



## SHORT FORM SPEC MECHANICALLY ATTACHED ROOFING SYSTEM

December 2011

This SHORT FORM SPEC is a brief outline of WeatherBond's Mechanically Attached Roofing System requirements. The "Products" Technical Data Bulletins contain information on proper usage of WeatherBond products as well as applicable cautions and warnings. Prior to the installation of this roofing system, this information must be thoroughly reviewed.

### PART I GENERAL

#### 1.01 DESCRIPTION

The WeatherBond RBR EPDM Mechanically Attached Roofing System incorporates (black) 45, 60 or 75-mil thick **reinforced** EPDM membrane or 45, 60 or 90-mil thick **non-reinforced** EPDM membrane. An acceptable insulation is mechanically fastened to the roof deck and the membrane is mechanically attached with Fastening Plates or Fastening Bars and the appropriate WeatherBond Fastener spaced 6" minimum to 12" maximum on center, depending on project criteria, along the center of the membrane seam.

Adjoining sheets of EPDM membrane are seamed together a minimum of 6" using P&S Seam Tape and EPDM Primer. Field sheets are either 7', 8' or 10' wide, depending on wind load requirements, building height and type of roof deck. At the roof perimeter, a heavier fastening density is required using 4-1/2" wide sheets or P&S RPS.

At the perimeter of the roof, 2 rows of securement must be provided spaced 4'-6" to 5'-0" apart. Securement can be provided using 9" wide WeatherBond Peel & Stick RPS (Reinforced Perimeter Strip) or plates or fastening bars installed above the membrane and overlaid with WeatherBond Peel & Stick Cured Cover Strip. Fasteners shall be spaced a maximum of 12" on center.

**This non-reinforced EPDM roofing system is restricted to projects with a roof height of 50 feet or less and located in a maximum wind zone of 119 mph.**

#### 1.02 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to job site in original, unopened containers labeled with the manufacturer's name, brand name and installation instructions.
- B. Job site storage temperatures in excess of 90° F may affect shelf life of curable materials (i.e., adhesives, sealants, primers, Seam tape, pourable sealer, peel & stick flashings and uncured flashing).
- C. When liquid adhesives and sealants are exposed to lower temperatures, restore to a minimum of 60° F before use. Do

not store adhesive containers with opened lids due to loss of solvent, which will occur from flash off.

- D. Insulation and underlayment must be stored so it is kept dry and is protected from the elements. Store insulation on a skid and completely cover with a breathable material such as tarp or canvas. If the insulation is lightweight, it should be weighted to prevent possible wind damage.

#### 1.03 JOB CONDITIONS

- A. This roofing system **must not be applied** on portions of a project where **slope exceeds 18"** in one horizontal foot.
- B. On retrofit-recover projects, existing roofing material must be investigated and wet material must be removed. Existing sprayed-in-place urethane roofs and Phenolic insulation must be removed.
- C. The use of a vapor retarder to protect insulation and reduce moisture accumulation within an insulated roofing assembly should be investigated by the specifier. Consult the latest publications by ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.) and NRCA (National Roofing Contractors Association) for specific information.
- D. If this roofing system is installed during windy conditions or on projects that are not encapsulated, precautionary measures must be taken to utilize temporary ballast during installation.
- E. Coordination between trades is essential to avoid unnecessary rooftop traffic over sections of the roof and to prevent damage to the membrane.

#### 1.04 WARRANTY

Up to **20-year Material Warranty** is available with WeatherBond RBR EPDM membrane for commercial roofing applications.

A Limited Lifetime Membrane Material warranty is available for residential roofing applications.

### PART 2 PRODUCTS

#### 2.01 GENERAL

The installation, performance or integrity of products by others is not the responsibility of WeatherBond and is expressly disclaimed by the WeatherBond Warranty.

## 2.02 MEMBRANE

WeatherBond RBR EPDM (Ethylene, Propylene, Diene Terpolymer) may be used for this roof system.

## 2.03 RELATED MATERIALS

- A. WeatherBond EPDM Bonding Adhesive, EPDM Primer, Peel & Stick Seam Tape, Lap Sealant, Cured EPDM Flashing, Peel & Stick Flashing, WeatherBond Fasteners and Fastening Plates or Bars and P&S RPS (with the corresponding fasteners) are required for use with this roofing system.
- B. Other Products: Walkway Pads/Rolls, Pipe Seals, Peel & Stick Inside/Outside Corners, Pipe Flashings and Pourable Sealer Pockets.

## PART 3 EXECUTION

### 3.01 GENERAL

- A. When feasible, begin the application at the highest point of the highest roof level and work to the lowest point to prevent moisture infiltration and to minimize construction traffic on completed sections. This will include completion of all flashings and terminations.

### 3.02 ROOF DECK CRITERIA

- A. A proper substrate shall be provided by the building owner. The structure shall be sufficient to withstand normal construction loads and live loads.
- B. Acceptable decks and the applicable WeatherBond Fasteners:
  - 1. **Steel, 22 gauge or heavier** - Carlisle HP Fasteners with Polymer Plates, WeatherBond HPWX Fasteners with Polymer Fastening Strips or Sure-Tite Fasteners with Deck-Tite Fastening Bars are required for membrane securement with a minimum pullout of 425 pounds per fastener.
  - 2. **Lightweight Insulating Concrete over Steel** - Carlisle HP Fasteners with Polymer Plates, HPWX Fasteners with Polymer Fastening Strips or Sure-Tite Fasteners and Deck-Tite Fastening Bars are required with a minimum pullout of 360 pounds into the steel deck below the lightweight concrete.
  - 3. **Structural Concrete, rated 3,000 psi or greater** - WeatherBond CD-10 or MP 14 Fasteners are required with a minimum pullout of 800 pounds per fastener.
  - 4. **Wood Plank or minimum 15/32" thick Plywood** - Carlisle HP Fasteners are required with a minimum pullout of 360 pounds.
  - 5. **Oriented Strand Board (OSB), minimum 7/16" thick** - WeatherBond HP Fasteners are required with a minimum pullout of 360 pounds.
  - 6. **Cementitious Wood Fiber and Gypsum** - WeatherBond NTB Fasteners are required with a minimum pullout of 300 pounds.

## 3.03 SUBSTRATE PREPARATION

- A. On retrofit-recover projects, cut and remove wet insulation and fill all voids created by such removal with new insulation so that it is relatively flush.
- B. For all projects, substrate must be even without noticeable high spots or depressions and free of accumulated water, ice or snow. Clear substrate of debris and foreign material. Fresh bitumen based roof cement must be removed or concealed.

## 3.04 INSTALLATION

Refer to the applicable Material Safety Data Sheets and Technical Data Bulletins for cautions and warnings.

### A. Insulation Attachment

- 1. WeatherBond Insulation shall be mechanically fastened to the roof deck with a minimum of 1 insulation fastener and plate per every 8 square feet.

On retrofit projects where existing material is specified to remain, WeatherBond Polyisocyanurate insulation which is less than 1-1/2" thick shall be fastened to the roof deck with 1 fastener and plate every 4 square feet.

### B. Membrane Placement and Attachment

- 1. A minimum of one 4-1/2' wide perimeter membrane sheet or 9" wide P&S RPS (positioned beneath the field sheets) shall be installed at the perimeter of each roof level and 7', 8' or 10' wide sheets shall be installed over the field of the roof.
- 2. Membrane shall be mechanically attached with the appropriate WeatherBond Fasteners and Polymer Seam Plates (required for steel decks) or Seam Fastening Plates spaced 6" minimum to 12" maximum on center, depending on project criteria, within the membrane seam.
- 3. As an option to the use of Fastening Plates, WeatherBond Polymer Fastening Strips and HPWX Fasteners or Sure-Tite Fasteners and Deck-Tite Metal Fastening Bars may be used for membrane securement.
- 4. Overlap adjacent EPDM membrane sheets a minimum of 6 inches at fastener locations (along the length of the membrane sheet) and 3" at end roll sections (the width of the membrane).
- 5. **Membrane Seaming with P&S Seam Tape**
  - a. Apply WeatherBond RBR EPDM Primer to Seam area.
  - b. Position P&S Seam Tape onto bottom membrane sheet with edge of the release film along a line marked 1/2" out from the top sheet. Press tape onto sheet using hand pressure, overlapping tape roll ends a minimum of 1".
  - c. Remove the release film and press top sheet onto

tape using hand pressure. Roll the seam with a 2" wide steel roller.

- d. Install P&S T-Joint Covers or a 6" wide section of P&S Uncured Flashing over all field Seam intersections.
- e. The use of Lap Sealant with tape Seams is optional except at cut edges of reinforced membrane and tape overlaps.

### C. Additional Membrane Securement

EPDM membrane must be secured at the perimeter of each roof level, roof section, expansion joint, curb, skylight, interior wall, penthouse, etc., at any angle change which exceeds 2" in one horizontal foot, and at all penetrations in accordance with WeatherBond's details published with WeatherBond's specifications.

Additional membrane securement may be provided by P&S RPS, Polymer Fastening Strips, Deck-Tite Fastening Bars or Seam Fastening Plates.

### D. Membrane Flashing

1. When feasible, flash all penetrations and walls with cured EPDM membrane or Clean Cured Flashing. Uncured or P&S Uncured Flashing shall be limited to overlay vertical seams (as required at angle changes) or to flash inside/outside corners, scuppers, pourable sealer pockets and unusually shaped penetrations and walls where use of cured membrane flashing is not practical.
2. WeatherBond's prefabricated accessories (Pre-Molded Pipe Seals and Peel & Stick Products; such as, Flashings, Pourable Sealer Pockets, Pipe Seals, and Inside/Outside Corners) should be used, when feasible, in lieu of Uncured or P&S Flashing.
3. When using WeatherBond Cover Strip or P&S Overlayment Strip to overlay Fastening Plates or metal edging flanges, etc., WeatherBond Primer must be used to clean the membrane and metal surfaces.
4. Terminate flashing in accordance with an appropriate WeatherBond C-9 Termination.

### E. Other Related Work

1. **Walkways** are required at all traffic concentration points (i.e., roof hatches, access doors, rooftop ladders, etc.), regardless of traffic frequency. Walkways are also required if regular maintenance (once a month or more) is necessary to service rooftop equipment. Walkways are considered a maintenance item and are excluded from the WeatherBond Warranty.
  - a. WeatherBond Walkway Rolls must be adhered to the EPDM membrane with P&S Seam Tape/Primer. P&S Walkway Pads (with Seam Tape Factory-Applied to the walkway underside) are also available.

- b. Smooth concrete pavers, when used, shall be loose laid over a slip-sheet of cured EPDM membrane or 2 layers of Protection Mat.
- c. Rubber Pavers can be placed directly over the membrane. Installation Instructions Sheets are available from WeatherBond.

**Note:** Pavers are not recommended when the roof slope is greater than 2" per one horizontal foot.

2. **Copings, counterflashing and other metal work**, not supplied by WeatherBond, shall be fastened to prevent metal from pulling free or buckling and sealed to prevent moisture from entering the roofing system or building.

**Attach copies of applicable WeatherBond Details that pertain to the individual project to complete a bid package submittal.**

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