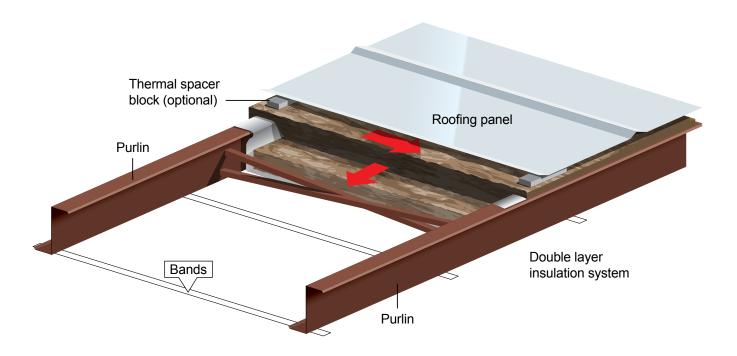


Banding System

One of the most popular high R-value insulation systems used in Metal Building Construction is the Banding System. This is an easily installed, attractive system which requires very little hardware. The typical purlin installation consists of white banding which is fastened to the bottom of the purlins in a steel building. It is important to fill the entire cavity as most industry experts believe that air spaces within a fiberglass system should be avoided in order to properly control condensation. This banding is used to support a layer of faced blanket insulation that is positioned parallel to the purlins. An additional layer of unfaced insulation is positioned above the purlins at the time the roof panels are being installed.



Banding System Installation Instructions

- **Step #1:** Install the 1" white steel banding to the bottom of the purlin flanges with self drilling TEK screws. The typical method is to install the banding perpendicular to the purlins 30" on center.
- Step #2: Faced blanket insulation is specifically fabricated to fit between each pair of purlins and is typically produced in rolls that equal 1 bay length (plus 12" extra for stretching/handling). These rolls are unwound and positioned within the purlin space and are supported by the banding. It is important that the tabs (the facing material that is laminated to the lower fiberglass layer is wider than the glass this extra material is called a "tab" or "tabs") are pulled up and over the purlins. These tabs should either be rolled and stapled together or sufficiently overlapped in order to achieve a consistent vapor retarder. If overlapped, place a small piece of tape (every few feet or so) on the tabs so they don't separate as the top layer of insulation is positioned.
- **Step #3:** End to end connection of the rolls (above each frame line) can be achieved by peeling back a small amount of the fiberglass and then stapling the exposed facing from one roll to the next or by taping the ends of each roll to the top of the rafter (depending on the specific construction details). Some erectors prefer to run a TEK screw with a washer through the insulation into the rafter for additional support. A similar approach can be used at the ends of the buildings where the exposed facing should be taped to the rake angle.

Step #4: Position the unfaced fiberglass layer perpendicular to the purlins - on top of the tabs and faced insulation. Optional thermal blocks can be used where applicable. Once this step is complete, the roof panels can be installed above the insulation.

Note: It is suggested that you check for mid-span bracing and other obstructions when selecting a high R-value system, as they may compromise thermal performance and vapor retarder integrity depending on their location. Some systems are much better choices than others when bracing exists. Not recommended for high humidity applications - those that exceed 35% for more than 3 hours at any one time.