



**Metacrylics**<sup>®</sup>  
energy efficient coatings

## High Solids Silicone Installation Spec Book



365 Obata Court, Gilroy, CA 95020  
PHONE: (408) 280-7733 | FAX: (408) 280-6329  
[metacrylics.com](http://metacrylics.com)



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## Coating over EPDM Roof: 10-Year System

### Materials Needed:

Product	Application Rate	Application Calculator
EPDM Rinse	0.2 gallons/SQ	0.2 x ___ SQs = ___ Gallons
Clear Acrylic Base	1 gallon/SQ	1 x ___ SQs = ___ Gallons
HS Silicone White	2 gallons/SQ	2 x ___ SQs = ___ Gallons
Polyester Fabric	As needed for all seams	

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics® rep or contact Metacrylics for full system specifications.

### General Application Guidelines

1. Thoroughly clean roof, removing any debris prior to application of EPDM Rinse.
2. Apply Metacrylics® EPDM Rinse over the EPDM @ 0.2 gallons/SQ and let sit for 20 minutes, then pressure wash to remove EPDM Rinse.
3. Thoroughly pressure wash roof.
4. Apply Metacrylics® Clear Acrylic Base @ 1 gallon/SQ to the entire roof, including parapet walls, flashings, HVAC ductwork or anything else being coated. Allow 4-12 hours to cure.
5. Penetration details (see Metacrylics® Penetration Detail Instructions or CAD Details)
6. Measure the lineal footage of all of the EPDM seams and 3-course with Metacrylics® HS Silicone and 6" Polyester Fabric (use a brush to embed the fabric into the Silicone) OR seal seams with Silicone Gel at the rate of 1 gallon per 100 lineal feet (no fabric reinforcement needed with Silicone Gel).
7. Apply Metacrylics® HS Silicone White @ 2 gallons/SQ in a single application to entire roof. Apply to parapet walls, flashings, and HVAC ductwork. Vertical surfaces will require 2 coats at 1 gallon/SQ per coat to prevent sagging. Allow 24 hours between applications.



## Coating over EPDM Roof: 15-Year System

### Materials Needed:

Product	Application Rate	Application Calculator
EPDM Rinse	0.2 gallons/SQ	0.2 x ___ SQs = ___ Gallons
Clear Acrylic Base	1 gallon/SQ	1 x ___ SQs = ___ Gallons
HS Silicone White	2.5 gallons/SQ	2.5 x ___ SQs = ___ Gallons
Silicone Gel	As needed for field seams & penetrations	
Polyester Fabric	As Needed	

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics® rep or contact Metacrylics for full system specifications.

### General Application Guidelines

1. Thoroughly clean roof, removing any debris prior to application of EPDM Rinse.
2. Apply Metacrylics® EPDM Rinse over the EPDM @ 0.2 gallons/SQ and let sit for 20 minutes, then pressure wash to remove EPDM Rinse.
3. Thoroughly pressure wash roof.
4. Penetration details (see Metacrylics® Penetration Detail Instructions or CAD Details).
5. Apply Metacrylics® Clear Acrylic Base @ 1 gallon/SQ to the entire roof and all areas to be coated. Allow 4-12 hours to cure.
6. Measure the lineal footage of all of the EPDM seams and 3-course with Metacrylics® HS Silicone and 6" Polyester Fabric (use a brush to embed the fabric into the Silicone) OR seal field seams with Silicone Gel at the rate of 1 gallon per 100 lineal feet (no fabric reinforcement needed in Silicone Gel).
7. Apply Metacrylics® HS Silicone White @ 2.5 gallons/SQ over the Clear Acrylic Base in two applications at the rate of 1.25/SQ per coat. Also apply to parapet walls, flashing, and HVAC ducting.



## Coating over EPDM Roof: 20-Year System

### Materials Needed:

Product	Application Rate	Application Calculator
EPDM Rinse	0.2 gallons/SQ	0.2 x ___ SQs = ___ Gallons
Clear Acrylic Base	1 gallon/SQ	1 x ___ SQs = ___ Gallons
HS Silicone White	3 gallons/SQ	3 x ___ SQs = ___ Gallons
Silicone Gel	As needed for seams & penetrations	
Polyester Fabric	As needed	

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics® rep or contact Metacrylics for full system specifications.

### General Application Guidelines

1. Thoroughly clean roof, removing any debris prior to application of EPDM Rinse.
2. Apply Metacrylics® EPDM Rinse over the EPDM @ 0.2 gallons/SQ and let sit for 20 minutes, then pressure wash to remove EPDM rinse.
3. Thoroughly pressure wash roof.
4. Penetration details (see Metacrylics® Penetration Detail Instructions or CAD Details).
5. Apply Metacrylics® Clear Acrylic Base @ 1 gallon/SQ to the entire roof and all objects being coated. Allow 4-12 hours to cure.
6. Measure the lineal footage of all of the EPDM seams and 3-course with Metacrylics® HS Silicone and 6" Polyester Fabric (use a brush to embed the fabric into the Silicone) OR seal field seams with Silicone Gel at the rate of 1 gallon per 100 per lineal foot (no fabric reinforcement needed in Silicone Gel).
7. Apply Metacrylics® HS Silicone White @ 3 gallons/SQ over the Clear Acrylic Base in two applications at the rate of 1.5 gallons/SQ. Also apply to parapet walls, flashing, HVAC ductworks and all objects being coated. Allow 24 hours to cure between applications.



## Coating over TPO or PVC Roof: 10-Year System

### Materials Needed:

Product	Application Rate	Application Calculator
TPO Primer	0.25 gallons/SQ	0.25 x ___ SQs = ___ Gallons
HS Silicone White	2 gallons/SQ	2 x ___ SQs = ___ Gallons
Silicone Gel	As needed for field seams & penetrations	
Polyester Fabric	As needed	

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics<sup>®</sup> rep or contact Metacrylics<sup>®</sup> for full system specifications.

### General Application Guidelines

1. Thoroughly pressure wash roof.
2. Apply Metacrylics<sup>®</sup> TPO Primer @ 0.25 gallons/SQ to the entire roof, including parapet walls, flashings, and HVAC ductwork. Allow 4-8 hours to cure.
3. Penetration details (see Metacrylics<sup>®</sup> Penetration Detail Instructions or CAD Details)
4. Measure the lineal footage of all of the TPO seams and 3-course with Metacrylics<sup>®</sup> HS Silicone and 6" Polyester Fabric (use a brush to embed the fabric into the Silicone) OR apply Silicone Gel to field seams at the rate of 1 gallon per 100 lineal foot (no fabric reinforcement needed in Silicone Gel).
5. Apply Metacrylics<sup>®</sup> HS Silicone White @ 2 gallons/SQ in a single application. Apply to parapet walls, flashings, HVAC ductwork and all areas to be coated. Vertical surfaces will require 2 coats at 1 gallon/SQ per coat to prevent sagging. Allow 24 hours between applications.



## Coating over TPO or PVC Roof: 15-Year System

### Materials Needed:

Product	Application Rate	Application Calculator
TPO Primer	0.25 gallons/SQ	0.25 x ___ SQs = ___ Gallons
HS Silicone White	2.5 gallon/SQ	2.5 x ___ SQs = ___ Gallons
Silicone Gel	As needed for field seams & penetrations	
Polyester Fabric	As needed	

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics® rep or contact Metacrylics for full system specifications.

### General Application Guidelines

1. Thoroughly pressure wash roof.
2. Apply Metacrylics® TPO Primer @ 0.25 gallons/SQ to entire roof. Allow 4-8 hours to cure.
3. Penetration detail (see Metacrylics® Penetration Detail Instructions or CAD Details).
4. Measure the lineal footage of all of the TPO seams and 3-course with Metacrylics® HS Silicone and 6" Polyester Fabric (use a brush to embed the fabric into the Silicone) OR apply Silicone Gel to field seams at the rate of 1 gallon per 100 lineal foot (no fabric reinforcement needed in Silicone Gel).
5. Apply Metacrylics® HS Silicone White @ 2.5 gallons/SQ in two applications at the rate of 1.25 gallons/SQ. Also apply to parapet walls, flashing, HVAC ductworks and any other surfaces to be coated. Allow 24 hours to cure between applications.



## Coating over TPO or PVC Roof: 20-Year System

### Materials Needed:

Product	Application Rate	Application Calculator
TPO Primer	0.25 gallons/SQ	0.25 x ___ SQs = ___ Gallons
HS Silicone White	3 gallon/SQ	3 x ___ SQs = ___ Gallons
Silicone Gel	As needed for field seams & penetrations	
Polyester Fabric	As needed	

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics<sup>®</sup> rep or contact Metacrylics for full system specifications.

### General Application Guidelines

1. Thoroughly pressure wash roof.
2. Apply Metacrylics<sup>®</sup> TPO Primer @ 0.25 gallons/SQ to entire roof. Allow 4-8 hours to cure.
3. Penetration details (see Metacrylics<sup>®</sup> Penetration Detail Instructions or CAD details).
4. Measure the lineal footage of all of the TPO seams and 3-course with Metacrylics<sup>®</sup> HS Silicone and 6" Polyester Fabric (use a brush to embed the fabric into the Silicone) OR apply Silicone Gel to field seams at the rate of 1 gallon per 100 lineal foot (no fabric reinforcement needed in Silicone Gel).
5. Apply Metacrylics<sup>®</sup> HS Silicone White @ 3 gallons/SQ in two applications at the rate of 1.5 gallons/SQ per coat. Also apply to parapet walls, flashing, HVAC ductworks and any other surfaces to be coated. Allow 24 hours to cure between applications.





## Coating over BUR/Modified Capsheet Roof: 10-Year System

### Materials Needed:

Product	Application Rate	Application Calculator
Acrylic Bleed Block Primer	1 gallons/SQ	1 x ___ SQs = ___ Gallons
HS Silicone White	2 gallons/SQ	2 x ___ SQs = ___ Gallons
Silicone Gel	As needed for field seams & penetrations	
Polyester Fabric	As needed	

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics<sup>®</sup> rep or contact Metacrylics<sup>®</sup> for full system specifications.

### General Application Guidelines

1. Thoroughly pressure wash roof.
2. Apply Metacrylics<sup>®</sup> Acrylic Bleed Block Primer @ 1 gallon/SQ to entire roof. Allow 4-8 hours to cure.
3. Penetration details (see Metacrylics<sup>®</sup> Penetration Detail Instructions or CAD details).
4. Measure the lineal footage of all of the field seams and 3-course with Metacrylics<sup>®</sup> HS Silicone and 4" Polyester Fabric (use a brush to embed the fabric into the Silicone) OR apply Silicone Gel to field seams at the rate of 1 gallon per 100 lineal foot (no fabric reinforcement needed in Silicone Gel).
5. Apply Metacrylics<sup>®</sup> HS Silicone White @ 2 gallons/SQ in a single application. Apply to parapet walls, flashings, HVAC ductwork and all areas to be coated. Vertical surfaces will require 2 coats at 1 gallon/SQ per coat to prevent sagging. Allow 24 hours between applications.



## Coating over BUR/Modified Capsheet Roof: 15-Year System

### Materials Needed:

Product	Application Rate	Application Calculator
Acrylic Bleed Block Primer	1 gallon/SQ	1 x ___ SQs = ___ Gallons
HS Silicone White	2.5 gallons/SQ	2.5 x ___ SQs = ___ Gallons
Silicone Gel	As needed for field seams & penetrations	
Polyester Fabric	As needed	

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics<sup>®</sup> rep or contact Metacrylics for full systems specifications.

### General Application Guidelines

1. Thoroughly pressure wash roof.
2. Apply Metacrylics<sup>®</sup> Acrylic Bleed Block Primer @ 1 gallon/SQ to entire roof. Allow 4-8 hours to cure.
3. Penetration details (see Metacrylics<sup>®</sup> Penetration Detail Instructions or CAD details).
4. Measure the lineal footage of all of the field seams and 3-course with Metacrylics<sup>®</sup> HS Silicone and 4" Polyester Fabric (use a brush to embed the fabric into the Silicone) OR apply Silicone Gel to field seams at the rate of 1 gallon per 100 lineal feet (no fabric reinforcement needed in Silicone Gel).
5. Apply Metacrylics<sup>®</sup> HS Silicone White @ 2.5 gallons/SQ in a single application. Apply to parapet walls, flashings, HVAC ductwork and all areas to be coated. Vertical surfaces will require 2 coats at 1 gallon/SQ per coat to prevent sagging. Allow 24 hours between applications.



## Coating over BUR/Modified Capsheet Roof: 20-Year System

### Materials Needed:

Product	Application Rate	Application Calculator
Acrylic Bleed Block Primer	1 gallon/SQ	1 x ___ SQs = ___ Gallons
HS Silicone White	3 gallons/SQ	3 x ___ SQs = ___ Gallons
Silicone Gel	As needed for field seams & penetrations	
Polyester Fabric	As needed	

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics<sup>®</sup> rep or contact Metacrylics for full system specifications.

### General Application Guidelines

1. Thoroughly pressure wash roof.
2. Penetration detail (see Metacrylics<sup>®</sup> Penetration Detail Instructions or CAD Details).
3. Measure the lineal footage of all of the field seams and 3-course with Metacrylics<sup>®</sup> HS Silicone and 4" Polyester Fabric (use a brush to embed the fabric into the Silicone) OR apply Silicone Gel to field seams at the rate of 1 gallon per 100 lineal feet (no fabric reinforcement needed in Silicone Gel).
4. Apply Metacrylics<sup>®</sup> Silicone White @ 3 gallons/SQ in two applications at the rate of 1.5 gallons/SQ. Also apply to parapet walls, flashing, HVAC ductworks and any other areas to be coated. Allow 24 hours to cure between applications. Note: Vertical surfaces may require additional coats to be applied at lower application rates in order to prevent product sagging. Allow 24 hours to cure between applications.



## Coating over Tar & Gravel Roof: 15-Year System

### Materials Needed:

Product	Application Rate	Application Calculator
Acrylic Bleed Block Primer or Acrylic Clear Base	1.5 gallons/SQ	1.5 x ___ SQs = ___ Gallons
HS Silicone White	3.5 gallons/SQ	3.5 x ___ SQs = ___ Gallons
Silicone Gel		As needed
Polyester Fabric		As needed

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics<sup>®</sup> rep or contact Metacrylics for full system specifications.

### General Application Guidelines

1. Spud or tear off gravel roof, ensuring all loose gravel is removed.
2. Thoroughly clean roof of all debris and dust. Pressure wash roof.
3. Apply Metacrylics<sup>®</sup> Acrylic Bleed Block Primer or Acrylic Clear Base @ 1.5 gallons/SQ to entire roof. NOTE: If the old roof has been completely removed and surface is smooth, apply primer at 1 gallon/SQ.
4. Penetration details (see Metacrylics<sup>®</sup> Penetration Detail Instructions or CAD Details).
5. Apply Metacrylics<sup>®</sup> HS Silicone @ 3.5 gallons/SQ to entire roof in two applications at the rate of 1.75 gallons/SQ per coat. Also apply to parapet walls, flashing, HVAC ductworks, and any other areas to be coated. Vertical surfaces may require additional coats to be applied at lower application rates in order to prevent product sagging. Allow 24 hours to cure between applications.



## Coating over Tar & Gravel Roof: 20-Year System

### Materials Needed:

Product	Application Rate	Application Calculator
Acrylic Bleed Block Primer of Acrylic Clear Base	1.5 gallons/SQ	1.5 x ___ SQs = ___ Gallons
HS Silicone White	4.5 gallons/SQ	4.5 x ___ SQs = ___ Gallons
Silicone Gel		As needed
Polyester Fabric		As needed

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics<sup>®</sup> rep or contact Metacrylics for full system specifications.

### General Application Guidelines

1. Spud or tear off gravel roof, ensuring all loose gravel is removed.
2. Thoroughly clean roof of all debris and dust. Pressure wash roof.
3. Apply Metacrylics<sup>®</sup> Acrylic Bleed Block Primer or Acrylic Clear Base @ 1.5 gallons/SQ to entire roof. NOTE: If the old roof has been completely removed, less primer will be needed.
4. Penetration details (see Metacrylics<sup>®</sup> Penetration Detail Instructions or CAD Details).
5. Apply Metacrylics<sup>®</sup> HS Silicone @ 4.5 gallons/SQ to entire roof in 2 applications at the rate of 2.25 gallons/SQ per coat. Also apply to parapet walls, flashing, HVAC ductworks and any other areas to be coated. Note: Vertical surfaces may require additional coats to be applied at lower application rates in order to prevent product sagging. Allow 24 hours to cure between applications.



## Coating over Metal Roof: 10-Year System

Corrugated, Standing Seam, & R-Panel

### Materials Needed:

Product	Application Rate	Application Calculator
Acrylic Clear Base, Roof & Tile Primer, or Black Primer	1 gallons/SQ (when using Roof & Tile Primer apply @ 0.3 g/SQ)	1 x ___ SQs = ___ Gallons
HS Silicone White	1.5 gallons/SQ	1.5 x ___ SQs = ___ Gallons
Silicone Gel		As needed
Polyester Fabric		As needed

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics® rep or contact Metacrylics® for full system specifications.

### General Application Guidelines

1. Tighten or replace all exposed fasteners where needed. Add additional fasteners to tighten loose panels to restore original design intent. Apply Metacrylics Silicone Gel over fasteners to encapsulate and seal.
2. Inspect roof for open joints, laps, holes etc. and repair flaws so water does not enter the building. 3-course with Metacrylics High Solids Silicone and polyester fabric to reinforce, seal and repair needed areas.
3. Remove all loose debris and built up dirt, wire brush and remove any flaking rust and pressure wash roof to remove all peeling/flaking paint to ensure proper adhesion of coating system.
4. Apply Metacrylics® Acrylic Clear Base @ 1 gallon/SQ to the entire roof and other areas to be coated. Allow 4-12 hours to cure. If the metal has rust, use rust-inhibiting Metacrylics® Black Primer and apply at the same rate. You also can use Acrylic Roof & Tile Primer and apply at the rate of .3 gallons/SQ.



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5. Field Seam & End-Lap Reinforcement:

6. Horizontal Seams: Apply foot pressure to underlapping panel next to joint. If joint opens more than 1/16-inch, add fasteners to tighten the opening. Where needed, 3-course bad or buckled field seams and end-laps with alternating layers of Metacrylics High Solids Silicone and polyester fabric.
7. Vertical Seams: If vertical seams are open more than 1/16-inch, add fasteners to tighten the opening. 3-Course bad or buckled vertical field seams with alternating layers of Metacrylics High Solids Silicone & polyester fabric. Otherwise, fill all vertical seams with Metacrylics Silicone Gel as lap sealer mastic
8. Ridge Caps: Replace missing ridge cap gaskets as needed. Where needed, 3-course ridge cap closure cavity with alternating layers of Metacrylics High Solids Silicone and polyester fabric.
9. Apply Metacrylics<sup>®</sup> HS Silicone @ 1.5 gallons/SQ in one application over all areas to be coated. Vertical surfaces may require multiple coats to be applied at lower application rates in order to prevent product sagging. Allow 24 hours to cure between applications.

Metal Roof Square Footage Uplift Calculations to determine accurate square footage for required materials:

- For Standing Seam metal roof systems: Multiply square feet. by 1.3 to capture extra surface area for ribs
- For Corrugated metal roof systems: Multiply total square feet by 1.15 to capture extra surface area for uneven surfaces
- For R-Panel metal roof systems: Multiply total square feet by 1.12 to capture extra surface area for uneven surfaces



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metacrylics.com

## Coating over Metal Roof: 15-Year System

Corrugated, Standing Seam, & R-Panel

### Materials Needed:

Product	Application Rate	Application Calculator
Acrylic Clear Base, Roof & Tile Primer, or Black Primer	1 gallons/SQ (when using Roof & Tile Primer apply @ 0.3 g/SQ)	1 x ___ SQs = ___ Gallons
HS Silicone White	2.5 gallons/SQ	2.5 x ___ SQs = ___ Gallons
Silicone Gel		As needed
Polyester Fabric		As needed

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics® rep or contact Metacrylics® for full system specifications.

### General Application Guidelines

1. Tighten or replace all exposed fasteners where needed. Add additional fasteners to tighten loose panels to restore original design intent. Apply Metacrylics Silicone Gel over fasteners to encapsulate and seal.
2. Inspect roof for open joints, laps, holes etc. and repair flaws so water does not enter the building. 3-course with Metacrylics High Solids Silicone and Polyester fabric to reinforce, seal and repair needed areas.
3. Remove all loose debris and built up dirt, wire brush and remove any flaking rust and pressure wash roof to remove all peeling/flaking paint to ensure proper adhesion of coating system.
4. Apply Metacrylics® Acrylic Clear Base @ 1 gallon/SQ to the entire roof and other areas to be coated. Allow 4-12 hours to cure. If the metal has rust, use rust-inhibiting Metacrylics® Black Primer and apply at the same rate. You also can use Acrylic Roof & Tile Primer and apply at the rate of .3 gallons/SQ.





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5. Field Seam & End-Lap Reinforcement:

6. Horizontal Seams: Apply foot pressure to underlapping panel next to joint. If joint opens more than 1/16-inch, add fasteners to tighten the opening. Where needed, 3-course bad or buckled field seams and end-laps with alternating layers of Metacrylics High Solids Silicone and polyester fabric.
7. Vertical Seams: If vertical seams are open more than 1/16-inch, add fasteners to tighten the opening. 3-Course bad or buckled vertical field seams with alternating layers of Metacrylics High Solids Silicone & polyester fabric. Otherwise, fill all vertical seams with Metacrylics Silicone Gel as lap sealer mastic.
8. Ridge Caps: Replace missing ridge cap gaskets as needed. Where needed, 3-course ridge cap closure cavity with alternating layers of Metacrylics High Solids Silicone and polyester fabric
9. Apply Metacrylics<sup>®</sup> HS Silicone @ 2.5 gallons/SQ in two applications at the rate of 1.25 gallons/SQ over all areas to be coated. Vertical surfaces may require multiple coats to be applied at lower application rates in order to prevent product sagging. Allow 24 hours to cure between applications.

[Metal Roof Square Footage Uplift Calculations to determine accurate square footage for required materials:](#)

- For Standing Seam metal roof systems: Multiply square feet. by 1.3 to capture extra surface area for ribs
- For Corrugated metal roof systems: Multiply total square feet by 1.15 to capture extra surface area for uneven surfaces
- For R-Panel metal roof systems: Multiply total square feet by 1.12 to capture extra surface area for uneven surfaces



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## Coating over Metal Roof: 20-Year System

Corrugated, Standing Seam, & R-Panel

### Materials Needed:

Product	Application Rate	Application Calculator
Acrylic Clear Base, Roof & Tile Primer, or Black Primer	1 gallons/SQ (when using Roof & Tile Primer apply @ 0.3 g/SQ)	1 x ___ SQs = ___ Gallons
HS Silicone White	3 gallons/SQ	3 x ___ SQs = ___ Gallons
Silicone Gel		As needed
Polyester Fabric		As needed

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics® rep or contact Metacrylics® for full system specifications.

### General Application Guidelines

1. Tighten or replace all exposed fasteners where needed. Add additional fasteners to tighten loose panels to restore original design intent. Apply Metacrylics Silicone Gel over fasteners to encapsulate and seal.
2. Inspect roof for open joints, laps, holes etc. and repair flaws so water does not enter the building. 3-course Metacrylics High Solids Silicone and Polyester fabric to reinforce, seal and repair needed areas.
3. Remove all loose debris and built up dirt, wire brush and remove any flaking rust and pressure wash roof to remove all peeling/flaking paint to ensure proper adhesion of coating system.
4. Apply Metacrylics® Acrylic Clear Base @ 1 gallon/SQ to the entire roof and other areas to be coated. Allow 4-12 hours to cure. If the metal has rust, use rust-inhibiting Metacrylics® Black Primer and apply at the same rate. You also can use Acrylic Roof & Tile Primer and apply at the rate of .3 gallons/SQ.



5. Field Seam & End-Lap Reinforcement:

6. Horizontal Seams: Apply foot pressure to underlapping panel next to joint. If joint opens more than 1/16-inch, add fasteners to tighten the opening. Where needed, 3-course bad or buckled field seams and end-laps with alternating layers of Metacrylics High Solids Silicone and polyester fabric.
7. Vertical Seams: If vertical seams are open more than 1/16-inch, add fasteners to tighten the opening. 3-Course bad or buckled vertical field seams with alternating layers of Metacrylics High Solids Silicone & polyester fabric. Otherwise, fill all vertical seams with Metacrylics Silicone Gel as lap sealer mastic.
8. Ridge Caps: Replace missing ridge cap gaskets as needed. Where needed, 3-course ridge cap closure cavity with alternating layers of Metacrylics High Solids Silicone and polyester fabric
9. Apply Metacrylics<sup>®</sup> HS Silicone @ 3 gallons/SQ over in two applications at the rate of 1.5 gallons/SQ over all areas to be coated. Vertical surfaces may require multiple coats to be applied at lower application rates in order to prevent product sagging. Allow 24 hours to cure between applications.

[Metal Roof Square Footage Uplift Calculations to determine accurate square footage for required materials:](#)

- For Standing Seam metal roof systems: Multiply square feet. by 1.3 to capture extra surface area for ribs
- For Corrugated metal roof systems: Multiply total square feet by 1.15 to capture extra surface area for uneven surfaces
- For R-Panel metal roof systems: Multiply total square feet by 1.12 to capture extra surface area for uneven surfaces



## Coating over Spray Polyurethane Foam Roof: 10-Year System

### Materials Needed:

Product	Application Rate	Application Calculator
Clear Base	2 gallons/SQ	1 x ___ SQs = ___ Gallons
HS Silicone White	2 gallons/SQ	2 x ___ SQs = ___ Gallons
Silicone Gel		As needed
Polyester Fabric		As needed

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics<sup>®</sup> rep or contact Metacrylics for full system specifications.

### General Application Guidelines

1. All saturated foam areas must be removed and replaced with similar materials of equal thickness.
2. Pressure wash roof. If roof cannot be pressure washed, then thoroughly wash the surface with TSP or similar cleaner to remove oxidation and residue.
3. Apply Metacrylics<sup>®</sup> Clear Base @ 1 gallon/SQ to the entire roof and any other areas to be coated. Allow 4-12 hours to cure.
4. Penetration details (see Metacrylics<sup>®</sup> Penetration Detail Instructions or CAD Details).
5. Apply Metacrylics<sup>®</sup> HS Silicone @ 2 gallons/SQ in a single application over all areas to be coated. Vertical surfaces may require multiple coats to be applied at lower application rates in order to prevent product sagging. Allow 24 hours to cure between applications.



## Coating over Spray Polyurethane Foam Roof: 15-Year System

### Materials Needed:

Product	Application Rate	Application Calculator
Clear Base	1 gallons/SQ	1 x ___ SQs = ___ Gallons
HS Silicone White	2.5 gallons/SQ	2.5 x ___ SQs = ___ Gallons
Silicone Gel		As needed
Polyester Fabric		As needed

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics<sup>®</sup> rep or contact Metacrylics for full system specifications.

### General Application Guidelines

1. All saturated foam areas must be removed and replaced with similar materials of equal thickness.
2. Pressure wash roof. If roof cannot be pressure washed, then thoroughly wash the surface with TSP or similar cleaner to remove oxidation and residue.
3. Apply Metacrylics<sup>®</sup> Clear Base @ 1 gallon/SQ to the entire roof and any other areas to be coated. Allow 4-8 hours to cure.
4. Penetration details (see Metacrylics<sup>®</sup> Penetration Detail Instructions or CAD Details).
5. Apply Metacrylics<sup>®</sup> HS Silicone @ 2.5 gallons/SQ in 2 applications at the rate of 1.25 gallons/SQ per coat to all areas being coated. Vertical surfaces may require multiple coats to be applied at lower application rates in order to prevent product sagging. Allow 24 hours to cure between applications.



## Coating over Spray Polyurethane Foam Roof: 20-Year System

### Materials Needed:

Product	Application Rate	Application Calculator
Clear Base	1 gallons/SQ	1 x ___ SQs = ___ Gallons
HS Silicone White	3 gallons/SQ	3 x ___ SQs = ___ Gallons
Silicone Gel		As needed
Polyester Fabric		As needed

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics<sup>®</sup> rep or contact Metacrylics for full system specifications.

### General Application Guidelines

1. All saturated foam areas must be removed and replaced with similar materials of equal thickness.
2. Pressure wash roof. If roof cannot be pressure washed, then thoroughly wash the surface with TSP or similar cleaner to remove oxidation and residue.
3. Apply Metacrylics<sup>®</sup> Clear Base @ 1 gallons/SQ to the entire roof and other areas to be coated. Allow 4-8 hours to cure.
4. Penetration details (see Metacrylics<sup>®</sup> Penetration Detail Instructions or CAD Details).
5. Apply Metacrylics<sup>®</sup> HS Silicone @ 3 gallons/SQ in 2 applications at the rate of 1.5 gallons/SQ over areas to be coated. Vertical surfaces may require multiple coats to be applied at lower application rates in order to prevent product sagging. Allow 24 hours to cure between applications.



## Re-Coating Existing Silicone Coated Roof: 10-Year System

### Materials Needed:

Product	Application Rate	Application Calculator
HS Silicone White	2 gallons/SQ	2 x ___ SQs = ___ Gallons
Silicone Gel	As needed	

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics<sup>®</sup> rep or contact Metacrylics for full system specifications.

### General Application Guidelines

1. Thoroughly pressure wash roof with TSP or other cleaning agent. It is vital to clean roof thoroughly for appropriate adhesion.
2. Always conduct a pull test over existing Silicone to ensure appropriate adhesion exists between the existing and new Silicone application. Adhesion levels are appropriate if the pull test shows results greater than 4 lbs. Surfaces with pull test results under 4 lbs are not advisable to re-coat.
3. Seal around roof penetrations with either HS Silicone or Silicone Gel and 3-course such roof details where needed.
4. Seal field with either HS Silicone or Silicone Gel and 3-course field seams where needed.
5. Apply Metacrylics<sup>®</sup> HS Silicone @ 2 gallons/SQ to the entire roof and any other areas to be coated. Vertical surfaces may require multiple coats to be applied at lower application rates in order to prevent product sagging. Allow 24 hours to cure between applications.



## Re-Coating Existing Silicone Coated Roof: 15-Year System

### Materials Needed:

Product	Application Rate	Application Calculator
HS Silicone White	2.5 gallons/SQ	2.5 x ___ SQs = ___ Gallons
Silicone Gel	As needed	

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics<sup>®</sup> rep or contact Metacrylics for full system specifications.

### General Application Guidelines

1. Thoroughly pressure wash roof with TSP or other cleaning agent. It is vital to clean roof thoroughly for appropriate adhesion.
2. Always conduct a pull test over existing Silicone to ensure appropriate adhesion exists between the existing and new Silicone application. Adhesion levels are appropriate if the pull test shows results greater than 4 lbs. Surfaces with pull test results under 4 lbs are not advisable to re-coat.
3. Seal around roof penetrations with either HS Silicone or Silicone Gel and 3-course such roof details where needed.
4. Seal field with either HS Silicone or Silicone Gel and 3-course field seams where needed.
5. Apply Metacrylics<sup>®</sup> HS Silicone @ 2.5 gallons/SQ in 2 applications at the rate of 1.25 gallons/SQ per coat to the entire roof and any other areas to be coated. Vertical surfaces may require multiple coats to be applied at lower application rates in order to prevent product sagging. Allow 24 hours to cure between applications.





## Re-Coating Existing Silicone Coated Roof: 20-Year System

### Materials Needed:

Product	Application Rate	Application Calculator
HS Silicone White	3 gallons/SQ	3 x ___ SQs = ___ Gallons
Silicone Gel	As needed	

NOTE: 1 SQ = 100 sq. ft.

Always consult your Metacrylics<sup>®</sup> rep or contact Metacrylics for full system specifications.

### General Application Guidelines

1. Thoroughly pressure wash roof with TSP or other cleaning agent. It is vital to clean roof thoroughly for appropriate adhesion.
2. Always conduct a pull test over existing Silicone to ensure appropriate adhesion exists between the existing and new Silicone application. Adhesion levels are appropriate if the pull test shows results greater than 4 lbs. Surfaces with pull test results under 4 lbs are not advisable to re-coat.
3. Seal around roof penetrations with either HS Silicone or Silicone Gel and 3-course such roof details where needed.
4. Seal field with either HS Silicone or Silicone Gel and 3-course field seams where needed.
5. Apply Metacrylics<sup>®</sup> HS Silicone @ 3 gallons/SQ in 2 applications at the rate of 1.5 gallons/SQ per coat to the entire roof and any other areas to be coated. Vertical surfaces may require multiple coats to be applied at lower application rates in order to prevent product sagging. Allow 24 hours to cure between applications.



## Penetration Detail Instructions

### GUTTERS

1. Thoroughly pressure wash gutters. Rusted areas must be replaced with new gutters.
2. Apply Metacrylics Rust Inhibitor Acrylic Black Primer to gutters at the rate of 1 gallon/SQ.
3. 3-course with alternating layers of HS Silicone & fabric over all joints or apply Silicone Gel with no reinforcement over joints. Do not use Peel & Coat on any gutters.

### PARAPET COPING (CAP)

1. Thoroughly wash or pressure wash parapet coping.
2. Prime coping. Any rusted areas must be primed with Rust Inhibitor Primer (Metacrylics Rust Inhibitor Acrylic Black Primer or Metacrylics 2-Part Epoxy Primer).
3. 3-Course over the top of the coping (cap) joints and exposed screws with alternating layers of Metacrylics HS Silicone and fabric or apply Metacrylics Peel & Coat tape to coping joints and exposed screws and apply Metacrylics HS Silicone/Silicone Gel over tape.

### NOSINGS, EDGE FLASHINGS, & GRAVEL STOPS

1. Apply primer to all edge flashings. If new, wipe with vinegar or suitable cleaning agent.
2. Apply 3-Course with alternating layers of Metacrylics HS Silicone & 6" fabric or Silicone Gel (without fabric reinforcement) over the top of the edge flashing.

**WOOD BLOCKS** 3. Apply the 3-Course or Gel up 2"-3" onto flashing and 3"-4" onto roofing surface.

1. Lift and remove block.
2. Apply Silicone Gel to the area the block was sitting.
3. Allow to dry and replace block.
4. If damage to the roof occurs while removing block, 3-Course with HS Silicone or Silicone Gel & Fabric and replace block when dry.

### WOOD SLEEPERS (HVAC SUPPORTS)

1. Jack up HVAC unit and remove sleeper.
2. Apply Metacrylics HS Silicone at the rate of 2 gallons/SQ in the area the wood sleeper had been or granulated slip sheet under entire area of sleepers and HVAC.
3. When the system is cured, replace sleepers. Be sure that lags attaching HVAC to sleepers are not too long and will not penetrate the roof system.
4. If sleepers cannot be moved or lifted, they must be completely encapsulated with Metacrylics HS Silicone. The area under HVAC should be coated with Metacrylics HS Silicone.



## Penetration Detail Instructions

### HVAC DUCTING

1. Thoroughly pressure wash all ducts.
2. 3-Course duct joints with alternating layers of Metacrylics HS Silicone & fabric.
3. Apply 2 gals/SQ of Metacrylics HS Silicone in two applications of 1 gal/SQ of HS Silicone.

### SKYLIGHTS

1. 3-Course with alternating layers of Metacrylics HS Silicone and fabric up the side of the skylight curb a minimum of 3" and onto the roof surface area 3". Be careful not to cover any weep (drainage) holes in the skylight.
2. Apply Silicone Gel to all exposed screw heads.

### PITCH POCKETS

1. Fill pitch pocket with Metacrylics HS Silicone or Silicone Gel
2. 3-Course with HS Silicone & fabric over the top of the pitch pocket and down to the base of the pitch pocket, and at least 3" onto the roof.
3. Apply Silicone Gel up and around the penetration coming from the pitch pocket a minimum of 6".

### SCUPPERS & DRAINS

1. Remove all old asphalt, mastic, and roofing materials around and inside the scupper. For drains, remove the drain screen, clamp ring, and screws.
2. Thoroughly apply Metacrylics primer to scuppers and drains.
3. For scuppers:
  1. Apply Metacrylics HS Silicone liberally to the inside and outside of the scupper
  2. Cut an appropriate size piece of fabric for the width of the scupper and embed into the Silicone inside and outside of scupper a minimum of 4".
  3. Apply a cover coat of Metacrylics HS Silicone to saturate and encapsulate the fabric.
4. For drains:
  1. 3-Course with alternating layers of HS Silicone or Silicone Gel & fabric into the drain pipe at least 2". Use a 20" or 40" square piece of fabric and place over the drain, cutting a hole out for the drain.



**Metacrylics**<sup>®</sup>  
energy efficient coatings

## Penetration Detail Instructions

### PLUMBING VENT

1. 3-Course with alternating layers of HS Silicone and fabric a minimum of 3" up vent and 3" onto roof surface or seal with Silicone Gel 3" up vent and 4" down onto roof surface.

### CURB

1. 3-Course with alternating layers of HS Silicone and fabric a minimum of 3" up curb and 3" onto roof surface or seal with Silicone Gel 3" up curb and 4" down onto roof surface.



365 Obata Court, Gilroy, CA 95020  
PHONE: (408) 280-7733 | FAX: (408) 280-6329  
metacrylics.com