to the end of the building. To prevent buckling, pull the insulation material tight between purlins.
5. Install the remaining rolls of insulation in accordance with steps 1-4.
6. Seal all seams and joints using the appropriate TVM tape (white or reflective).



### SUGGESTED PRODUCTS FOR THIS APPLICATION:

- |                       |   |
|-----------------------|---|
| REFLECTIVE INSULATION | ▶ 2200 or 2500 series - available in various dimensions |
| TVM REFLECTIVE TAPE   | ▶ 15213 (reflective), 15853 (white poly)                |

\*Check local building codes for compliance before installation. This installation sheet is intended solely to illustrate the proper location and placement of TVM's Reflective Insulation products in specific construction applications. They are not intended to illustrate proper construction methods – which is ultimately the responsibility of the builder or contractor. The installation instructions are only recommendations relating to the location and placement of TVM's Reflective Insulation products, and TVM Building Products makes no claims that these construction systems are universally accurate.

\*\*All warranties and performance estimates are void if TVM Reflective Insulation products are used in exterior applications, or in non-enclosed systems or buildings.

\*\*\*Exercise caution when using TVM Reflective Insulation products near and around electrical wiring and devices.

CUSTOMER SERVICE and SALES

TOLL FREE: 1.888.699.1645

Phone: 1.814.269.9674

Fax: 1.814.269.4683

Email: customerservice@tvmi.com



www.tvmi.com







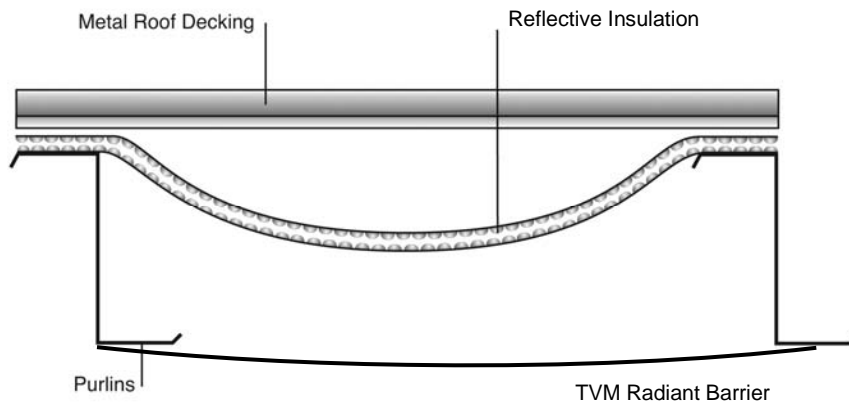
## METAL BUILDING ROOF Two Airspaces

- Ideal insulation for metal frame building applications
- Quick and easy to install, and adds R-value
- Reduces heat loss, and heat gain all year round
- Can block up to 97% of radiant heat transfer

### INSTALLATION METHOD

---

1. Starting at the ridge, unroll TVM insulation perpendicular to the purlins.
2. Using 1 ¼" self-tapping screws, attach end of roll to ridge (screws spaced 8" apart).
3. Continue installing insulation towards roof's edge, allowing the insulation to sag between purlins.
4. Unroll the second roll of insulation as in step 1, and attach the two sections together using the Quick Seam tab (if applicable), or TVM tape.
5. Affix TVM Radiant Barrier to the bottom of purlins with 1 ¼" self-tapping screws to create a second reflective airspace. Use TVM tape to seal all seams and joints, and ensure that the white surface of the radiant barrier faces down.
6. Continue to install the radiant barrier in this manner, until the entire ceiling is covered.



### SUGGESTED PRODUCTS FOR THIS APPLICATION:

---

- REFLECTIVE INSULATION
- TVM RADIANT BARRIER
- TVM REFLECTIVE / POLY TAPE

\*Check local building codes for compliance before installation. This installation sheet is intended solely to illustrate the proper location and placement of TVM's Reflective Insulation products in specific construction applications. They are not intended to illustrate proper construction methods – which is ultimately the responsibility of the builder or contractor. The installation instructions are only recommendations relating to the location and placement of TVM's Reflective Insulation products, and TVM Building Products makes no claims that these construction systems are universally accurate.

\*\*All warranties and performance estimates are void if TVM Reflective Insulation products are used in exterior applications, or in non-enclosed systems or buildings.

\*\*\*Exercise caution when using TVM Reflective Insulation products near and around electrical wiring and devices.

CUSTOMER SERVICE and SALES

TOLL FREE: 1.888.699.1645

Phone: 1.814.269.9674

Fax: 1.814.269.4683

Email: customerservice@tvmi.com



www.tvmi.com



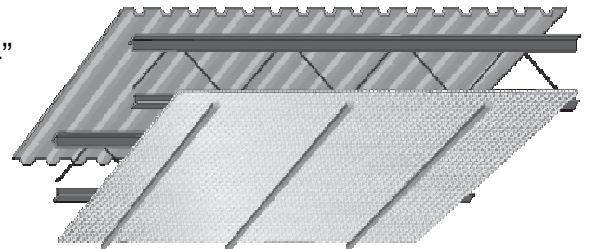


## METAL BUILDING RETROFIT

- Ideal insulation for metal frame building applications
- Quick and easy to install, and adds R-value
- Reduces heat loss, and heat gain all year round
- Can block up to 97% of radiant heat transfer

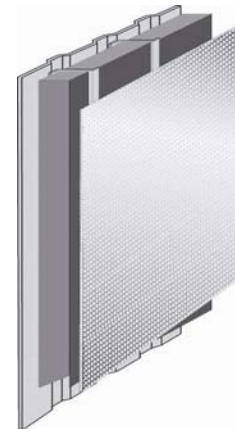
### INSTALLATION METHOD #1 – Ceiling Installation

1. Use double-coated tape to temporarily attach reflective insulation to purlins.
2. Attach metal or wood strips perpendicular to purlins every 24” using mechanical or shot fasteners.
3. Seal all seams and joints with TVM reflective tape.
4. Leave at least 12” around the perimeter for ventilation.
5. All water pipes should be below the insulation, to help prevent winter freeze.



### INSTALLATION METHOD #2 – Wall Installation

1. Use metal channels to attach reflective insulation with screws.
2. As an alternative method – use double-coated tape to attach reflective insulation to purlins temporarily, then screw metal attachment strips into place every 24”.
3. Seal seams with TVM reflective tape.



### SUGGESTED PRODUCTS FOR THIS APPLICATION:

- |                       |   |
|-----------------------|---|
| REFLECTIVE INSULATION | ▶ 2200 or 2500 series - available in various dimensions |
| TVM REFLECTIVE TAPE   | ▶ 15213 (reflective), 15853 (white poly)                |

\*Check local building codes for compliance before installation. This installation sheet is intended solely to illustrate the proper location and placement of TVM's Reflective Insulation products in specific construction applications. They are not intended to illustrate proper construction methods – which is ultimately the responsibility of the builder or contractor. The installation instructions are only recommendations relating to the location and placement of TVM's Reflective Insulation products, and TVM Building Products makes no claims that these construction systems are universally accurate.

\*\*All warranties and performance estimates are void if TVM Reflective Insulation products are used in exterior applications, or in non-enclosed systems or buildings.

\*\*\*Exercise caution when using TVM Reflective Insulation products near and around electrical wiring and devices.

CUSTOMER SERVICE and SALES

TOLL FREE: 1.888.699.1645

Phone: 1.814.269.9674

Fax: 1.814.269.4683

Email: customerservice@tvmi.com



www.tvmi.com





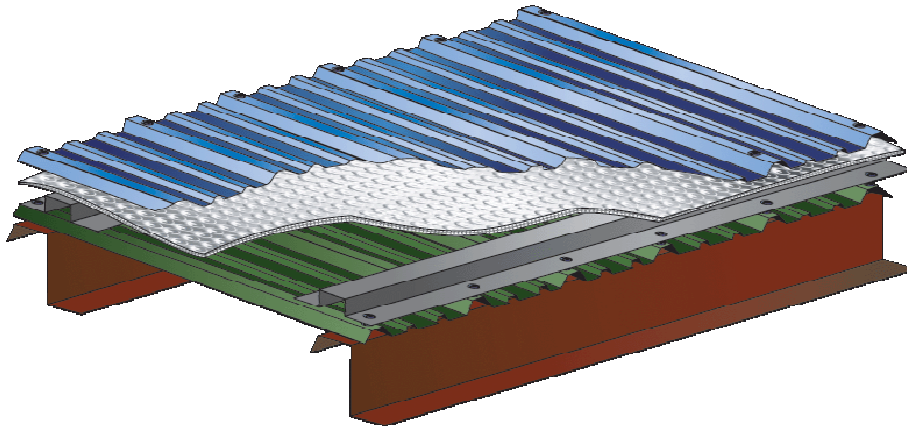
## METAL BUILDING RE-ROOF APPLICATION

- Ideal insulation for metal frame building applications
- Quick and easy to install, and adds R-value
- Reduces heat loss, and heat gain all year round
- Can block up to 97% of radiant heat transfer

### INSTALLATION METHOD

---

1. Attach appropriate furring strips onto existing ribbed metal roof.
2. Pull TVM insulation tight, and lay across furring strips with Quick Seam tab on the leading edge. (if applicable). Allow draping between the furring strips.
3. Lay next strip of insulation parallel to the first. Slide this strip beneath tab and use Quick Seam tab to seal the joint (if applicable). Seal all seams and joints with TVM reflective tape.
4. Lay new roof on top of insulation and affix as per manufacturer's instructions.



### SUGGESTED PRODUCTS FOR THIS APPLICATION:

---

- |                       |   |
|-----------------------|---|
| REFLECTIVE INSULATION | ▶ 2200 or 2500 series - available in various dimensions |
| TVM REFLECTIVE TAPE   | ▶ 15213 (reflective), 15853 (white poly)                |

\*Check local building codes for compliance before installation. This installation sheet is intended solely to illustrate the proper location and placement of TVM's Reflective Insulation products in specific construction applications. They are not intended to illustrate proper construction methods – which is ultimately the responsibility of the builder or contractor. The installation instructions are only recommendations relating to the location and placement of TVM's Reflective Insulation products, and TVM Building Products makes no claims that these construction systems are universally accurate.

\*\*All warranties and performance estimates are void if TVM Reflective Insulation products are used in exterior applications, or in non-enclosed systems or buildings.

\*\*\*Exercise caution when using TVM Reflective Insulation products near and around electrical wiring and devices.

CUSTOMER SERVICE and SALES

TOLL FREE: 1.888.699.1645

Phone: 1.814.269.9674

Fax: 1.814.269.4683

Email: customerservice@tvmi.com



www.tvmi.com





METAL BUILDING WALL APPLICATION

- Ideal insulation for metal frame building applications
• Quick and easy to install, and adds R-value
• Reduces heat loss, and heat gain all year round
• Can block up to 97% of radiant heat transfer

INSTALLATION METHOD #1 – Drape Method

- 1. Begin attaching TVM Reflective Insulation by first applying double-sided tape on the C or Z channels.
2. Unroll the product, allowing it to sag between channels creating a 3/4" air space.
3. Apply TVM reflective tape to seams, or use the Quick Seam tab if available.
4. Attach wall panels as usual – creating an enclosed air space between insulation and the wall covering itself.

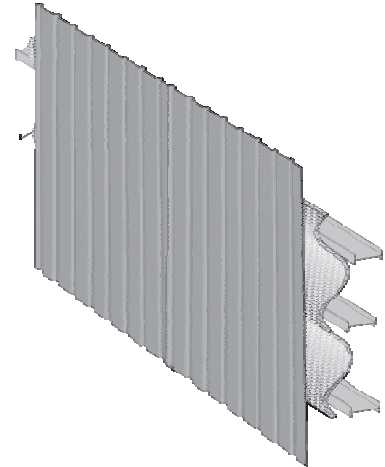


Figure 1

INSTALLATION METHOD #2 – Purlin Method

- 1. Beginning at end purlin, attach TVM reflective insulation – double-sided tape can be used if necessary to temporarily hold the product in place.
2. Unroll the reflective insulation, pull tight, and continue mounting product to purlins.
3. Apply TVM reflective tape to seams or use Quick Seam tabs, if they are available.
4. Attach 3/4" – 1" strapping overtop of the insulation.
5. Attach wall panels as per usual method, creating an enclosed air space between product panels and insulation.

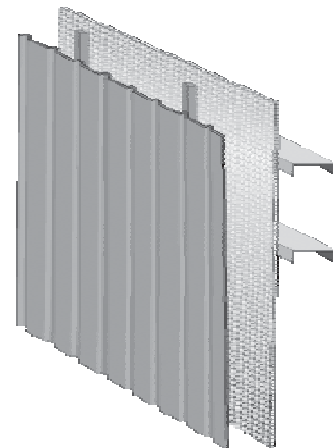


Figure 2

SUGGESTED PRODUCTS FOR THIS APPLICATION:

- REFLECTIVE INSULATION -> 2200 or 2500 series -, available in various dimensions
TVM REFLECTIVE TAPE -> 15213 (reflective), 15853 (white poly)

\*Check local building codes for compliance before installation. This installation sheet is intended solely to illustrate the proper location and placement of TVM's Reflective Insulation products in specific construction applications. They are not intended to illustrate proper construction methods – which is ultimately the responsibility of the builder or contractor.

\*\*All warranties and performance estimates are void if TVM Reflective Insulation products are used in exterior applications, or in non-enclosed systems or buildings.

\*\*\*Exercise caution when using TVM Reflective Insulation products near and around electrical wiring and devices.





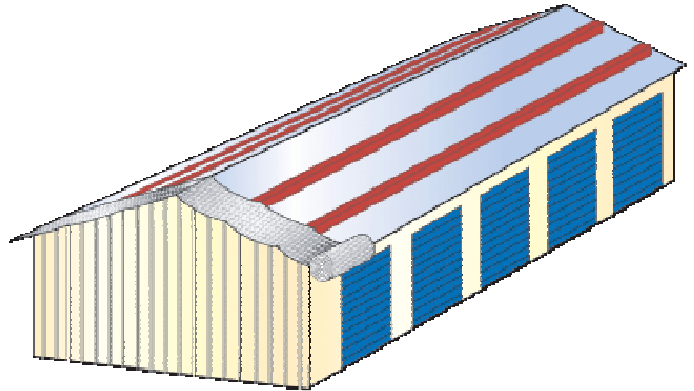


## MINI STORAGE APPLICATION

- Ideal for Mini Storage buildings with flat, gable, and single slope roofing
- Quick and easy to install, while adding R-value
- Reduces heat loss, and heat gain all year round
- Can block up to 97% of radiant heat transfer

### INSTALLATION METHOD

1. Measure distance from eave to eave.
2. To ensure TVM insulation is applied level and in-line, snap a chalk line along the length that the insulation will run.
3. Cut a piece of TVM insulation slightly longer than the length measured in step 1. This extra length will allow the material to drape between purlins.
4. Apply double-sided tape to both eaves. Unroll TVM insulation from the ridge, draping material between purlins. Allow material sag approximately  $\frac{3}{4}$ " to create the necessary airspace.
5. Fasten material to eave using double-sided tape. If necessary, use mechanical fasteners such as self tapping screws.
6. Install first metal roofing piece as per manufacturer's instructions.
7. Repeat steps 3-6 for the remainder of the insulation and roofing.
8. Seal all seams and butt joints using TVM tape to ensure a continuous vapour barrier.



### SUGGESTED PRODUCTS FOR THIS APPLICATION:

- |                       |   |
|-----------------------|---|
| REFLECTIVE INSULATION | ▶ 2200 or 2500 series - available in various dimensions |
| TVM REFLECTIVE TAPE   | ▶ 15213 (reflective), 15853 (white poly)                |

\*Check local building codes for compliance before installation. This installation sheet is intended solely to illustrate the proper location and placement of TVM's Reflective Insulation products in specific construction applications. They are not intended to illustrate proper construction methods – which is ultimately the responsibility of the builder or contractor. The installation instructions are only recommendations relating to the location and placement of TVM's Reflective Insulation products, and TVM Building Products makes no claims that these construction systems are universally accurate.

\*\*All warranties and performance estimates are void if TVM Reflective Insulation products are used in exterior applications, or in non-enclosed systems or buildings.

\*\*\*Exercise caution when using TVM Reflective Insulation products near and around electrical wiring and devices.

CUSTOMER SERVICE and SALES

TOLL FREE: 1.888.699.1645

Phone: 1.814.269.9674

Fax: 1.814.269.4683

Email: customerservice@tvmi.com



www.tvmi.com



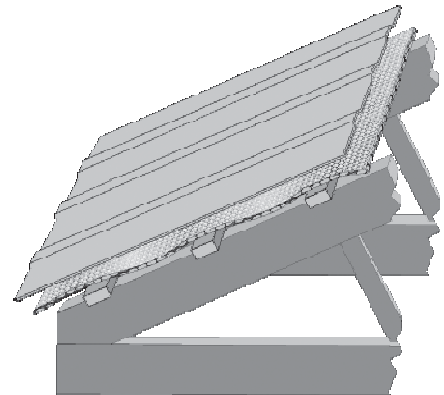


## NEW POST FRAME BUILDING

- Ideal insulation for post frame building applications
- Quick and easy to install, and adds R-value
- Reduces heat loss, and heat gain all year round
- Can block up to 97% of radiant heat transfer

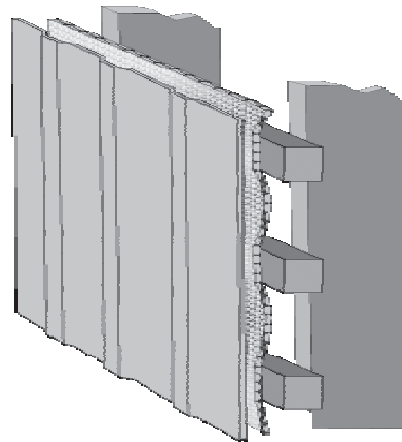
### INSTALLATION METHOD #1

1. Starting at end truss, attach TVM insulation securely over purlins.
2. As you unroll the insulation, allow it to drape slightly between purlins.
3. Attach the product to the purlins using staples, and seal all seams with TVM tape.
4. Affix roofing panels as usual – creating an enclosed air space between insulation and the roof itself.



### INSTALLATION METHOD #2

1. Attach TVM insulation to purlins of the building wall, and unroll product vertically.
2. As the insulation is unrolled, allow it to slightly drape between each purlin.
3. Attach product to purlins using staples, and seal all seams with TVM tape.
4. Affix roofing panels as usual – creating an enclosed airspace between insulation and the roof itself.



### SUGGESTED PRODUCTS FOR THIS APPLICATION:

- |                       |   |
|-----------------------|---|
| REFLECTIVE INSULATION | ▶ 2200 or 2500 series - available in various dimensions |
| TVM REFLECTIVE TAPE   | ▶ 15213 (reflective), 15853 (white poly)                |

\*Check local building codes for compliance before installation. This installation sheet is intended solely to illustrate the proper location and placement of TVM's Reflective Insulation products in specific construction applications. They are not intended to illustrate proper construction methods – which is ultimately the responsibility of the builder or contractor. The installation instructions are only recommendations relating to the location and placement of TVM's Reflective Insulation products, and TVM Building Products makes no claims that these construction systems are universally accurate.

\*\*All warranties and performance estimates are void if TVM Reflective Insulation products are used in exterior applications, or in non-enclosed systems or buildings.

\*\*\*Exercise caution when using TVM Reflective Insulation products near and around electrical wiring and devices.

CUSTOMER SERVICE and SALES

TOLL FREE: 1.888.699.1645

Phone: 1.814.269.9674

Fax: 1.814.269.4683

Email: customerservice@tvmi.com



www.tvmi.com





## POST FRAME BUILDING RETROFIT

- Ideal insulation for post frame building applications
- Quick and easy to install, while adding R-value
- Reduces heat loss, and heat gain all year round
- Can block up to 97% of radiant heat transfer

### INSTALLATION METHOD

1. If trusses or wall posts are 48" or greater on center, add wood furring strips in the 'cross' direction to wall posts and roof trusses.
2. Unroll TVM insulation horizontally – in the direction of the furring strips – and staple into place.
3. To ensure a continuous insulation system, seal all seams and butt joints with TVM tape.

#### Builder's Notes:

- If a white interior finish is desired, TVM poly-reflective insulation may be used. Install as per usual method, however with poly-white side facing the interior.
- Use TVM white poly tape to seal all seams and butt joints.
- When TVM insulation comes in direct contact with ACQ lumber, it may discolour. This will not affect the overall insulation value of TVM insulation.



### SUGGESTED PRODUCTS FOR THIS APPLICATION:

- |                       |   |
|-----------------------|---|
| REFLECTIVE INSULATION | ▶ 2200 or 2500 series - available in various dimensions |
| TVM REFLECTIVE TAPE   | ▶ 15213 (reflective), 15853 (white poly)                |

\*Check local building codes for compliance before installation. This installation sheet is intended solely to illustrate the proper location and placement of TVM's Reflective Insulation products in specific construction applications. They are not intended to illustrate proper construction methods – which is ultimately the responsibility of the builder or contractor. The installation instructions are only recommendations relating to the location and placement of TVM's Reflective Insulation products, and TVM Building Products makes no claims that these construction systems are universally accurate.

\*\*All warranties and performance estimates are void if TVM Reflective Insulation products are used in exterior applications, or in non-enclosed systems or buildings.

\*\*\*Exercise caution when using TVM Reflective Insulation products near and around electrical wiring and devices.

CUSTOMER SERVICE and SALES

TOLL FREE: 1.888.699.1645

Phone: 1.814.269.9674

Fax: 1.814.269.4683

Email: customerservice@tvmi.com



www.tvmi.com





## RESIDENTIAL ROOF – ABOVE PLYWOOD DECKING

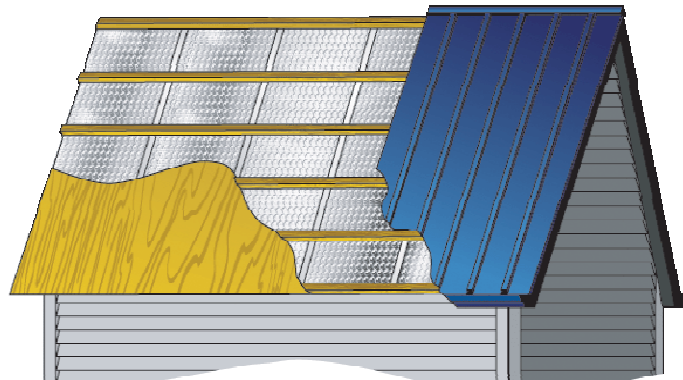
- Effectively directs heat back into the living space
- Quick and easy to install, and adds R-value
- Increases efficiency of radiant heating systems
- Can block up to 97% of radiant heat transfer

### INSTALLATION METHOD

---

1. Starting at one eave, measure the length from eave-to-eave, up and over the ridgeline.
2. Pre-cut measured length of insulation to span from eave-to-eave.
3. Starting at one eave, lay insulation flat onto plywood decking towards the ridge, and continue down the other side, to the opposite eave (white side down, if applicable).
4. Lay down the next strip of insulation parallel to - and beside - the first strip. Tape all seams with TVM reflective tape.
5. Repeat step 4 until the entire roof decking is covered with reflective insulation.
6. Attach furring strips (1"-2" thick) over the insulation material. This is required to create the necessary air space.
7. Install metal roofing, using the furring strips as your base.

**Builders Note:** To ensure proper ventilation, always install a ridge vent and continuous soffit vents.



### SUGGESTED PRODUCTS FOR THIS APPLICATION:

---

- TVM REFLECTIVE INSULATION   ▶ 2200 or 2500 series – available in various dimensions  
TVM REFLECTIVE TAPE       ▶ 15213 (reflective)

\*Check local building codes for compliance before installation. This installation sheet is intended solely to illustrate the proper location and placement of TVM's Reflective Insulation products in specific construction applications. They are not intended to illustrate proper construction methods – which is ultimately the responsibility of the builder or contractor. The installation instructions are only recommendations relating to the location and placement of TVM's Reflective Insulation products, and TVM Building Products makes no claims that these construction systems are universally accurate.

\*\*All warranties and performance estimates are void if TVM Reflective Insulation products are used in exterior applications, or in non-enclosed systems or buildings.

\*\*\*Exercise caution when using TVM Reflective Insulation products near and around electrical wiring and devices.

CUSTOMER SERVICE and SALES

TOLL FREE: 1.888.699.1645

Phone: 1.814.269.9674

Fax: 1.814.269.4683

Email: customerservice@tvmi.com



www.tvmi.com

