



Product Data Sheet

MULE-HIDE #211 PLASTIC CEMENT (Meets ASTM D4586 and D3409)

PRODUCT DESCRIPTION

Mule-Hide #211 Plastic Cement is a general purpose formulation for use as a cold-applied sealing and repair material in many types of asphalt roof membranes. Mule-Hide #211 Plastic Cement has a heavy “trowel-grade” consistency which makes this product ideal for flashing details and a variety of waterproofing repairs, such as moving joints and roof penetrations. Mule-Hide #211 Plastic Cement has a superior formulation that will not separate.



BASIC USES

- Repairing asphalt shingles, conventional built-up roofs, metal and masonry surfaces.
- Sealing leaks and openings around flashings (chimneys, vents, skylights, metal joints, gutters and similar objects used in constructing built-up flashings).
- Positive side damp proofing of concrete, masonry walls and foundations.
- NOT RECOMMENDED for use with polymer-modified bitumen (APP, SBS).
- DO NOT USE with PVC, TPO, EPDM or other single-ply membranes.

PHYSICAL PROPERTY INFORMATION*

Property	Value
Maximum VOC	250 G/L
Consistency	Thick Mastic
Weight	8.8 lbs. per gallon
Flash Point (T.C.C.)	105°F+
Service Temperature (range)	40°F to 90°F
Resistance to Acids, Alkyds	Excellent

* Data reported is based on available independent and in-house resources. Mule-Hide reserves the right to change or modify, at its discretion, and without prior written notice, any of the information, requirements, specifications or policies contained in this document.

PACKAGING

- 2.8 Gallon Pail (10.59 Liters)
- 4.7 Gallon Pail (17.79 Liters)

BENEFITS & SUPPLEMENTAL STATEMENTS

- Provides exceptional weathering characteristics over a wide range of challenging temperatures and weather conditions. Will not mudcrack and will remain highly resilient and durable through all seasons
- Interlocking fiber matrix assures uniform, excellent adhesion
- Exhibits excellent sag resistance when used on vertical surfaces, even at high temperatures.
- Non-destructive to conventional asphalt based roofing membranes
- 100% recycled cellulose fibers

CODE APPROVALS/COMPLIANCE

- Miami Dade County Approved
- Meets or exceeds requirements of ASTM D4586 Type I
- Meets or exceeds requirements of ASTM D3409

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COVERAGE RATES

- Approximately 8 gallons per 100 sq. ft. for a 1/8" (3 mm) coat applied to both surfaces.
(All values are approximate and may vary with ambient temperature and job conditions)

INSTALLATION TEMPERATURE

- Apply only when ambient temperatures are 45°F and rising. Cold weather could result in uneven application and improper curing of product. Cold weather will cause product to stiffen making application more difficult.
- Store product at room temperature for minimum 24 hours prior to application.
- Do not heat container or attempt to thin this product.
- Not recommended for application on substrates that exceed 140°F.

INSTALLATION INSTRUCTIONS

Surface Preparation:

- All surfaces to be adhered must be clean, dry and free from any foreign matter such as oil, grease, dirt or any debris that could inhibit the bonding capabilities of the roof cement.
- On existing roofs, inspect roof deck condition - moisture in old roof or local building codes may indicate complete removal of existing roof.
- Blisters, buckles and raised edges should be cut out for a smooth surface.
- Check all flashing, edges, drains, valleys and vents and repair as needed. On gravel roofs, remove gravel before making repair.
- To greatly extend the life of the product, apply an aluminum roof coating after a minimum 30 day cure time.

Installation Method:

- Use notched trowel, wide-edged putty knife or gloved hand to apply cement evenly and in equal amounts to substrate and flashing. Coat should be 1/8" thick, without gaps, dry areas or bubbles.

Attachment:

- Membrane Flashing: No cure time before attaching flashing. Simply press into place with even pressure, smoothing out wrinkles and bubbles. Coat underside of membrane and substrate to be covered with cement at rate indicated. Set membrane over cemented substrate and press into place working out any wrinkles or non-adhered area. Roll all side and end laps, making sure a sufficient amount of cement has been applied to the laps so that a bead of cement is visible at all lap edges. Mechanically fasten membrane flashing on parapet walls to avoid membrane slippage.
- Metal: Set metal flanges in full bead of 1/8" (3 mm) thick cement. Apply cement between joints and apply pressure so that a bead of cement is visible at joint edge.
- Repairs: Repair cracks, tears, holes and breaks by applying cement 1/8" (3 mm) to 1/4" (6mm) thick. Apply and work cement into break or crack, then apply cement 2" (50 mm) – 4" (100 mm) beyond the problem area feathering the edges. If repair area is over 1/4" (6 mm) wide or more than 2" (50 mm) long, embed glass or polyester fabric into the cement for added reinforcement, and then cover with additional cement. If desired, repeat procedure for coursing application and feather each layer of fabric beyond underlying layer.

PRECAUTIONS

COMBUSTIBLE LIQUID AND VAPOR

- Contains petroleum distillate. Harmful or fatal if swallowed. Close container after each use. **DO NOT TAKE INTERNALLY!** Vapor harmful. May affect the brain or central nervous system causing dizziness, headache, or nausea. Causes nose and throat irritation. Causes eye irritation. Causes skin irritation. Reports have associated repeated and prolonged occupational exposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Keep away from heat and open flame.

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PRECAUTIONS (continued)

- Use only with adequate ventilation. **CLOSE AIR INTAKES** on roof until solvents dissipate. Do not breathe vapors. If you experience eye watering, headache, or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use.
- **California Proposition 65 Warning:** This product may contain chemicals known to the State of California to cause cancer, birth defects and/or reproductive harm.

Personal Protection – Irritation may result from prolonged or repeated contact with skin. Wear chemical resistant gloves, protective goggles and protective clothing, if needed.

Eye Contact – Rinse immediately with clean water for 15 minutes and see medical advice.

Waste Disposal – Empty containers must be disposed of in accordance with local, state, and federal regulations.

For Professional Use Only – Keep out of the reach of children.

For Exterior Use Only - Refer to material safety data sheet (MSDS) for specific data and handling.

CLEAN UP

- Clean tools with mineral spirits or paint thinner.

STORAGE & HANDLING

- Product shelf life is 24 months from date of manufacture when properly stored.
- Store container at room temperature for minimum 24 hours prior to use.
- Do not store at temperatures greater than 120°F.
- Observe normal safeguards for storing and handling of product prior to and during use.
- Keep containers tightly covered when not in use.

PROTECTION & SAFETY

Mule-Hide maintains Safety Data Sheets on all of its non-exempt products. Safety Data Sheets contain health and safety information for your development of appropriate product handling procedures to protect your employees and customers. Mule-Hide's Safety Data Sheets should be read and understood by all of your supervisory personnel and employees before using Mule-Hide products in your facilities.

ADDITIONAL INFORMATION

The information given on this PDS is subject to change without notice. Always check the Mule-Hide website at www.mulehide.com for the latest information, changes and updates or contact Mule-Hide Products Company at 800-786-1492.

DISCLAIMER

The statements provided concerning the material shown are intended as a guide for material usage and are believed to be true and accurate at the time of printing. No statement made by anyone may supersede this information, except when done in writing by Mule-Hide Products Co., Inc. Since the manner of use is beyond our control, Mule-Hide does not authorize anyone to make any warranty of merchantability or fitness for any particular purpose or any other warranty, guarantee or representation, expressed or implied, concerning this material. Buyer and user accept the product under these conditions and assume the risk of any failure, any injury person or property (including that of the user), loss or liability resulting from the handling, storage or use of the product whether or not it is handled, stored or used in accordance with the directions or specifications. Mule-Hide must be notified in writing of any claims and be given the opportunity to inspect the alleged failure before repairs are made.