Roofing Industry Trends and Sustainability

System options, Restoration options, Sustainability, Preventative Maintenance

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Baltimore/Washington Area Territory Manager

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Topics we will cover

- Introduction to Tremco and our Team
- Roof Code & Permit Review
- Roof Project proper process
- Importance of PM
- Quick Roof systems review
  - IRMA
  - MB's
  - Single Plies
- Restorations and fluid systems





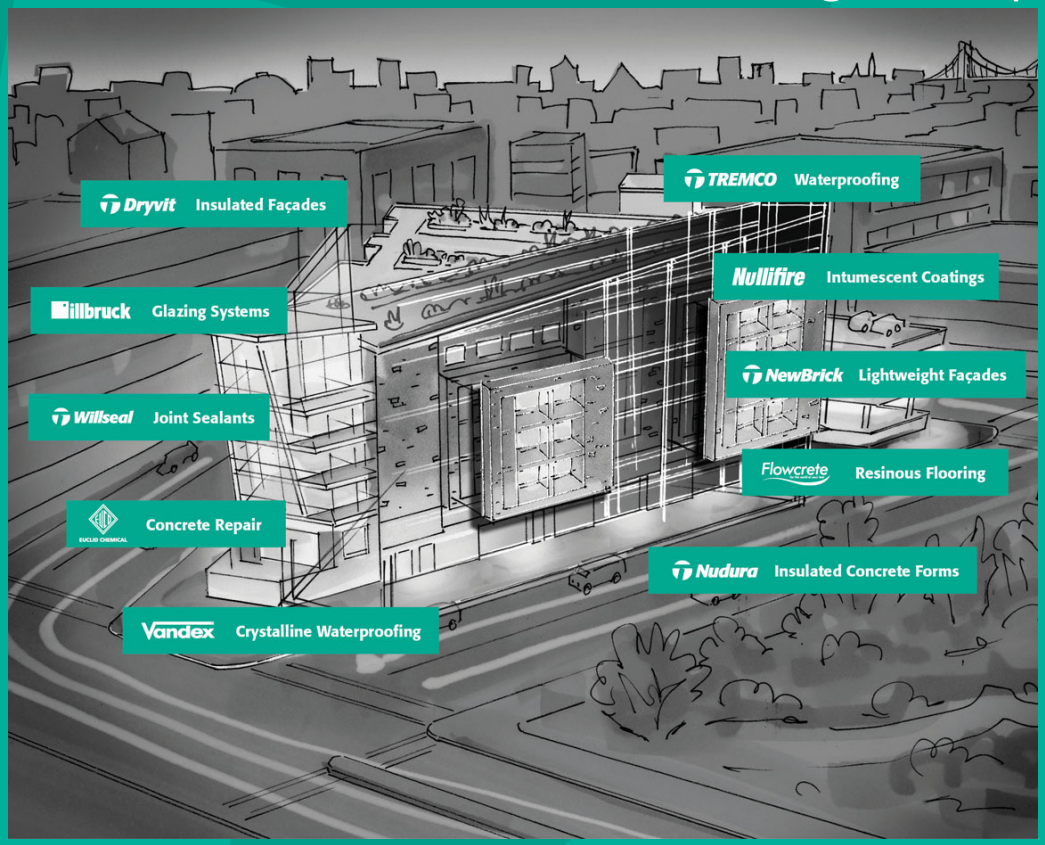
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TREMCO Dryvit NewBrick Nudura Willseal Flowcrete Illbruck Nullifire Vandex EUCLID CHEMICAL

Tremco CPG covers the entire building envelope



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Maintenance Will Make Your Roof Last Longer

-A roof with regular professional maintenance lasts 3 years longer on average compared to roofs with no maintenance. (Army Corps of Engineers)

-Your roof warranties require routine inspections and maintenance.

-Detecting and repairing problems early saves money, reduces downtime, limits damage to the roof, and prevents premature deterioration.

- For roughly 10 - 12 cents per square foot, we can provide preventive maintenance and 24-Hour Emergency Leak Response.





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What Does PM Include?

- Our Tech's walk the roof 1-2 times per year (We will price with both options).
- Our Tech's are highly trained in PM and proper repairs for all roof systems with compatible materials.
- They will make PM repairs to all components of the roof system they can with the allotted time.
- PM includes debris removal from around drains and gutters.
- 1-800-5Tremco 24/7 leak hotline
- www.myOLI.com Database to track all inspections, reports, and repairs
- Any larger repairs outside scope of PM are noted and will provide a price if possible.
- We have over 2,200 customers with 15,500 buildings and 72,500 roofs covering 398,000,000 square feet of roofing under this contract.

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www.myoli.com

Inspection Details

Items	Description
Roof Name	Roof 03 - Unit #334 - #342
Notes	A 10' and a 32' ladder are required to access the roof.
Service Activity Type	TremCare Gold
Service Activity Date	Dec 9 2025
Job Number	130057
Information Source	Core
Year of Installation	2004
Roof Leaks	No
Leak Sensitivity	High
Roof Size	3,225 sq. ft.
# of Stories	2
Is Ladder Required?	Yes
Asset Value	$25.00 per sq. ft.
Total Asset Value	$80,625.00
Overall Roof Condition	Restore Immediately
Technician	Jerry Finke
Surfacing	Granules
Roof Type/System	Modified Bitumen
Ply Info	1 ply Modified Bitumen, Torch
Ply Info	2 plys Fiberglass, Hot Adhered
Insulation	1" Polyisocyanurate, Mechanically Attached
Insulation	2" Polyisocyanurate, Mechanically Attached
Deck Type	Plywood
Drainage	Internal Drains
Slope	1/4 inch(es) per foot, Saddles/Crickets


Overview.


Debris on roof.


Removed debris.


Debris in drain.


Removed debris.


Weathered.


Previous repair.


Reinforced previous repair.


Open flashing lap.


Repaired flashing lap.


Overgrown tree limbs.

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Current Process of Many Projects





- Call roofers they know and ask to submit a proposal.
- Each contractor will submit whichever system they would like to install no matter what is best for owners. Rarely options are given.
- Restoration usually not offered because less money to be made.
- A Contractors proposal offers very little protection to the Owners.
- Contractors buy product through a distributor, manufacturers have no input on design, or oversight during install. Easy out for warranty.
- Contractors is in this to make money!
- Contractors are not designers and typically don’t check code and will try to work around permit requirements.

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Process with Tremco





- Contact us and we will inspect the roof and do investigations to determine the condition and construction.
- We will write a report with the best options at different budget levels.
- We can write MasterSpec specifications to meet local building code and invite local qualified contractors to bid.
  - Or we can collaborate with your design professional for the best system.
- Bids go direct to Owner to review.
- We will manage Pre-bid, Pre-Con and Final Inspection Meetings
- We will inspect the job multiple times a week and provide progress reports.
- All of this included at NO charge since we are paid through use of our products.

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820 First ST Roof Project

820 First Street Northeast Washington, DC 20002

TREMCO Construction Products Group

Date Tue 04/21/2026 **Job #** **Prepared By** Jamie Gill

Weather

6:00 AM	12:00 PM	4:00 PM
36°	52°	60°
Clear	Partially cloudy	Partially cloudy
Wind: 5 MPH | Precipitation: .0" | Humidity: 66%	Wind: 7 MPH | Precipitation: .0" | Humidity: 34%	Wind: 10 MPH | Precipitation: .0" | Humidity: 25%

General Notes

1. Met with Patuxent Roofing project foreman and walked previously completed areas to identify any issues that need to be corrected. No major issues or concerns. Production crew were installing the fluid applied base coat and reinforcing scrim sheet adjacent to the cooling tower. Upper penthouse roof section 2 has been power washed and prepped for fluid applied membrane. Spoke with the project foreman about installing additional ballast in between the studio bump outs to promote drainage. Roof is being re-ballasted after manufacturers punchlist inspection. Roof section 5 still to be done.

Kyle Jones | 04/22/26 | 09:40AM



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Roof Code Updates

- All new roofs must meet International Building Code that mandates a minimum R-30(R-33 in DC) insulation value above the deck.

- All Roof coverings on most buildings must be UL 790 Class B

- All Edge metal systems must meet ASNI SPRI ES-1

- All roofs should be able to withstand ASCE 7-16 uplift pressures





Code Compliance Peace of Mind

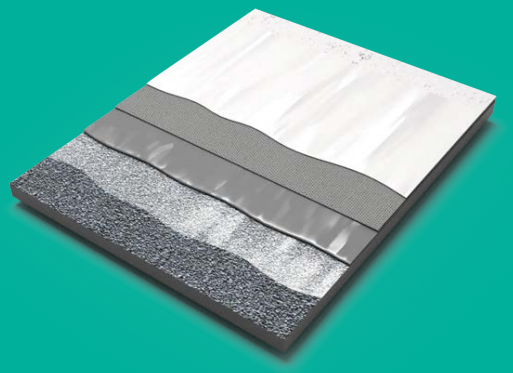
The design of the System: ****** does not undertake any analysis of the architecture or engineering required to evaluate what type of System, Installation or Material is appropriate for a building and makes no warranty express or implied as to the suitability of its Products for any particular structure. Such a determination is the responsibility of the architect, engineer or design professional; Improper selection of materials for the assembly or the failure to accurately calculate wind uplift and/or applicable design loads.**

- **Every warranted job has the specifications reviewed by our Technical team to ensure fire and wind ratings are in place before its approved to ship product!**
- **All restoration projects must have pictures and a moisture survey submitted.**
- **Each Tremco roof has been individually designed to meet all Local, State, and Federal building codes including insulation and drainage requirements.**

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What Roof Projects Require a Permit?

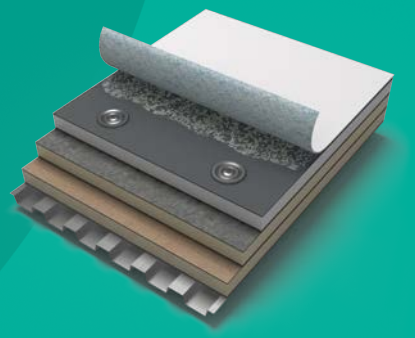
- Fluid applied Restoration – No Permit also no energy code requirement.



- Retrofit – Yes Permit is required but don't have to bring it up to energy code.



- Replacement – Yes permit is required and yes all systems must meet energy code.



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Liability for the Condo Board

1. Liability for Defective or Non-Code-Compliant Work
   The association is responsible for maintaining, repairing, and replacing common elements (including the roof) under the DC Condominium Act (D.C. Code § 42-1903.07). If the roof is improperly installed and later leaks, fails in wind, or causes water damage, mold, or structural issues, the association is typically liable to unit owners for resulting damage. Boards can face negligence claims for failing to select a competent contractor or ensure code compliance. This often leads to expensive litigation, special assessments, and reserve fund depletion.
2. 2. Regulatory Enforcement and Corrective Costs
   Even without a permit requirement, DOB can enforce code violations. Outcomes can include stop-work orders, fines (sometimes up to several thousand dollars per day for serious or ongoing violations), and orders to open up or fully redo the work at the association's expense. Non-compliant



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Liability for the Condo Board

3. Insurance Gaps

The association's master policy may deny or contest claims for damage caused by non-code-compliant or improperly installed work.

An unlicensed or non-compliant contractor's general liability insurance is more likely to be challenged or limited.

Workers' compensation exposure is a major risk: if the contractor is unlicensed or lacks coverage and a worker is injured, the association can be treated as the statutory employer and face significant claims

4. Fiduciary Duty and Potential Personal Exposure

Board members owe a fiduciary duty to the association and unit owners. Approving a contractor who fails to pull required permits (where applicable), ignores the building code, or lacks proper licensing/insurance can support claims of breach of duty. Directors & Officers (D&O) insurance often covers this, but it is not a complete shield, especially in cases of gross negligence or if coverage is inadequate.



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Lessons Learned
Large Bethesda Condo

Scope of Work:

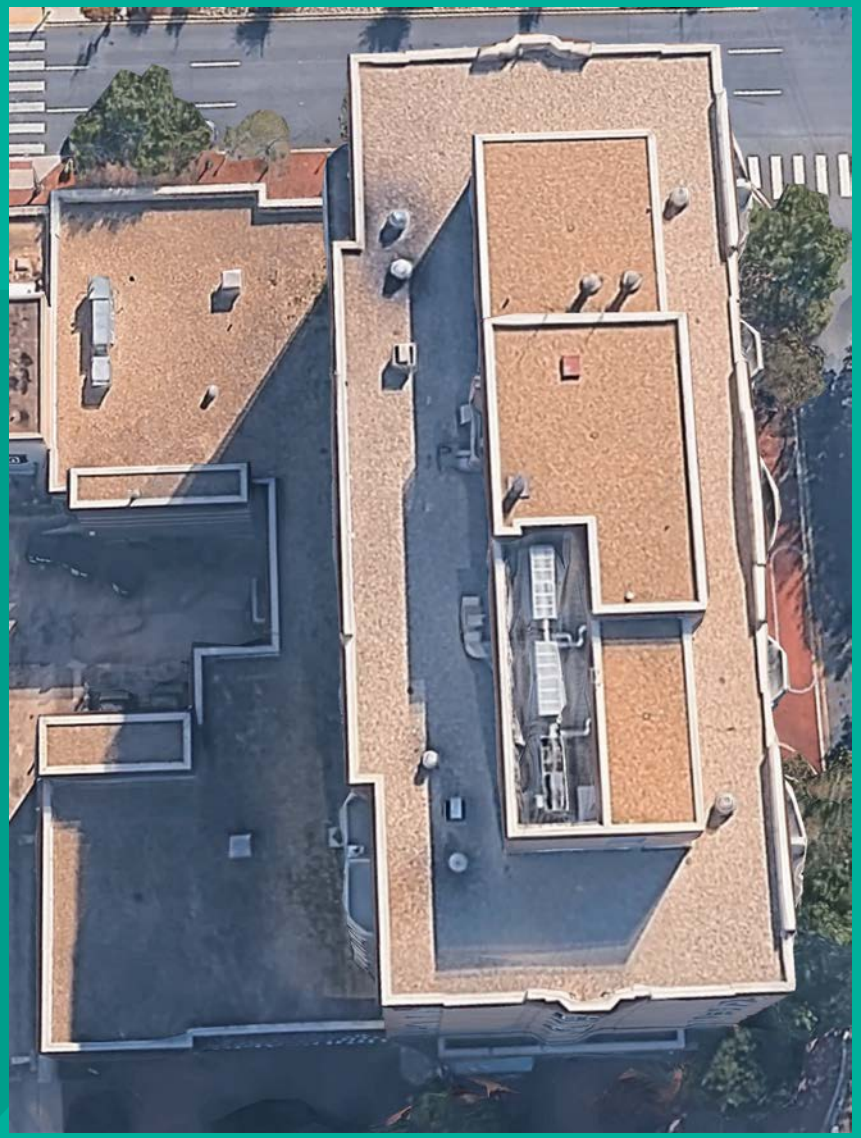
- Remove the existing gravel/rocks
- Remove old black screen
- Remove existing insulation board
- Clean and prepare the roof membrane
- Apply 100% silicone Henry coating on the membrane
- Reinstall insulation board back
- Install the new black screen
- Return existing gravel/rocks to original position

1

Safety:

-Before starting the repairs, ensure that we have the necessary safety equipment and fall protection gear.
- Inspect the roof and flashing.
- Identify the damaged areas and assess the extent of the damage.
- Clean the area repair membrane and apply sealant.
-Apply flashing caulk around the repaired areas to ensure a watertight seal.
-Paint and seal gaps on the flashing with DTM(premium metal paint from Sherwin-Willims)

Total of Labor and material : PRICE: $123,800.00



Lessons Learned

NEW 36-MIL FIBERTITE ROOF SYSTEM WITH A 20-YEAR WARRANTY ON MATERIALS AND 10-YEARS ON WORKMANSHIP ON THE MAIN FLAT ROOFS. (All work will be installed as per FiberTite specification requirements, industry standards and D.C. building codes):

1. Provide scaffolding, dumpsters and debris chutes for the project.
2. Provide permits for the new roofing system.
3. We will provide tarps and other property protection methods throughout the duration of the project.
4. Ac unit disconnected by others. We can provide an estimate for this if necessary.
5. We will remove up to two layers of roofing material down to the wood deck. Additional layers will be removed at an additional cost. We will remove all metal flashing, coping, collars and vents.
6. We will remove the bottom courses of shingles from the sloped roofs where they meet the flat roofs.
7. The job site will be policed and cleaned up at the end of each workday. All debris will be put in the dumpsters at the end of each workday. All roof top materials will be secured and tied down at the end of each workday.
8. Any replacement of rotted/damaged framing or finishing lumber will be written as a "Contract Amendment" request. These change orders will be priced based on the published price sheet and will be billed according to the job specifications of that contract. If any woodwork is needed, we will install it to today's DC building codes.
9. We will re-nail or re-secure any loose roof deck to the roof rafters.
10. Provide and install 5/4"x6" nail boards to the edges of the roofs. The boards are installed so we may fasten the edge metal directly into the structure.
11. Provide and install 1" polyisocyanurate insulation to the roof deck.

Install new Mule Hide .60 Mil TPO Roof system

Tear off existing roof

Please note:

This price includes the tear off of (2) existing layers of roof.

For every extra layer of roof that needs to be torn off, it will add $0.30 per square foot.

Take photos of all rotten wood, keep track of footages, and uploaded to Acculynx

All rotten wood will be replaced for an additional fee ($95 standard per sheet of plywood, $125 per sheet if any fire rated is needed, or $9 per LF for 1x/2x)

Install insulation

Secure insulation boards with drill point fasteners

Secure insulation boards with 3" plates

Install Mule Hide cover strip where applicable

Install pre-finished white 24-gauge TPO coated heat weldable gravel stop drip edge where applicable

Install pre-finished white 24-gauge TPO coated heat weldable drip edge where applicable

Flash all chimneys, vents, and walls where applicable

Fabricate custom aluminum parapet wall capping

Install new aluminum parapet wall capping where applicable

Install new Mule Hide TPO heat weldable pipe collars where applicable

Use weathered membrane TPO membrane cleaner where applicable

Replace all incorrect vents with new

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Lessons Learned

SCOPE OF WORK EPDM ROOFING:

1. Pull permits for project:
   a. DOB permit for roof replacement 'in-kind'
   b. DDOT permit for construction, occupancy and staging, as well as public inconvenience fees, as required
2. Staging for project before commencement (Roofing LLC to be provided proper access prior to work start to set up)
   a. Materials to be boomed onto roof, dumpsters set beside building,
   b. Roof to be flagged off on perimeters per OSHA guidelines,
   c. Safety harnesses will be worn, as required.
   d. Upper Roof area included within proposal
3. Temporarily relocate existing gravel ballast across the roof in a phased (leapfrog) manner to facilitate work operations, and stockpile on-site for reinstallation.
4. Perform infrared scan of the entire roof to see if the substrate is wet and needs to be replaced. Any roofing and insulation requiring replacement to be done at $7.50 /sqft
5. Remove existing vertical flashing, sheet metal flashing, and trim as necessary to allow for installation of new vertical flashing, sheet metal flashing, and trim in accordance with manufacturer specifications.
6. Install new 60 Mil EPDM membrane over existing insulation per manufacturers specifications.
7. Furnish and install new EPDM vertical wall flashings, including all required skylight support penetration flashings, in accordance with m specifications.
8. Move gravel ballast back over the new EPDM membrane. (1 In accordance with wind uplift requirements.
9. Furnish and install new 24 ga. painted steel counter-flashing
10. Furnish and install new retrofit drains at all existing drains o
11. Provide 2-year workmanship warranty from 20-year NDL warranty.

OPTION A

WILL MOVE EXISITING RIVER ROOF. REMOVE EXISITING RIDGID INSULATION AND FILTER FABRIC. CLEAN EXISTING MODIFIED BITMEN ROOF. INSTALL VAPOR BARRIER. SUPPLY AND INSTALL 60 MIL TPO . REINSTALL RIDGED INSULATION. INSTALL NEW FILTER FABRIC. REINSTALL RIVER ROCK. FLASH ALL CURBS, PENETRATION,PITCH POCKETS. GAF WILL INSPECT AND ISSUE 20YR NDL WARRANTY FROM MANUFACTURE

20YR LABOR AND MATERIAL AND WORKMANSHIP FROM MANUFACTURE FROM

OPTION B

WILL REMOVE EXISITING RIVER ROOF. REMOVE EXISITING RIDGID INSULATION AND FILTER FABRIC. REMOVE EXISTING EPDM ROOF ROOF DOWN TO THE ROOF DECK. INSTALL NEW TAPERED INSULATION. SUPPLY AND INSTALL GAF 60 SELF ADHEARED TPO. FLASH ALL CURBS, PENETRATION,PITCH POCKETS.

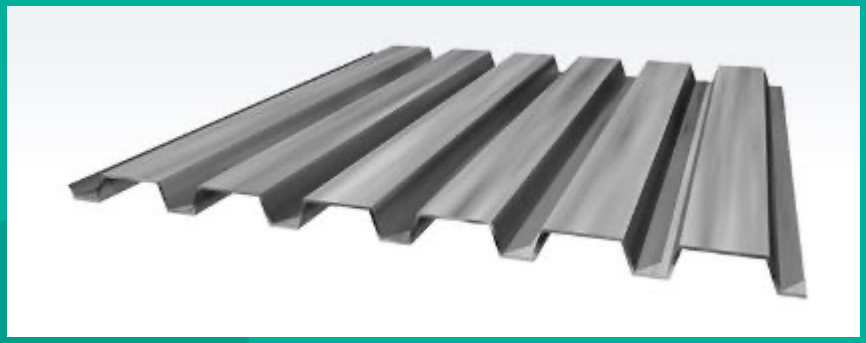
GAF WILL INSPECT AND ISSUE 20YR NDL WARRANTY FROM MANUFACTURE

20YR LABOR AND MATERIAL AND WORKMANSHIP FROM MANUFACTURE FROM

Deck Types

- Metal
- Concrete
- Wood
- Gypsum
- Tectum

- Sloped or Flat?

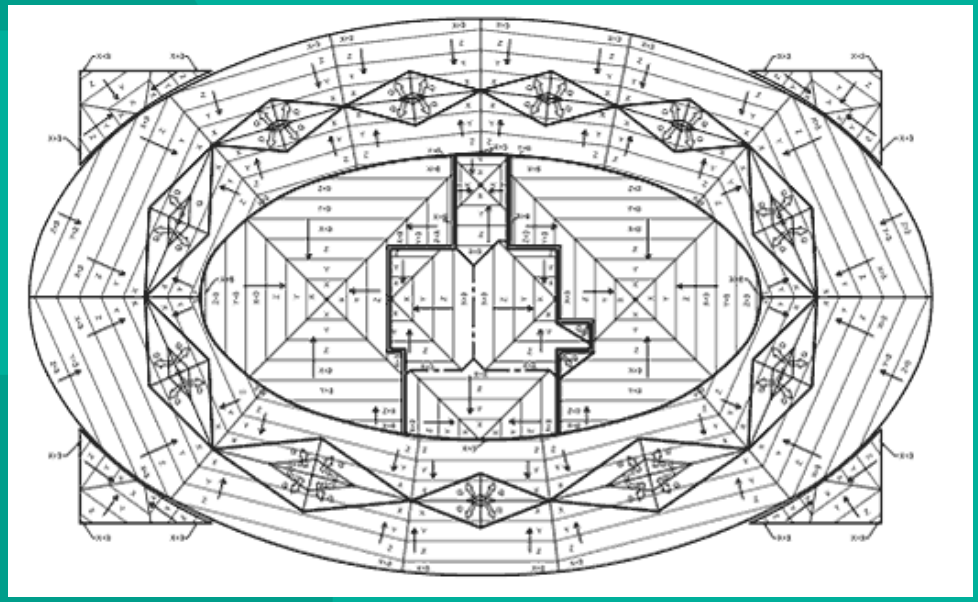


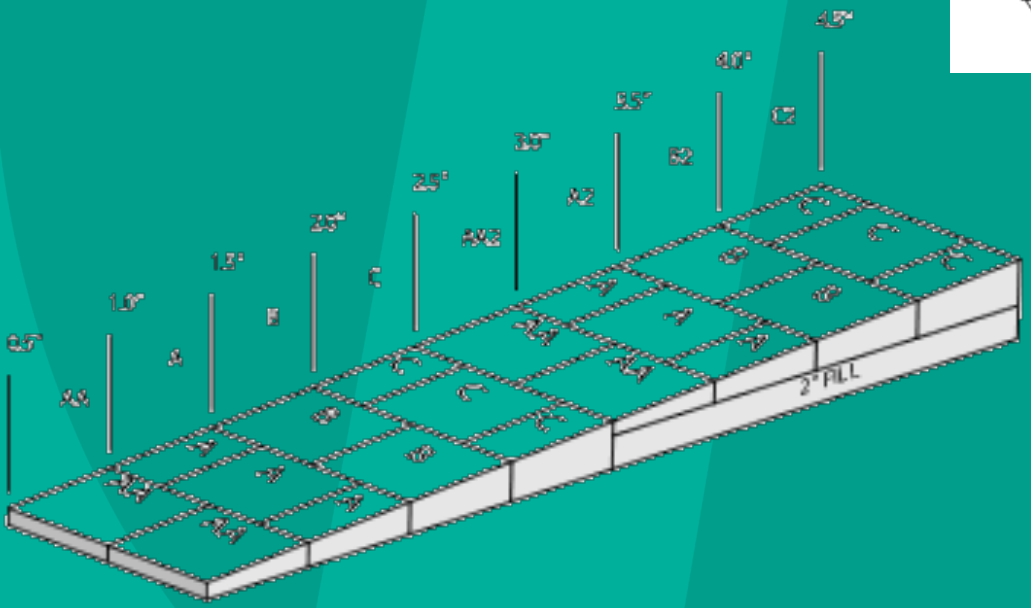


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The Functions of Insulation

- Factory-tapered board roof insulation systems are composed of multiple layers of square-edged insulation boards that are tapered at the factory to provide drainage slopes of 1/16 inch per foot or greater.







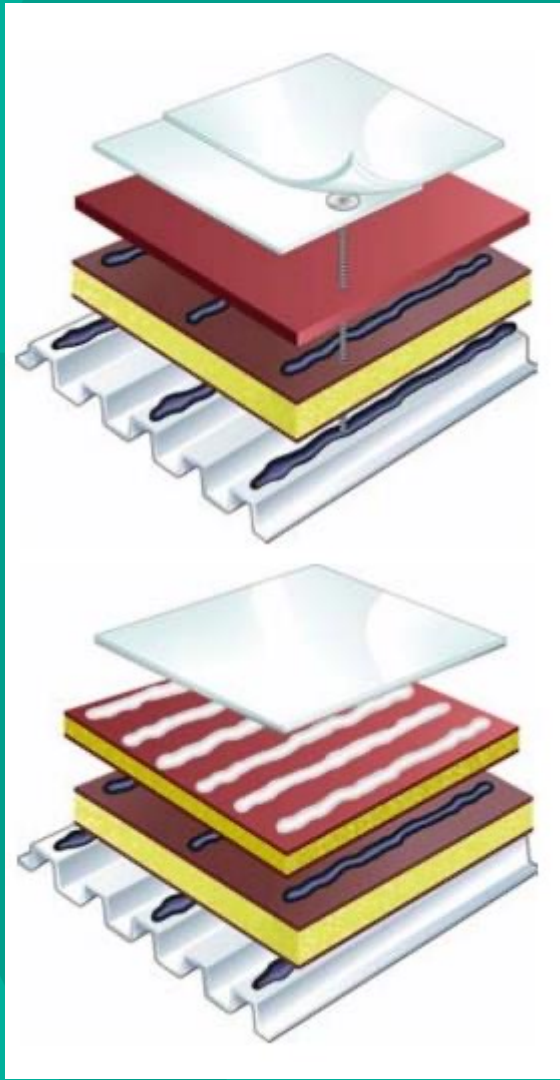
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Roof System Hierarchy

- Metal Roofs (Pre-engineered watertight systems) – 30+ Years
- IRMA or PMA assemblies – 30+ Years
- Cold MB or BUR - 25-30 years
- Hot MB or BUR – 20-25 years
- KEE ASTM 6754 Sheets – 25 years
- Torch Applied MB (Under the right conditions) – 20 years
- PVC/KEE membranes – 20 years
- PVC membranes – 18 years
- EPDM/TPO membranes – 15 yr
- SPUF roofs – 10 years if lucky



SINGLE PLY MEMBRANES



- Rubber or plastic waterproofing membranes
- By definition - One ply with seams
- Three methods of installation:
  - Loose laid and ballasted
  - Mechanically fastened
  - Fully adhered
- Surface color typically black or white

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SINGLE PLY MEMBRANES

- **SINGLE PLY MEMBRANES**
- **PROS**
  - Low initial cost
  - Quick installation
  - Elastomeric
- **CONS**
  - No ply redundancy
  - Thin systems
  - Shrinkage (thermoset)
  - Embrittlement (thermoplastic)
  - Seam problems
  - Abuse intolerant
  - Pond intolerant

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MODIFIED BITUMEN (MB)

- **MODIFIED BITUMEN**
  - **–ASTM 6162, 6163, 6164**
  - **–Type I, II, or III**

- **PROS**
- Factory surfacing
- Factory controlled thickness
- High abuse tolerance
- Aesthetically appealing

- **CONS**
- Higher initial costs
- Lap integrity
- Hot Applied - Torches / kettles
- Granule Loss

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Inverted Roof Membrane Assembly (IRMA)





- **PROS**
- Membrane PROTECTED
- Lowest Life cycle cost
- Easier to achieve R Value
- Abuse tolerant

- **CONS**
- Structure must handle load
- Overburden can cost $$

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So what System do you Specify?

- Environmental Conditions
  - Odor sensitive building with intakes that cant be shut down?
  - Foot traffic and usage
  - Deck type
- Wind, fire insurance, code requirements
  - UL 790, ASCE7-16, ANSI SPRI ES-1, etc
- Cost / Budget
- Long Term Building
- Manufacturer history
- **DO NOT BASE DECISION ON…..**

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A WARRANTY!!!!!!!

Remember most of the costs involved with roof replacement are the same whether you go with a TPO or a Cold process MB…

- Roof Tear off is the same
- Access and staging the same
- Polyiso insulation the same
- Metal edge systems and drainage the same

The only thing you are paying for with upgrading your system is the actual membrane! So yes some systems are 2x or more the cost of the materials for the membrane but this may only represent an increase of 10-20% of the overall job.

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Why Restore vs Replace?

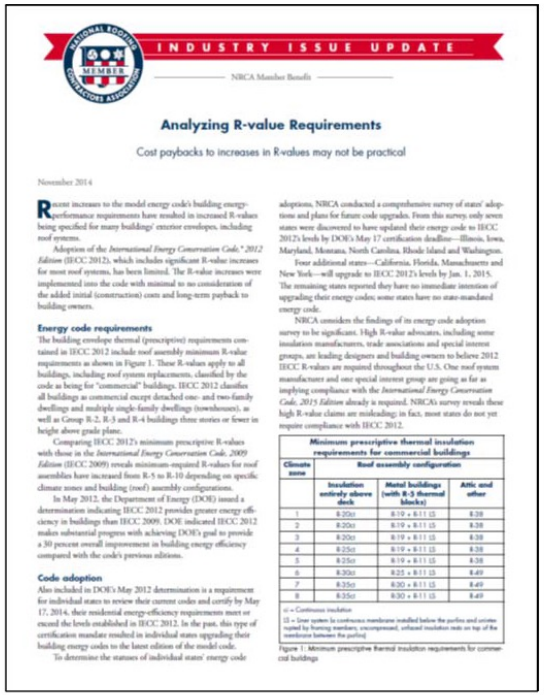
- Little to no disruption to your tenants. (Noise, Odor, etc)
- New IECC codes with R30-33 min is driving up the price of Re-roofing
- Can match or even exceed many replacement warranties
- Contractors on and off the job quicker
- Less liability since they are not opening the roof
- USDA BioPreferred coating gives unique solution to “Green” clients
- Owners love options or alternates, so give them some!





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But wont R30 save us money?



INDUSTRY ISSUE UPDATE

NRCA Member Benefit

Analyzing R-value Requirements

Cost paybacks to increases in R-values may not be practical

November 2014

Recent increases to the model energy code's building energy-performance requirements have resulted in increased R-values being specified for many buildings' exterior envelopes, including roof systems.

Adoption of the *International Energy Conservation Code,® 2012 Edition* (IECC 2012), which includes significant R-value increases for most roof systems, has been limited. The R-value increases were implemented into the code with minimal to no consideration of the added initial (construction) costs and long-term payback to building owners.

Energy code requirements

The building envelope thermal (prescriptive) requirements contained in IECC 2012 include roof assembly minimum R-value requirements as shown in Figure 1. These R-values apply to all buildings, including roof system replacements, classified by the code as being for "commercial" buildings. IECC 2012 classifies all buildings as commercial except detached one- and two-family dwellings and multiple single-family dwellings (townhouses), as well as Group R-2, R-3 and R-4 buildings three stories or fewer in height above grade plane.

Comparing IECC 2012's minimum prescriptive R-values with those in the *International Energy Conservation Code, 2009 Edition* (IECC 2009) reveals minimum-required R-values for roof assemblies have increased from R-5 to R-10 depending on specific climate zones and building (roof) assembly configurations.

In May 2012, the Department of Energy (DOE) issued a determination indicating IECC 2012 provides greater energy efficiency in buildings than IECC 2009. DOE indicated IECC 2012 makes substantial progress with achieving DOE's goal to provide a 30 percent overall improvement in building energy efficiency compared with the code's previous editions.

Code adoption

Also included in DOE's May 2012 determination is a requirement for individual states to review their current codes and certify by May 17, 2014, their residential energy-efficiency requirements meet or exceed the levels established in IECC 2012. In the past, this type of certification mandate resulted in individual states upgrading their building energy codes to the latest edition of the model code.

To determine the statuses of individual states' energy code adoptions, NRCA conducted a comprehensive survey of states' adoptions and plans for future code upgrades. From this survey, only seven states were discovered to have updated their energy code to IECC 2012's levels by DOE's May 17 certification deadline—Illinois, Iowa, Maryland, Montana, North Carolina, Rhode Island and Washington.

Four additional states—California, Florida, Massachusetts and New York—will upgrade to IECC 2012's levels by Jan. 1, 2015. The remaining states reported they have no immediate intention of upgrading their energy codes; some states have no state-mandated energy code.

NRCA considers the findings of its energy code adoption survey to be significant. High R-value advocates, including some insulation manufacturers, trade associations and special interest groups, are leading designers and building owners to believe 2012 IECC R-values are required throughout the U.S. One roof system manufacturer and one special interest group are going as far as implying compliance with the *International Energy Conservation Code, 2015 Edition* already is required. NRCA's survey reveals these high R-value claims are misleading; in fact, most states do not yet require compliance with IECC 2012.

Minimum prescriptive thermal insulation requirements for commercial buildings

Climate zone	Roof assembly configuration		
	Insulation entirely above deck	Metal buildings (with R-5 thermal blocks)	Attic and other
1	R-20ci	R-19 + R-11 LS	R-38
2	R-20ci	R-19 + R-11 LS	R-38
3	R-20ci	R-19 + R-11 LS	R-38
4	R-25ci	R-19 + R-11 LS	R-38
5	R-25ci	R-19 + R-11 LS	R-38
6	R-30ci	R-25 + R-11 LS	R-49
7	R-35ci	R-30 + R-11 LS	R-49
8	R-35ci	R-30 + R-11 LS	R-49

ci = Continuous insulation

LS = Liner system (a continuous membrane installed below the purlins and uninterrupted by framing members; uncompressed, unfaced insulation laid on top of the membrane between the purlins)

Figure 1: Minimum prescriptive thermal insulation requirements for commercial buildings

NRCA "Industry Issue Update," November 2014

Payback analysis:

- 100 sq. single story building
- Costs per R+5 increases
- Energy savings per R+5 increases
- Local energy costs
- Cost ÷ Savings = Payback
- 16 cities in 8 climate zones

Payback results (Philadelphia, PA):

- R-10 to R-15: 7.5 yrs.
- R-15 to R-20: 15.5 yrs.
- R-20 to R-25: 24.9 yrs.
- R-25 to R-30: 54.3 yrs.

NRCA

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But I can get a 20 year warranty with Acrylic or other coatings? Be Careful!

- Be sure to specify that warranties must be:
  - (Specified term) year NDL
  - Not Pro-rated
  - Not Material only
  - Not held by a LLC
  - Realistic, common sense exclusions not:
    - Poor workmanship
    - Foot traffic
    - Normal weather events (Gale winds, Storms, etc)
  - Recommended to also include periodic inspections during the warranty.

- Pick systems with a re-coat warranty extension option

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But I can get a 20 year warranty with Acrylic or other coatings? Be Careful!

EXCLUSIONS FROM COVERAGE

(e.g., items that are not "ordinary wear and tear" or are beyond control)

This guarantee does **NOT** cover conditions other than leaks. This guarantee also does **NOT** cover leaks caused by any of the following:

1. Inadequate roof maintenance, that is, the failure to follow the Scheduled Maintenance Checklists provided with this guarantee (extra copies available by calling Guarantee Services at or the failure to repair owner responsibility items.
2. Unusual weather conditions or natural disasters including, but not limited to, winds in excess of 55 miles per hour, hail, floods, hurricanes, lightning, tornados, and earthquakes, unless specifically covered by an addendum to this guarantee.
3. Impact of foreign objects or physical damage caused by any intentional or negligent acts, accidents, misuse, abuse or the like.
4. Damage to the roof constructed of the Products due to: (a) movement, cracking, or other failure of the roof deck or building; (b) improper installation or failure of any materials, including pre-existing coatings; (c) infiltration or condensation of moisture through or around the walls, copings, building structure, or surrounding materials except where high wall waterproofing flashings are installed; (d) chemical attack on the membrane, including, but not limited to, exposure to grease or oil; (e) the failure of wood nailers to remain attached to the structure; (f) use of materials that are incompatible with the Products; or (g) architectural, engineering, or design defects or flaws in the roof or building.
5. Traffic of any nature on the roof.
6. Blisters in the Products that have not resulted in leaks.
7. Changes in the use of the building or any repairs, modifications, or additions to the Products after the roof is completed, unless approved in advance in writing by
8. Conditions that prevent positive drainage or result from ponding water. This exclusion does not cover any coatings.
9. Gutters or damage to any restoration system caused by gutters.
10. Changes in the color of the Products, including, but not limited to, fading.

EXCLUSIONS FROM COVERAGE

This limited warranty does **NOT** cover any Products installed over cold storage or freezer buildings or buildings with high humidity conditions. This limited warranty does **NOT** cover conditions other than leaks or leaks caused by any of the following:

1. Improper workmanship in applying the Products or any other roof component.
2. Lack of roof maintenance.
3. Unusual weather conditions or natural disasters, including but not limited to, windstorms, hail, floods, hurricanes, lightning, tornados, and earthquakes.
4. Damage to the roof constructed of the Products due to: (a) movement or cracking of the roof deck or building; (b)improper installation or failure of any materials used in any roof base or insulation or materials other than the Products; (c) infiltration or condensation of moisture through the walls, copings, building structure, or surrounding materials, except where high wall waterproofing flashings are installed; (d) expansion or contraction of any counterflashing or metal work; (e) chemical attack on the membrane including, but not limited to, exposure to grease and oil; (f) the failure of wood nailers to remain attached to the structure; or (g) use of materials that are incompatible with the Products.
5. Changes in the use of the building unless approved in writing in advance by .
6. Conditions that prevent positive drainage or areas of roof that pond water. This exclusion does not apply if the Product used consists of .
7. Changes in the color of the Products, including fading.

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Restoration Candidate

- Minimal Deficiencies
  - Locate open laps, cracking/splitting, exposed scrim, extreme weathering, etc.
- Positive Drainage / Slope
  - Minimal Ponding Water
- Minimal to No Wet Insulation
  - 25% or more wet = Replacement



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Restoration Candidate?



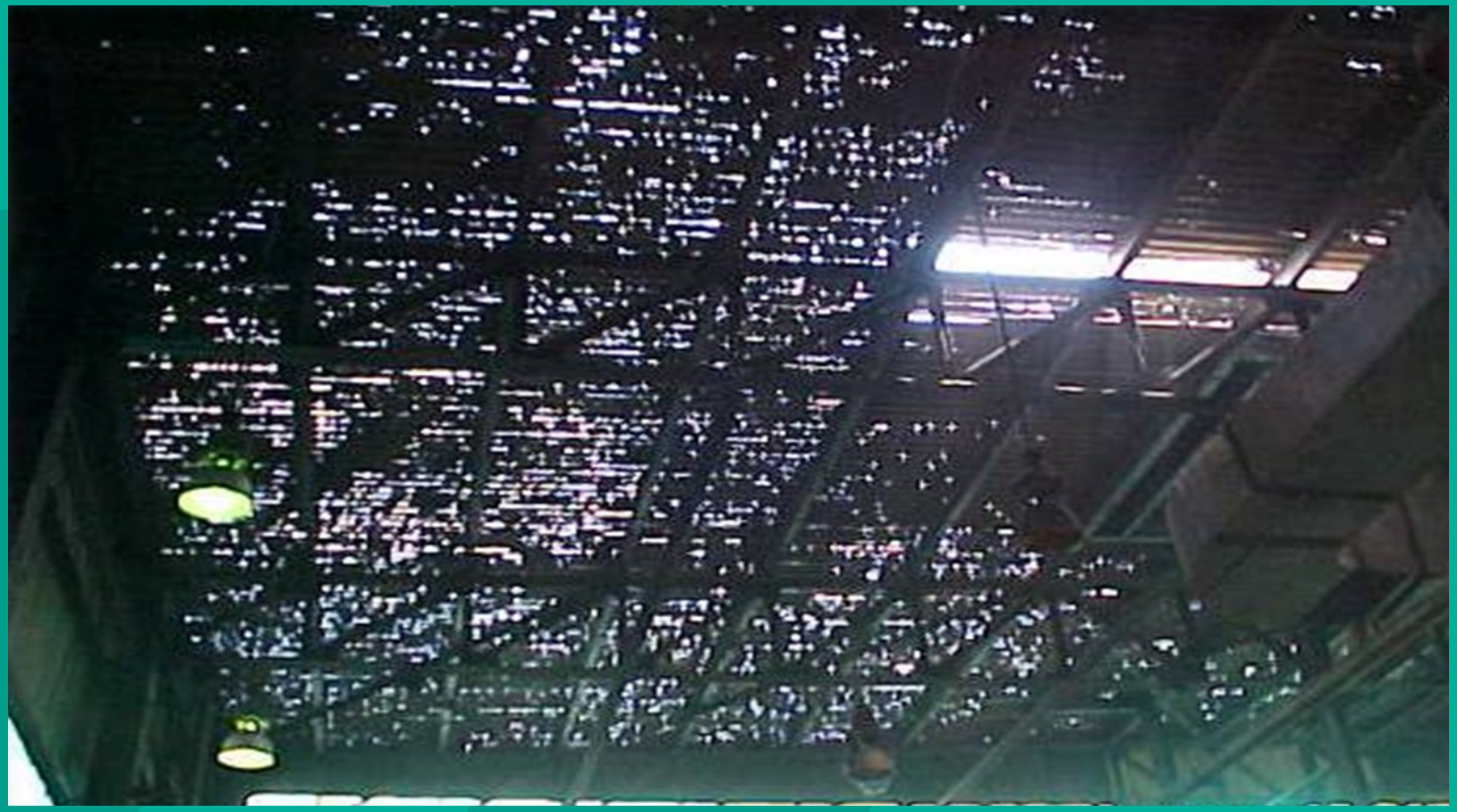
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Restoration Candidate?



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Restoration Candidate?



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Restoration Candidates?









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Restoration Candidates?





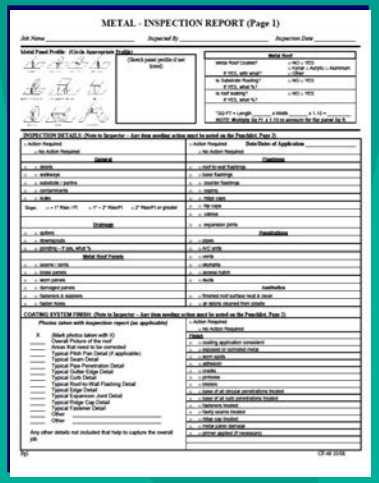




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Rooftop Inspection


LOW-SLOPE - INSPECTION REPORT (Page 1)


METAL - INSPECTION REPORT (Page 1)

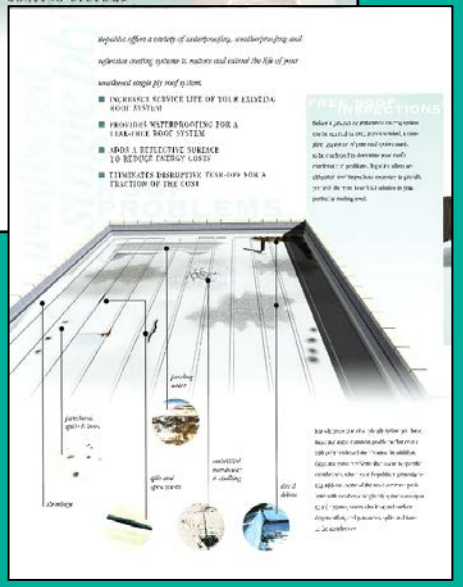








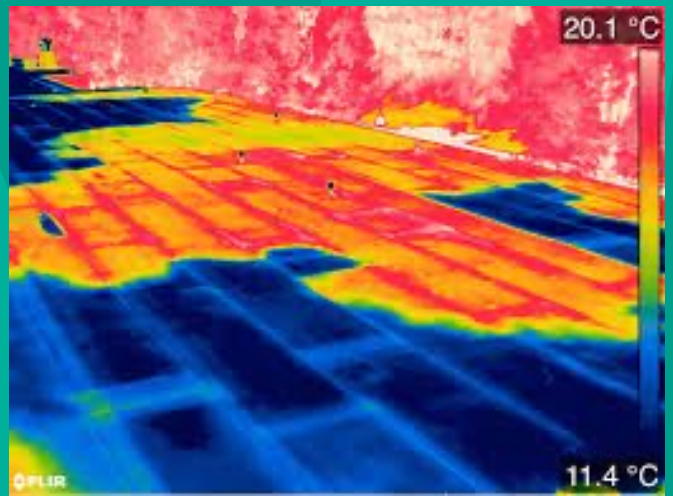


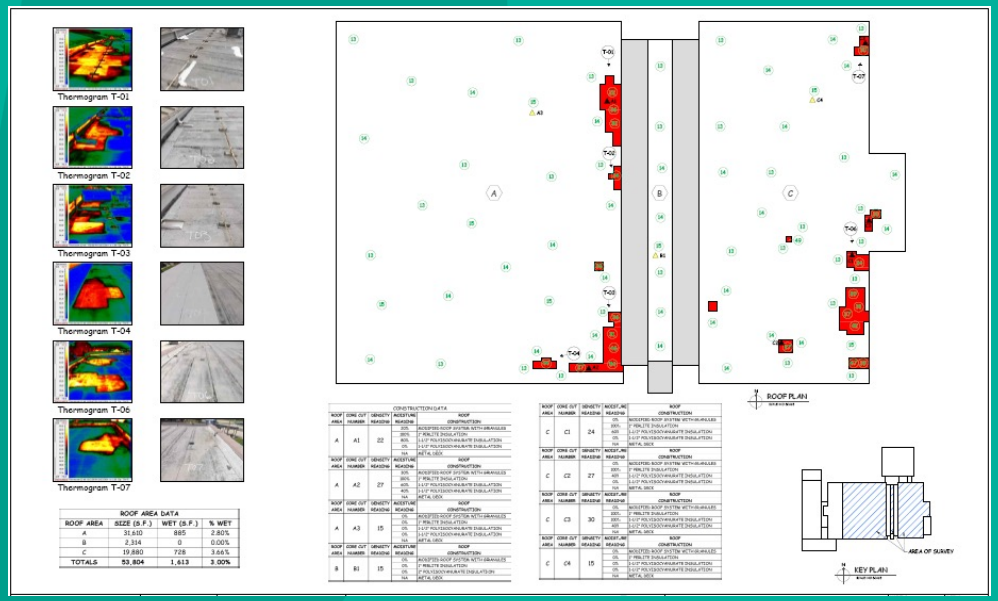


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IR Scan / Moisture Survey

- Required when insulation is present
  - Not needed on direct to deck systems or on concrete and metal restorations
- Critical step in restoration
  - Wet components must be identified and removed prior to install
- Tremco Diagnostic Team
  - Perform IR scan services
  - Or use a local Certified Thermographer





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Kennedy Krieger HQ Alphagrade Restoration



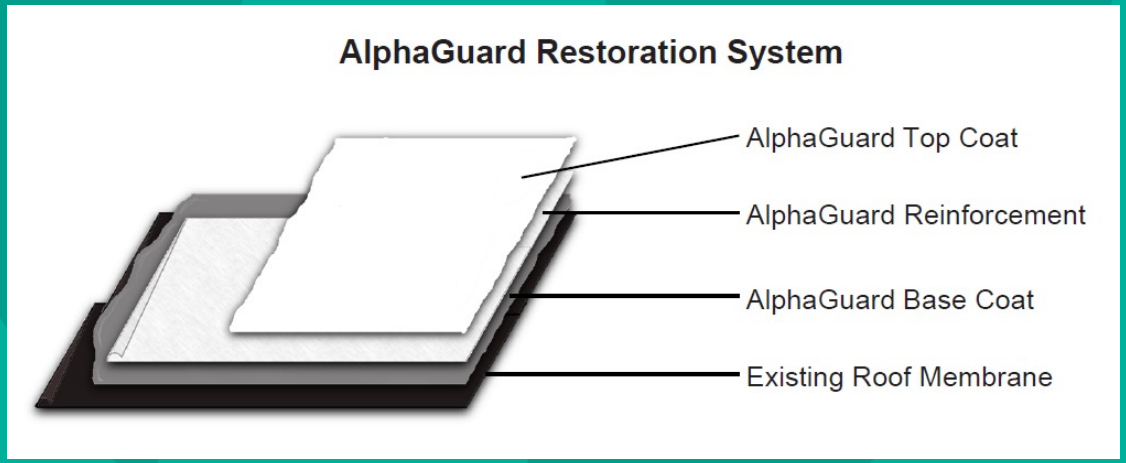


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AlphaGuard MT/MTS & BIO System

- AlphaGuard WB Primer - ½ gals / SQ
- AlphaGuard Base Coat
  - Concrete, Smooth BUR/MB, Single-Ply - 3 gals / SQ
  - Granule Surface MB - 4 gals / SQ
- Embed Reinforcement
  - AlphaGuard Glass Mat
  - Permafab
- AlphaGuard Top Coat - 2 gals / SQ (Extra System is 3 gals/SQ)





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AlphaGuard MT / BIO System

- AlphaGuard Base Coat
  - Coverage
    - Smooth Surface - 3 gals / 100 sq. ft.
    - Granule Surface - 4 gals / 100 sq. ft.
  - Embed Reinforcement
    - AlphaGuard Glass Mat or Permafab

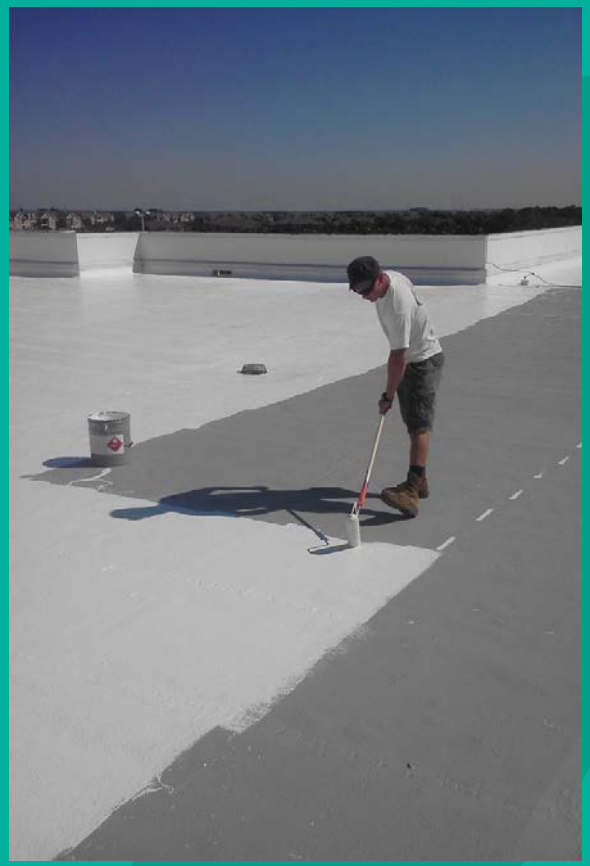




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AlphaGuard MT / BIO System

- AlphaGuard Top Coat
  - Coverage: 2 gal / 100 sq. ft.





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Ford Field – Lions Stadium









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Ford Field – Lions Stadium





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Benjamin Condominiums









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Chateauville Condominium













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Carrollsburg Square









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CNN DC Headquarters





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AU Centennial Hall









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Christ Church Harbor Apartments



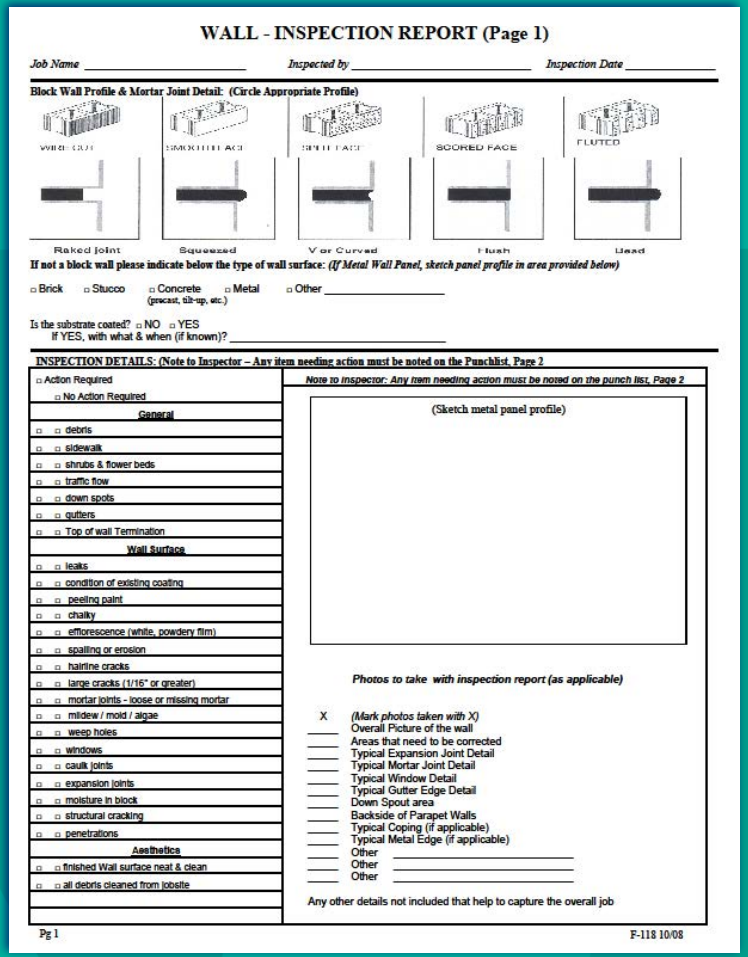






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Wall Restorations



WALL - INSPECTION REPORT (Page 1)

Job Name _____ *Inspected by* _____ *Inspection Date* _____

Block Wall Profile & Mortar Joint Detail: (Circle Appropriate Profile)

If not a block wall please indicate below the type of wall surface: ***(If Metal Wall Panel, sketch panel profile in area provided below)***

▫ Brick ▫ Stucco ▫ Concrete (precast, tilt-up, etc.) ▫ Metal ▫ Other _____

Is the substrate coated? ▫ NO ▫ YES
If YES, with what & when (if known)? _____

INSPECTION DETAILS: (Note to Inspector – Any item needing action must be noted on the Punchlist, Page 2

▫ Action Required
▫ No Action Required

General	
▫ ▫ debris	
▫ ▫ sidewalk	
▫ ▫ shrubs & flower beds	
▫ ▫ traffic flow	
▫ ▫ down spots	
▫ ▫ gutters	
▫ ▫ Top of wall Termination	
Wall Surface	
▫ ▫ leaks	
▫ ▫ condition of existing coating	
▫ ▫ peeling paint	
▫ ▫ chalky	
▫ ▫ efflorescence (white, powdery film)	
▫ ▫ spalling or erosion	
▫ ▫ hairline cracks	
▫ ▫ large cracks (1/16" or greater)	
▫ ▫ mortar joints - loose or missing mortar	
▫ ▫ mildew / mold / algae	
▫ ▫ weep holes	
▫ ▫ windows	
▫ ▫ caulk joints	
▫ ▫ expansion joints	
▫ ▫ moisture in block	
▫ ▫ structural cracking	
▫ ▫ penetrations	
Aesthetics	
▫ ▫ finished Wall surface neat & clean	
▫ ▫ all debris cleaned from jobsite	

Note to Inspector: Any item needing action must be noted on the punch list, Page 2

(Sketch metal panel profile)

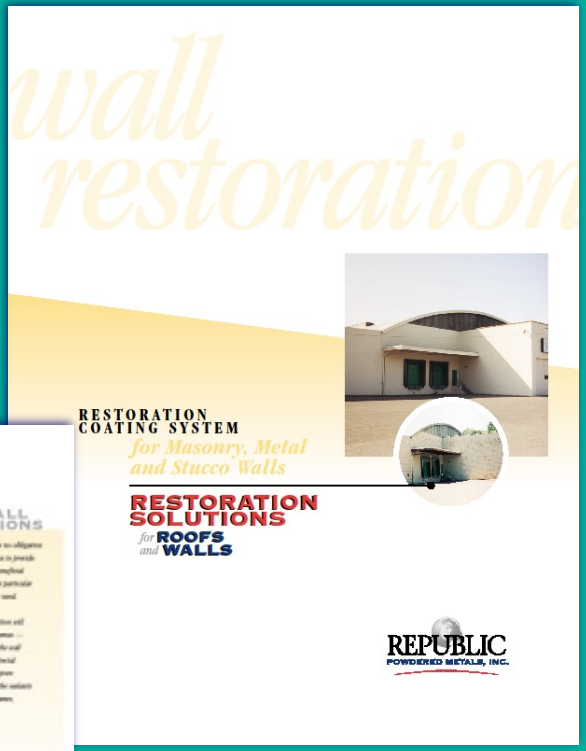
Photos to take with inspection report (as applicable)

X *(Mark photos taken with X)*
____ Overall Picture of the wall
____ Areas that need to be corrected
____ Typical Expansion Joint Detail
____ Typical Mortar Joint Detail
____ Typical Window Detail
____ Typical Gutter Edge Detail
____ Down Spout area
____ Backside of Parapet Walls
____ Typical Coping (if applicable)
____ Typical Metal Edge (if applicable)
____ Other _____
____ Other _____
____ Other _____

Any other details not included that help to capture the overall job

Pg 1 F-118 10/08





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Which substrates are eligible?







Painting vs Coating

- Paint is 5-8 wet mils; 3-5 dry mils
  - Typically lasts 2 -3 years
- Coatings 24 mils wet, 12 dry mils
  - Waterproof
- Labor costs the same
- High tensile
- High perm rating -- breathable film
- Variety of colors

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The Virginian – Stucco facade







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Roofing and Building Maintenance

Providing roofing *and* weatherproofing peace *of* mind

wti

PURE AIR™ CONTROL SERVICES, INC.

Healthy Buildings, Healthy People

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