

# FLUID-APPLIED ROOFING SYSTEMS





## COATINGS

There is more to roofing than total replacement. When considering life-cycle costs, it can make sense to prolong the life of the roof with coatings and qualify for a fresh No Dollar Limit (NDL) warranty on an existing roof.

Reflective roof coatings extend the service life of a mature roofing system. Lasting restoration or repair delays capital expense until an expensive tear-off or overlay is necessary.

- Trusted performance with quick application & clean up using brush, roller or airless sprayer
- Proven, time-tested formulations
- Minimal disruption to the building
- Maximize installed-cost value
- Energy savings—meets CRRC cool roof requirements by reflecting solar energy and reducing interior building temperatures

### **ANATOMY OF COATINGS**

Roof coating systems are applied in layers to build desired dry mil thickness:

- All installations require proper cleaning prior to application
- Depending on substrate, primer may be required
- Penetrations are individually addressed before base application
- Tinted base eliminates guesswork when applying finish
- With annual maintenance, a properly installed coating system may perform up to 20 years

### **APPLICATION METHODS:**





## SILICONE COATINGS

100% Silicone Roof Coating is a high-solids, single-part elastomeric roof coating and manufactured from durable inorganic silicone resins, reinforcing and reflective pigments. Apply over new spray-applied polyurethane foam, EPDM, TPO, aged PVC, aged acrylic coatings, concrete, asphalt built-up roofs, granulated modified bitumen roofs and metal roofs.

- Provides years of durable, low-maintenance, seamless protection—control UV damage, reduce thermal shock, fully adhered system seals off water entry points
- Superior resistance to ponding water—low water absorption outperforms conventional solvent- and waterbased protective roof coatings
- Same day re-coating possible with quick cure time
- Low-odor-solvent-free formula; VOC compliant throughout North America
- White 100% Silicone Roof Coating improves rooftop air conditioning unit efficiency

Silicone coatings are the best choice when:

- There is ponding water
- A complex roof provides installation issues for a conventional membrane roof
- Two roofing systems exist (eliminating tear-off)

## **ACRYLIC COATINGS**

A-300 Acrylic Roof Coating is an elastomeric, water-based roof coating system or maintenance coating. It may be used over metal and on smooth asphalt built-up roofs, Mod Bit, EPDM, TPO and PVC.

- Exceptional exterior durability and UV stability
- · Specifications for both reinforced and non-reinforced assemblies
- Superior flexibility in low-temperature environments

Acrylic coatings are the best choice:

- On tight budgets
- When there is no ponding water
- Over a metal roof with minimal rust when installation temperatures are above freezing





## **OUTLINING THE FACTS**

Coatings have progressed from a maintenance decision to a long-term roofing investment with NDL system warranties up to 20 years.

### **BEST PRACTICES ON A ROOF COATING INSTALL**

### 1. Coatings alone will not fix a leaky roof

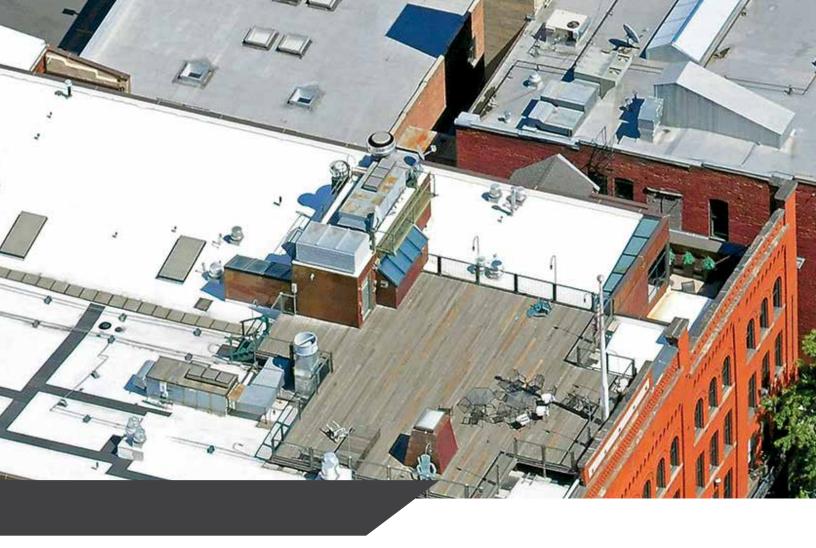
As stated, the primary function of a coating is to extend the service life of an existing roofing system. If the existing roofing system leaks or is severely deteriorated in areas, applying a liquid coating over the affected area is not a long-term solution. Short-term success, maybe, but certainly not a long-term fix.

## 2. The existing roofing system must be repaired with like materials before applying a coating

Prior to installing any coating, the existing roofing system must be repaired with like materials and brought up to a watertight condition. When restoring a roof, it is very important to not just treat the symptom, but also to correct the cause. By addressing defective roof issues in advance, fluid applied roofing systems can qualify for NDL warranties up to 20 years.

### 3. Moisture trapped below a coating will try to get out through the coating

Remove all moisture trapped within the existing roofing system. A moisture scan alone does not confirm the absence of moisture. Core cuts of the existing system are required to verify the findings of the moisture scan. Remove and replace all wet materials in the existing roofing system before applying any coating.



### 4. Coatings don't stick to everything

Adhesion tests are critical in determining the suitability of a particular coating over a particular substrate. Failure to perform adhesion tests before starting the project can lead to catastrophic failures in the new coating system.

### 5. Coatings do not work well on a gravel-surfaced roof

Gravel surfacing presents numerous problems for a coating project. Enough liquid can be poured over gravel until it is completely covered, but extremely thick coating application presents a whole new set of problems ranging from never drying to severe cracking.

### 6. Coatings do not stick to a dirty surface

Surface prep must include a thorough cleaning of the original roofing system. Cleaning should include more than power washing with plain water. An appropriate cleaner followed by rinsing is required to provide a suitable surface. Sometimes, heavily-soiled roofs require multiple cleanings to achieve required cleanliness.

### 7. Spray-apply coatings

Coatings can be applied with a brush, roller or sprayed. Not all sprayers work with all coatings. Spraying coatings provides more even coverage and a better appearance than brushing or rolling, but requires an initial capital investment of \$15,000-\$20,000 for proper equipment. Roof coatings can be very thick, requiring a powerful spray rig to deliver the coating to the substrate.

### 8. Review formal specifications

Always read manufacturer specifications and consult with a Mule-Hide Territory Manager prior to starting a project.

## **DESIGN POINT: STAINING/BLEED THROUGH**

Asphalt roofs contain light oils. New asphalt and modified bitumen should age a minimum of 90 days prior to coating application to allow the oils to leave the membrane. Even aged asphalt and modified bitumen have enough retained oil to cause staining. Any coating applied over asphalt or modified bitumen should have a stain blocker.

Ю

H

# **ASPHALT-BASED ROOFS**

Automation temperature Restrictions Installation temperatures nust be above 40°F   High-remperature Restrictions Do not exceed 120°F Do not exceed 120°F   BeCoat Time 12 hurs Coverage 24 hours   Strong Odor Not Strong Odor Not   Warranty 10 yr 15 yr 20 yr   Outer and the analysis 115 Cleaner (diluted) 115 Cleaner (diluted) 115 Cleaner (diluted)   Coverage per Sq 1/4-1/2 Gal 1/4-1/2 Gal 1/4-1/2 Gal 1/4-1/2 Gal 1/4-1/2 Gal 1/4-1/2 Gal   Primer Not Coverage per Sq Not Required Stilicone Roof Stilicone Roof Stilicone Roof Stilicone Roof   Seams & Coverage per Sq A-200 Flashing A-200 Flashing Stilicone Roof Stilicone Roof Stilicone Roof   Seams & Coverage per Sq 1.5 Gal 1.5 Gal 1.5 Gal 1.5 Gal 1.5 Gal   Base Coat A-200 Flashing A-200 Flashing Stilicone Roof Stilicone Roof Stilicone Roof   Tist Coat per Sq 1.5 Gal 1.5 Gal 1.5 Gal 2 Gal 2 Gal	Attribute	Acrylic			Silicone		
Primer Required $\begin{tabular}{lllllllllllllllllllllllllllllllllll$		Fa	air		Very Good		
Aux-Temperature RestrictionsInstallation temperatures hoursLabove 40°FHigh-Temperature RestrictionsDo not exceed 120°FDo not exceed 120°FRe-Coat Time12 hours $2-4$ hoursStrong OdorNo $32$ ( $32$	Permeable	Y	es		Yes		
RestrictionsInstallation temperatures RestrictionsDo not exceed 10°FDo not exceed 120°FHigh-Temperature Restrictions0 not exceed 110°F $2-4$ hoursStrong Odor12 hours $-2-4$ hoursStrong OdorNoNotSystem $A cruceSiliconeWarranty10 yr15 yr10 yr115 Cleaner (diluted)115 Cleaner (diluted)115 Cleaner (diluted)Coverage per Sq1/4-1/2 Gal1/4-1/2 Gal1/4-1/2 GalPrimerCoverage per SqNotRequiredNotRequired1.5-Gal1.5-GalSeams &FlashingA-200 FlashingA-200 FlashingSilicone RoofSealantSilicone RoofSealantSilicone RoofSealantBase CoatA-300 BaseA-300 Finish1.5 Gal100% Silicone1.5-GalSilicone RoofSealantSilicone RoofSealantSilicone RoofSealantInt Coat per Sq1.5 Gal1.5 Gal1.5 Gal1.5 Gal100% SiliconeSealantSilicone RoofSealantInt Coat per Sq1.5 Gal1.5 Gal1.5 Gal1.5 Gal1.5 Gal1.5 GalInt Coat per Sq1.5 Gal1.5 Gal1.5 Gal1.5 Gal2.5 GalInst Coat per Sq1.5 Gal1.6 Gal1.5 Gal2.5 GalInst Coat per Sq1.5$	Primer Required	N	10		Yes		
RestrictionsLO HOLSQUED HOLSQUED HOLSQUED HOLSQUED HOLSQUED LOUPRe-Coat Time12 hours $2-4$ hoursStrong OdorNoSiliconeSystemAcrysterSiliconeWarranty10 yr15 yr10 yr15 yr20 yr20 Yr115 Cleaner (diluted)115 Cleaner (diluted)115 Cleaner (diluted)115 Cleaner (diluted)Coverage per Sq1/4-1/2 Gal1/4-1/2 Gal1/4-1/2 Gal1/4-1/2 Gal1/4-1/2 GalPrimerNot RequiredNot RequiredSilicone Root SealantSilicone Root SealantSilicone Root SealantSeams & FlashingA-200 FlashingA-200 FlashingSilicone Root 	Low-Temperature Restrictions	Installation temperature for 48 conse	es must be above 45°F ecutive hours	Installation	temperatures must be a	above 40°F	
Strong OdorNoMildStrong OdorNoMildSystemAcrylicSiliconeWarranty10 yr15 yr10 yr15 yr20 yr20 Yr115 Cleaner (diluted)115 Cleaner (diluted)115 Cleaner (diluted)115 Cleaner (diluted)Coverage per Sq1/4-1/2 Gal1/4-1/2 Gal1/4-1/2 Gal1/4-1/2 GalPrimerNot RequiredMultibase SB (l'needed)Multibase SB (l'needed)Multibase SB (l'needed)Multibase SB (l'needed)Seams & FlashingA-200 FlashingA-200 FlashingSilicone Roof SealantSilicone Roof SealantSilicone Roof SealantSilicone Roof 	High-Temperature Restrictions	Do not exc	ceed 110°F		Do not exceed 120°F		
SystemAcrylicSiliconeWarranty10 yr15 yr10 yr15 yr20 yr20 Yr115 Cleaner (diluted)115 Cleaner (diluted)115 Cleaner (diluted)115 Cleaner (diluted)115 Cleaner (diluted)Coverage per Sq1/4-1/2 Gal1/4-1/2 Gal1/4-1/2 Gal1/4-1/2 Gal1/4-1/2 GalPrimerNot RequiredNot RequiredMultibase SB If needed)Multibase SB 	Re-Coat Time	12 h	nours		2-4 hours		
Warranty10 yr15 yr10 yr15 yr20 yr20 Yr115 Cleaner (diluted)115 Cleaner (diluted)115 Cleaner (diluted)115 Cleaner (diluted)115 Cleaner (diluted)Coverage per Sq1/4-1/2 Gal1/4-1/2 Gal1/4-1/2 Gal1/4-1/2 Gal1/4-1/2 GalPrimerNot RequiredNot RequiredMultibase SB (freeded)Multibase SB (freeded)Multibase SB (freeded)Multibase SB (freeded)Seams & FlashingA-200 FlashingA-200 FlashingSilicone Roof SealantSilicone Roof SealantSilicone Roof SealantSilicone Roof SealantBase CoatA-300 BaseA-300 Base100% Silicone Coating100% Silicone Coating100% Silicone Coating100% Silicone Coating1 st Coat per Sq1.5 Gal1.5 Gal1.5 Gal1.6 Gal1.5 GalMutt Thickness242424Base coats are not required. Single-pass applications are recommendedMutt Thickness1.5 Gal1 Gal1.5 Gal1.00% Silicone Coating100% Silicone Coating2nd Coat per Sq1.5 Gal1 Gal1.5 Gal2.6 Gal2.5 Gal3rd Coat per Sq1.5 Gal1 GalYm Mil Thickness24322432403rd Coat per Sq1.216223038Total Minimums1216223038	Strong Odor	Ν	lo		Mild		
20 Yr115 Cleaner (diluted)115 Cleaner (diluted)115 Cleaner (diluted)115 Cleaner (diluted)Coverage per Sq1/4-1/2 Gal1/4-1/2 Gal1/4-1/2 Gal1/4-1/2 Gal1/4-1/2 GalPrimer Coverage per SqNot RequiredMultibase SB (ff needed)Multibase SB (ff needed)Multibase SB (ff needed)Multibase SB (ff needed)Seams & FlashingA-200 FlashingA-200 FlashingSilicone RoofSilicone RoofSilicone RoofBase CoatA-300 BaseA-300 Base1.5 Gal1.00% Silicone CoatingSilicone RoofSilicone RoofIst Coat per Sq1.5 Gal1.5 Gal1.5 Gal100% Silicone Coating100% Silicone Coating100% Silicone Coating100% Silicone CoatingIst Coat per Sq1.5 Gal1.5 Gal1.5 Gal1.6 Gal1.6 Gal1.00% Silicone Coating100% Silicone CoatingIst Coat per Sq1.5 Gal1.6 Gal1.6 Gal2.5 Gal2.5 GalFinish CoatA-300 FinishA-300 Finish1.6 Gal2.6 Gal2.5 GalIst Coat per Sq1.5 Gal1 GalYet Mil Thickness2.4322.43240Ist Coat per Sq-1.6 Gal2.2303.8Ist Coat per Sq1.5 Gal1.6 Gal2.23.03.8Ist Coat per SqIst Coat per Sq1.5 Gal1.6 Gal2.23.03.8Ist Coat per Sq- <t< th=""><th>System</th><th>Acr</th><th>ylic</th><th></th><th>Silicone</th><th></th></t<>	System	Acr	ylic		Silicone		
Coverage per Sq1/4-1/2 Gal1/4-1/2 Gal1/4-1/2 Gal1/4-1/2 Gal1/4-1/2 GalPrimer Coverage per SqNot RequiredNot RequiredMultibase SB (Ir needed)Multibase SB (Ir needed) <t< td=""><td>Warranty</td><td>10 yr</td><td>15 yr</td><td>10 yr</td><td>15 yr</td><td>20 yr</td></t<>	Warranty	10 yr	15 yr	10 yr	15 yr	20 yr	
PrimerNot RequiredNot RequiredMultibase SB (f needed)Multibase SB (f needed)Multibase SB (f needed)Coverage per SqA-200 FlashingA-200 Flashing1.5-Gal1.5-Gal1.5-GalSeams & FlashingA-200 FlashingA-200 FlashingSilicone Roof SealantSilicone Roof SealantSilicone Roof SealantBase CoatA-300 BaseA-300 BaseA-300 Base100% Silicone Coating100% Silicone Coating100% Silicone Coating1st Coat per Sq1.5 Gal1.5 Gal1.5 Gal100% Silicone Coating100% Silicone Coating100% Silicone CoatingMultibase SB1.5 Gal1.5 Gal1.5 Gal100% Silicone Coating100% Silicone Coating100% Silicone CoatingInish CoatA-300 FinishA-300 Finish100% Silicone Coating100% Silicone Coating100% Silicone CoatingInish CoatA-300 FinishA-300 Finish1.5 Gal2 Gal2.5 GalInish Coat per Sq1.5 Gal1 Gal1.5 Gal2 Gal2.5 GalInish Coat per Sq1.5 Gal1 GalInish Coat per Sq1.21 Gal23038Inish Coat per Sq </td <td>20 Yr</td> <td>115 Cleaner (diluted)</td>	20 Yr	115 Cleaner (diluted)	115 Cleaner (diluted)	115 Cleaner (diluted)	115 Cleaner (diluted)	115 Cleaner (diluted)	
PrimeNot RequiredNot RequiredNot RequiredNot RequiredNot Required(if needed)(if needed)(if needed)Coverage per SqA-200 FlashingA-200 FlashingA-200 FlashingSilicone Roof SealantSilicone Roof SealantSilicone Roof SealantSilicone Roof SealantBase CoatA-300 BaseA-300 Base100% Silicone Coating100% Silicone Coating100% Silicone Coating1st Coat per Sq1.5 Gal1.5 Gal100% Silicone Sealant100% Silicone Sealant100% Silicone Coating1st Coat per Sq1.21212Base coating100% Silicone Coating100% Silicone CoatingInish CoatA-300 FinishA-300 Finish100% Silicone Coating100% Silicone Coating100% Silicone CoatingInish Coat per Sq1.5 Gal1 Gal1.5 Gal2 Gal2.5 Gal2nd Coat per Sq1.5 Gal1 GalMet Mil Thickness24322432402nd Coat per Sq-1 GalWet Mil Thickness2432243240Dry Mil Thickness1216223038Total Minimum RequirementsInformationInformationInformationInformation	Coverage per Sq	1/4-1/2 Gal	1/4-1/2 Gal	1/4-1/2 Gal	1/4-1/2 Gal	1/4-1/2 Gal	
Coverage per SqA-200 FlashingA-200 Flashing1.5-Gal1.5-Gal1.5-GalSeams & FlashingA-200 FlashingA-200 FlashingSilicone Roof SealantSilicone Roof SealantSilicone Roof SealantBase CoatA-300 BaseA-300 BaseA-300 Base100% Silicone Coating100% Silicone Coating100% Silicone Coating100% Silicone Coating100% Silicone Coating100% Silicone Coating1 St Coat per Sq1.5 Gal1.5 Gal1.5 Gal100% Silicone Coating100% Silicone Coating100% Silicone Coating100% Silicone Coating1 Dry Mil Thickness242412100% Silicone Coating100% Silicone Coating100% Silicone Coating100% Silicone Coating2 nd Coat per Sq1.5 Gal1 Gal1.5 Gal2 Gal2.5 Gal3 nd Coat per Sq1.5 Gal1 GalWet Mil Thickness2432243240Dry Mil Thickness24322432403 nd Coat per Sq1216223038Total Minimum Requirements1216223038	Primer	Not	Not				
FlashingA-200 FlashingA-200 FlashingOlive SealantOlive SealantOlive SealantOlive SealantOlive SealantBase CoatA-300 BaseA-300 Base100% Silicone Coating100% Silicone Coating100% Silicone Coating100% Silicone Coating100% Silicone Coating100% Silicone Coating100% Silicone Coating100% Silicone Coating100% Silicone Coating1st Coat per Sq1.5 Gal1.5 Gal242424Base coats are not required. Single-pass applications are recommende.Dry Mil Thickness121212Todal100% Silicone Coating100% Silicone Coating100% Silicone Coating100% Silicone Coating2nd Coat per Sq1.5 Gal1 Gal1.5 Gal2 Gal2.5 Gal3rd Coat per Sq-1 GalWet Mil Thickness2432243240Dry Mil Thickness1216223038Total Minimum RequirementsIInternet InternetInternet InternetInternet	Coverage per Sq	Required	Required	1.5-Gal	1.5-Gal	1.5-Gal	
Base CoatA-300 BaseA-300 BaseCoatingCoatingCoatingCoating1st Coat per Sq1.5 Gal1.5 GalBase CoatingBase coats are not required. Single-pass applications are recommended.Wet Mil Thickness2424Base coatingBase coatingDry Mil Thickness1212100% Silicone Coating100% Silicone Coating100% Silicone CoatingFinish CoatA-300 FinishA-300 Finish100% Silicone Coating100% Silicone Coating100% Silicone Coating2nd Coat per Sq1.5 Gal1 Gal3rd Coat per Sq-1 GalWet Mil Thickness2432243240Dry Mil Thickness1216223038Total Minimum RequirementsImage Silicone CoatingImage Silicone CoatingImage Silicone CoatingImage Silicone Coating	Seams & Flashing	A-200 Flashing	A-200 Flashing	Silicone Roof Sealant		Silicone Roof Sealant	
Wet Mil Thickness2424Base coats are not required. Single-pass applications are recommended.Dry Mil Thickness121212Finish CoatA-300 FinishA-300 Finish100% Silicone Coating100% Silicone Coating100% Silicone Coating2nd Coat per Sq1.5 Gal1 Gal1.5 Gal2 Gal2.5 Gal3rd Coat per Sq-1 GalWet Mil Thickness2432243240Dry Mil Thickness1216223038Total Minimum RequirementsIntegerIntegerIntegerInteger	Base Coat	A-300 Base	A-300 Base				
Wet Mil Thickness242424applications are recommended.Dry Mil Thickness1212	1st Coat per Sq	1.5 Gal	1.5 Gal				
Dry Mil Thickness1212Finish CoatA-300 FinishA-300 Finish100% Silicone Coating100% Silicone Coating2nd Coat per Sq1.5 Gal1 Gal1.5 Gal2 Gal2.5 Gal3rd Coat per Sq-1 GalWet Mil Thickness2432243240Dry Mil Thickness1216223038Total Minimum RequirementsImage: State of the state of	Wet Mil Thickness	24	24		•	<b>o</b> .	
Finish CoatA-Sou FinishA-Sou FinishCoatingCoatingCoating2nd Coat per Sq1.5 Gal1 Gal1.5 Gal2 Gal2.5 Gal3rd Coat per Sq-1 GalWet Mil Thickness2432243240Dry Mil Thickness1216223038Total Minimum RequirementsCoatingCoatingCoatingCoating	Dry Mil Thickness	12	12	άρμ			
Since per Sq-1 Gal3rd Coat per Sq-1 GalWet Mil Thickness2432243240Dry Mil Thickness1216223038Total Minimum RequirementsImage: Since per Sin	Finish Coat	A-300 Finish	A-300 Finish				
Wet Mil Thickness2432243240Dry Mil Thickness1216223038Total Minimum RequirementsImage: Comparison of the second s	2nd Coat per Sq	1.5 Gal	1 Gal	1.5 Gal	2 Gal	2.5 Gal	
Dry Mil Thickness1216223038Total Minimum RequirementsImage: Comparison of the second	3rd Coat per Sq	-	1 Gal	-	-	-	
Total Minimum Requirements	Wet Mil Thickness	24	32	24	32	40	
Requirements	Dry Mil Thickness	12	16	<u>16</u> <u>22</u> <u>30</u>		38	
	Total Minimum Requirements						
	•	3 Gal	3.5 Gal	1.5 Gal	2 Gal	2.5 Gal	
Dry Mil Thickness 24 28 22 30 38	Dry Mil Thickness	24	28	22	30	38	

### **APPLICATION METHODS:**





## **DESIGN POINT: ADHESION**

TPO membranes have a low-surface energy making adhesion difficult. Adhering coatings to TPO membranes requires sanding, scuffing or priming the surface. A-300 Base TPO and Si TPO Primer formulas address low surface energy and improve coating adhesion.

# **TPO ROOFS**

	_					
Attribute	Acr	ylic		Silicone		
Resistance to Ponding Water	Fair			Very Good		
Permeable	Ye	es		Yes		
Primer Required	N	0		Yes		
Low-Temperature Restrictions	Installation temperature for 48 conse		Installation	temperatures must be a	above 40°F	
High-Temperature Restrictions	Do not exc	eed 110°F		Do not exceed 120°F		
Re-Coat Time	12 h	ours		2-4 hours		
Strong Odor	N	0		Mild		
System	Acr	ylic		Silicone		
Warranty	10 yr	15 yr	10 yr	15 yr	20 yr	
Clean	115 Cleaner (diluted)	115 Cleaner (diluted)	115 Cleaner (diluted)	115 Cleaner (diluted)	115 Cleaner (diluted)	
Coverage per Sq	1/4-1/2 Gal	1/4-1/2 Gal	1/4-1/2 Gal	1/4-1/2 Gal	1/4-1/2 Gal	
Primer	Not Required	Not Required	Si TPO Primer (if needed)	Si TPO Primer (if needed)	Si TPO Primer (if needed)	
Coverage per Sq	nequirea	nequired	1/8 Gal	1/8 Gal	1/8 Gal	
Seams & Flashing	A-200 Flashing	A-200 Flashing	Silicone Roof Sealant	Silicone Roof Sealant	Silicone Roof Sealant	
Base Coat	A-300 Base TPO	A-300 Base TPO	100% Silicone Coating	100% Silicone Coating	100% Silicone Coating	
1st Coat per Sq	1.5 Gal	1.5 Gal				
Wet Mil Thickness	24	24		ats are not required. Sin lications are recommend		
Dry Mil Thickness	12	12	-1-1-	applications die recommended.		
Finish Coat	A-300 Finish	A-300 Finish	100% Silicone Coating	100% Silicone Coating	100% Silicone Coating	
2nd Coat per Sq	1.5 Gal	1 Gal	1.5 Gal	2 Gal	2.5 Gal	
3rd Coat per Sq	-	1 Gal	-	-	-	
Wet Mil Thickness	24	32	24	32	40	
Dry Mil Thickness	12	16	22	30	38	
Total Minimum Requirements						
Gallons per Square	3 Gal	3.5 Gal	1.5 Gal	2 Gal	2.5 Gal	
Dry Mil Thickness	24	28	22	30	38	

### **APPLICATION METHODS:**



Brush

## **DESIGN POINT: PLASTICIZER MIGRATION**

PVC in its natural state is rigid. Added plasticizers make PVC flexible for use as a roofing membrane but difficult to coat. As PVC ages and plasticizers migrate out of the membrane, it becomes a candidate for roof coatings.

# **PVC ROOFS**

Attribute	Acrylic		Silicone		
Resistance to Ponding Water	Fair		Very Good		
Permeable	Ye	Yes		Yes	
Primer Required	N	0		Yes	
Low-Temperature Restrictions	Installation temperature for 48 conse		Installation	n temperatures must be a	bove 40°F
High-Temperature Restrictions	Do not exc	eed 110°F		Do not exceed 120°F	
Re-Coat Time	12 h	ours		2-4 hours	
Strong Odor	N	0		Mild	
System	Acr	ylic		Silicone	
Warranty	10 yr	15 yr	10 yr	15 yr	20 yr
Clean	115 Cleaner (diluted)	115 Cleaner (diluted)	115 Cleaner (diluted)	115 Cleaner (diluted)	115 Cleaner (diluted)
Coverage per Sq	1/4-1/2 Gal	1/4-1/2 Gal	1/4-1/2 Gal	1/4-1/2 Gal	1/4-1/2 Gal
Primer	Not Required	Not Required	Multibase SB (If needed)	Multibase SB (If needed)	Multibase SB (If needed)
Coverage per Sq			1.5 Gal	1.5 Gal	1.5 Gal
Seams & Flashing	A-200 Flashing	A-200 Flashing	Silicone Roof Sealant	Silicone Roof Sealant	Silicone Roof Sealant
Base Coat	A-300 Base	A-300 Base	100% Silicone Coating	100% Silicone Coating	100% Silicone Coating
1st Coat per Sq	1.5 Gal	1.5 Gal			
Wet Mil Thickness	24	24		bats are not required. Sing plications are recommend	
Dry Mil Thickness	12	12	-1-1		
Finish Coat	A-300 Finish	A-300 Finish	100% Silicone Coating	100% Silicone Coating	100% Silicone Coating
2nd Coat per Sq	1.5 Gal	1 Gal	1.5 Gal	2 Gal	2.5 Gal
3rd Coat per Sq	-	1 Gal	-	-	_
Wet Mil Thickness	24	32	24	32	40
Dry Mil Thickness	12	16	22	30	38
Total Minimum Requirements					
Gallons per Square	3 Gal	3.5 Gal	1.5 Gal	2 Gal	2.5 Gal
Dry Mil Thickness	24	28	22	30	38

### **APPLICATION METHODS:**



Brush

## **DESIGN POINT: MEMBRANE SWELLING**

EPDM membrane is very durable with excellent weathering properties, but poor chemical resistance to solvents. Many solvents make EPDM membrane swell and deteriorate. Mule-Hide recommends acrylics and silicones on EPDM.

# **EPDM ROOFS**

Attribute	Acr	ylic		Silicone	
Resistance to Ponding Water	Fa	air	Very Good		
Permeable	Ye	Yes		Yes	
Primer Required	N	lo		No	
Low-Temperature Restrictions		es must be above 45°F ecutive hours	Installation	temperatures must be a	bove 40°F
High-Temperature Restrictions	Do not exc	ceed 110°F		Do not exceed 120°F	
Re-Coat Time	12 h	ours		2-4 hours	
Strong Odor	N	lo		Mild	
System	Acr	ylic		Silicone	
Warranty	10 yr	15 yr	10 yr	15 yr	20 yr
Clean	115 Cleaner (diluted)	115 Cleaner (diluted)	115 Cleaner (diluted)	115 Cleaner (diluted)	115 Cleaner (diluted)
Coverage per Sq	1/4-1/2 Gal	1/4-1/2 Gal	1/4-1/2 Gal	1/4-1/2 Gal	1/4-1/2 Gal
Primer	Not Required	Not Required	Not Required	Not Required	Not Required
Seams & Flashing	A-200 Flashing	A-200 Flashing	Silicone Roof Sealant	Silicone Roof Sealant	Silicone Roof Sealant
Base Coat	A-300 Base	A-300 Base	100% Silicone Coating	100% Silicone Coating	100% Silicone Coating
1st Coat per Sq	1.5 Gal	1.5 Gal			
Wet Mil Thickness	24	24		ats are not required. Sing ications are recommend	
Dry Mil Thickness	12	12	срр. 		
Finish Coat	A-300 Finish	A-300 Finish	100% Silicone Coating	100% Silicone Coating	100% Silicone Coating
2nd Coat per Sq	1.5 Gal	1 Gal	1.5 Gal	2 Gal	2.5 Gal
3rd Coat per Sq	-	1 Gal	-	-	-
Wet Mil Thickness	24	32	24	32	40
Dry Mil Thickness	12	16	22 30 38		38
Total Minimum Requirements					
Gallons per Square	3 Gal	3.5 Gal	1.5 Gal	2 Gal	2.5 Gal
Dry Mil Thickness	24	28	22	30	38

### **APPLICATION METHODS:**



## **DESIGN POINT: RUST & SKYLIGHTS**

Metal panels must be structurally sound to provide a safe work environment and suitable surface for coating application. Acrylics and silicones require treating rust before coating. Fiberglass skylights are a safety hazard to roof workers. Never coat a skylight the same color as the roof.

# **METAL ROOFS**

Attribute	Acrylic				Silicone		
Resistance to Ponding Water	Fair			Very Good			
Permeable		Yes			Yes		
Primer Required		No			No		
Low-Temperature Restrictions	· · · · · · · · · · · · · · · · · · ·	eratures must be abov consecutive hours	ve 45°F for 48	Installa	ation temperatures r above 40°F	nust be	
High-Temperature Restrictions	C	Do not exceed 110°F		[	Do not exceed 120°	F	
Re-Coat Time		12 hours			2-4 hours		
Strong Odor		No			Mild		
System		Acrylic			Silicone		
Warranty	10 yr	15 yr	20 yr	10 yr	15 yr	20 yr	
Clean	115 Cleaner (diluted)	115 Cleaner (diluted)	115 Cleaner (diluted)	115 Cleaner (diluted)	115 Cleaner (diluted)	115 Cleaner (diluted)	
Coverage per Sq	1/4-1/2 Gal	1/4-1/2 Gal	1/4-1/2 Gal	1/4-1/2 Gal	1/4-1/2 Gal	1/4-1/2 Gal	
Prime Rust Areas	A-125 Primer	A-125 Primer	A-125 Primer	A-125 Primer	A-125 Primer	A-125 Primer	
Coverage per Sq	1/2 Gal	1/2 Gal	1/2 Gal	1/2 Gal	1/2 Gal	1/2 Gal	
Seams & Flashing	A-200 Flashing	A-200 Flashing	A-200 Flashing	Silicone Roof Sealant	Seal-Fast Liqui-Flash	Seal-Fast Liqui-Flash	
Base Coat	A-300 Base	A-300 Base	A-300 Base	100% Silicone Coating	100% Silicone Coating	100% Silicone Coating	
1st Coat per Sq	1 Gal	1 Gal	1.5 Gal				
Wet Mil Thickness	16	16	24	Base coats are r	not required. Single- are recommended.		
Dry Mil Thickness	8	8	12				
Finish Coat	A-300 Finish	A-300 Finish	A-300 Finish	100% Silicone Coating	100% Silicone Coating	100% Silicone Coating	
2nd Coat per Sq	1 Gal	1.5 Gal	1.5 Gal	1.5 Gal	1.5 Gal	2 Gal	
Wet Mil Thickness	16	24	24	24	24	32	
Dry Mil Thickness	8	12	12	22	22	30	
Total Minimum Requirements							
Gallons per Square	2 Gal	2.5 Gal	3 Gal	1.5 Gal	1.5 Gal	2 Gal	
Dry Mil Thickness	16	20	24	22	22	30	

### **APPLICATION METHODS:**



## PRODUCT OFFERING

# **ACRYLIC COATINGS**

### SPRAY EQUIPMENT MINIMUM REQUIREMENTS

- Cleaning: Properly clean and store all equipment and hoses after each use.
- **Pump:** Airless spray rig with a minimum material output of 2 gallons per minute at 3000 psi.
- Hoses: Maximum 300' of high-pressure material hose. Hose inside diameters (ID) are available from 1/2" to 1/4". Whip hose length should be one ID size smaller than rest of hose length.
- Spray Gun: Airless spray gun must be equipped with swivel for handling ease. Gun must also be equipped with a Reverse-A-Clean nozzle.
- Spray Tips: .025" .035" orifice size recommended, with a wide-angle fan pattern. Ideal orifice size varies with weather conditions. Always have spray tips at project site within the recommended orifice size range. Always use wet film gauge to determine the proper mil thickness.



A-300 FINISH

CRRC® rated, highly-elastomeric coating, that has exceptional durability and UV stability that extends roof life. Attractive bright white reduces energy consumption. Apply by brush, roller or airless sprayer.



### A-310 FINISH

Forms a seamless and flexible layer of protection for your roof. This durable coating is designed to seal and dramatically reduce surface temperatures. It is formulated with UVreactive chemicals for enhanced film-forming characteristics and dirt pickup-resistance remaining bright white after weathering.

<b>Product Code</b>	Color	Description	Coverage	Shelf Life
16MHA3005		5 Gallon Pail		
16MHA30050	White	50 Gallon Drum		
16MHA300T0		275 Gallon Tote		
16MH3005GY		5 Gallon Pail		
16MH3050GY	Gray	50 Gallon Drum		
16MH300T0G		275 Gallon Tote		
16MHA3005T		5 Gallon Pail	See Specification	
16MH300T50	Tan	50 Gallon Drum		1 Year
16MH300T0T		275 Gallon Tote		
16MH3005BK		5 Gallon Pail		
16MH3050BK	Black	50 Gallon Drum		
16MH300T0B		275 Gallon Tote		
16MHA3005S		5 Gallon Pail		
16MHA3050S	Santa Fe Tan	50 Gallon Drum		
16MHA30TOS	i o iun	275 Gallon Tote		

<b>Product Code</b>	Color	Description	Coverage	Shelf Life
16MHA3105		5 Gallon Pail		
16MHA31050	White	50 Gallon Drum		
16MHA310T0		275 Gallon Tote		
16MHA3105G		5 Gallon Pail		
16MHA3150G	Gray	50 Gallon Drum		
16MHA31TOG		275 Gallon Tote	See Specification	1 Year
16MHA3105T		5 Gallon Pail		
16MHA3150T	Tan	50 Gallon Drum		
16MHA31TOT		275 Gallon Tote		
16MHA3105B		5 Gallon Pail		
16MHA3150B	Black	50 Gallon Drum		
16MHA31T0B		275 Gallon Tote		
16MHA3105S	<u> </u>	5 Gallon Pail		
16MHA3150S	Santa Fe Tan	50 Gallon Drum		
16MHA31TOS		275 Gallon Tote		



\*Colors shown are representative of product. Actual colors may vary.



#### A-320 FINISH

Can be used as either a base or surface coat. This product has excellent adhesion to sprayed polyurethane foam (SPF) and a variety of other construction and roofing substrates. It can exceed the expected tensile strength of typical acrylic roof coatings. This product provides excellent durability and dirt pickup resistance.

<b>Product Code</b>	Description	Coverage	Shelf Life
16MHA3205	5 Gallon Pail		
16MHA32050	50 Gallon Drum	See Specification	1 Year
16MHA320T0	275 Gallon Tote		



### A-200 FLASHING

Highly flexible sealant for seams, penetrations, flashings, metal roof fasteners, and other areas to fill voids in the substrate. Brushed or extruded application.

Product Code	Description	Coverage	Shelf Life
16MHA2002	2 Gallon Pail - White		
16MHA2005	5 Gallon Pail - White		
16MH2002FW	2 Gallon Pail - Fibrated - White	75-100 Lin. Ft Seams/	
16MH2005FW	5 Gallon Pail - Fibrated - White	300-400	1 Year
16MH2002FT	2 Gallon Pail - Fibrated - Tan	Fastener Heads	
16MH2005FT	5 Gallon Pail - Fibrated - Tan		



### A-125 METAL ROOF PRIMER

Zinc-rich, dark yellow color for easy-tosee coverage. Improves adhesion of finish coating while encapsulating rust and inhibiting new rust. Apply by brush, roller or airless sprayer.

<b>Product Code</b>	Description	Coverage	Shelf Life
16MHA1255	5 Gallon Pail		
16MHA12550	50 Gallon Drum	1/2 Gallon per Sq	1 Year
16MHA125T0	275 Gallon Tote		



### A-300 BASE

Apply to non-corroded metal, modified bitumen, asphalt BUR, PVC, EPDM, Hypalon, polyurethane foam and concrete roofs. A high degree of rubber-like elasticity allows wide swings in temperature and significant building movement. A-300 Base provides a well-bonded surface for the application of A-300 FINISH coat.

<b>Product Code</b>	Description	Coverage	Shelf Life
16MHA3BC5	5 Gallon Pail		
16MHA3BC50	50 Gallon Drum	1.5 Gallons per Sq	1 Year
16MHA3BCT0	275 Gallon Tote		



#### A-300 BASE TPO

An all-acrylic polymer-based coating designed for improved adhesion to the surface of suitably cleaned, weathered (minimum 4 years) TPO (thermoplastic polyolefin) roofing membranes and flashings. When applied to a properly cleaned, weathered TPO roof, A-300 BASE TPO provides a well-bonded light blue surface for the application of A-300 FINISH coat.

<b>Product Code</b>	Description	Coverage	Shelf Life
16MHA3BT5	5 Gallon Pail		
16MHA3BT50	50 Gallon Drum	1.5 Gallons per Sq	1 Year
16MHA3BTT0	275 Gallon Tote		



#### **MP LIQUID SEALANT**

A 100% solids, non-shrink, one-part polyurethane pourable sealer. Use with metal roof seams and fasteners, gutters, damaged polyurethane foam and roof projections on PVC, EPDM, primed TPO, primed Mod Bit and primed BUR roofing systems.

<b>Product Code</b>	Description	Carton	Shelf Life
08MHMPLS2W	12 oz Sausage - White		
08MHMPLS2B	12 oz Sausage - Black	20 - 12oz Sausages	1 Year
08MHMPLS2G	12 oz Sausage - Gray	Guddugoo	



#### 115 CLEANER - Concentrate

Highly effective cleaner removes dirt and deposits commonly found on roof decks. Apply with a 2000-psi power washer to cut through grease and rinse away. Apply by low-pressure sprayer.

\*Please refer to PDS for diluting instructions

Product Code	Description	Coverage	Shelf Life
16MHA1151	1 Gallon Pail		
16MHA1155	5 Gallon Pail	1/4-1/2 Gallon per Sq	1 Year
16MHA11555	55 Gallon Drum		

## PRODUCT OFFERING

# SILICONE COATINGS

### SPRAY EQUIPMENT MINIMUM REQUIREMENTS

- Cleaning: Properly clean and store all equipment and hoses after each use.
- **Pump:** Graco 933es Hi Flo spray rig with a minimum material output of 4 gallons per minute at 3000 psi. Pump lower must be set to maximum lower-ball travel.
- **Hoses:** Maximum 250' of high-pressure (7250 psi) material hose, 3/4" ID with a 1/2"x 25' whip. Whip hose should be one ID size smaller than rest of hose length.
- Spray Gun: EHF Spray Gun (7250 psi) equipped with a Reverse-A-Clean nozzle.
- Spray Tips: XDF 7250 psi tip (.029" .035") with recommended pressure at the gun should be 3000 psi while spraying.
- **Transfer Pump:** Monarch 5:1 pneumatic pump requires the use of an air compressor capable of delivering 20 CFM @ 90 psi.



### **100% SILICONE ROOF COATING**

Is a 100% silicone based, single-part roof coating that creates a barrier that is durable, elastic, resistant to weathering, breathable, watertight, and weatherproof. 100% Silicone Roof Coating is manufactured from durable inorganic silicone resins, reinforcing and reflective pigments and silane adhesions promoters.

<b>Product Code</b>	Color	Description	Coverage	Shelf Life
16MHSIRC5	White	5 Gallon Pail		2 Years
16MHSIRC55	white	55 Gallon Drum		
16MHSIRC5G	Gray	5 Gallon Pail		
16MHSIR55G	Glay	55 Gallon Drum	Minimum 1.5 Gallon	
16MHSIRC5T	Τ	5 Gallon Pail		
16MHSIR55T	Tan	55 Gallon Drum		
16MHSIRC5B	Disali	5 Gallon Pail	per Sq	
16MHSIRC55B	Black	55 Gallon Drum		
16MHSIR5S	Santa	5 Gallon Pail		
16MHSIR55S	Fe Tan	55 Gallon Drum		



#### SILICONE LS ROOF COATING

A ready-to-use, solvent borne, moisture cure silicone roof coating, which cures to form a seamless membrane when applied over the entire roof area. It also keeps the surface cool, providing protection from ultraviolet sun and other weather exposures.

Product Code	Description	Coverage	Shelf Life
16MHSIRL5W	5 Gallon Pail - White	Minimum	
16MHSIRL5G	5 Gallon Pail - Gray	1.5 Gallon per Sq	1 Year



### **100% SILICONE SEALANT**

Is a high-solids non-shrinking moisture-cure silicone sealant that has minimal odor, contains no solvents and has less than 10 grams per liter VOC. Provides excellent adhesion to concrete, masonry, polyurethane foam, EPDM, TPO, aged PVC, aged acrylic coatings, granular cap sheet, wood, metals, Kynar® finishes and most other common building materials. Si TPO Primer is required for TPO roof membranes.

<b>Product Code</b>	Description	Coverage	Shelf Life
16MHSISECL	1 tube (30/ctn) - Clear	_	2 Years
16MHSISEWH	1 tube (30/ctn) - White	See Specification	
16MHSISEA2	2 Gallon Pail - White	opoundation	



20



LIQUI-FLASH

Is semi-self-leveling so it can be used to seal seams and affect repairs on single-ply membranes at any slope. It may also be used to fill pitch pockets and pans, seal gutters and metal roof seams & fasteners with minimal tooling.

Product Code	Description	Carton	Weight	Shelf Life
16MHLFWH10	10 oz Tube - White	30/ctn	37 lbs.	
16MHLFWH20	20 oz Sausage - White	20/ctn	44 lbs.	
16MHLFWH1	1 Gallon Pail - White	1 pail	9 lbs.	
16MHLFWH35	3.5 Gallon Pail - White	1 pail	31 lbs.	
16MHLFBK10	10 oz Tube - Black	30/ctn	37 lbs.	
16MHLFBK20	20 oz Sausage - Black	20/ctn	44 lbs.	2 years
16MHLFBK1	1 Gallon Pail - Black	1 pail	9 lbs.	z years
16MHLFBK35	3.5 Gallon Pail - Black	1 pail	31 lbs.	
16MHLFGY10	10 oz Tube - Gray	30/ctn	37 lbs.	
16MHLFGY20	20 oz Sausage - Gray	20/ctn	44 lbs.	
16MHLFGY1	1 Gallon Pail - Gray	1 pail	9 lbs.	
16MHLFGY35	3.5 Gallon Pail - Gray	1 pail	31 lbs.	



#### 115 CLEANER - Concentrate

Highly effective cleaner removes dirt and deposits commonly found on roof decks. Apply with a 2000-psi power washer to cut through grease and rinse away. Apply by low-pressure sprayer.

\*Please refer to PDS for diluting instructions

<b>Product Code</b>	Description	Coverage	Shelf Life
16MHA1151	1 Gallon Pail		
16MHA1155	5 Gallon Pail	1/4-1/2 Gallon per Sq	2 Years
16MHA11555	55 Gallon Drum	por eq	



#### **TIETEX 272 POLY FABRIC**

Tietex 272 is 100% polyester stitch-bonded fabrics made without the use of adhesives. With unique elongation, quick wet-out and saturation.

	Product Code	Description	Weight
	09MHTT2063	1 roll - 6" X 300'	4 lbs
Tietex 272 Poly Fabric	09MHTT2123	1 roll - 12" X 300'	7 lbs
	09MHTT2403	1 roll - 40" X 324'	25 lbs



### **MULTIBASE SB**

Light yellow primer for concrete, modified bitumen, asphalt BUR, PVC, EPDM and Hypalon roof surfaces prior to applying 100% Silicone Roof Coatings. Do not use on coaltar-pitch roofs, TPO membranes or any areas of ponding water.

Product Code	Description	Coverage	Shelf Life
16MHMBSB5	5 Gallon Pail	1 Collop por Sa	1 Year
16MHMBSB50	50 Gallon Drum	1 Gallon per Sq	i tëdi



#### **SI TPO PRIMER**

Promotes adhesion with 100% Silicone Roof Coating to new and aged TPO roofing membranes. Manufactured from fastevaporating solvents and adhesive resins. Primer has a blue tint to allow applicator to better gauge application rates.

<b>Product Code</b>	Description	Coverage	Shelf Life
16MHSITPRP	1 Pint w/ brush applicator (clear)	1 pint per square	
16MHSITPR1	1 Gallon Pail (blue)	1 Collon nor 9, 10 Ca	2 Years
16MHSITPR5	5 Gallon Pail (blue)	1 Gallon per 8-10 Sq	

# NOTES





"The name trusted in roofing since 1906"

### Customer Line: 800-786-1492 • www.mulehide.com



The information herein should not be considered all-inclusive and should always be accompanied by a review of the Mule-Hide specifications and guidelines and good application practices.

This information herein is based upon data and knowledge considered to be true and accurate at the time of printing and is provided for the reader's consideration, investigation and verification. No statement made by anyone may supersede this information, except when done in writing by Mule-Hide Products Co., Inc. Mule-Hide Products Co., Inc. does not warrant any results to be obtained. Statements concerning possible use of Mule-Hide products are made without knowledge of your particular roof and such an application may not be fit for your particular purpose. MULE-HIDE DISCLAIMS ALL WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, except written warranties attached to Mule-Hide products and written warranties signed by an officer of Mule-Hide.

Visit the Mule-Hide website at www.mulehide.com prior to any installation for updated technical specifications and details. Mule-Hide is a U.S. registered trademark. All rights reserved.