

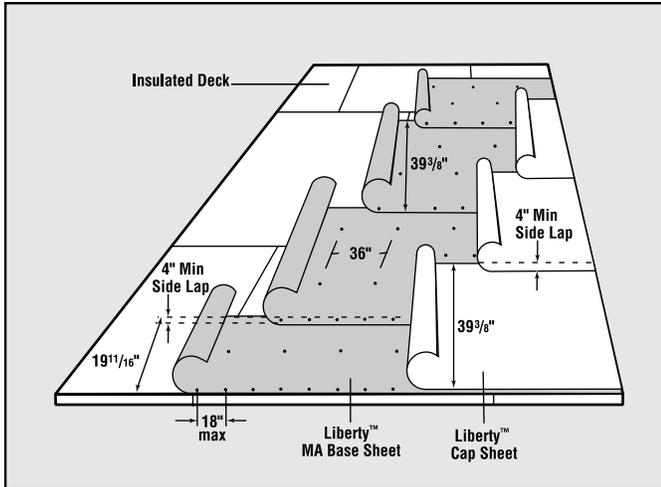
Liberty™ SBS Self-Adhering Construction Specification I-1-1-LC

Specification Sheet

Updated: 1/03



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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 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 – 140 pounds (63.5 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 in the insulation boards greater than 1/4" (6mm) width, must be filled with insulation.
5. Recommendations in the current GAFMC Application and Specifications Manual apply.

Application of Roofing Membrane

Insulation Installation:

General requirements:

Perimeter and insulation stop, treated wood nailers must be of the same thickness as the insulation and, as practical, be in place 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.

Liberty MA Mechanically Attached Base Sheet

Installation:

Note: No more Liberty MA Base Sheet should be installed than can be covered with Liberty Cap Sheet on the same day. Do not phase.

1. Starting at the low point on the roof, mechanically attach a 1/2" 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 of the roof. (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 4" (102mm) to avoid Cap Sheet laps over Liberty MA Base Sheet rows of plates). Mechanically fasten full width sheets with three rows of Drill-Tech Screws and Plates (3" diameter 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. Avoid over driving the screws.

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.

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 1/16" – 1/8" troweling of Matrix 205 Sure Grip Adhesive. Nail flanges as needed. Apply a toweling 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 full width sheets of Liberty Cap Sheets as follows:

Do not remove the selvage edge release film until required. See Step 5 below, "Subsequent Courses."

1. 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 Cap Sheet selvage edge on the high side of the roof to assure water flow over the side laps.
2. Fold the sheet in half, (away from the edge of the roof) along its length, exposing approximately 20" (508mm) of the bottom of the sheet.
3. Remove the exposed release film, leaving 8" at the end of the roll where the Cap Sheet will overlap the previous sheet.
4. Working from the center of the length of Cap Sheet, allow the Cap 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.
5. Firmly hand press the sheet to avoid wrinkles and trapped air as the cap sheet adheres to the Liberty™ MA Base Sheet.
6. Now fold the other half of the sheet back on itself exposing the remaining release film. Apply a bead of Matrix™ 205 Sure-Grip™ Adhesive along the Liberty MA Base 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 an end-lap) 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 Cap Sheet adheres to the Liberty MA Base Sheet.

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

1. Complete the overlapping end lap joint by pulling the overlapping end back and apply a $\frac{1}{16}$ " - $\frac{1}{8}$ " (2-3mm) thick troweling of Matrix™ 205 Sure-Grip™ Adhesive to the granule surface of the underlying sheet. 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. See "T"-Joint Selvage Cut drawing.
2. 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.
3. Offset Cap Sheet end laps in adjacent courses by a minimum of 36" (914mm).

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

1. Position the Cap Sheet to over lap the previous course by the selvage edge width.
2. 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.
3. 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 to minimize the potential for a blister or water entry.
4. Remove the exposed release film, leaving 8" at the end of the roll where the Cap Sheet will overlap the previous sheet.
5. Now remove the selvage edge release film from the lower Cap Sheet being overlapped.
6. Working from the center of the length of Cap Sheet, allow the Cap Sheet to roll onto the Liberty MA Base Sheet being careful to avoid wrinkles and trapped air and while maintaining proper alignment with the selvage edge.
7. Firmly hand press the sheet to avoid wrinkles and trapped air as the Cap Sheet adheres to the Liberty MA Base Sheet.
8. 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.
9. Firmly hand press the Cap Sheet to avoid wrinkles and trapped air as the Cap Sheet adheres to the Liberty MA Base Sheet.
10. 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:

1. Install Drill-Tec Fasteners and 2" Diameter Flat Plates a maximum of 24"(610mm) on center along the open selvage edge. Position the fasteners between 1" and 2" from the selvage 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:

1. Before leaving the roof, broom the entire roof surface to assist with adhesion, taking care to not track the endlap adhesive
2. 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."

