**General**

**Introduction**
The OptiLiner™ Banded Liner System is designed to provide maximum thermal performance in pre-engineered metal buildings using Owens Corning™ metal building insulation. In addition to excellent thermal performance, this system offers superior acoustics, finished appearance and a brighter interior.

**Safety Considerations**
This system shall be installed by a contractor employing a site specific safety plan.

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**Before You Start**
- Open pallets and packaging to ensure complete order was received
- Review drawings to ensure each custom made fabric panel is installed in the appropriate area
- Obtain necessary base channel for your building type
- Assemble appropriate equipment and tools
- Assure weather is appropriate to begin installation
Wall Installation Instructions

Materials List
• Banding
• Fabric panels
• Fasteners
• Adhesive and/or double faced tape
• Insulation per specification
• Insulation Hangers
• Foam Thermal Break Tape

Equipment and Tools Required
• Man lift / scissor lift
• Screw gun
• Tape measure
• Razor knife
• Tin snips
• Paint brushes
• Safety glasses
• Cut proof gloves
• Locking clamps
• Base channel
• Banding dispenser
• Iron pipe for banding dispenser

Installation
Base Channel
1. Standard steel base channel is supplied by the contractor or building manufacturer.
2. Attach base channel on plane with inside flange of girts.

Thermal Break Tape
1. Prior to installing wall sheets, attach foam thermal break tape to the outside flange of the girts, eave struts, base channel and framed openings (overhead doors, etc.).

Insulation Hangers
1. Once the wall sheeting is complete, start at the end of the wall area to be insulated and begin installing insulation hangers between the girts and wall sheeting.
2. Cut hangers into 32 inch sections and straighten if necessary.
3. Pull three of the barbed arrows 90° to the main body of the hanger.
4. Slide the top part of the hanger between the girt and wall sheet until at least 1.5 inches is above the girt.
5. Bend the protruding portion inward to lock the hanger in place. If required you may also attach the hanger to the girt with an appropriate fastener without penetrating the wall sheet. Hangers in the top cavity are attached to the bottom of the eave strut using a fastener.
6. Two hangers should be used to hold any insulation blanket up to 72 inches in width, by placing them 16 inches from each side of the blanket. Repeat this step for each wall area to be insulated.

Fiberglass Insulation
1. Cut each piece of insulation to snugly fit the height between the wall girts.
2. Lift the insulation blanket into position and impale it on the hanger barbs.
3. Slightly bend the hanger barbs in an upward position just enough to hold the insulation in place.
4. Work the insulation around each barb to insure maximum recovery and insure insulation edges for each section are tightly butted together to eliminate voids.
Banding and Fabric

1. Determine the number of vertical bands spaced the same as the roof bands and cut each to the proper length.

2. At this time, cut and install the longitudinal roof band at both ends to the bottom of the rafter (tight to back corner of rafter) and parallel to the eave strut flush with the inside flange of the wall girts.

3. Locate the appropriately sized fabric for the bay in which you are installing.

4. Unroll the fabric at the base channel of the wall and lift the fabric into position.

5. At one corner of the fabric and at the rafter & roof intersection, begin positioning the fabric against the inside of the column, three inches over the longitudinal roof band.

6. Clamp in place at the roof bands to hold in several points across the top of the entire wall area, positioning and squaring the fabric in the wall area (see image top of next column).

7. Adhere the wall fabric to the ceiling fabric with adhesive or double stick tape.

8. Install the wall bands by attaching a fastener through the wall band, the fabric and the longitudinal roof band across the eave.
Wall Installation Instructions

9. Work the fabric downward removing all wrinkles. Using the supplied adhesive or double faced tape, seal the bottom of the fabric to the base channel, starting in the center and working the fabric to the bottom corner of the wall.

10. Fasten the wall banding and fabric at the base channel then at each girt.

11. Trim the fabric square around the entire wall area and finish off by adhering the fabric to the column or web.

End Wall Installation

1. Similar procedures should be employed to complete end wall installation. A couple of the more common end roof/wall constructions are demonstrated below.

Note: Throughout the installation process insure all fabric edges are sealed properly to adjacent surfaces to maintain vapor barrier integrity.