



2001Co. Up Side Down Cover Tape Patented Air Sealing Techniques For Reroofing Over an Existing Smooth Surface Roofs Up To 80 Miles Per Hour Wind Riders*

Upside Down Cover Tape Air Seal Details are patented cost effective perimeter and penetration roof membrane termination techniques that use the field membrane as a flashing in itself at angle change terminations.

A seven inch (7") reinforced cover tape is mechanically fastened over an existing smooth surface roof assembly to the structural deck with 2001Co. termination bars with the release paper side up, six or more inches out from the angle change.

The field membrane is loose laid over the field of the roof and adhered on the underside to the upside down cover tape before angle changes.

The field membrane is then adhered up the adjoining angle change, curb, penetration wall, cricket, or perimeter edge as a flashing in itself.

Benefits Of Upside Down Cover Tape Air Seals

- 1) The field membrane air seal termination is accomplished out from the angle change expansion and contraction movement of a vertical wall and horizontal deck that can adversely affect angle change terminations.
- 2) The field membrane termination is held in stronger shear force compared to weaker peel forces if terminated on a vertical wall.
- 3) The air seal termination has all the fasteners concealed under the field membrane with no fasteners penetrating the field membrane.
- 4) The Up Side Down Cover Tape roof deck termination is not affected like vertical wall angle change termination that will deteriorate from masonry walls, wicking water and corroding fasteners, or freeze thaw push out of the fastener in pre-drilled masonry anchor holes.
- 5) Building expansion and contraction of a vertical wall against a horizontal roof deck force does not stress these angle change terminations.

* For Wind Riders over 80 mph 2001 Co. must evaluate the existing roof specific construction and roof deck fastener holding capability.



Air Seal Method and Deck Requirement For Specific MPH Wind Rider

1) 60 Miles per Hour Wind Rider:

Up to 60 MPH all 2001 Company Air seal details.

2) 61 and Higher Miles per Hour Wind Riders:

- A. Wind riders over 61 miles per hour require (PIN) Pre Installation Notice and require PIN acceptance plus ASCE 7 evaluation.
- B. Roof assembly acceptance by 2001Co. prior to starting the roof.
- C. ASCE-7-11 PSF Pressure evaluation.
- D. Pictures of air seals being installed are required for Wind Riders over 80 MPH.

3) 81 to 120 MPH Wind Riders:

Buildings in hurricane susceptible coastal area require one of the following:

- A. Hurricane back wrap compression board 120 MPH max.
- B. Direct membrane termination onto the air sealed monolithic concrete deck for over 120MPH.
- C. Shear skirt termination through the air sealed substrate onto the monolithic roof deck only.

Note: No vertical wall shear skirt terminations over 90 mph.

- D. Spring flange air seal membrane held in compression on a non-fastenable deck with a vertical wall termination and wall to deck air seal every building evaluated **90 mph Wind Rider maximum.**

4) Up to 150 MPH Wind Rider:

- A. On 22 gage metal decks fastened with Kelly cowboy hat washers using Kelly patented slow rise adhesive foam air sealing application techniques with hurricane back wrap air seal details.

B. On concrete decks, direct membrane termination to the concrete deck is required.

Concrete deck joints must be sealed with 18' minimum membrane strips adhered over the deck joints.

5) **Over 150 MPH and up to 200 MPH Wind Rider:**

On structural poured in place concrete decks only: air sealed to 2001Co. designs.

2001Co. requires direct termination of reinforced membrane 24" or greater out from the perimeter edge.

A. Poured in place concrete decks.

B. Precast concrete panel deck joints and through roof deck penetration are air sealed with 2001 Company membrane strips adhered over the joints and through roof deck penetrations deck to curb angle changes to stop internal building air flow up into the roof assembly.

C. Structural concrete poured in a metal pan.