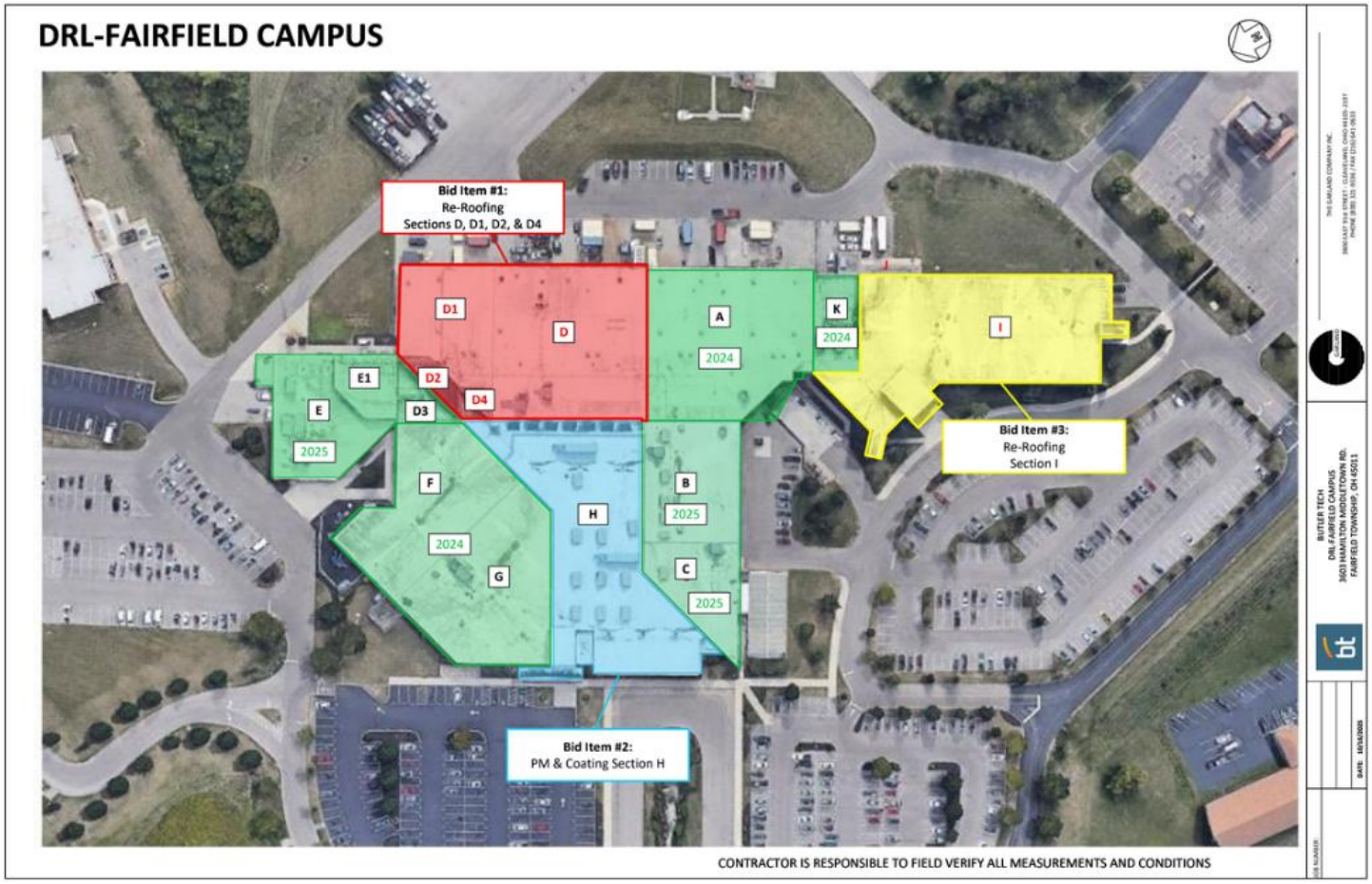
Butler Tech – DRL - 2026

Addendum #1 – 12/15/2025

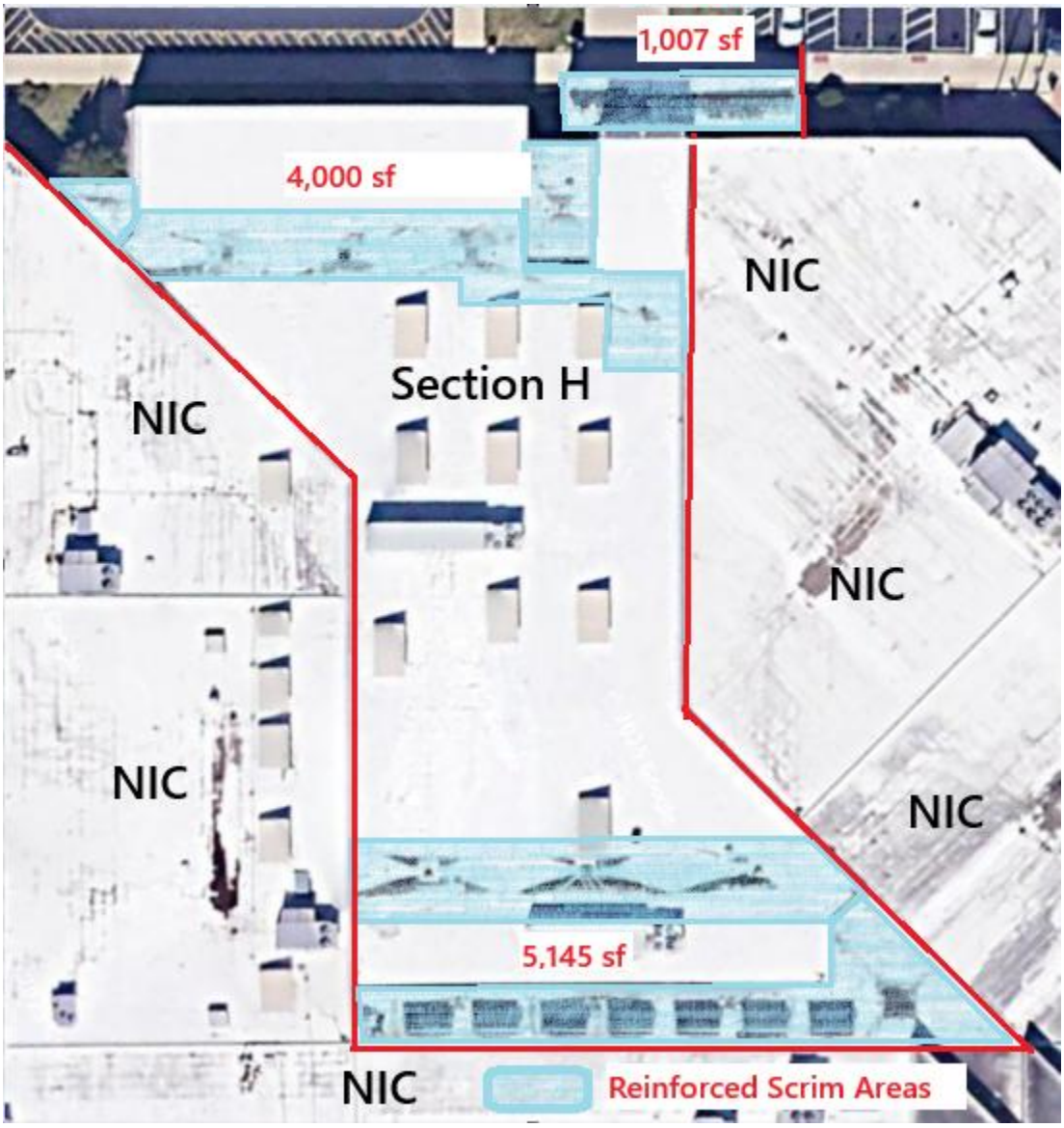
Prebid 12/3/25

Key Map



1. **Bid Item #2 – Section H Coating:**
    a. See the Cool Sil pdf document - 12.5.25 Specification DRL
    b. See Coating map and ponding areas

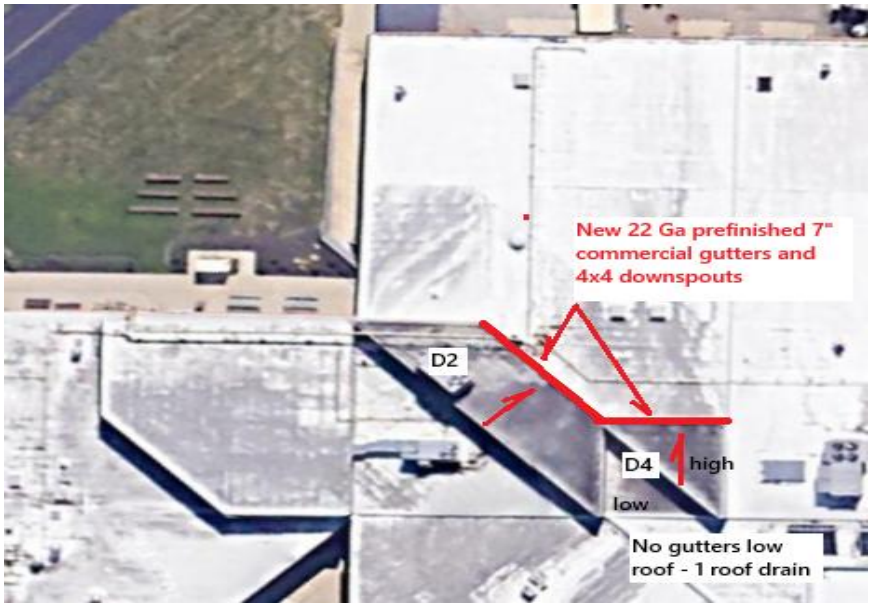
Coating Map



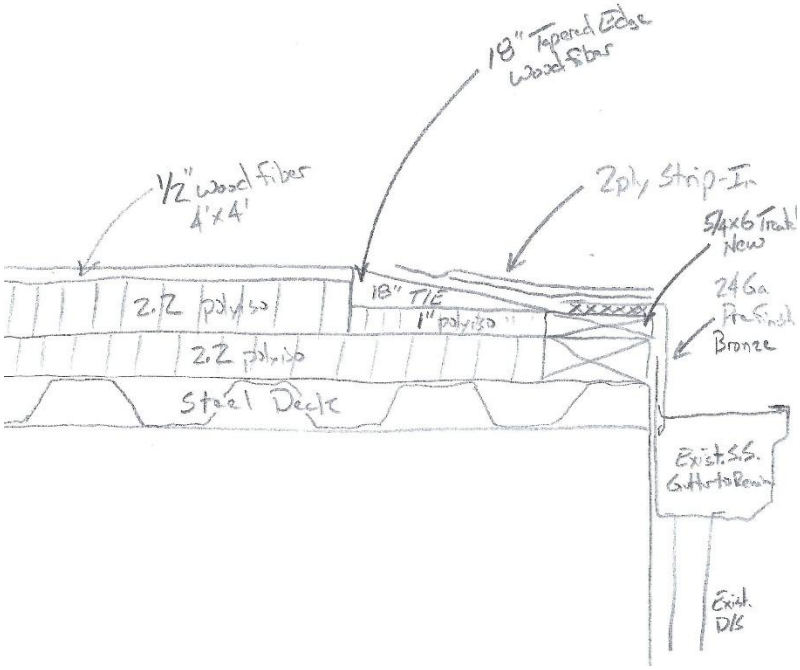
2. **Section I EagleView** - See South Roof Sections EV Report in attachments

3. **Section D2 and D3 Gutters** – Add **NEW** gutters and downspouts at low end of the penthouse roof (see map) – The roofs have slope in the structure. The existing stainless-steel gutters on the main roof are to remain. Keep the gutters, Sump roof to gutters and add new gutter apron.

New Gutter Map

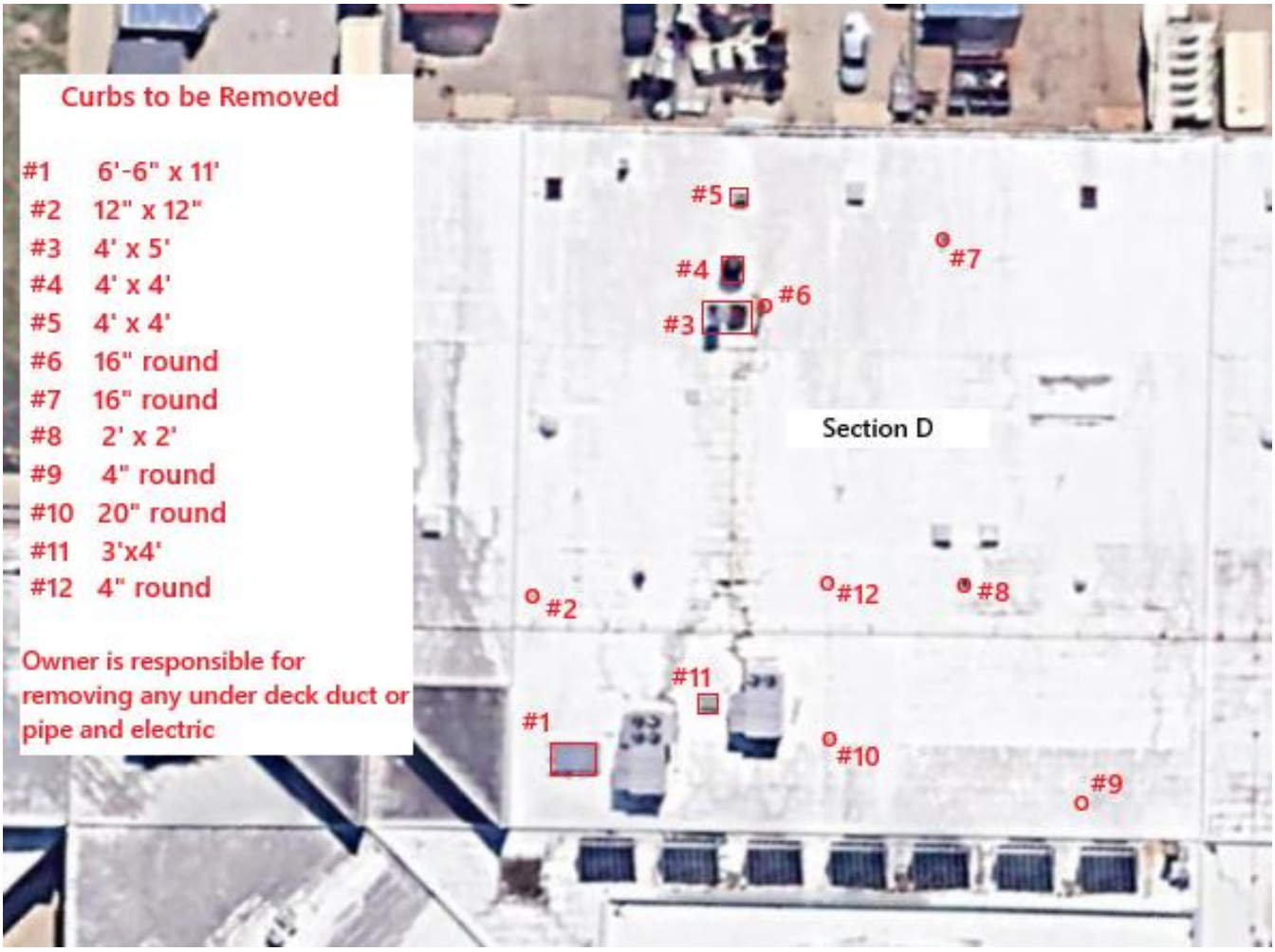


Sump detail for new and existing gutters



4. **Section D Curbs** – ‘Dead Curb’ removal - 2’x2’ or smaller - plate deck opening. Larger opening to receive new steel deck to match existing 1.5” deep deck

Curb Removal Map



5. **Existing Roof Core Data:**

   Section I - Slope is in the structure. Saddles are needed between roof drains

   - 2 ply modified with reflective coating (no gravel)
   - ½" wood fiber
   - 1.5" polyiso
   - Steel deck

   Section D – Slope is in the structure

   - 2 ply modified with reflective coating (no gravel)
   - ½" wood fiber
   - 1.5" polyiso
   - BUR Coal Tar and slag
   - 2" Perlite

6. Steel deck
7. **Gas Line Supports:**

   Section D

   Include 20 new gas line suppoerts to match existing supports. All existing supports in good condition are to be re-used. All gas line support bases (old and new) to be set on Meadows White Walk ½" modified pads

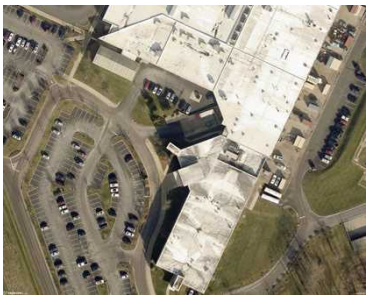
8. **Walkway Pads Meadows Whitewalk (3 ft x 4 ft x .5" pads)** For units, ladders, roof hatches and gasline support base.
   a. Section H – 60 pads 48" long + 10 pads for pipe support base
   b. Section I – 8 pads 44" long
   c. Section D – 4 pads 48" long

9. **Owner Material Purchase: The owner will pre-purchase a base amount of 100 rolls of base ply and 100 rolls of cap sheet for each section.**
   a. Section D - The owner (Butler Tech) will be providing & purchasing 100 rolls of Flexbase 80 & 100 rolls of StressPly FR Mineral.
   b. Section I - The owner (Butler Tech) will be providing & purchasing 100 rolls of Flexbase 80 & 100 rolls of StressPly FR Mineral.

ROOF MEASUREMENT REPORT

3603 Hamilton Middletown Rd, Hamilton, OH 45011

Report Contents

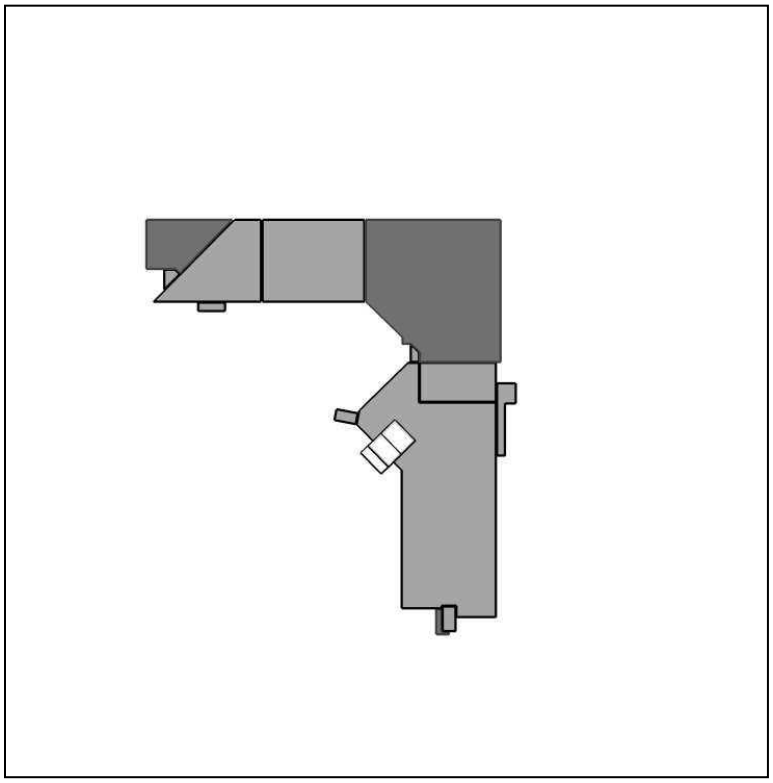


Report Details

Date:	03/22/2023
Report:	51225869
Building:	1

Roof Details

Total Area:	80,785 sq ft
Total Roof Facets:	16
Predominant Pitch:	0/12
Number of Stories:	<=1
Total Ridges/Hips:	0 ft
Total Valleys:	0 ft
Total Rakes:	113 ft
Total Eaves:	145 ft
Total Penetrations:	141
Total Penetrations Perimeter:	1,719 ft
Total Penetrations Area:	2,291 sq ft



In this 3D model, facets appear as semi-transparent to reveal overhangs.

Contact Us

Contact: Brian Hogan

Company: The Garland Company Inc.

Address: 3800 East 91st St
Cleveland OH 44105

Phone: 216-641-7500

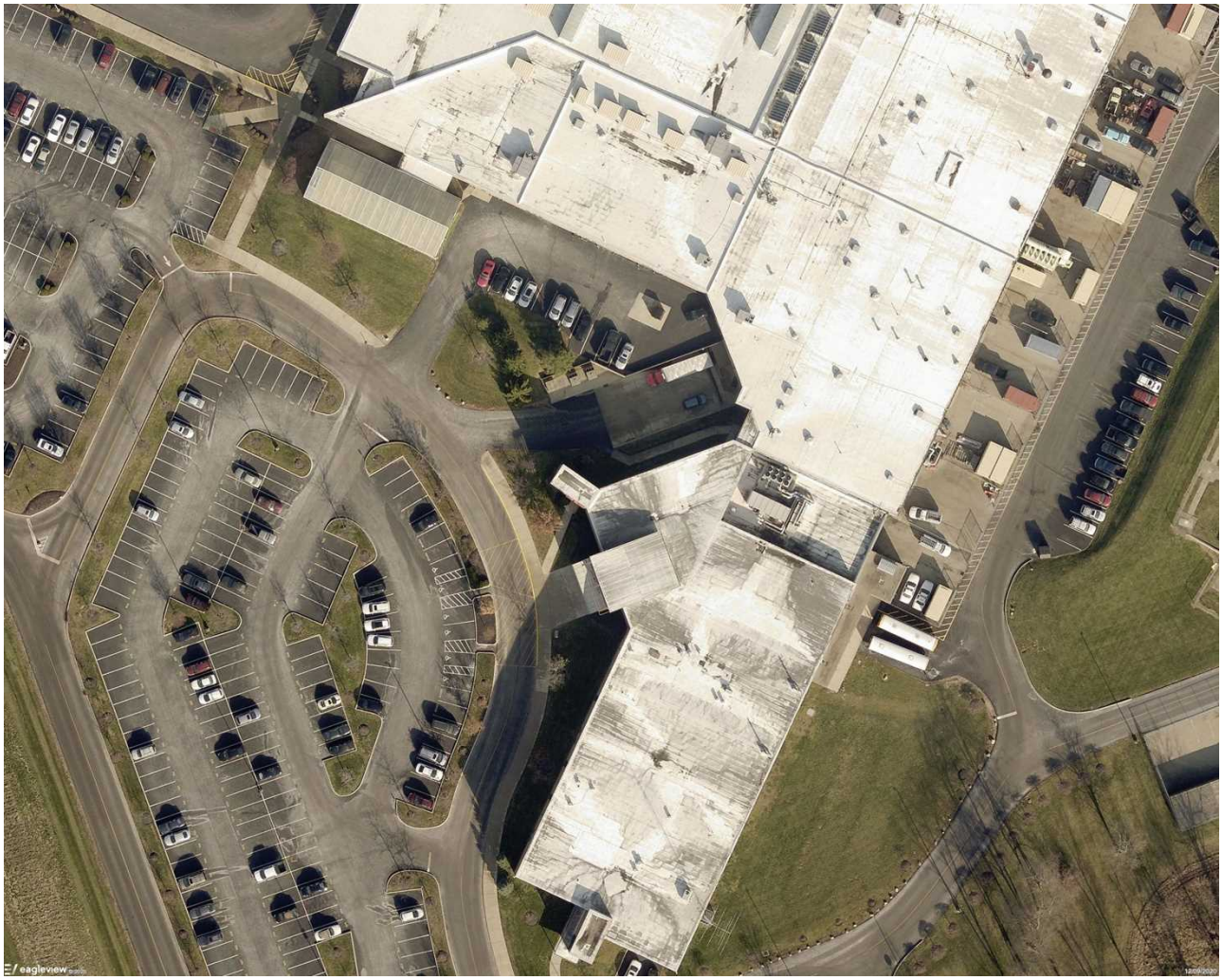
Measurements provided by www.eagleview.com

Certified Accurate
www.eagleview.com/Guarantee.aspx

eagleview

REPORT IMAGES

The following aerial images show different angles of this structure for your reference.



Top View

REPORT IMAGES

North View

East View

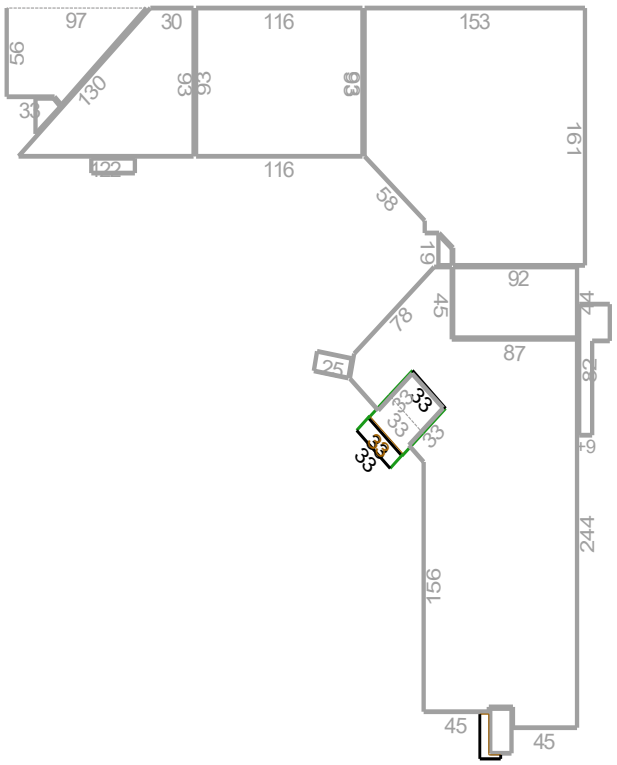
REPORT IMAGES

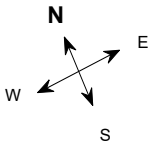
South View

West View

LENGTH DIAGRAM

Total Line Lengths:	Ridges = 0 ft	Valleys = 0 ft	Flashing = 74 ft	Eaves = 145 ft
	Hips = 0 ft	Rakes = 113 ft	Step flashing = 0 ft	Parapets = 3,300 ft

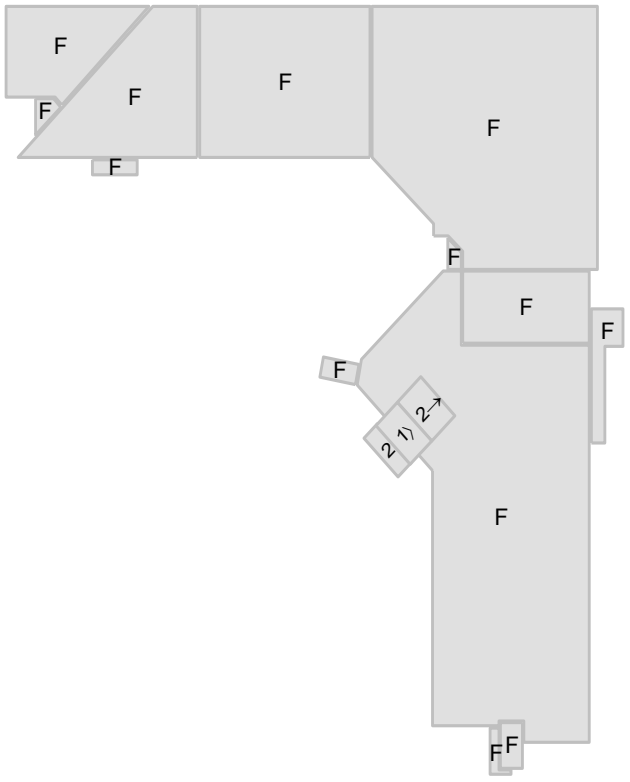


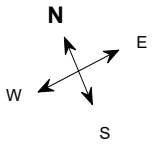


Note: This diagram contains segment lengths (rounded to the nearest whole number) over 5 feet. In some cases, segment labels have been removed for readability. Plus signs preface some numbers to avoid confusion when rotated (e.g. +6 and +9).

PITCH DIAGRAM

Pitch values are shown in inches per foot, and arrows indicate slope direction. The predominant pitch on this roof is 0/12.

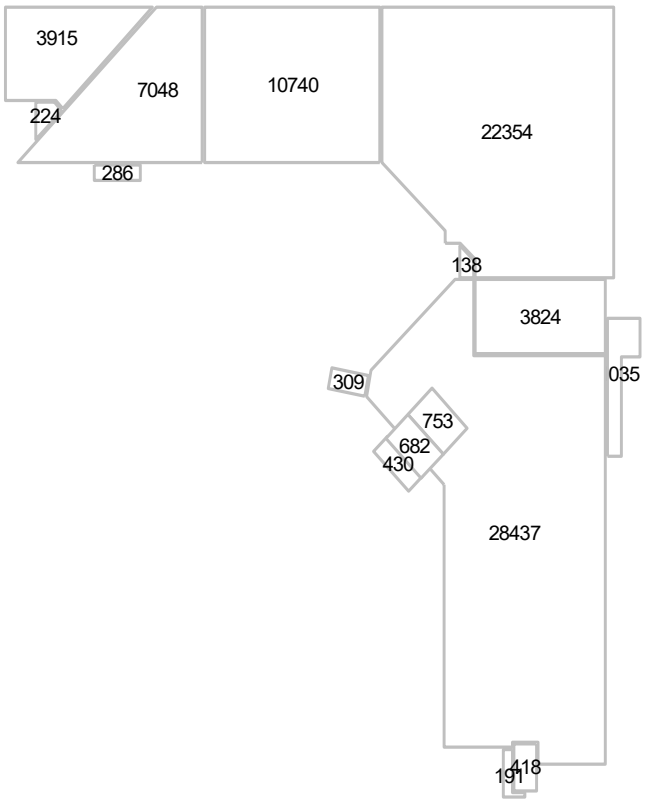


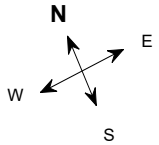


Note: This diagram contains labeled pitches for facet areas larger than 20 square feet. In some cases, pitch labels have been removed for readability. Gray shading indicates flat, 1/12 or 2/12 pitches. If present, a value of "F" indicates a flat facet (no pitch).

AREA DIAGRAM

Total Area = 80,785 sq ft, with 16 facets.





Note: This diagram shows the square feet of each roof facet (rounded to the nearest foot). The total area in square feet, at the top of this page, is based on the non-rounded values of each roof facet (rounded to the nearest square foot after being totaled).

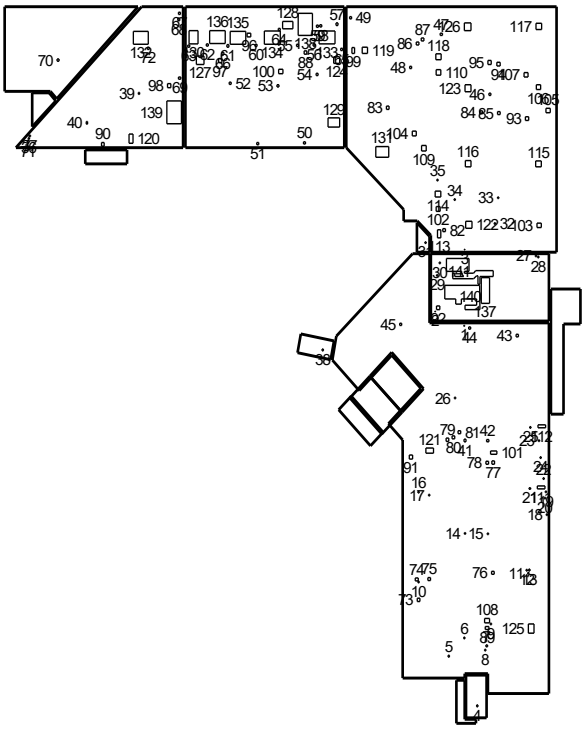
PENETRATIONS

Penetrations Notes Diagram

Penetrations are labeled from smallest to largest for easy reference.

Total Penetrations: 141
Total Penetrations Perimeter = 1,719 ft

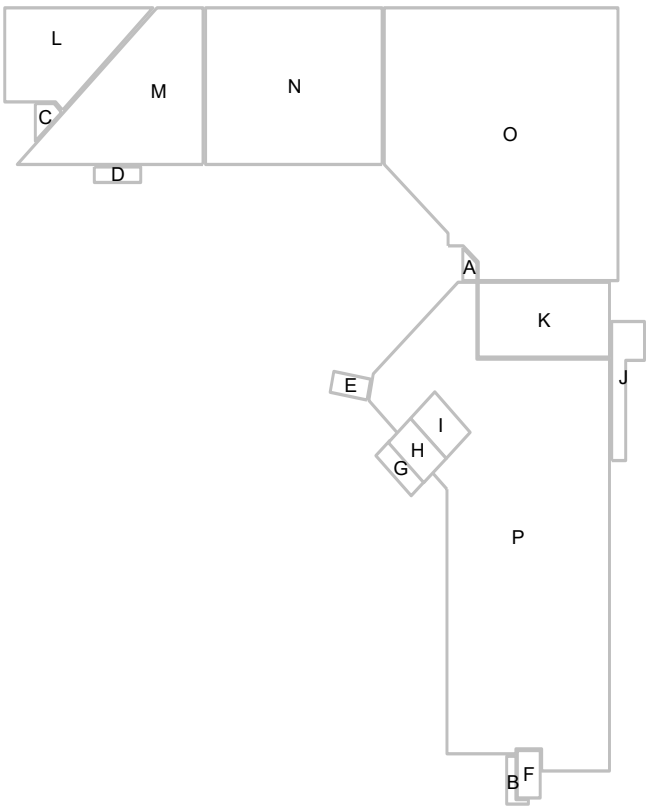
Total Penetrations Area: 2,291 sq ft
Total Roof Area Less Penetrations = 78,494 sq ft

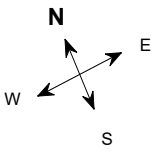


Note: Any measured penetration smaller than 3x3 feet may need field verification. Accuracy is not guaranteed. The total penetration area is not subtracted from the total roof area.

NOTES DIAGRAM

Roof facets are labeled from smallest to largest (A to Z) for easy reference.





Property Info

Property Location

Longitude = -84.4924508 Latitude = 39.4082395

Online map of property:
http://maps.google.com/maps?f=g&source=s_q&hl=en&geocode=&q=3603+Hamilton+Middletown+Rd,Hamilton,OH,45011

Property Info

Year Built:

Effective Year Built: *

*.

Notes

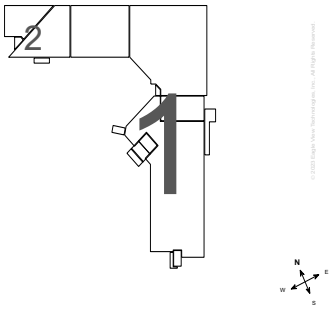
This was ordered as a commercial property. There were no changes to the structure in the past four years.

REPORT SUMMARY

Below is a measurement summary using the values presented in this report.

Lengths, Areas and Pitches

Ridge .....0 ft (0 Ridges)
Hips.....0 ft (0 Hips)
Valleys .....0 ft (0 Valleys)
Rakes*.....113 ft (6 Rakes)
Eaves/Starter** .....145 ft (6 Eaves)
Drip Edge (Eaves + Rakes) .....258 ft (12 Lengths)
Parapet Walls.....3,300 ft (68 Lengths)
Flashing .....74 ft (4 Lengths)
Step Flashing .....0 ft (0 Lengths)
Total Area .....80,785 sq ft
Total Penetrations Area.....2,291 sq ft
Total Roof Area Less Penetrations.....78,494 sq ft
Total Penetrations Perimeter.....1,719 ft
Predominant Pitch.....0/12



Total Roof Facets = 16

**Rakes are defined as roof edges that are sloped (not level).*
*** Eaves are defined as roof edges that are not sloped and level.*

Measurements by Structure

Structure	Area (sq ft)	Ridges (ft)	Hips (ft)	Valleys (ft)	Rakes (ft)	Eaves (ft)	Flashing (ft)	Step Flashing (ft)	Parapets (ft)
1	69311	0	0	0	112	145	73	0	2598
2	11473	0	0	0	0	0	0	0	701

All values in this table are rounded up to the nearest foot for each separate structure. Measurement totals displayed elsewhere in this report are added together before rounding which may cause totals to differ.

Areas per Pitch

Roof Pitches	0/12	1/12	2/12
Area (sq ft)	78918.7	682.3	1183.5
% of Squares	97.7%	0.8%	1.5%

The table above lists each pitch on this roof and the total area and percent (both rounded) of the roof with that pitch.

Waste Calculation Table

Waste %	0%	10%	12%	15%	17%	20%	22%
Area (sq ft)	80,785	88863.5	90479.2	92902.8	94518.5	96,942	98557.7
Squares	807.8	888.6	904.8	929.0	945.2	969.4	985.6

This table shows the total roof area and squares (rounded up to the nearest decimal) based upon different waste percentages. The waste factor is subject to the complexity of the roof, individual roofing techniques and your experience. Please consider this when calculating appropriate waste percentages. Note that only roof area is included in these waste calculations. Additional materials needed for ridge, hip, valley, and starter lengths are not included.

Parapet Calculation Table

Wall Height (ft)	1	2	3	4	5	6	7
Vertical Wall Area (sq ft)	3300	6600	9900	13200	16500	19800	23100

This table provides common parapet wall heights to aid you in calculating the total vertical area of these walls. Note that these values assume a 90 degree angle at the base of the wall. Allow for extra materials to cover cant strips and tapered edges.

Penetration Table

	1-3	4-39	40	41-72	73-88	89-90	91-98	99	100-106	107
Area (sq ft)	0.2	1	1.5	2.2	4	5	6.3	8	9	9
Perimeter (ft)	2	4	5	6	8	9	10	12	12	13
	108	109-110	111-112	113	114-119	120	121	122-124	125	126
Area (sq ft)	10.5	12.2	11	13.8	16	18	19.2	20.2	24	25
Perimeter (ft)	13	14	15	16	16	18	18	18	20	20
	127	128	129	130	131	132	133-136	137	138	139
Area (sq ft)	30.2	37.5	51	55.2	66.5	93.5	97.7	102	152.3	157.5
Perimeter (ft)	22	25	29	30	33	39	40	46	50	51

Any measured penetration smaller than 3x3 feet may need field verification. Accuracy is not guaranteed. The total penetration area is not subtracted from the total roof area.

3603 Hamilton Middletown Rd, Hamilton, OH 45011 Report: 51225869

IMPORTANT LEGAL NOTICE AND DISCLAIMER

Notice and Disclaimer

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Contractors agree to always conduct a preliminary site survey to verify Roof Report ordered. In the event of an error in a Report, your sole remedy will be a refund of the fees paid by you to obtain this Report.

Cool-Sil™

Non-Reinforced & Partially Reinforced Single-Ply Restoration Application Guidelines

since 1895

DESCRIPTION

Cool-Sil is a solvent-free, one-component and moisture-curing silicone rubber roof coating system. This coating application is designed for use on existing aged smooth surface BUR, granulated cap sheets, single-ply membrane and metal roofs. Cool-Sil provides excellent UV resistance, adhesion, and breathability, and has exceptional waterproofing properties. It is easily applied by roller, squeegee, or brush.

MATERIALS

The materials used in the Cool-Sil single-ply restoration system may include:

1. Coating: Cool-Sil HB (Roller Grade) Silicone Roof Coating
2. Primer: Cool-Sil Single Primer (required for TPO or PVC), Rust-Go® Primer (for priming metal components only)
3. Sealant: All-Sil, Cool-Sil FG, Cool-Sil Skylight Sealer
4. Fabric Reinforcement: Grip Polyester™ Firm or UniBond ST™
5. Cleaning Solution: Garland D7™ or Simple Green Oxy Solve
6. Walkways: Cool-Sil Yellow Walkway Coating and Cool-Sil Yellow Walkway Granules

APPLICATION EQUIPMENT

1. 3/8" (10 mm) shed resistant nap roller
2. 1/4" (6.3 mm) notched squeegee
3. Wet mil gauge

INSTALLATION

Installation of the Cool-Sil system is accomplished in the following steps: repair, preparation, priming (when required), and application.

Prior to installation, ensure that adhesion testing was conducted in accordance with Garland adhesion testing procedures to verify a minimum adhesion strength of 2 pounds per linear inch (pli) for Cool-Sil to the applicable substrates. When calculating material requirements for a particular project, consideration must be given to overspray and applicator variance.

Repair

1. All necessary field and flashing repairs must be done according to good construction practices, including the removal of all wet insulation and defective materials as identified through a moisture detection survey such as an infrared scan and replacement with like-materials.
2. All single-ply seams must be checked and any loose seams must be resealed, or if necessary, replaced with new single-ply materials.
3. Wrinkled single-ply membrane areas must be cut out and replaced to ensure a smooth substrate.
4. Repair any single-ply membrane that has shrunk and is tenting at walls.
5. Repairs should be made with cured single-ply membrane.
6. Remove any walkway pads and make necessary repairs with new single-ply membrane.
7. All roof areas must promote positive drainage.

Preparation

1. Confirm local water run-off ordinances and restrictions prior to cleaning roof.
2. Carefully powerwash all roof surfaces with greater than 2,000 psi pressure to remove debris, rust, scale, dirt, dust, chalking, peeling, flaking coatings, etc. Do not force water into the roof system or damage roof surfaces.
3. Wearing personal protective clothing and equipment, remove algae, mildew or fungus with Garland D7 or Simple Green Oxy Solve. Rinse at least twice to be sure all cleaning agents or contaminants are completely removed to prevent adhesion issues.
4. If the roof surface becomes contaminated with dirt, dust or other contaminants at any time during the application of the Cool-Sil system, then cleaning measures must be taken to restore the surface to a suitable condition.
5. Ensure roof is dry prior to product application.

Application of Non-Reinforced Single-Ply Application

A. Single-Ply Membrane field/flashing seams and details coating:

1. Apply Cool-Sil at 2.0 gal/sq. ft. or Cool-Sil FG at 1/4 in. thick, 8 in. wide over all seams. Always begin with flashing seams and details before proceeding to field application. The minimum application rate should be 2.0 gal/100 sq. ft. (0.82 L/m^2).
2. Allow the product to cure thoroughly before applying field coating layers, as described in section B.

NOTE: Fabric reinforcement is required in areas that hold water, around drains, on loose/damaged seams or over existing membrane repairs. Recommended over originally fully adhered single-ply seams. Choose fabric reinforcement Method 1 or 2 indicated in the Partially Reinforced System below.

Application of Partially Reinforced Single-Ply System

Single-Ply Field/Flashing Side Laps, End Laps and Details (Choose Method 1 or 2)

Method 1: Application of UniBond ST

1. Always begin with flashing seams and details.
2. Verify that the surface is clean and properly prepared.
3. Round corner edges of Unibond ST with scissors.
4. Remove the clear release liner from the back in workable sections.
5. Center 6” wide UniBond ST over the middle of lap. For other details requiring reinforcement such as drains, penetrations and curbs.
6. Do not stretch or cause air pockets, wrinkles or fishmouths.
7. Apply pressure to tape starting at the center and work toward the outside edge with a steel roller to activate the bonding process.
8. Inspect the tape to ensure that it is properly installed. Verify edges are tightly fixed to the surface. If any discrepancies are present, repair them before the coating is applied.

9. Saturate the tape's polyester surface with Cool-Sil coating and allow to cure before applying field coating.

Method 2: Application of 3-course Cool-Sil

1. Always begin with flashing seams and details.
2. Determine where the first run of 6 in. (150 mm) wide Grip Polyester Firm reinforcement will be started and verify the surface is clean. For other details requiring reinforcement (such as drains, penetrations or curbs), 12", 38" and 40" wide fabric reinforcement is available.
3. Position Grip Polyester Firm to roll out, apply coating at 3.0 gal/100 sq. ft. (1.22 L/m^2) extending 4 in. (100 mm) on each side of lap to where the reinforcement is to be applied. Immediately roll reinforcement into the coating and completely saturate surface, ensuring full encapsulation of fabric without pinholes, voids, openings or vertical fibers.
4. Allow the product to cure before applying field coating.

B. Single-Ply Field Coating

1. Prior to field coating application, the local Garland representative needs to complete an inspection of all treated seams and details.
2. Apply a base coating of Cool-Sil in a uniform manner at a minimum application rate of 1.5 gal/100 sq. ft. (0.61 L/m^2) over the entire roof surface, including all flashings. Use a 1/4" notched squeegee to spread coating and roller-apply for uniform minimum coverage. Allow to cure thoroughly, but for no more than 72 hours.
3. Apply a top coating of Cool-Sil in a perpendicular direction over base coat at 1.0 gal/100 sq. ft. (0.41 L/m^2).

Application of Non-Skid Surface for Walkways

1. Apply Cool-Sil at 1.0 gal/100 sq. ft. (0.41 L/m^2) to clean and dry topcoat within 72 hours of its application.
2. Broadcast dry roofing granules or 20-40 mesh silica sand at 30 lbs./sq. ft. into wet coating and immediately back-roll to set.

INSPECTION

Inspect entire roof area and touch up deficient areas with additional Cool-Sil as necessary to ensure complete and uniform coverage. Solvent wipe coating with acetone if it is exposed over 72 hours prior to overcoating. Special attention should be given to critical areas of roof, including roof penetrations, transitions, existing membrane seams, flashings and drains.

LIMITATIONS

These are general guidelines for application of the Cool-Sil system. The material requirements may vary depending on the specific job requirements. If unusual conditions exist, contact your local Garland representative. Garland's fluid-applied elastomeric roofing systems must be applied to structurally sound substrates and properly prepared surfaces. All surfaces must be clean and dry before application of coatings. Garland's roofing systems must not be applied over wet insulation or roofing materials. Failure of the substrate does not constitute failure of the Garland fluid-applied membrane or system. Garland's systems are designed for use on roofs with positive drainage.

1. Cool-Sil is a moisture-cured roof coating. Consequently, Cool-Sil application must not be done when rain or other conditions such as fog or heavy dew are possible within a 12 hour period.
2. Roof surface must be at least 6°F or 3°C above the dew point and rising.
3. Surfaces must always be clean before application of product. Care must be taken to ensure that on-site manufacturing emissions or extended time intervals after original cleaning do not interfere with any stage of the coating applications. If either condition occurs, then cleaning may be required again.
4. Drying time is affected by numerous factors, including temperature, direct sunlight, relative humidity, air movement, thickness, etc. Coating skin time is 2 hours and overcoat time is 4 hours at 77°F (25°C) and 50% relative humidity. Higher temperature and/or humidity will result in reduced skin and overcoat times, lower temperature and/or humidity may extend skin and overcoat times.
5. Thinning of coating materials is not permitted.
6. Adequate coating thickness is essential to performance. A controllable area should be measured and the specified material applied. The minimum coverage rate must be achieved throughout the entire fluid-applied roofing assembly and can be verified using a wet mil gauge during application. Multiple coats may be necessary on verticals to prevent sagging.
7. Solvent wipe coating with acetone or MEK if it is exposed over 72 hours prior to overcoating.
8. If a new single-ply membrane is used for repairs, it must be solvent-wiped with acetone prior to coating.
9. Deviations from these application guidelines and specific material requirements may seriously affect the fluid-applied roofing system performance and are strictly prohibited.
10. Applicator must comply with all applicable local, state and federal regulations if lead-based paint or other hazardous materials are encountered.
11. Roofing is hazardous work and fluid-applied membranes are very slippery when wet. Comply with fall protection rules and regulations.

COLD WEATHER RESTRICTIONS

Do not attempt application if ice, snow, moisture or dew is present. Restrict application when overnight temperature drops below 40°F (4.4o°C). Ambient temperature must be 50°F (10°C) and rising through the day. Cooler temperatures will negatively impact the properties of the system. Contact your Garland representative for proper cold weather applications.

HOT WEATHER RESTRICTIONS

Do not attempt application if moisture or dew is present. Ambient temperature must be less than 95°F (35°C). Contact your Garland representative for proper hot weather application.

STORAGE

Cool-Sil on the job site should be stored in a shaded, ventilated area under a light-colored, breathable reflective tarp. Do not store in direct sunlight. Storage temperature must range from 60 to 80°F (15°C to 26°C). Indoor ventilated storage is recommended when ambient temperature is below 60°F (15°C) or above 80°F (26°C).

COOL-SIL™

Cool-Sil HB | 100% Silicone
Technical Data Sheet

OVERVIEW & FEATURES

Cool-Sil HB is a silicone rubber fluid-applied roof system that is solvent-free, high solids, one-component and moisture-curing. This system is designed to restore existing aged smooth surface BUR, granulated cap sheets, single-ply membranes and metal roofs. It can also be used as a repair material for maintenance applications.

Cool-Sil provides excellent UV resistance, adhesion, and breathability, and has exceptional waterproofing properties. It is easily applied by roller, squeegee, or brush.

Ready to use – This one-part material can be applied easily to a dry, moisture-free and clean surface and is quickly rain-safe. It fully cures in 1 to 4 hours based on temperature and humidity by reacting with moisture in the air.

Protective – Cool-Sil HB provides long-term protection because it resists weathering, aging, oxidation, rain and snow, the effects of ozone, ultraviolet radiation and temperature extremes typically found on roofs.

Durable – With its high solids content and absence of hydrocarbon solvents, Cool-Sil provides a thick and durable, mold and mildew resistant roof covering that performs in a wide temperature range in the most severe climatic conditions.

This product may contribute toward a variety of LEED credit points.

PREPARATION

Conduct a moisture survey prior to roof restoration and make any necessary repairs, including removal of any wet insulation and roofing materials, replacing with like materials. Allow repairs to cure completely. Confirm local water run-off ordinances and restrictions prior to cleaning. Carefully power-wash all surfaces with greater than 2,000 psi pressure to remove debris, rust, scale, dirt, dust, chalking, peeling or flaking coatings, etc. Do not force water into the roof system or damage roof surfaces. Wearing personal protective clothing and equipment, remove algae, mildew, or fungus with Simple Green Oxy Solve, scrubbing with a push broom scrub brush. Rinse at least twice to be sure all cleaning agents and contaminants are completely removed to prevent adhesion issues. If the roof surface becomes contaminated with dirt, dust, or other particles at any time during the application of the Cool-Sil system, cleaning measures must be taken to restore the surface to a suitable condition.

APPLICATION

Refer to the Cool-Sil Restoration Application Guides (single-ply, modified bitumen, or metal) for complete substrate-specific repair, preparation and application requirements.

PRECAUTIONS

- In accordance with Garland's adhesion testing protocol, ensure that the coating bond strength to the existing roof substrate(s) is two (2) pounds per linear inch (pli) or greater
- Storage temperatures should be between 60-80°F (15.6-26.7°C) and not exceed 110°F (43.3°C). Indoor ventilated storage is recommended. Ensure job site storage is in a shaded and ventilated area. Do not store in direct sunlight.
- Coverage rates vary depending on warranty and substrate.
- Restrict coating application when the ambient temperature is not at least 50°F (10°C) and rising or when overnight temperature drops below 40°F (4.4°C).
- Restrict coating application when the ambient temperature is greater than 95°F (35°C).
- Roof surface must be at least six (6) Fahrenheit degrees or three (3) Celsius degrees above the dew point and rising.
- In areas where the roof is subject to foot traffic, it is recommended to apply a granule non-skid walkway surface.
- Excess water on a Cool-Sil roof can cause the roof to become slippery.
- Not intended to be installed over an asphalt glaze coating.
- Coverage rates may vary based on surface condition/texture and do not take into account material loss due to spraying, surface texture, surface absorption, waste, etc.

COOL-SIL™

Cool-Sil HB | 100% Silicone
Technical Data Sheet

since 1895

Technical Data	Cool-Sil HB
Color	Standard White and Gray
Solid Content Volume (ASTM D2369)	95% (+/-2)
Tack-Free Time	1-2 hours
Cure Time	1-4 hours
Durometer Hardness Shore A (ASTM D2240)	37
Tensile Strength (ASTM D412)	290 psi
Temperature Stability Range	-35°F to 212°F (-37°C to 100°C)
Elongation (ASTM D412)	150%
Permeability* (ASTM E108)	11 perms
Accelerated Weathering QUV, 5,000 hours (ASTM G154)	No Degradation
Flash Point (ASTM D-4206)	>141°F (60.6°C)
Low Temperature Flexibility (ASTM D522)	-50°F (-45.6°C)
Shelf Life	24 months, unopened and stored between 60°F and 80°F (15.6°C and 26.6°C)
Packaging	5 gallon pail (18.9 L)
Viscosity (ASTM D2196)	6,000-10,000 cps

**20 mils at 100°F (38°C) and 90% relative humidity*

For specific application recommendations, please contact your local Garland Representative or Garland Technical Service Department.

Eco-Facts	Cool-Sil HB	
VOC	<50 grams/liter	
	Initial	**Aged**
Solar Reflectance* (ASTM C1549)	0.89	0.73
Thermal Emittance* (ASTM C1371)	0.90	0.90
SRI Value*	113	90

**Reflectance, emittance, and SRI values are for white color only.*

For more information, visit us at: www.garlandco.com

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