



January 2, 2015

## **2001 Co. Wet Roof Substrate Accelerated Drying Technique Specification For a Wet Built-Up-Roof Over an Air Sealed Deck**

### **Preparation of the Existing Roof for 2001 Co. Wet Roof Drying Technique**

- 1.0 **Cut the 1<sup>st</sup> and 2<sup>nd</sup> Roof Membrane** with a roof saw 2' (two feet) on center to allow moisture to vent up into the new Wind Vented Roof Assembly.
- 1.01 **Warning:** Only cut the 1<sup>st</sup> or 2<sup>nd</sup> roof membranes to let moisture egress up into the new 2001 Co. Wind Vented Re-roof Self Drying Repair Waterproofing System.  
**DO NOT** cut into the deck or air barrier. If the deck or air barrier is cut with a roof saw, it must be repaired.
- 1.02 Sweep and clean up saw cut debris with roof vacuum and cover the existing roof moisture venting saw cuts with a slip sheet so the rough saw cut edges will not abrade the underside of the new roof membrane.  
Minimum slip sheet Geotextile to transfer water vapor to perimeter Equalizer Valves.
- 1.03 Roof separator options:
  1. Geotextile
  2. Fireguard mat
  3. 2001 Gravel Mat
  4. Weighted cover board ½" (Dens Deck, Cement Board, or Equal Loose Laid)
  5. Insulation loose laid and weighted in place with ½" weighted cover board
  6. Note: On smooth surface roofs that are not permeated for a wet roof drying rider no separator is needed with EPDM and TPO membranes. PVC membranes always need a separator layer over an existing roof membrane
- 1.04 Install the 2001 Wind Vented Waterproofing Membrane and Equalizer Valves to specifications and details approved for the specific building.
- 2.0 **Install 2001 Co Equalizer Valves™** per 2001 Co. job specific diagram.
- 2.01 Along the perimeter edge of every roof section.
- 2.02 At 30 feet intervals or less for a roof drying rider.

- 2.03 Three feet back from the perimeter edges or expansion joints
- 2.04 Cut a 6” diameter hole in the new EPDM membrane and underlying separator Geotextile and existing substrate down to the air barrier.
- 2.05 And remove hole in membrane and substrate to the vapor barrier.
- 2.06 A 6” (six inch) diameter plumber’s wood deck hole saw works well to cut this hole.
- 2.07 Clean the top surface of the new 2001 EPDM membrane with membrane cleaner in the circumference of the Equalizer Valve boot.
- 2.08 After using EPDM membrane cleaner do a final clean with Windex and clean rags.
- 2.09 Place pre-flashed EPDM pipe booted 2001 Co equalizer valve over the 6” hole. Install new Equalizer Valve and pipe boot on top of the new EPDM membrane cleaned and primed surface to mark the area. Heat weld membranes, clean and prepare to weld.
- 2.10 Seam tape the EPDM pipe boot to the cleaned and primed roof membrane. Heat weld membranes, weld per 2001 Co. requirements.
- 2.11 Finish pipe boot flange to roof membrane for proper installation.

**3.00 Install electric powered mechanical blower unit in the center of each roof section according to the 2001 Co roof drawing and installation instructions for 2001 Co. waterproofing membrane used.**

- 3.01 Note: optional reversible blower unit that can pressurize as well as vacuum.  
3.02 Acceptable blower 20 in Grainger # 7A401.

Exhaust Ventilator



Exhaust Vent, 20 In

- [HVACR](#)
- > [Exhaust Fans](#)
- > [Aluminum Exhaust Ventilators](#)

Exhaust Ventilator, Axial Belt Drive Downblast with Drive Package, 3957 CFM @ 0.000-In SP, @ 0.125-In. SP 3625, @ 0.250-In SP 3337, Roof Mounting Location, Overall Height 30 1/2 In., Max. Inlet Temp 120 F, Motor Voltage 230/460, 3 Phase, Max. Operating Amps 3.2/1.6, Motor HP 3/4, 1147 RPM, Propeller Dia 20 In, Propeller Material Steel

### 3.03 Acceptable roof curb Grainger 4C 454.

#### Roof Curb, Adjustable Width

- [HVACR](#)
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Roof Curb, Adjustable Width, Nonventilated, Outside Square 23 1/2 to 32 In, Curb Height 6 3/8 In, 18 Gauge Galvanized Steel Construction, For General Ventilation, Use With Dayton Ventilators Having a Square Base From 25 to 30 1/2 Inches

Grainger Item #	4C454
Price (ea.)	<b>\$254.00</b>
Brand	DAYTON
Mfr. Model #	4C454
Ship Qty. 	1
Sell Qty. (Will-Call) 	1
Ship Weight (lbs.)	47.0
Usually Ships** 	<a href="#">Today</a>
Catalog Page No.	<a href="#">3756</a> 
Country of Origin	USA



#### **4.0 Installation of commercial electrical exhaust vent [20 in]**

- 4.01 Locate exhaust ventilator in the middle of the roof section to be dried out.
- 4.02 Do not locate in a low drain area or in an area of ponding water.
- 4.03 Place near the middle of the roof on a high cricket or upper slope.
- 4.04 Assemble the adjustable curb and size to properly fit the exhaust ventilator unit.
- 4.05 Place the ventilator curb box on the new 2001 roof membrane and mark out the inside square dimension.
- 4.06 Cut out inside square dimension of the membrane with an x so the pie pieces can be adhered to the inside wall of new mechanical curb to hold it in place on top of the membrane.
- 4.07 Remove roof substrate under the new curb to the vapor barrier.

- 4.08 **Warning:** Do not cut through the deck or air barrier. If you do cut through the deck or air barrier, this must be repaired
- 4.09 Clean a 4' X 4' area on the top surface of the new membrane with Windex and clean rags first to remove surface dirt and static talc film on the membrane.
- 4.10 After using Windex, use membrane cleaner in the area of the new flashing membrane to be installed.
- 4.11 Place performed curb on clean membrane for sizing.
- 4.12 Stick blower curb flange to top surface with 4" membrane inseam double-sided tape and adhere the inside pie pieces up the back of the new fan curb. Heat weld TPO or PVC.
- 4.13 Flash curb with bonding adhesive and 60 mil. reinforced EPDM, PVC, or TPO membrane up and over the curb adhering the front side flashing membrane a minimum of 6" down the back of the curb.
- 4.14 2001 Co. recommends to extend the flashing membrane out from the base of the curb a minimum of two feet.
- 4.15 Seam tape the new EPDM flashing extension to the new cleaned EPDM membrane or weld the new PVC or TPO to the new membrane per 2001 Co requirements.
- 4.16 The two foot extension out from the curb base is to facilitate the ease of removal and reinstallation of exhaust ventilator on other roof sections after this section has been successfully dried.
- 4.17 Electrically hook up the exhaust ventilator to building owners electrical engineering requirements and to local code compliance.  
Note: 2001 Co suggests external heavy duty extension cord hook up of mechanical blower when permissible by local code.
- 4.18 Mechanically attach the blower unit to the top of the newly flashed curb.
- 4.19 Turn on electric and check if the exhaust blower vent is working correctly.
- 4.20 **DO NOT** mechanically attach the blower unit to the structure. It is made to float with the roof membrane.

## **5.0 Check for holes or deficiencies in the new roof membrane by air pressurizing the New 2001 Co. membrane roof assembly and wash the membrane surface with soapy water and a soft bristle broom similar to looking for a hole in a tire.**

- 5.01 2001 Co. exhaust ventilators have a viable alternative option reverse polarity switch to pressurize the roof assembly to test for leak holes.

- 5.02 Pressurize the underside of the roof membrane with the reversible motor to blow air under the 2001 Co. waterproofing membrane.
- 5.03 Regulate the pressure once the membrane is ballooning uniformly between the mechanically fastened penetrations by the variable speed of the blower.
- 5.04 While the new membrane is pressurized.
- 5.05 Wash the roof: with soapy water [simple green, joy dish soap] or other cleaning solution and
- 5.06 With a soft bristle broom: scrub the roof surface and look for bubbles, similar to checking for puncture or hole in a car tire. If scrubbing the roof with a floor scrubber use squeegee or soft bristle broom over membrane to see bubbles.  
**Warning:** Do not use a pressure washer we are trying to find leaks. A pressure washer can blow holes in the roof membrane and tear new seams open.
- 5.07 **Air Seal Existing Equalizer Valves** with a garbage bag and rubber bands if the roof will not hold air pressure during the pressurization phase to check for leak deficiencies.
- 5.08 After leak deficiency pressure testing, turn center roof blowers on to vacuum mode to accelerate wet roof drying.