January 2, 2015

2001 Co. Patented Wind Vent Reverse Ballasted Roof System For Concrete or Air Sealed Deck

Summary Specification to Install a 2001 Co. Patented Wind Vented Roof Assembly Over the Existing Ballasted Roof Membrane Using the 2001 Co. Reverse Ballasted Method

Existing Roof Assembly: Concrete deck, loose laid insulation and ballasted single ply.

Building less than thirty feet (30') high and not in high wind zones. Call 2001 Co. Technical Department for high wind applications.

Preparation

1. **Check existing perimeter and penetration angle change terminations and flashings**: If any are ripped or deficient, or are shrinking causing bridging, re-anchor field membrane prior to gravel ballast removal to stop additional deterioration when the membrane shrinks.
2. **Remove ballast rock from existing EPDM rubber roof membrane**: temporary ballast roof with sleepers or bags of ballast rock or water bags, one per every 4 x 8 insulation board around the perimeter and one for every 10' x 10' area in the field of the roof. This is necessary to help keep the existing roof in place in wind storms and the existing roof insulation from warping and cupping.
3. **After ballast removal**: sweep and vacuum up dirt and small rock on roof to find existing roof deficiencies to patch.
4. **The existing membrane must be water tight and intact during re-roof construction**: using the new 2001 Co. Wind Vented **Reverse Ballasted Roof Restoration System**.

   Patch holes, rips, tears, punctures, seam and flashing deficiencies in the old EPDM roof membrane.

   Seam the new roof membrane into existing at the close of the work day incase of rain.

Optional Rigid Roof Insulation

5. **Loose Lay Optional Rigid Roof Insulation**: Underwriters Laboratory (UL) Class A fire approved rigid roof insulation boards for the roof assembly, and membrane chosen, are loose laid over the existing roof membrane. Off-set the joints of multiple layers of insulation boards two feet (2') in length and width direction for energy efficiency.

   NOTE: The insulation boards can be spot adhered in place with latex insulation adhesive or slow rise adhesive foam to keep in place from wind before being ballasted with a weighted cover board.

Weighted Cover Boards

6. **The Optional New Insulation Board and the Existing Roof Assembly is Weighted in Place With Weighted Cover Boards**:

   A. Loose lay six feet (6') wide of one-half inch (1/2") cement tile board around the perimeter of the roof.

   B. Loose lay three feet (3') wide of one-half inch (1/2") cement tile board around all roof penetrations.

   C. Loose lay 2001 Co. approved weighted cover board options over the remainder of the roof.

      ½" cement tile board

      ½" Dens Deck

      ½" Gypsum (needs prebid approval)

   NOTE: Cover board should be offset/staggered by twelve inch (12") minimum.

7. **2001 Co. Roof Waterproofing Membrane**:

   Option A – Adhere single ply membrane to cement tile boards as described in 6A and 6B.

Loose lay and seam single ply membrane in the field of the roof per 2001 Co. sheet and seam instructions. This Option A method qualifies for a 54 MPH warranty if all 2001 Co. requirements are met.

Option B – Fully adhere single ply to 6A, B and C. This Option B method qualified for a 90 MPH warranty if all 2001 Co. requirements are met.

8. **Air Seal Termination.**

   Direct terminations to angle change walls and curbs through existing membrane using approved 2001 Co. details.

   Direct terminations over existing metal fascia per approved 2001 Co. details.

   Note: If existing ballasted roof angle change terminations are in the same termination plane of the new 2001 Company Wind Vented Repair Membrane, install a tapered insulation 1” to 0 taper under the perimeter weighted cover board to raise the angle change termination line above the exiting wall termination anchors.

   Warning: DO NOT pull off the existing angle change roof termination fasteners and install new over the same angle change area. This will cause a structural deficiency in the vertical wall that will compromise the fastener holding capability of the new roof. Plus this wall destruction could send wall debris into the internal building and structurally damage the parapet.

9. **2001 Co. Equalizer Valves**™ are installed according to the job specific 2001 Co. Wind Vortex Intensity **Equalizer Valve™** diagram. Cut the six inch (6”) hole below the Equalizer Valve™ down through all roof membranes. DO NOT cut the air barrier, which is the deck or the vapor barrier on the deck.

   Equalizer Valves™ provide for added wind resistance and continual drying of the roof assembly.

10. **Finish Perimeter Penetration Vertical Wall, and Roof Top Equipment Waterproofing Flashings**: to 2001 Co. details and specifications. Wherever possible remove roof top equipment from the curb and extend wall flashing up and over the curb and mechanically fasten on the inside wall of the curb.

    Note: Do not cover through wall flashings or weep holes in a vertical wall with a wall flashing membrane.