

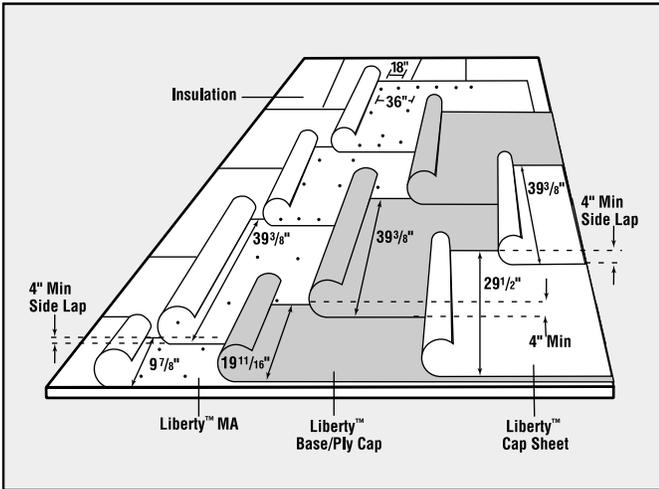
Liberty™ SBS Self-Adhering Construction Specification I-1-2-LC

Specification Sheet

Updated: 1/03



*Quality You Can Trust Since 1886...
From North America's Largest Roofing Manufacturer™*



Deck - Insulated:

Steel, Plywood, OSB, and wood plank

Applicable Slope Range:

1/4" to 6" per foot; See instructions specific to slopes between 1/2" to 3" per foot for additional fastening requirements.

Materials

- Insulation
- One ply of Liberty™ MA Mechanically Attached Base Sheet (Liberty™ MA Base Sheet)
- One ply of Liberty™ Base/Ply Sheet
- One ply of Liberty™ Cap Sheet
- Matrix™ 205 System Pro SBS Sure-Grip™ Adhesive
- Fasteners – Drill Tec® Screws with 3" Diameter Flat Plates
– Drill Tec® Screws with 2" Diameter Flat Plates
- Approximate Membrane weight per square – 220 pounds (100 kg)

Application Instructions:

General:

1. Ponding areas must be eliminated from the roof.
2. Install Liberty membranes in dry, 45°F (7°C) and rising weather. Heat weld the side laps of the Liberty Cap Sheet at temperatures below 60°F (16°C).
3. Decks must be clean, dry, smooth and structurally sound.
4. Any gaps between insulation boards than 1/4" (6mm) width, must be filled with insulation.
5. Recommendations in the current GAFMC Application and Specifications Manual apply.

Insulation Installation:

General requirements:

Perimeter and insulation stop treated wood nailers must be of the same thickness of the insulation and be in place, as practical, prior to the installation of insulation. Loose lay the insulation with snug joints between boards; stagger the end joints between courses. Insulation board ends must rest on the flanges of metal decks.

Install only that quantity of insulation as can be covered with the complete Liberty membrane system upon leaving the roof.

Application of Roofing Membrane

Liberty MA Mechanically Attached Base Sheet Installation:

Note: No more Liberty MA Base Sheet should be installed than

can be covered with Liberty Base/Ply and Liberty Cap Sheet on the same day. Do not phase.

1. Starting at the low point on the roof, mechanically attach a 1/4" width sheet of Liberty MA Base Sheet, through the insulation, into the deck and parallel to the edge of the roof. The sheet should be installed with the lay line on the high side. (Run the first sheet over the edge as required for the edge detail.) Continue up the roof with full width sheets overlapping, shingle fashion, the previous course by a minimum of 4" (102mm) (to avoid Cap Sheet laps over Liberty MA Base Sheet rows of plates). (If wind uplift resistance is a concern, apply a bead of Matrix 205 System Pro SBS Sure Grip Adhesive in the sidelap of the MA Base Sheet before closing it). Mechanically fasten with three rows of Drill-Tech Screws and Plates (Flat Plates). Place the first row through the seam 1 1/2" (37mm) from the leading edge and on 18" (457mm) centers. Locate the second row of fasteners 14" (356mm) from the leading edge on 36" (915mm) centers. The third row of fasteners shall be 26" (660mm) from the leading edge on 36" (915mm) centers. The fasteners in the second and third rows should be staggered.

Liberty Base/Ply Sheet Installation:

1. Starting at the low point on the roof, align a manageable length (a length that allows a wrinkle and bubble free installation) of a 1/2" width sheet of Liberty Base/Ply Sheet over the Liberty MA Base Sheet, parallel to the edge of the roof.
2. Turn the sheet over and remove the release film from the sheet.
3. Working from the center of the length of Base/Ply Sheet, allow the Base/Ply Sheet to roll onto the MA Base Sheet being careful to avoid wrinkles and trapped air and while maintaining proper alignment with the edge of the roof.
4. Firmly hand press the sheet to avoid wrinkles and trapped air as the Base/Ply Sheet adheres to the MA Base Sheet.

Endlaps – Where additional lengths of Liberty Base/Ply Sheet are added in the same course, overlap the previous sheet a minimum of 6" (152mm). On the upper sheet, cut the lay line selvage edge at a 45° angle to provide a tapered transition at the "T" joints formed by succeeding courses. See "T"-Joint Selvage Cut drawing. Firmly hand roll this overlap area.

Offset Base/Ply end laps in adjacent courses a minimum of 36" (915mm).

Subsequent courses – install additional courses of Liberty Base/Ply as follows:

1. Position the Base/Ply Sheet to over lap the previous course by 4" (102mm).
2. Fold the sheet in half, (away from the edge of lower sheet) along its length, exposing approximately 20" (508mm) of the bottom of the sheet.
3. Remove the exposed release film and roll the sheet in place working from the center of the sheet outward towards the ends of the sheet.
4. Working from the center of the length of Base/Ply Sheet, allow the Base/Ply Sheet to roll onto the MA Base Sheet being careful to avoid wrinkles and trapped air and while maintaining proper alignment with the selvage lay line edge.
5. Firmly hand press the sheet to avoid wrinkles and trapped air as the Base Sheet adheres to the MA Base Sheet.
6. Now fold the other half of the sheet back on itself exposing the remaining release film. Remove the release film and roll the sheet in place working from the center of the sheet outward towards the ends of the sheet.
7. Firmly hand press the sheet to avoid wrinkles and trapped air as the Base/Ply Sheet adheres to the MA Base Sheet.

- Complete the side lap installation by rolling the lap with a hand roller.

Liberty™ Cap Sheet Installation:

Prior to the installation of the Cap Sheet, install primed gravel stops, and other flanged perimeter metal and penetration flashings in a $\frac{1}{16}$ " – $\frac{1}{8}$ " troweling of Matrix™ 205 Sure Grip™ Adhesive. Nail flanges as needed. Apply a troweling of Matrix 205 Sure Grip Adhesive on top of the flanges to soundly adhere the Cap Sheet to the flanges.

First Course – Starting at the low edge of the roof, install a $\frac{3}{4}$ width sheet of Liberty™ Cap Sheets as follows:

Do not remove the selvage edge release film until required. See "Subsequent Courses," Step 4 below.

- Align manageable lengths (a length that allows a wrinkle and bubble free installation) of Liberty Cap Sheet with the edge of the roof. Position the 4" (102mm) selvage edge on the high side of the roof to assure water flow over the side laps. Fold the sheet in half, (away from the edge of the roof) along its length, exposing approximately 15" (375mm) of the bottom of the sheet.
- Remove the exposed release film, leaving 8" at the end of the roll where the Cap Sheet will overlap the previous sheet.
- Working from the center of the length of Cap Sheet, allow the Cap Sheet to roll onto the Base/Ply Sheet being careful to avoid wrinkles and trapped air and while maintaining proper alignment with the edge of the roof.
- Firmly hand press the sheet to avoid wrinkles and trapped air as the Cap Sheet adheres to the Base/Ply Sheet.
- Now fold the other half of the Cap Sheet back on itself exposing the remaining release film. Apply a bead of Matrix™ 205 Sure-Grip™ Adhesive along the Base/Ply Sheet edge step to minimize the potential for a blister or water entry. Remove the release film (except for the 8" at the end of the roll for the endlap) and roll the sheet into place working from the center of the sheet outward towards the ends of the sheet.
- Firmly hand press the sheet to avoid wrinkles and trapped air as the Cap Sheet adheres to the Base/Ply Sheet.

Endlaps – Where additional lengths of Liberty Cap Sheet are added in the same course, overlap the previous sheet a minimum of 6" (152mm).

- Complete the overlapping end joint by pulling the overlapping edge back and troweling Matrix 205 Sure-Grip Adhesive to the granule surface of the underlying sheet $\frac{1}{16}$ " – $\frac{1}{8}$ " (2-3mm) thick. At the selvage edge of the overlapped sheet, remove only enough release film to accommodate the end lap. On the upper sheet, cut the selvage edge at a 45° angle to provide a tapered transition at the "T" joints formed by succeeding courses.
- Remove the release film from the overlapping Cap Sheet and lay it into the Matrix 205 Sure-Grip Adhesive. Firmly press and roll this overlap seam, squeezing out a small bead of adhesive at the end lap edge.
- Offset Cap Sheet end laps in adjacent courses by a minimum of 36".

Subsequent courses – install additional courses of Liberty Cap Sheet as follows:

Position the Cap Sheet to over lap the previous course by 4" (102mm) (the selvage edge width).

- Fold the sheet in half, (away from the selvage edge of lower sheet) along its length, exposing approximately 20" (508mm)

of the bottom of the sheet.

- Apply a bead of Matrix 205 Sure-Grip Adhesive along the top edge of the lower Cap Sheet being overlapped and at any selvage edge "T" joints.
- Remove the exposed release film, leaving 8" at the end of the roll where the cap sheet will overlap the previous Cap Sheet.
- Now remove the selvage edge release film from the lower sheet being overlapped.
- Working from the center of the length of Cap Sheet, allow the Cap Sheet to roll onto the Base/Ply Sheet being careful to avoid wrinkles and trapped air and while maintaining proper alignment with the selvage edge of the previous course.
- Firmly hand press the sheet to avoid wrinkles and trapped air as the cap sheet adheres to the Base/Ply Sheet.
- Now fold the other half of the sheet back on itself exposing the remaining release film. Remove the release film (except for the 8" at the end of the roll for the endlap) and roll the sheet in place working from the center of the sheet outward towards the ends of the sheet.
- Firmly hand press the sheet to avoid wrinkles and trapped air as the Cap Sheet adheres to the Base/Ply Sheet.
- Complete the side lap installation by rolling the lap with a hand roller.

Slopes between $\frac{1}{2}$ " – 3" per foot – install the Liberty Cap Sheet as above with the following additional side lap fastening:

- Install one Drill-Tec® Screw and 2" diameter Flat Plate fastener a maximum of 24" (610mm) along the lap in the selvage edge. Position the fastener between 1" and 2" from the top edge.

Slopes between 3" and 6" per foot – For roof slopes between 3" and 6" per foot, contact Contractor Services at 1-800-Roof 411 (1-800-766-3411)

Finish the installation – complete the installation as follows:

- Before leaving the roof, broom the entire roof surface to assist with adhesion, taking care to not track the endlap adhesive.
- Any wrinkles in the Liberty Cap Sheet must be cut out and covered with Cap Sheet. Remove the release film from the back of the patch prior to embedding in a troweling of Matrix 205 Sure-Grip Adhesive. The patch must extend at least 6" (152mm) in all directions beyond the cut out area.

"Note: Repair leaks promptly to avoid adverse affects, including mold growth."

