INTRODUCTION
to the
MULE-HIDE PRODUCTS CO., INC.
PVC SPECIFICATION MANUAL

The main purpose of this manual is to create a better understanding of specifications and conditions for the installation of Mule-Hide Roofing Systems. This information is intended to assist building owners, architects and design professional in selecting a suitable roof system.

Each successful roofing project is the product of good design, proper materials and installation. Mule-Hide Products Co., Inc. is committed to help you achieve success by helping you to knowledgeably select and use Mule-Hide products. In addition to our quality products, Mule-Hide offers a full-time technical service department and one of the most comprehensive performance warranty programs in the industry.

Mule-Hide is not, under any circumstance, responsible for the design and construction of any building nor responsible for the adequacy of any structure to support a roof system. Under no circumstances will Mule-Hide be responsible for any roofing system failures due to design errors, structural defects of any building components or damages caused by other trades. Mule-Hide's review of any specifications or building plans is for the sole purpose of making recommendations concerning details for the installation of the Mule-Hide roofing system products.

Mule-Hide reserves the right to make changes or modifications to this publication at any time without prior notice. Although Mule-Hide has attempted to take care in preparing these specifications, no representation or warranty can be made in connection with these specifications. Mule-Hide expressly disclaims all representations and warranties, whether expressed or implied, including warranties of merchantability and fitness for a particular purpose.

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October 18, 2013

Re: **State Regulations Concerning Emissions of VOCs from Adhesives and Sealants**

Regulations governing volatile organic compounds (VOCs) continue to increase. These regulations are currently concentrated in the Northeast. The EPDM Roofing Association (ERA) has published the attached memo on its website that summarizes these requirements by State.

Mule-Hide offers the following products as low-VOC alternatives to our standard bonding adhesives and primer.

- Low-VOC Bonding Adhesive – Used for EPDM and TPO
- Low-VOC PVC Bonding Adhesive – Used for PVC
- Low-VOC EPDM Primer – Used on EPDM and TPO

Mule-Hide also offers Water-Based Bonding Adhesives for use with EPDM, TPO & PVC.

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State Regulations Concerning Emissions of VOCs from Adhesives and Sealants.

Updated August 2013

States	Website	Implementation Dates	Sale/Distribution Dates
Connecticut **Regulation effective October 3, 2008**	http://www.ct.gov/deep/cwp/view.asp?A=2684&Q=322184 Sec 22a-174-44 Adhesives and sealants (c) (10); Sale/distribution: (b)(1); (b)(2); (c)(5) and (c) (11)	2009: 6/1 – 8/31 2010: 5/1 – 9/30 2011: 5/1 – 9/30 2012: 01/01 and thereafter	After 01/01/12, non-compliant products intended for use out of state may be sold/distributed at any time provided records are kept. No provisions permitting sell-through after January 1, 2012 for use/sale in state.
Delaware **Regulation effective April 11, 2009.**	http://regulations.delaware.gov/register/april2009/final/12%20DE%20Reg%201333%2004-01-09.htm Section 4.0 Adhesives and Sealants 4.3 Reqs., Table 4-1 VOC Limits Amendments to Regulation 1141 Sale/distribute: 4.4.5	2009: 6/1 – 8/31 2010: 5/1 – 9/30 2011: 5/1 – 9/30 2012: 01/01 and thereafter	During implementation periods, only compliant products may be sold/distributed for use within state. Non-compliant products intended for use out of state may be sold at any time provided records are kept. No provisions permitting sell-through after January 1, 2012 for use/sale in state.
District of Columbia **Regulation effective, January 2012.**	General Requirements: 743 p. 68 http://www.dcregs.dc.gov/Gateway/FinalAdoptionHome.aspx?RuleVersionID=3875264 Sale/distribute: 745.6 and 745.10 http://www.dcregs.dc.gov/Gateway/FinalAdoptionHome.aspx?RuleVersionID=3875458	2012: 01/01 and thereafter	Sale/distribution permitted without restriction until 01/01/12 Non-compliant products intended for use out of state may be sold at any time provided records are kept. Sell-through/use-through permitted of products manufactured prior to December 31, 2011.
Maine **Regulation effective June 24, 2009.**	http://www.maine.gov/sos/cec/rules/06/chaps06.htm Chapter 159 Seasonal Implementation: 3 (F) Manufacture/Sale/Distribution: 1.A.(1) and 3 (G)	2011: 5/1 – 9/30 2012: 01/01 and thereafter	Sale/distribution permitted without restriction until 01/01/12 After 01/01/12, non-compliant products intended for use out of state may be sold/distributed at any time provided records are kept. No provisions permitting sell-through after January 1, 2012 for use/sale in state.
Maryland **Regulation published April 2008. Amendment effective 2/9/09.**	http://www.dsd.state.md.us/comar/getfile.aspx?file=26.11.35.01.htm Seasonal Implementation: Subsection I (that's the letter I, not the number 1) Sale/distribution: Part F	2009: 5/15 – 9/15 2010: 5/1 – 9/30 2011: 5/1 – 9/30 2012: 01/01 and thereafter	During implementation periods, only compliant products may be sold/distributed for use within state. Non-compliant products intended for use out of state may be sold at any time provided records are kept. No provision permitting sell-through.

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States	Website	Implementation Dates	Sale/Distribution Dates
Massachusetts **Draft regulation proposed.**	http://www.mass.gov/dep/service/regulations/proposed/adhpregr.pdf	Draft: 2014: 1/1 and thereafter (still just a draft)	Manufacture permitted until 1/1/14; Sale/distribution permitted until 9/1/14; use permitted until 5/1/15. Non-compliant products intended for use out of state may be sold at any time provided records are kept.
New Hampshire	http://des.nh.gov/organization/commissioner/legal/rulemaking/index.htm	Under consideration.	Under consideration
New Jersey **Regulation effective 12/1/08.**	http://www.state.nj.us/dep/aqm/Sub26.pdf Seasonal implementation: Section 7:27-26.4 (h) Sale/distribution: 7:27-26.4 (e) and (i) Sell-through: 7:27-26.3 Requirements I	2009: 6/1 – 8/31 2010: 5/1 – 9/30 2011: 5/1 – 9/30 2012: 01/01 and thereafter	During implementation periods, only compliant products may be sold / distributed for use within state. Non-compliant products intended for use out of state may be sold at any time provided records are kept. Sell-through permitted of products manufactured prior to January 1, 2009.
New York **Regulation effective 9/30/10.**	Amend. to 6 NYCRR Part 228 http://www.dec.ny.gov/regs/68559.html Seasonal implementation: [228 – 2.3 (c)]; Sale/distribution: [228 – 2.3 (d)] AND [228 – 2.4 (d 1) and (d 2)]	2011: 5/1-9/30 2012: 01/01 and thereafter	Sale/distribution permitted without restriction until 01/01/12. After 1/1/12, non-compliant products intended for use out of state may be sold at any time provided records are kept. Sell through: Product manufactured in 2010 may be sold/distributed/used without restriction through December 31, 2011.
Pennsylvania **Regulation effective December 2010. Implementation January 1, 2012.**	25 PA Code Chapters 129.77 (m) and 130.703 (c) and 130.703 (d) and 130.708 http://www.pacode.com/secure/data/025/025toc.html	2012: 01/01 and thereafter.	Sale/distribution permitted without restriction until 01/01/12. After 1/1/12, non-compliant products intended for use out of state may be sold at any time provided records are kept. Sell-through: Sell-through/use-through permitted of products manufactured prior to December 31, 2011.
Rhode Island **Regulation published June 4, 2009.**	APC. Regulation No. 44 http://www.dem.ri.gov/pubs/regs/regs/air/air44_09.pdf Seasonal Implementation: 44.2.2 Sale/distribute: 44.2.3 (k) and record-keeping: 44.5.1	2009: 7/1 – 8/31 2010: 5/1 – 9/30 2011: 5/1 – 9/30 2012: 01/01 and thereafter	During implementation periods, only compliant products may be sold / distributed for use within the state. Non-compliant products intended for use out of state may be sold at any time provided records are kept. Sell-through permitted of products manufactured prior to January 1, 2009.

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States	Website	Implementation Dates	Sale/Distribution Dates
Utah	Rule 307-342 http://utrules.eregulations.us/bulletin/notice/3/1/2013/37275	2014: 9/1 and thereafter	Regulation only affects counties of: Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber. Use of products is permitted after 9/1/14 IF product was manufactured prior to 9/1/2014. Non-compliant products intended for use out of affected area may be sold at any time provided records are kept.
Vermont	http://www.anr.state.vt.us/air/htm/ProposedAmendments.htm	Under consideration	Under consideration
Virginia **D06 regulation effective 2010. J07 regulation effective October 1, 2013.**	D06 (D zero 6) http://www.townhall.virginia.gov/L/ViewAction.cfm?actionid=2328 J07 (J zero 7) http://www.townhall.virginia.gov/L/ViewAction.cfm?actionid=2500 9VAC5-45-620 Article 6 Implementation Dates: 9VAC5-45-650 **G.2**. Sale/distribute: 9VAC5-45-650 **H** and 9VAC5-45-630 Exemptions **A**	**D06** 2010: 8/1 – 9/30 2011: 5/1 – 9/30 2012: 01/01 and thereafter. **J07** 2014: 3/1-9/30 2015: 01/01 and thereafter	D06 permits sale/distribution without restriction until 01/01/12; After 01/01/2012 non-compliant products intended for use out of emissions control areas may be sold at any time provided records are kept. No provisions permitting sell-through after January 1, 2012. D06 applies to: Northern Virginia Emissions Control Area and Fredericksburg Emissions Control Area. Spotsylvania County; Fredericksburg City J07 does not have provisions for sell-through will apply to: Richmond Emissions Control Area: counties/cities of Charles; Chesterfield; Hanover; Henrico; Prince George; Colonial Heights; Hopewell; Petersburg; Richmond.

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While this manual is published on a periodic basis, no manual can explicitly cover every condition or detail on a specific project or provide a detail for every new design or new product. For conditions or details not covered in this manual , please contact your local Mule-Hide representative, the Mule-Hide Technical Department or Customer Service Department for assistance.

PLEASE CONSULT THE MULE-HIDE WEBSITE FOR THE MOST CURRENT INFORMATION & LATEST UPDATES

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