

REQUEST FOR PROPOSAL

RFP# 26CC-RM1

ADDENDUM 1

Clear Creek Fish Hatchery

Maintenance and Repair

NISQUALLY INDIAN TRIBE

Prepared By:
Nisqually Building Department on behalf of
Nisqually Department of Natural Resources
4820 She-Nah-Num Drive

PROJECT: REQUEST FOR PROPOSAL #RFP 22CC-RM1

ADDENDUM NO: 1

ISSUE DATE: June 24, 2026

BID DATE: 3:00 pm on ~~Wednesday July 1, 2026~~ **Thursday July 9, 2026**

TO: Public

FROM: Elizabeth Glenn, Building Department Sr Project Manager

The following modifications and supplemental information are to be incorporated into qualification submittals. ACKNOWLEDGE RECEIPT OF THIS ADDENDUM ON BID FORM AND REVISE THE CONTRACT DOCUMENTS AS FOLLOWS:

Modifications to Bid Documents

1) RFP EDITS

- A. A bid extension has been requested. Bids will be due Thursday July 9, 2026 at 3:00 pm instead of Wednesday July 1, 2026.

2) NEW ROOF DETAILS

- B. All 'new roof' details indicate a ½" per foot slope. Revise slope to be ¼" per foot.
- C. Provide termination bar at top of new TPO roofing at vertical surfaces.

3) EXISTING BUILDING DRAWINGS

- D. The existing aeration tower drawings have been added. Please refer to sheets 50 and 51.

Bidder Questions and Observations

Questions are listed first, answers are listed as the "A":

- 1) What is the project value we need to use for the Bid Bond?
 - A. Please obtain a bond for a \$500,000 project.
- 2) Confirm the number of salvaged fencing panels at Pond 15.
 - A. Salvage 4 of the 6' fencing panels that do not contain doors.

- 3) There is R-19 batt insulation is held in the top cord of the trusses in the Lower GenSet Building (Sheet 122). Does the insulation and vapor barrier need to be installed at the top cord or the ceiling level? Since the joists are not deep enough I will probably have to use T-Foil with batts. Is it a ventilated ceiling? If not, I will have to use spray foam to the bottom of the deck and pin-on fiberglass batts with a flame barrier below it.
 - A. It should be installed at the top cord. It is not vented; use the spray foam and pin-on fiberglass batts to create R-49 insulation and vapor barrier.
- 4) Lighting upgrades – the scope of work says to assume 100 fixtures, how many lamps are there per fixture?
 - A. Bid should be for 2 lamps per fixture.
- 5) The scope of work calls for the electrical and lighting materials to be retained and reinstalled in the lower roof replacement. Recommend replacement of existing system.
 - A. Agreed. Bids to include removal and disposal of existing electrical in the soffits. Provide and install 30 surface mounted LED fixtures with surface mounted conduit. Fixtures to be Lithonia Lighting 10" Square canopy LED outdoor ceiling light or equivalent.
- 6) Do we need to replace the tank for the generator? The SOW says no electrical upgrades but during the walk through it seemed like a new ATS would be required.
 - A. The tank does not need to be replaced. After closer review, the ATS should be replaced.
- 7) How did the existing generator get into the CMU enclosure? How will we get it out?
 - A. There is a "removable panel" on the north wall of the generator room. It shown on Sheet 93 Floor Plan and there are interior and exterior photos below.



Inside Image



Outside Image

- 8) During the walk through it was observed that the bathrooms contain ceramic tile flooring and wainscotting. Does this get replaced with sheet vinyl?
- A. No. The tile should remain. The entrances of the restrooms do contain approximately 3'-6" x 6' of sheet vinyl and this will need to be replaced.
- 9) The existing columns have grooves. Do we need to replicate this? Are ALL of the columns to be replaced?
- A. The replacement columns should be 8" diameter wood columns without any grooves or decorative markings. All WOOD columns will be replaced except for the one supporting the existing metal roof to be demolished (shown on Sheet 94). This column is actually not shown on the floor plan sheet since it was added later. The steel columns (not to be replaced) are only at the east end of the building, outside of the Thawing Room.
- 10) Does the exposed wood require painting?
- A. Yes. All exposed wood (new and salvaged) to receive a clear wood stain.

Substitution Requests

- 1) Request to use EverGuard TPO mechanically attached system.
- A. This substitution is TENTATIVELY approved pending the availability of specialty colors. The white, tan, and grey listed are not preferred colors. The user would like to install a brick red or a brown color and the scope of work requested that bid prices be based around the specialty color selections.

Attachments

Substitution Request

Sheet 50 – Aeration Structure Plans and Section

Sheet 51 – Aeration Structure Aerator and Support Frame

END OF ADDENDUM



Clear Creek Fish Hatchery Joint Base Lewis-McChord, WA

Prepared for:
JR Swigart Co Inc
1400 Down River Drive
Woodland, WA 98674

GAF Design Services Project # PD-00081253

Commercial Who Is GAF?



About GAF

GAF, a Standard Industries company, is the leading roofing and waterproofing manufacturer in North America. For more than 135 years, GAF has been trusted to protect what matters most for families, business owners and roofing professionals with its innovative solutions and focus on exceptional service. GAF's leadership extends to its commitment to strengthen its communities and industry through investments in career development, sustainable products, and local community resilience.

Building solutions around you

At GAF Commercial, we stand behind our roofing and waterproofing products with industry-leading quality, guarantees, and personal service. From single-ply membranes to restoration coatings solutions, and state-of-the-art digital services to hands-on training, GAF Commercial offers a growing portfolio of durable, easy-to-use products and services centered around the needs of your property and business.

GAF Commercial Certification Programs: A Shared Commitment to Excellence

GAF Commercial has listened to building owners, consultants, and design professionals, and has built elevated Certifications programs around your priorities.

A GAF Commercial Certification* is a reliable indicator that a selected contractor has an established relationship with the manufacturer, and can be trusted to bring the quality workmanship, access to extensive training, and professional experience to help ensure quality installation; as well as access to GAF-backed guarantees you want to protect your investment and long-term reliability of your roof.

Building a more sustainable future around you

More than ever, tenants from all walks of life — businesses, hospitals, students, and more — are looking for sustainable commercial buildings. GAF's products are well-positioned to help meet sustainability goals.

- **Energy Efficiency:** Building products such as GAF polyiso insulation can help reduce the amount of energy used for heating and cooling, which can result in cost savings.[†]
- **UV Reflectivity:** Reducing the effect of UV radiation can help control cooling energy costs, protect building materials, and mitigate the urban heat island effect.[†] GAF offers a wide range of reflective white single-ply membranes, coatings, bright white asphaltic granules, and even pavement coatings for parking lots and playgrounds.
- **Green Building Certifications and Transparency:** GAF can provide third-party product-specific disclosures and certifications such as product-specific Environmental Product Declarations, Health Product Declarations, GREENGUARD Gold Certifications, third-party certified Recycled Content Certifications, and Declare Labels, to meet disclosure requirements and contribute towards earning green building certification.
- For more information on how GAF can help support Sustainability goals, visit gaf.com/sustainability

* Contractors enrolled in GAF certification programs are not employees or agents of GAF, and GAF does not control or otherwise supervise these independent businesses. Contractors may receive benefits, such as loyalty rewards points and discounts on marketing tools from GAF for participating in the program and offering GAF enhanced warranties or guarantees, which require the use of GAF products. Your dealings with a Contractor, and any services they provide to you, are subject to the Contractor Terms of Use available at [GAF.com](https://gaf.com).

[†] Energy cost savings are not guaranteed and the amount of savings may vary based on climate zone, utility rates, radiative properties on roofing products, insulation levels, HVAC equipment efficiency, and other factors.



Commercial Who Is GAF?



Learn More

Building excellence throughout the industry

As a trusted source of roofing science and construction reliability, GAF makes professional training available for the entire commercial roofing industry.

- Our **Building & Roofing Science** team focuses on providing research- and experience-driven insights, from roofing solutions and technical design insights to white papers and continuing education content — as well as opportunities to discuss your specific building challenges with our experts.
- More than a quarter-million roofers have taken advantage of **GAF CARE** (Center for the Advancement of Roofing Excellence) training in person and on demand, making GAF one of the leading promoters of roof installation and maintenance proficiency in the United States.

We're Building Community, too

GAF's social impact initiative, **Community Matters**, is focused on making a positive difference as neighbors and partners in the community by leveraging roofing expertise, resources and products to address the unique needs of each community. Through the GAF Community Contractor Program, for example, more than 500 certified contractors have helped to install roofs for thousands of families in need of decent affordable housing.

The GAF Community Matters initiative has made a significant impact since its inception, helping to repair the roofs of 5,000+ homes, training and educating more than 4,000 students exploring a career in roofing or manufacturing, providing support and resources for those who protect our communities, supporting local non-profit partners to provide critical resources to prepare communities for when disasters strike, and leading initiatives designed to bring people together in shared spaces that help enhance economic and social health.

The entire team is dedicated to supporting your needs, with Territory Managers and Field Services Inspectors based locally, and centralized Technical Design Support teams in place.

Thank you!



Design Services

877-423-7663 option 4, option 3
designservices@gaf.com

We protect what matters most™

GAF

CSI Form 1.5C

SUBSTITUTION REQUEST (During the Bid Period)

Project: Clear Creek Fish Hatchery Maintenance and Repair RFP
#26CC-RM1
Substitution Request Number: _____
From: J.R. Swigart Company., Inc.
To: Nisqually Indian Tribe
Date: 06/17/2026
A/E Project Number: _____
Re: _____
Contract For: _____

Specification Title: Thermoplastic Polyolefin (TPO) Roofing Description: Roofing
Division: 07 Page: 10 Article/Paragraph: _____

Proposed Substitution: Everguard TPO Roofing System
Manufacturer: G A F Address: 1 Campus Drive Parsippany, NJ 07054 Phone: 1-973-628-3000
Trade Name: EverGuard TPO Roofing Model No.: _____

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: Shyne Buenconsejo

Signed by: Shyne Buenconsejo

Firm: J.R. Swigart Company., Inc.

Address: 1400 Down River Dr. Woodland, WA 98674

Telephone: 360-727-7154

A/E's REVIEW AND ACTION

- ☐ Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by: _____ Date: _____

Supporting Data Attached: ☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ _____



We
protect
what
matters
most™

Design Services

June 18, 2026

JR Swigart Co Inc
1400 Down River Drive
Woodland, WA 98674

Subject: Substitution Request

Project: Clear Creek Fish Hatchery
Joint Base Lewis-McChord, WA

Project Identifier: PD-00081253

To Whom It May Concern:

We respectfully request consideration of the following on the above referenced project.

PROPOSED ALTERNATE: GAF® Specification: T-MA-N-I-60.

Products include:

- EverGuard® TPO 60 mil
- EverGuard® TPO Accessories
- EnergyGuard™ Polyiso Insulation
- DensDeck® Prime Roof Board
- Drill-Tec™ Fasteners and Plates
- Diamond Pledge™ NDL Roof Guarantee

The attached data includes product description, specification performance, test data, and specimen Guarantee as necessary for the evaluation of the request; applicable portions of the data are clearly identified. The undersigned states that the following paragraphs, unless modified on attachments, are correct:

1. This proposed alternate can perform equal to or better than the architect's specified system.
2. Maintenance and service products will be available for the proposed substitution.

The undersigned further states that the function, appearance, and quality of the proposed substitution are equal or superior to the specified item. If you have any further questions, please contact GAF Territory Manager Terry Becerra at terry.becerra@gaf.com. Thank you for your consideration, and we look forward to your acknowledgment via email for acceptance.

Sincerely,
George Tobjy
George Tobjy
Senior Design Services Specialist



Durable. Efficient. Proven.

Short for thermoplastic polyolefin, TPO is a highly engineered single-ply roofing membrane that offers excellent performance at a cost-effective price. Heat-welded seams provide superior strength. TPO's long-term heat, UV, and natural fungal resistance*, plus flexibility without need for plasticizers, also make TPO a reliable low-slope roofing system. GAF EverGuard® TPO — which uses the same core formula installed on more than 7 billion square feet of roof tops — has been proven in the field for more than 20 years.

Features:

EverGuard® TPO offers the following:

- Endures 2 to 2.5 times the industry standard, depending on thickness, in the ASTM D6878 weather-resistance test
- Offers guarantees for eligible systems up to 20 years for 45 mil, 25 years for 60 mil, and 30 years for 80 mil†
- Available in 12' rolls to cover more area with fewer rolls and seams
- Allows for heat-welded seams that provide greater seam strength compared to taped and other seams
- Creates a highly reflective and emissive white roof that can help reduce cooling costs‡ and urban heat island effect. (White, Energy Tan and Energy Gray only).

TPO Field Study: As a relatively new roof technology, TPO performance was proven mostly in lab studies. So when real-world TPO systems started approaching 20-year marks, GAF acquired and analyzed EverGuard® TPO samples across the United States. We found 8- to 16-year-old TPO roofs to be performing well and in most

instances, meeting the current ASTM D 6878-19 requirements for new membranes. [Download](#) the study from GAF.com.

Installation:

EverGuard® TPO is suitable for all types of single-ply systems:

- **Mechanically Attached** — for a quick and cost-effective system that can be installed practically year-round.
- **Induction Welded** — can be applied without using adhesives and installed practically year round. Qualifies for the same guarantee length as an adhered system.†
- **Adhered** — can be installed with EverGuard™ TPO Quick Spray, EverGuard™ TPO Quick Spray LV50, EverGuard™ TPO Low VOC Bonding Adhesive, EverGuard™ TPO 3 Square Low VOC Bonding Adhesive, EverGuard™ TPO SBA 1121 Bonding Adhesive, or EverGuard™ WB 181 Bonding Adhesive for the smoothest appearance.

Help keep the membrane clean during installation:

EverGuard® TPO 60 mil and 80 mil smooth and EverGuard® Fleece-back 60 mil membranes are available with MembraneShield Temporary Dirt-Blocking Film — a monolayer protective sheet adhered to select GAF EverGuard® TPO membranes using a water-insoluble acrylic-based adhesive. The film is designed to be left on during installation of the roof and to be removed after installation is completed or up to 90 days after installation. Only EverGuard® TPO labeled "With MembraneShield Temporary Dirt-Blocking Film" includes this feature.

Easy-to-Install Accessories:

EverGuard™ TPO prefabricated accessories save you time and labor, deliver consistent performance, and create a uniform aesthetic.

EverGuard™ TPO Primerless 6" Cover Tape

Self-adhering patent-pending Primerless EverGuard™ TPO 6" Cover Tape is non-reinforced TPO membrane backed with a butyl tape adhesive.



EverGuard™ TPO Split Pourable Sealer Pocket

The low-profile design requires less sealant and can be cut down to size to more tightly fit around penetrations.



EverGuard™ TPO Vent Boot

One standard size of the molded membrane Vent Boot accommodates 1" – 6" (25.4 mm – 152 mm) pipes and conduits. Vent Boots come with stainless steel clamping rings for the top of the penetration.



EverGuard™ TPO Scuppers

Manufactured with TPO-coated metal and unreinforced membrane for use in waterproofing wall scuppers, eliminating unnecessary flashing to waterproof the wall opening.



* Meets ASTM G21. GAF warranties and guarantees do not provide coverage against fungi or other biological growth. Refer to gaf.com for more information on warranty and guarantee coverage and restrictions.

† Additional requirements apply. Contact GAF for more information. See applicable guarantee, available at gaf.com, for complete coverage and restrictions.

‡ Energy cost savings are not guaranteed and the amount of savings may vary based on climate zone, utility rates, radiative properties of roofing products, insulation levels, HVAC equipment, efficiency, and other factors.



See our complete line of time-saving prefabricated TPO Accessories



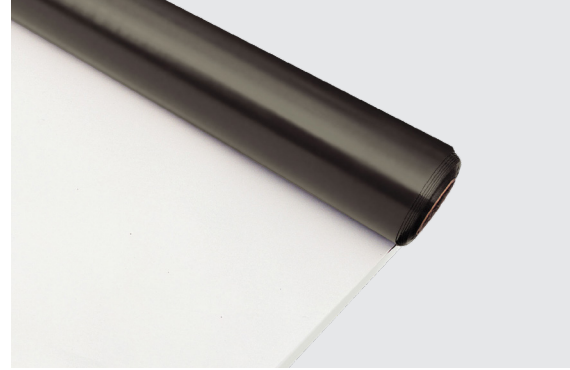
MADE IN THE U.S.A.
WITH DOMESTIC AND IMPORTED MATERIALS.
AMERICAN JOBS IN AMERICAN FACTORIES.

Declare.



We protect what matters most™

GAF



Physical Properties (ASTM D6878)

Type	ASTM Test Method	ASTM D6878 Minimum	EverGuard® TPO Test Values (approx.)*		
			45 mil	60 mil†	80 mil
TPO Nominal Thickness	ASTM D751	0.039"	0.045" (1.14 mm)	0.060" (1.52 mm)	0.080" (2.03 mm)
Thickness over Scrim	ASTM D7635	0.015"	15.8 mil (nominal)	24.1 mil (nominal)	31.4 mil (nominal)
Breaking Strength	ASTM D751 Grab Method MD	220 lbf (978 N)	375 lbf x 330 lbf (1,668 N x 2,188 N)	400 lbf x 360 lbf (1,779 N x 1,601 N)	440 lbf x 390 lbf (1,957 N x 1,735 N)
Elongation at Break	ASTM D751	15%	30%	30%	30%
Tear Strength	ASTM D751 (8" x 8" sample)	55 lbf (245 N)	90 lbf x 120 lbf (400 N x 534 N)	70 lbf x 130 lbf (311 N x 578 N)	100 lbf x 180 lbf (445 N x 801 N)
Brittleness Point	ASTM D2137	-40°F (-40°C)	-40°F (-40°C)	-40°F (-40°C)	-40°F (-40°C)
Ozone Resistance	ASTM D1149	No cracks @ 7x magnification	No visible deterioration @ 7x magnification	No visible deterioration @ 7x magnification	No visible deterioration @ 7x magnification
Properties after Heat Aging	ASTM D573	≤1.5% weight change after 8 weeks @ 275°F (135°C); No cracks @ 7X magnification	Pass	Pass	Pass
Linear Dimensional Change	ASTM D1204	±1%	0.2%	0.4%	0.4%
Water Absorption	ASTM D471	±3%	0.7%	0.7%	0.7%
Factory Seam Strength	ASTM D751	66 lbf (294 N)	115 lbf (512 N) (membrane failure)	145 lbf (645 N) (membrane failure)	155 lbf (689 N) (membrane failure)
Weather Resistance	ASTM G155	10,080 kJ(m²•nm) at 340 nm, No cracks @ 7x magnification	>20,000 kJ(m²•nm) at 340 nm	>25,000 kJ(m²•nm) at 340 nm	>25,000 kJ(m²•nm) at 340 nm

Additional Properties

Properties after Heat Aging	UAWS	Total radiation @ 8400 MJ/m² UV, no cracking	Pass	Pass	Pass
Puncture Resistance	FTM 101 C Method 2031	Not established	>350 lb. (159 kg)	>380 lb. (172 kg)	>380 lb. (172 kg)
Dynamic Puncture Resistance	ASTM D5635	Not established	17.5 J	25 J	37.5 J
Air Permeance	ASTM E2178	Not established	<0.02 L/(s•m²)	<0.02 L/(s•m²)	<0.02 L/(s•m²)
Permeance	ASTM E96	Not established	<0.08 Perms	<0.08 Perms	<0.08 Perms

Available Guarantees	Up to 20 years	Up to 25 years	Up to 30 years
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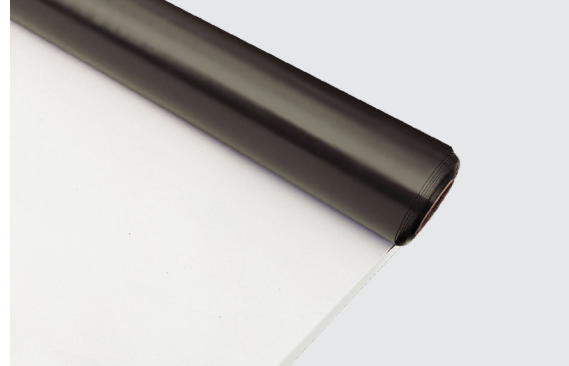
Values stated are approximate and subject to normal manufacturing variation. These values are not guaranteed and are provided solely as a guide.

* White Membrane only

† Certain data is provided in MD (machine direction) x CMD (cross machine direction) format.

Additional requirements apply. Contact GAF for more information. See applicable guarantee, available at gaf.com, for complete coverage and restrictions.

EverGuard®
GAF TPO
 Membrane
 45, 60, 80 mil



Sustainability Ratings/Certifications



The ratings below are subject to CRRC rating program conditions, requirements, and limitations. Visit coolroofs.org for important information and disclaimers about CRRC rating conditions, requirements, and limitations.

Product ID#	Type	Solar Reflectance	Thermal Emittance	Solar Reflectance Index (SRI)
	ASTM Test Method	ASTM C1549	ASTM C1371	ASTM E1980
White 0676-0001	Initial	0.81	0.90	101
	Aged 3 yrs	0.75	0.90	92
Tan 0676-0002	Initial	0.65	0.90	79
	Aged 3 yrs	0.59	0.84	69
Gray 0676-0003	Initial	0.59	0.90	70
	Aged 3 yrs	0.55	0.91	65
Energy Tan 0676-0039	Initial	0.72	0.89	89
	Aged 3 yrs	0.66	0.89	80
Energy Gray 0676-0045	Initial	0.72	0.87	88
	Aged 3 yrs	0.67	0.90	82

LEED Information

Manufacturing Location	Mount Vernon, IN, New Columbia, PA, Cedar City, UT, Gainesville, TX, Valdosta, GA
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Applicable Standards and Approvals

 Classified by UL in accordance with ANSI/UL790, including Class A-rated roofing assemblies. Refer to UL Product iQ for specific assemblies.	 FM Approved (Refer to roofnav.com for actual assemblies).	 Miami-Dade County Product Control Approved
Meets or exceeds the requirements of ASTM D6878	State of Florida Approved	Meets or exceeds the requirements of the Texas Department of Insurance.
Can be used to comply with the Title 24, Part 6, Cool Roof Requirements of the California Code of Regulations. (White only)	ICC-ES Evaluation Report ESR-4676 (Cedar City, UT only)	UL Evaluation Report UL ER1306-01

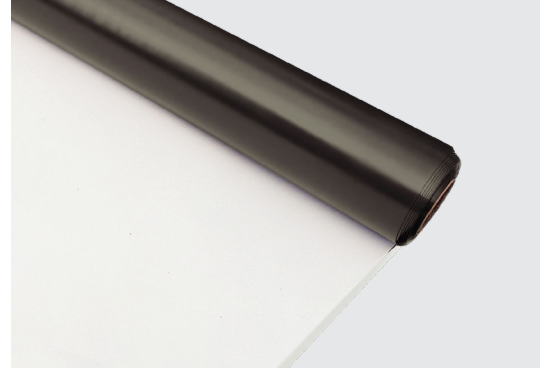
* CRRC Rapid Ratings: Interim laboratory-aged values that simulate naturally aged values and will be replaced by the measured three-year naturally aged values upon completion of the weathering process. Membrane rolls shipped horizontally on pallets, stacked pyramid-style and banded.

For additional information, contact GAF Design Services at 1-877-423-7663 or designservices@gaf.com

We protect what matters most™



EverGuard®
GAF TPO
 Membrane
45, 60, 80 mil



Product Data

Roll Size	45 mil	60 mil	80 mil
12' Roll Size	12' x 100' (3.66 x 30.5 m) 1,200 sq. ft. (111.5 sq.m)	12' x 100' (3.66 x 30.5 m) 1,200 sq. ft. (111.5 sq.m)	12' x 100' (3.66 x 30.5 m) 1,200 sq. ft. (111.5 sq.m)
12' Roll Weight (Average)	307 lb. (139 kg)	386 lb. (175 kg)	504 lb. (228 kg)
10' Roll Size	10' x 100' (3.05 x 30.5 m) 1,000 sq. ft. (92.9 sq.m)	10' x 100' (3.05 x 30.5 m) 1,000 sq. ft. (92.9 sq.m)	10' x 100' (3.05 x 30.5 m) 1,000 sq. ft. (92.9 sq.m)
10' Roll Weight (Average)	256 lb. (116 kg)	322 lb. (146 kg)	420 lb. (191 kg)
8' Roll Size	8' x 100' (2.43 x 30.5 m) 800 sq. ft. (74.3 sq.m)	8' x 100' (2.43 x 30.5 m) 800 sq. ft. (74.3 sq.m)	8' x 100' (2.43 x 30.5 m) 800 sq. ft. (74.3 sq.m)
8' Roll Weight (Average)	204 lb. (93 kg)	257 lb. (117 kg)	336 lb. (152 kg)
6' Roll Size	6' x 100' (1.83 x 30.5 m) 600 sq. ft. (55.7 sq.m)	6' x 100' (1.83 x 30.5 m) 600 sq. ft. (55.7 sq.m)	6' x 100' (1.83 x 30.5 m) 600 sq. ft. (55.7 sq.m)
6' Roll Weight (Average)	153 lb. (70 kg)	194 lb. (88 kg)	252 lb. (114 kg)
5' Roll Size	5' x 100' (1.52 x 30.5 m) 500 sq. ft. (46.5 sq.m)	5' x 100' (1.52 x 30.5 m) 500 sq. ft. (46.5 sq.m)	5' x 100' (1.52 x 30.5 m) 500 sq. ft. (46.5 sq.m)
5' Roll Weight (Average)	128 lb. (58 kg)	162 lb. (74 kg)	210 lb. (95 kg)
Colors	White, Gray, Energy Gray, Slate Gray, Tan, Energy Tan, Desert Tan, Dark Bronze, Dark Brown, Goldenrod, Sky Blue, Regal Blue, Electric Blue, Hartford Green, Patina Green, Regal Red, Terra Cotta.		
Storage	Store on pallets in a clean, dry area at temperatures below 100°F (38°C).		
Safety Warning	Membrane rolls are heavy. Employ at least two people to position and install.		





Description

EverGuard[®] TPO UN-55 Detailing Membrane provides roofing contractors with an easy-to-install factory-built detail. EverGuard[®] TPO UN-55 Detailing Membrane is constructed using GAF's proven, durable EverGuard[®] TPO. This accessory is used as an alternative material for flashing penetrations and corners of base and curb flashing.

- **Cost effective...**
Reliability is built in; made with GAF EverGuard[®] TPO membrane
- **Improved reliability...**
Factory-built accessories reduce risk of leaks and callbacks
- **Improved aesthetics...**
Uniform look

Application

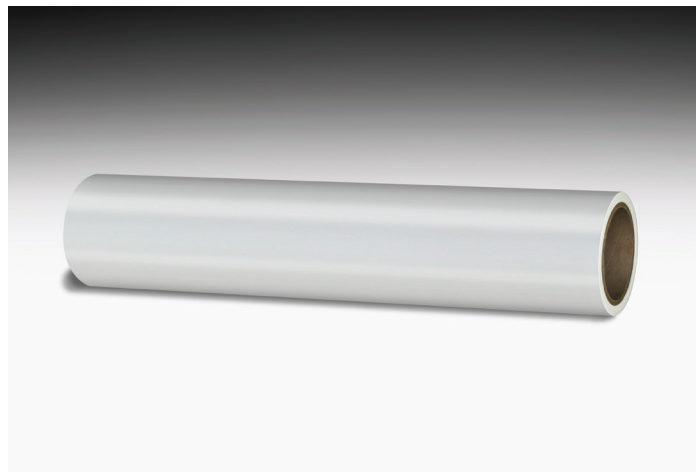
EverGuard[®] TPO UN-55 Detailing Membrane is designed for use with GAF EverGuard[®] TPO and EverGuard[®] Freedom[™] Self-Adhering TPO. UN-55 Detailing Membrane may be installed on:

- EverGuard[®] TPO 45, 60, and 80 mil mechanically attached or fully adhered roofing systems
- EverGuard[®] Freedom[™] TPO 45, 60, and 80 mil self-adhering roofing systems

See published application and specifications manual for detailed instructions.

Product Information

EverGuard[®] TPO UN-55 Detailing Membrane come standard in White, and is also offered in several additional colors. The membrane is unreinforced, so it's easier to work with at difficult flashing details.



UN-55 Detailing Membrane

- Manufactured to strict specifications
- Designed for ease of installation
- Alternative flashing/reinforcement material for penetrations and corners
- Required wherever preformed vent boots cannot be used

SPECIFICATIONS	
Roll Size:	24" x 50' (610 mm x 15.24 m) rolls
Material:	55 mil unreinforced TPO membrane
SHIPPING SPECIFICATIONS	
Weight per roll:	28 lbs (12.7 kg)

Quality You Can
Trust...From
North America's
Largest Roofing
Manufacturer![™]

gaf.com

Visit gaf.com to see our full line of prefabricated accessories!



Description

EverGuard[®] TPO 45 Mil Utility Flashing Membrane provides roofing contractors with an easy-to-install factory-built detail. EverGuard[®] 45 Mil Utility Flashing Membrane is constructed using GAF's proven, durable EverGuard[®] TPO. This accessory is used to strip-in coated metal flanges and at areas that require a reinforced membrane for flashing.

- **Cost effective...**
Reliability is built in
- **Improved reliability...**
Factory-built accessories reduce risk of leaks and callbacks
- **Improved aesthetics...**
Uniform look

Application

EverGuard[®] TPO 45 Mil Utility Flashing Membrane is designed for use with GAF EverGuard[®] TPO and EverGuard[®] Freedom[™] Self-Adhering TPO. 45 Mil Utility Flashing Membrane may be installed on:

- EverGuard[®] TPO 45, 60, and 80 mil mechanically attached or fully adhered roofing systems
- EverGuard[®] Freedom[™] TPO 45, 60, and 80 mil self-adhering roofing systems

See published application and specifications manual for detailed instructions.

Product Information

EverGuard[®] TPO 45 Mil Utility Flashing Membrane comes standard in White. The membrane is EverGuard[®] TPO 45 mil reinforced, so it's durable and versatile.



45 Mil Utility Flashing Membrane

- Manufactured to strict specifications
- Designed for ease of installation
- Used in a variety of flashing details, including stripping-in coated metal

SPECIFICATIONS	
Roll Size:	8" x 100' (203 mm x 30.5 m) rolls
Material:	45 mil reinforced TPO membrane
SHIPPING SPECIFICATIONS	
Weight per roll:	18 lbs (8.2 kg)

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Accessory

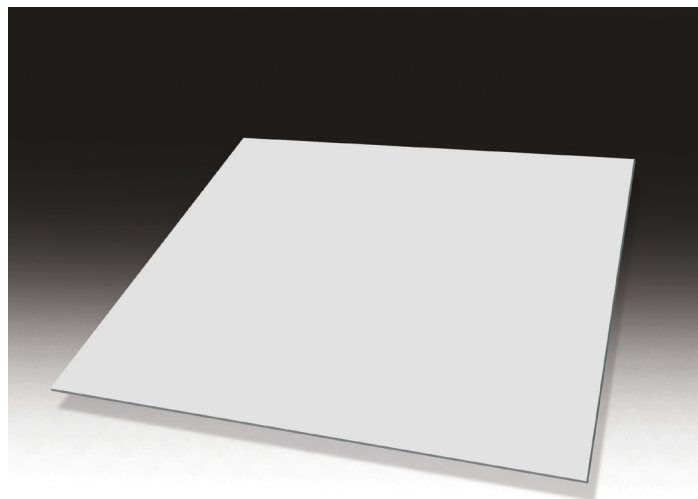
TPO Accessories

Description

EverGuard® TPO Coated Metal Sheets are constructed with TPO membrane laminated to galvanized sheet metal.

Product Information

- 24-gauge steel with a 25-mil thick membrane film
- Cuts and forms like standard sheet metal
- Field and flashing TPO membrane heat welds directly to coated metal
- For metal gravel stop and drip edges, metal base and curb flashing, sealant pans, and scupper sleeves
- Available in both EverGuard® and EverGuard Extreme® TPO



EverGuard® TPO Coated Metal Sheets

- 4' (1.21 m) x 10' (3.05 m) sheets
- 5, 10, or 30 sheets per pallet; 40 lb. (18.14 kg)/sheet
- Also available in (allow 2 – 4 weeks lead time):
 - Coated Aluminum – 23 lb. (10.43 kg)/sheet
 - 25-mil TPO and 40-gauge corrosion-resistant aluminum
 - Coated Stainless – 40 lb. (18.14 kg)/sheet
 - 25-mil TPO and 24-gauge stainless steel
 - 20-gauge Galvanized – 60 lb. (27.22 kg)/sheet
 - 25-mil TPO and 20-gauge galvanized steel

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DRILL-TEC™

Termination Bars

Description

Drill-Tec™ Termination Bars are designed to terminate single-ply membranes at parapet walls and other penetrations. They are made of extruded aluminum with a mill finish or Series #304 stainless steel alloy with pre-punched holes spaced at 6" (152.4 mm) intervals on 10' (3.05 m) long bars, and are secured using Drill-Tec™ #14 Fasteners or Drill-Tec™ Masonry Anchors.

Products and Packaging



Drill-Tec™ Flat Termination Bar – #453D

Material: 6063-T6 Extruded Aluminum

Dimensions: .09" (2.28 mm) thick x 1" (25.4 mm) wide x 10' (3.05 m) length per bar

Holes: 1/4" (6.35 mm) x 3/8" (9.53 mm) pre-punched holes on 6" (152.4 mm) o.c.

Packaging: 50 bars x 10' (3.05 m) pc. per tube. 57 lb. (25.86 kg)



Drill-Tec™ Lip Termination Bar – #453B

Material: 6063-T6 Extruded Aluminum

Dimensions: .09" (2.28 mm) thick x .75" (19 mm) wide x 10' (3.05 m) length per bar

Holes: 1/4" (6.35 mm) x 3/8" (9.53 mm) pre-punched holes on 6" (152.4 mm) o.c.

Packaging: 50 bars x 10' (3.05 m) pc. per tube. 57 lb. (25.86 kg)



Drill-Tec™ Lip SE Termination Bar with Sealant Ledge – #453WE

Material: 6063-T6 Extruded Aluminum

Dimensions: .075" (1.9 mm) thick x 1" (25.4 mm) wide x 10' (3.05 m) length per bar

Holes: 1/4" (6.35 mm) x 3/8" (9.53 mm) pre-punched holes on 6" (152.4 mm) o.c.

Packaging: 50 bars x 10' (3.05 m) pc. per tube. 50 lb. (22.68 kg)



TPO Accessories

Description

EverGuard[®] TPO single-ply roofing system accessories provide roofing contractors an easy-to-install factory-built detail. EverGuard[®] accessories are manufactured using a proprietary formulation designed for use with GAF EverGuard[®] TPO single-ply membranes.

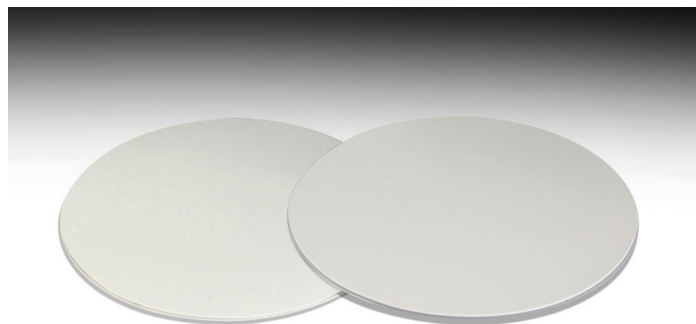
- **Cost Effective...**
Reduces installed costs
- **Improved Reliability...**
Factory-built accessories reduce risk of leaks and callbacks
- **Improved Aesthetics...**
Uniform look

Application

EverGuard[®] TPO accessories are designed for use with GAF EverGuard[®] TPO single-ply membranes. The accessories may be installed on mechanically attached, fully adhered, or RhinoBond[®] EverGuard[®] TPO roofing systems. EverGuard[®] accessories are installed using conventional techniques. See published application and specifications manual for detailed instructions.

Product Information

EverGuard[®] T-Joint Cover Patches are created from a proprietary TPO formulation engineered to work with EverGuard[®] TPO single-ply membranes. EverGuard[®] TPO T-Joint Cover Patches create a membrane seal over T-joints that arise when installing a 60 or 80 mil EverGuard[®] TPO system.



T-Joint Cover Patch

- Conforming membrane seal for use over T-joints in 60 and 80 mil membrane applications
- Designed for ease of welding over T-joints formed when installing an EverGuard[®] TPO system
- EverGuard[®] T-Joint Cover Patches are formed using unreinforced membrane to a nominal 55 mil thickness

SPECIFICATIONS	
Membrane Thickness:	.055" (1.40 mm)
Unit Size:	4" x 4" (102 mm x 102 mm)
SHIPPING SPECIFICATIONS	
Patches per carton:	100
Weight per carton:	3.3 lb. (1.5 kg)
Cartons per pallet:	196
PRODUCT SKUs	
T-Joint Cover Patch White	7712920
T-Joint Cover Patch Gray	7712345
T-Joint Cover Patch Tan	7712820

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EverGuard[®]TPO

SINGLE-PLY ROOFING SYSTEMS

TPO Roll Accessories

Description

EverGuard[®] TPO single-ply roofing system accessories provide roofing contractors an easy-to-install, factory-built detail. EverGuard[®] accessories are constructed from GAF's proven durable EverGuard[®] TPO single-ply reinforced membrane.

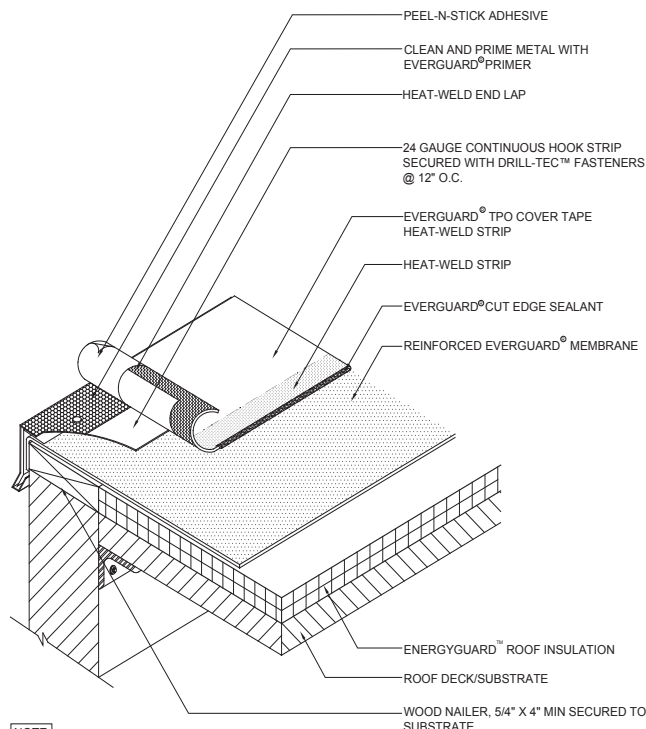
- **Cost effective...**
Reduce installed costs
- **Improved reliability...**
Factory-built accessories reduce risk of leaks and callbacks
- **Improved aesthetics...**
Uniform look

Application

EverGuard[®] TPO Heat-Weldable Cover Tape is constructed from 0.045 inch reinforced TPO membrane; the six-inch-wide tape has a 3-inch self-adhered area and a 3-inch heat-weldable area. The self-adhered membrane area is adhered to primed edge metal while the heat-weldable area is attached to the roofing membrane using the welding machine of choice. EverGuard[®] Heat-Weldable Cover Tape is eligible for inclusion in EverGuard[®] Diamond Pledge[™] Guarantee at up to 20 years of coverage.

Product Information

EverGuard[®] TPO Heat-Weldable Cover Tape is packaged as a hundred foot roll with two rolls in every box.



NOTE

1. TPO COVER TAPE ONLY TO BE USED WITH TPO MEMBRANE SYSTEMS.
2. CLEAN METAL AND MEMBRANE WITH EVERGUARD[®] TPO CLEANER AND LET DRY.
3. PRIME THE METAL ONLY WITH EVERGUARD[®] TPO PRIMER. DO NOT SPILL PRIMER ON WELDED SEAM AREA.
4. HOT-AIR WELD THE MEMBRANE TO MEMBRANE AREA USING EITHER A ROBOTIC OR HAND WELDER TO SPEC.

Heat-Weldable Cover Tape

Specifications

Roll length: 100'

Roll width: 6"

Shipping Specifications

Rolls per carton: 2

Weight of carton: 34 lbs

Cartons per pallet: 27

Code Approvals

- UL Listed Accessory
- Miami-Dade County Approved
- Texas Department of Insurance
- ICC-ES
- State of Florida Approved

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Accessory

Description

EverGuard® TPO 6" Cover Tape provides roofing contractors with an easy-to-install factory-built detail. EverGuard® TPO 6" Cover Tape is constructed from GAF's proven, durable, high-performance EverGuard® TPO.

- **Cost effective...**Reduces installed costs
- **Improved reliability...**Factory-built accessories reduce risk of leaks and callbacks
- **Improved aesthetics...**Uniform look

Application

For use in stripping-in primed galvanized edge metal and to install RapidSeam™ end laps. Using soap and water, clean the entire surface and roof membrane to be covered. Dry the entire area. Wipe area to be primed with a white cloth moistened with EverGuard® TPO Cleaner. Brush or roller-apply the EverGuard® Primer 3" (76 mm) onto each surface, carrying this past the ends 3" (76 mm). Install the EverGuard® TPO 6" Cover Tape over the primer after flash-off and roll-in with a silicone roller.



6" Cover Tape

Product Information

EverGuard® TPO 6" Cover Tape is a 6" (152 mm) wide, non-reinforced TPO membrane backed with a butyl tape adhesive.

Specifications	
Roll Length	100' (30.5 m)
Roll Width	6" (152 mm)
Shipping Specifications	
Rolls per Case	2
Weight per Case	37.4 lb. (16.96 kg)
Cases per Pallet	36
Product SKUs	
White	755A920
Tan	755A820
Gray	755A345

TPO Accessories

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EverGuard® & EverGuard Extreme® RTA (Roof Transition Anchor) Strip Specs

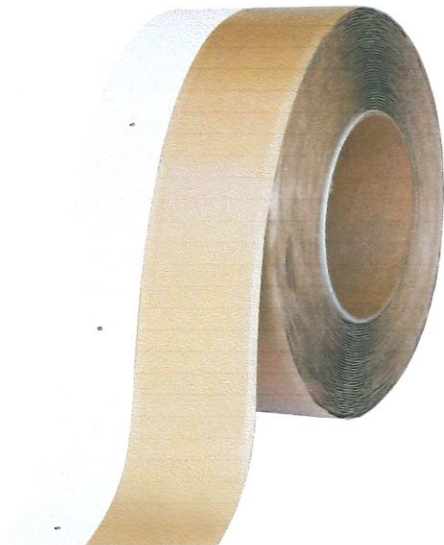
ABOUT	SPECS	DOCS	VIDEOS
(https://www.gaf.com/en-us/products/everguard-and-everguard-extreme-rt-roof-transition-anchor-strip)	(https://www.gaf.com/en-us/products/everguard-and-everguard-extreme-rt-roof-transition-anchor-strip/specifications)	(https://www.gaf.com/en-us/products/everguard-and-everguard-extreme-rt-roof-transition-anchor-strip/documents)	(https://www.gaf.com/en-us/products/everguard-and-everguard-extreme-rt-roof-transition-anchor-strip/videos)

SPECIFICATIONS

WIDTH	6" (152.4 mm)
ROLL SIZE	6' x 100' (1.88 x 30.48 m)
THICKNESS	45-mil
WIDTH: 6" (152.4 mm)	
ROLL SIZE: 6' x 100' (1.88 x 30.48 m)	
THICKNESS: 45-mil	

SHIPPING AND PACKAGING

WEIGHT/BOX	34.9 lb. (15.83 kg)
WEIGHT/BOX: 34.9 lb. (15.83 kg)	





Description

EverGuard[®] TPO single-ply roofing system accessories provide roofing contractors an easy-to-install factory-built detail. EverGuard[®] TPO accessories are manufactured using a proprietary formulation designed for use with GAF's EverGuard[®] TPO single-ply membranes.

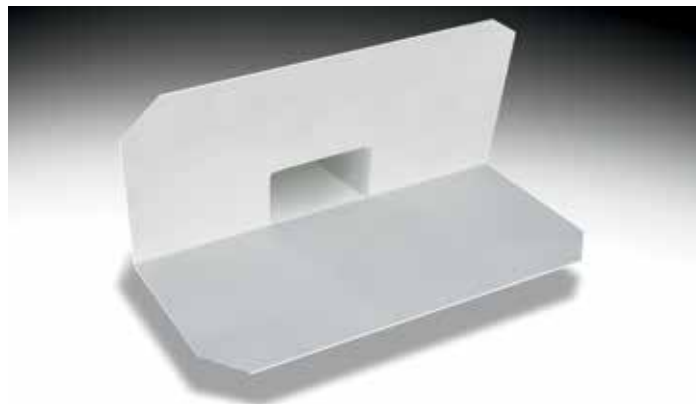
- **Cost effective...**
Reduce installed costs
- **Improved reliability...**
Factory-built accessories reduce risk of leaks and callbacks
- **Improved aesthetics...**
Uniform look

Application

EverGuard[®] TPO accessories are designed for use with GAF EverGuard[®] TPO single-ply membranes. The accessories may be installed on mechanically attached, fully adhered, self-adhered, or Rhino-Bond[®] EverGuard[®] TPO roofing systems. EverGuard[®] accessories are installed using conventional techniques. See published application and specifications manual for detailed instructions.

Product Information

EverGuard[®] Scuppers are manufactured out of TPO-coated metal and 55 mil unreinforced membrane. This product has two standard sizes and is available in white only.



Scupper

- For use in waterproofing wall scuppers
- Eliminates unnecessary flashing to waterproof the wall opening
- Custom sizes available*

SPECIFICATIONS	
Membrane thickness:	.055" (1.40 mm)
Dimensions:	4" x 6" x 12" (102 mm x 152 mm x 305 mm) 8" x 10" x 12" (203 mm x 254 mm x 305 mm)
SHIPPING SPECIFICATIONS	
Scuppers per carton:	2
Weight per carton:	
4" x 6" x 12"	7 lbs. (3.18 kg)
8" x 10" x 12"	12 lbs. (5.44 kg)
Cartons per pallet:	
4" x 6" x 12"	15
8" x 10" x 12"	9
PRODUCT SKUs	
4" x 6" x 12"	85TA920
8" x 10" x 12"	85TB920

*Contact your local representative for details



EverGuard[®]TPO
SINGLE-PLY ROOFING SYSTEMS

Preformed
Accessories

TPO Preformed Accessories

Description

EverGuard[®] TPO single-ply roofing system preformed accessories provide roofing contractors an easy-to-install, factory-built detail. EverGuard[®] preformed accessories are constructed from GAF's proven, durable EverGuard[®] TPO single-ply reinforced membrane.

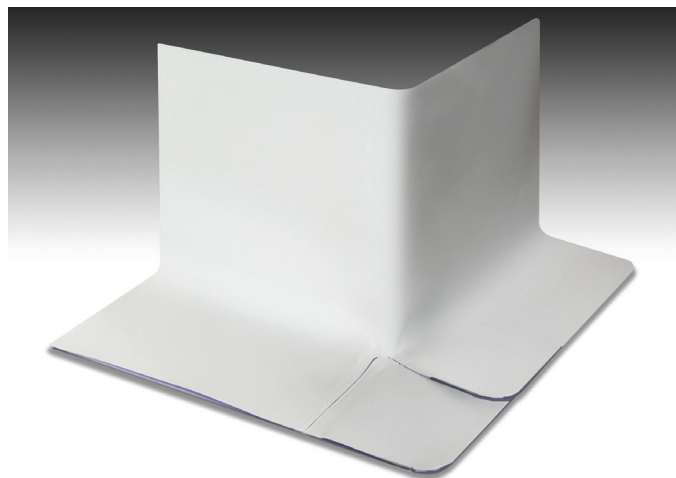
- **Cost effective...**
Reduces installed costs
- **Improved reliability...**
Factory-built accessories reduce risk of leaks and callbacks
- **Improved aesthetics...**
Uniform look

Application

EverGuard[®] TPO Corner Curb Wraps are designed for use with GAF EverGuard[®] TPO single-ply membranes. Corner Curb Wraps may be installed on mechanically attached, fully adhered, or self-adhered EverGuard[®] TPO roofing systems. Corner Curb Wraps are installed using conventional heat-welding techniques.

Product Information

EverGuard[®] Corner Curb Wraps are constructed from EverGuard[®] reinforced 45 mil TPO membrane. Four standard sizes of Corner Curb Wraps are available. Each Corner Curb Wrap is 12" in height and has a 6" base area for welding to field membrane.



Corner Curb Wrap

- Available in 4 standard sizes
- Available in white, gray, and tan
- Custom sizes also available*

SPECIFICATIONS	
Height:	12"
Base:	6"
Length:	13.5", 19.5", 25.5", 31.5"
SHIPPING SPECIFICATIONS	
Curbs per box:	4
Weight per box:	
13.5"	5.6 lbs.
19.5"	7.4 lbs.
25.5"	10.7 lbs.
31.5"	12.5 lbs.
Boxes per pallet:	32
PRODUCT SKUs	
White 13.5"	85F2920
White 19.5"	85F3920
White 25.5"	85F4920
White 31.5"	85F5920

*Contact your local representative for details.

Also Available...



Fluted Corner



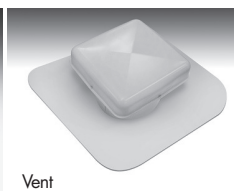
Inside Corner



Vent Boot



Universal Corner



Vent

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TPO Accessories

Description

EverGuard® TPO single-ply roofing system molded accessories provide roofing contractors an easy-to-install factory-built detail. EverGuard® molded accessories are manufactured using a proprietary formulation designed for use with EverGuard® TPO single-ply membranes.

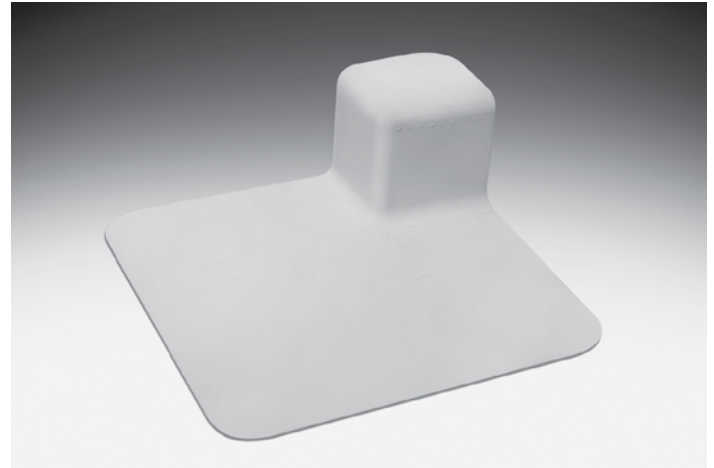
- **Cost effective...**
Reduces installed costs
- **Improved Reliability...**
Factory-built accessories reduce risk of leaks and callbacks
- **Improved aesthetics...**
Uniform look

Application

EverGuard® TPO molded accessories are designed for use with GAF EverGuard® TPO single-ply membranes and EverGuard® Freedom™ TPO self-adhering membranes. The molded accessories may be installed on mechanically attached, fully adhered, or self-adhered EverGuard® TPO roofing systems. EverGuard® molded accessories are installed using conventional techniques. See published application and specifications manual for detailed instructions.

Product Information

EverGuard® Universal Corners accommodate both inside and outside corners of base and curb flashings. Simply cut at markings to produce either an inside or outside corner reinforcement. EverGuard® Universal Corners eliminate the need to inventory two items.



Universal Corner

- One standard size
- Can be cut to accommodate use as either an inside or outside corner reinforcement
- Molded to 60 mil thickness from TPO

SPECIFICATIONS	
Dimensions:	3" x 3" (76 mm x 76 mm) with 6" (152 mm) Flange
Thickness:	0.070" (1.78 mm)
SHIPPING SPECIFICATIONS	
Corners per carton:	20
Weight per carton:	9 lb. (4.08 kg)
Cartons per pallet:	232
PRODUCT SKUs	
White	7730920CU

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Molded
Accessories

TPO Molded Accessories

Description

EverGuard® TPO single-ply roofing system molded accessories provide roofing contractors an easy-to-install, factory-built detail. EverGuard® molded accessories are manufactured using a proprietary formulation designed for use with GAF's EverGuard® TPO single-ply membranes.

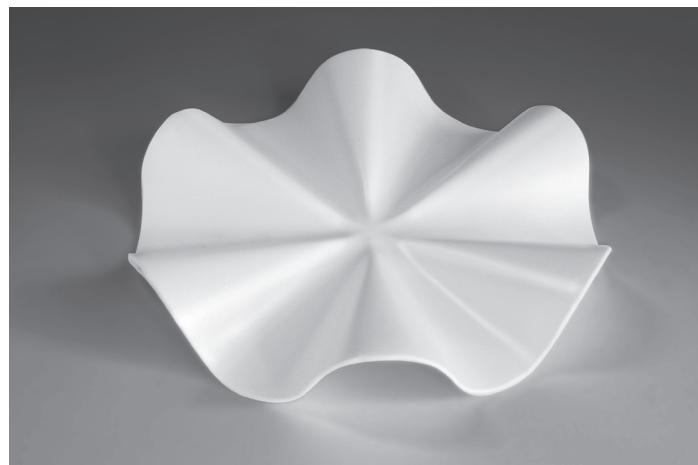
- **Cost effective...**
Reduces installed costs
- **Improved Reliability...**
Factory-built accessories reduce risk of leaks and callbacks
- **Improved aesthetics...**
Uniform look

Application

EverGuard® TPO molded accessories are designed for use with GAF EverGuard® TPO single-ply membranes and EverGuard® Freedom™ TPO self-adhering membranes. The molded accessories may be installed on mechanically attached, fully adhered, or self-adhered EverGuard® TPO roofing systems. EverGuard® molded accessories are installed using conventional techniques. See published application and specifications manual for detailed instructions.

Product Information

EverGuard® Fluted Corners are molded from a proprietary TPO formulation engineered to work with EverGuard® TPO single-ply membranes. Fluted Corners allow for easy flashing of non-uniform corners.

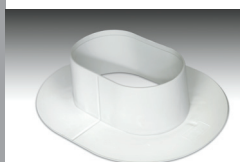


Fluted Corner

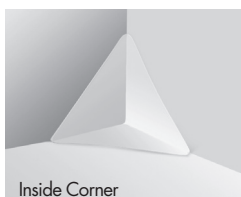
- Manufactured to accommodate imperfect corners
- Designed for ease of welding in tight areas
- Fluted Corners are formed using unreinforced membrane to a nominal 50 mil thickness

SPECIFICATIONS	
Diameter:	8"
Nominal thickness:	.050"
SHIPPING SPECIFICATIONS	
Corners per carton:	20
Weight per carton:	2.5 lbs.
Cartons per pallet:	250
PRODUCT SKUs	
TPO Fluted Corner White	8A00920WA
TPO Fluted Corner Tan	8A00820WA
TPO Fluted Corner Grey	8A00345WA

Also Available...



Pourable Sealer Pocket



Inside Corner



Vent Boot



Universal Corner



Vent

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EverGuard[®]TPO
SINGLE-PLY ROOFING SYSTEMS

Molded
Accessories

TPO Molded Accessories

Description

EverGuard[®] TPO single-ply roofing system molded accessories provide roofing contractors an easy-to-install, factory-built detail. EverGuard[®] molded accessories are manufactured using a proprietary formulation designed for use with GAF's EverGuard[®] TPO single-ply membranes.

- **Cost effective...**
Reduces installed costs
- **Improved reliability...**
Factory-built accessories reduce risk of leaks and callbacks
- **Improved aesthetics...**
Uniform look

Application

EverGuard[®] TPO molded accessories are designed for use with GAF EverGuard[®] TPO single-ply membranes and EverGuard[®] Freedom[™] TPO self-adhering membranes. The molded accessories may be installed on mechanically attached, fully adhered, or self-adhered EverGuard[®] TPO roofing systems. EverGuard[®] molded accessories are installed using conventional techniques. See published application and specifications manual for detailed instructions.

Product Information

EverGuard[®] Vent Boots are molded from a proprietary TPO formulation engineered to work with EverGuard[®] TPO single-ply membranes. Vent Boots allow for fast flashing of Vents and pipes between 1 and 6 inches in diameter.

Also Available...



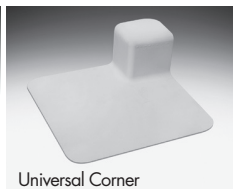
Fluted Corner



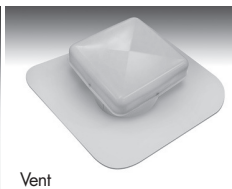
Inside Corner



Pourable Sealer Pocket



Universal Corner



Vent



Vent Boot

- One standard size accommodates most common pipes and conduits
- Supplied with stainless-steel clamping rings

SPECIFICATIONS	
Membrane thickness:	0.075"
For pipe sizes:	1" - 6" dia.
SHIPPING SPECIFICATIONS	
Boots per carton:	6
Weight per carton:	9 lbs.
Cartons per pallet:	54
PRODUCT SKUs	
Vent Boot White	7710920CU

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Description

EverGuard[®] TPO single-ply roofing system preformed accessories provide roofing contractors an easy-to-install, factory-built detail. EverGuard[®] preformed accessories are constructed from GAF's proven, durable EverGuard[®] TPO single-ply reinforced membrane.

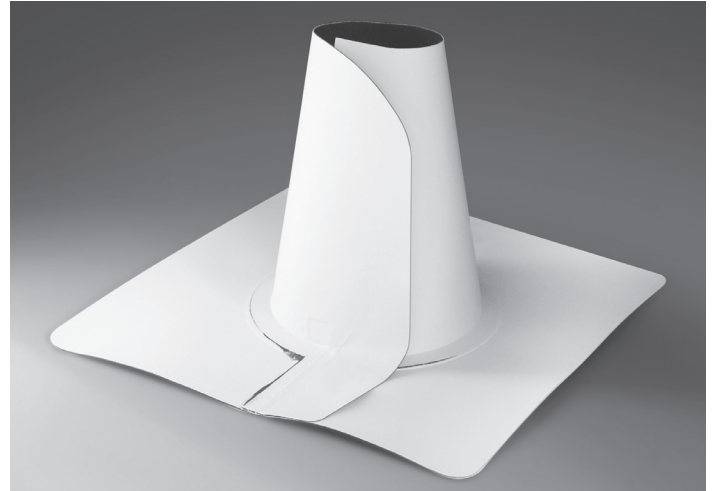
- **Cost effective...**
Reduces installed costs
- **Improved reliability...**
Factory-built accessories reduce risk of leaks and callbacks
- **Improved aesthetics...**
Uniform look

Application

EverGuard[®] TPO preformed accessories are designed for use with GAF EverGuard[®] TPO single-ply membranes. The preformed accessories may be installed on mechanically attached, fully adhered, or self-adhered EverGuard[®] TPO roofing systems. Preformed accessories are installed using conventional techniques. See published application and specifications manual for detailed instructions.

Product Information

EverGuard[®] Split Pipe Boots are constructed from EverGuard[®] reinforced 45 mil membrane. Three standard sizes of Split Pipe Boots are available. Since they are split, they can be wrapped around pipes and conduit where closed boots cannot be used.



Split Pipe Boot

- Available in 3 standard sizes
- Custom sizes also available*

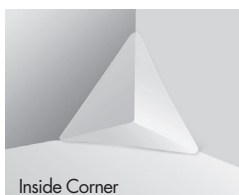
SPECIFICATIONS	ITEM DIMENSIONS/SKU #
For pipe sizes:	1" x 2" 85G1920
	3" x 5" 85G2920
	6" x 8" 85G3920
SHIPPING SPECIFICATIONS	
Boots per box:	6
Weight per box:	
1" – 2"	7.5 lbs.
3" – 5"	7.5 lbs.
6" – 8"	11 lbs.
Boxes per pallet:	
1" – 2"	36
3" – 5"	36
6" – 8"	24

*Contact your local representative for details.

Also Available...



Fluted Corner



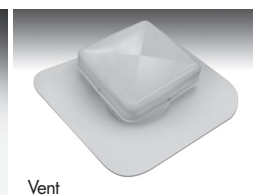
Inside Corner



Preformed Vent Boot



Universal Corner



Vent



Preformed Accessories

TPO Preformed Accessories

Description

EverGuard® TPO single-ply roofing system preformed accessories provide roofing contractors an easy-to-install, factory-built detail. EverGuard® preformed accessories are constructed from GAF's proven, durable EverGuard® TPO single-ply reinforced membrane.

- **Cost effective...**
Reduces installed costs
- **Improved reliability...**
Factory-built accessories reduce risk of leaks and callbacks
- **Improved aesthetics...**
Uniform look

Application

EverGuard® TPO preformed accessories are designed for use with GAF EverGuard® TPO single-ply membranes. The preformed accessories may be installed on mechanically attached, fully adhered, or self-adhered EverGuard® TPO roofing systems. Preformed accessories are installed using conventional techniques. See published application and specifications manual for detailed instructions.

Product Information

EverGuard® Square Tube Wraps are constructed from EverGuard® reinforced 45 mil membrane. Three standard sizes of Square Tube Wrap are available. They are split and can be wrapped around square and rectangular roof structures such as machinery screen supports. A stainless-steel clamp is included to assist in sealing the top edge of the wrap.



Square Tube Wrap

- Available in 3 standard sizes
- Custom sizes also available*
- Includes stainless-steel clamp for top edge seal

SHIPPING SPECIFICATIONS	
Pieces per box:	6
Weight per box:	6.0 lbs. (4" x 4")
	6.5 lbs. (4" x 6")
	7.0 lbs. (6" x 6")
Boxes per pallet:	24
PRODUCT SKUs	
EverGuard® TPO Square Tube Wrap 4" x 4"	8506920
EverGuard® TPO Square Tube Wrap 4" x 6"	8508920
EverGuard® TPO Square Tube Wrap 6" x 6"	8507920

*Contact your local representative for details.

Also Available...



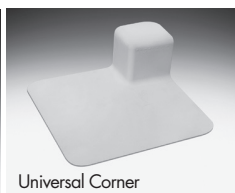
Fluted Corner



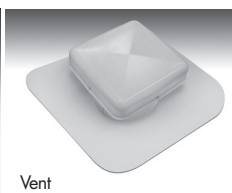
Inside Corner



Preformed Vent Boot



Universal Corner



Vent

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EverGuard[®]TPO
SINGLE-PLY ROOFING SYSTEMS

Molded
Accessories

TPO Molded Accessories

Description

EverGuard[®] TPO single ply roofing system molded accessories provide roofing contractors an easy-to-install, factory-built detail. EverGuard[®] molded accessories are manufactured using a proprietary formulation designed for use with GAF's EverGuard[®] TPO single-ply membranes.

- **Cost effective...**
Reduces installed costs by up to 25%
- **Improved Reliability...**
Factory built accessories reduce risk of leaks and callbacks
- **Improved aesthetics...**
Uniform look

Application

EverGuard[®] TPO molded accessories are designed for use with GAF EverGuard[®] TPO single-ply membranes and EverGuard[®] Freedom[™] TPO self-adhering membranes. The molded accessories may be installed on mechanically attached, fully adhered or self-adhered EverGuard[®] TPO roofing systems. EverGuard[®] molded accessories are installed using conventional techniques. See published application and specifications manual for detailed instructions.

Product Information

EverGuard[®] pourable sealer pockets are molded from a proprietary TPO formulation engineered to work with EverGuard[®] TPO single-ply membranes. They eliminate the need for contractors to fabricate a pitch pocket in the field.



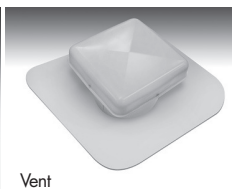
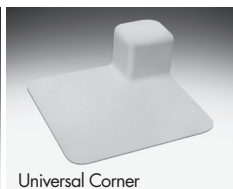
Pourable Sealer Pocket

- Perfect for irregular roof penetrations
- Fill with EverGuard[®] TPO pourable sealer or TOPCOAT[®] FlexSeal[™] for the perfect finish
- Available in custom colors and sizes*

SPECIFICATIONS	
Total Width of Pocket	12"
Total Length of Pocket	15 1/4"
Height of Walls	4"
SHIPPING SPECIFICATIONS	
Box Size	28" x 12" x 12"
Pieces per box	6
Weight per box	6.5 lbs
Boxes per pallet	16
Pallet Size	42" x 42"
PRODUCT SKUs	
White	8002920CU

* Contact your local representative for details.

Also Available...



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EverGuard[®]TPO
SINGLE-PLY ROOFING SYSTEMS

Coated
Accessories

TPO Coated Accessories

Description

EverGuard[®] TPO single-ply roofing system coated metal drain accessory provides roofing contractors an easy-to-install, factory-built detail. EverGuard[®] TPO coated drains are constructed using GAF's proven, durable EverGuard[®] TPO coated onto a durable drain unit.

- **Cost effective...** Reduces installed costs by up to 25%
- **Improved Reliability...** Factory-built accessories reduce risk of leaks and callbacks
- **Improved Aesthetics...** Uniform look

Application

EverGuard[®] TPO coated accessories are designed for use with GAF EverGuard[®] TPO single-ply membranes and EverGuard[®] Freedom[™] TPO self-adhering membranes. The factory-coated accessories may be installed on mechanically attached, fully adhered, or self-adhered EverGuard[®] TPO roofing systems. See current application and specifications manual for detailed instructions.

Product Information

EverGuard[®] TPO coated drains are constructed from aluminum and coated with a weldable TPO compound. TPO membrane can be heat welded directly to the drain body, resulting in a strong, secure installation. Each drain is fitted with a BlueSeal[®] mechanical drain seal for a secure, tight seal into the building drain system.



TPO Coated Metal Drain

Available Sizes

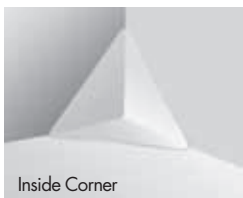
EverGuard[®] TPO Coated Metal Drains are available in two sizes:

- 3" drain will fit into a 3" ID pipe
- 4" drain will fit into a 4" ID pipe

Also Available...



Fluted Corner



Inside Corner



Vent Boot



Universal Corner



Vent

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TPO Preflashed Accessories

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EverGuard® TPO SINGLE-PLY ROOFING SYSTEMS

Preflashed Accessories

Description

EverGuard® TPO single-ply roofing system preflashed accessories provide roofing contractors an easy-to-install, factory-built detail. EverGuard® preflashed accessories are constructed using GAF's proven, durable EverGuard® TPO single-ply detailing membrane.

- **Cost effective...** Reduces installed costs by up to 25%
- **Improved Reliability...** Factory-built accessories reduce risk of leaks and callbacks
- **Improved aesthetics...** Uniform look

Application

EverGuard® TPO preflashed accessories are designed for use with GAF EverGuard® TPO single-ply membranes and EverGuard® Freedom™ TPO self-adhering membranes. The preflashed accessories may be installed on mechanically attached, fully adhered, or self-adhered EverGuard® TPO roofing systems. Preflashed accessories are installed using conventional techniques. See published application and specifications manual for detailed instructions.

Product Information

EverGuard® preflashed TPO Drains are constructed from spun aluminum and preflashed using EverGuard® 55 mil detailing membrane. No special tools needed for installation. Wide range of sizes allows for proper fit into any size roofing drain. All hardware, including strainer and gravel guard, are included with drains. EMSEAL watertight expanding seal for retrofit drains is included, making plumbing tie-in quick and easy.

Also Available...



TPO Drain

Recommended Uses

- Whole-sized Drains (2", 3", 4", 5" or 6") can be used on new construction and directly attached to new plumbing with a flexible coupling (not included).
- Half-inch-sized Drains (1 1/2", 2 1/2", 3 1/2", 4 1/2", and 5 1/2") can be used as retrofit drains by ordering a drain sized 1/2" smaller than the drain pipe being fitted (for a 4" drain pipe, use a 3 1/2" drain).



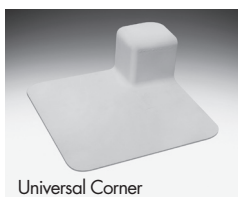
Fluted Corner



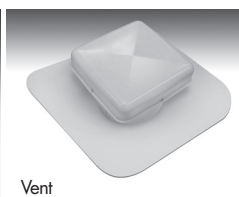
Inside Corner



Vent Boot



Universal Corner



Vent



EVERGUARD® TPO

Description

EverGuard® TPO Walkway Roll provides roofing contractors with an easy-to-install factory-built detail. EverGuard® TPO Walkway Rolls are manufactured using proven, durable EverGuard® TPO as well as recycled TPO.

Durable...

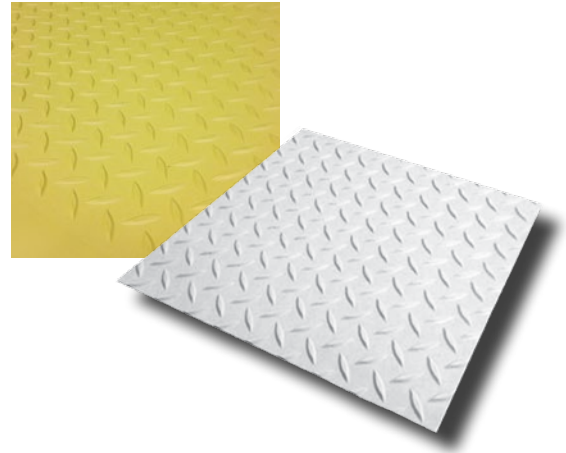
The EverGuard® TPO Walkway Roll is designed to protect the membrane in areas exposed to rooftop traffic for maintenance access or other uses. These areas include HVAC, roof hatches, access doors, etc. The EverGuard® TPO Walkway Roll is required on a GAF-warranted roofing system.

Options...

In addition to a standard Gray TPO Walkway Roll, GAF has recently introduced Yellow Walkway Rolls to the market. These "safety" Yellow Walkway Rolls are great for sensitive areas of a roof, such as perimeters, around skylights, or in areas of low clearance.

Product Highlights

- Great traction with diamond plate design
- Walkways have smooth edges for easy weldability
- Manufactured using recycled TPO with excellent weatherability built in
- Comes in standard Gray and Yellow
- 34" x 50' (864 mm x 15.24 m) (diamond pattern measures 30" [762 mm] with 2" [51 mm] smooth on both edges)
- 125 mil thickness
- 75 lb. (34.02 kg) per roll (nominal)



Walkway Roll

Application

Heat weld – Heat-weld EverGuard® TPO Walkway Roll to the roof membrane surface continuously around the walkway roll perimeter.

- Walkway rolls must be spaced 6" (152 mm) to allow for drainage.

Tape – EverGuard® TPO Walkway Roll may also be installed with TPO primer and 3" (76 mm) seam tape.

- First, roll or brush the TPO primer on the back of the TPO roll along the edges and down the middle length of the roll.
- Clean and prime the roof membrane where the roll will be installed.
- Install tape to the back of the roll where cleaned (edges and middle) and roll-in with a silicone hand roller.
- Remove the release paper and install the taped rolls directly onto the roof membrane. Secure the rolls by rolling into place.
- Walkway rolls must be spaced 6" (152 mm) to allow for drainage.

EverGuard® TPO accessories are designed for use with GAF EverGuard® TPO single-ply membranes and with EverGuard Extreme® and EverGuard® Freedom™ TPO self-adhering membranes. The factory-coated accessories may be installed on mechanically attached, fully adhered, or self-adhered EverGuard® TPO roofing systems.

See published application and specifications manual for detailed instructions.

Visit gaf.com to see our full line of prefabricated accessories!

TPO Accessories

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Product Data Sheet

EverGuard® Sealants

Description

GAF EverGuard® single-ply roofing systems include a full line of EverGuard®/GAF sealants.

Note: EverGuard®/GAF sealants are specially formulated for specific applications: be sure to use the correct sealant for the application. The following EverGuard®/GAF sealants are available:

Product	Description	Benefit/Application	Units Per Carton	Carton Weight
EverGuard® Water Block	One-part butyl-based high-viscosity sealant	• Suitable for sealing between flashing membrane and substrate surface behind exposed termination bars • Suitable for sealing between roofing membrane and drain flanges	25 10.5 oz. cartridges	13 lbs.
EverGuard® TPO & PVC Cut Edge Sealant	Sealant used at any non-factory edge of TPO and PVC membrane	• Used to seal non-factory edges (cut edges) as a final step in reinforced membrane installation • PVC Cut Edge with PVC • TPO Cut Edge with TPO	• 12 pints/ctn. • 100 lineal feet per pint @ 1/8" diameter bead.	12 lbs.

Storage:

- Store sealants in original containers on pallets or shelving in a dry area.
- Store sealants in 50-100°F conditioned area away from open flame or other combustion source.
- Do not allow to freeze.



EVERGUARD® TPO Accessory



TPO Primer

Description

Used for preparing metal and membrane for application of cover tape, and preparing membrane and pourable sealer pockets to apply EverGuard® One-Part or Two-Part Pourable Sealant.

Application

Pourable Sealant Pocket

Prior to filling the TPO Pourable Sealant Pocket, the inside vertical pan sides must be primed with GAF TPO Primer. Fill the base of the pans with non-shrink grout and top with a minimum 2" thickness of GAF One-Part or Two-Part Pourable Sealant.

Cover Tape

When installing Cover Tape, apply EverGuard® TPO Primer or EverGuard® Low VOC TPO Primer to both the metal and membrane with a 3" roller. Allow primer to flash off before applying tape.

HW Cover Tape

When installing Heat Weld Cover tape, apply EverGuard® TPO Primer or EverGuard® Low VOC TPO Primer to the metal only with a 3" roller. Allow the primer to flash off prior to installing HW Cover Tape.

SPECIFICATIONS	
Can size	1 gallon
Cans per carton	6
Product SKUs:	
TPO Primer	755B
Low VOC TPO Primer	755D

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EVERGUARD® TPO Accessory

TPO Accessories

Description

Used to clean exposed or contaminated seams prior to heat welding to remove any residual soap or revitalize aged membranes.

Application

- Do not use on "bag fresh" material that has been exposed for less than 12 hours unless it has been contaminated.
- Follow the guidance below for cleaning TPO:

Light Contamination — Membrane that has been exposed overnight or up to a few days to airborne debris, foot traffic, dew, or light precipitation can usually be cleaned with a white cloth moistened with EverGuard® TPO Cleaner. Be sure to wait for solvent to flash off prior to welding.

Dirt-Based Contamination — Membrane that is dirt encrusted will require the use of a low-residue cleaner, such as Formula 409®, and a mildly abrasive scrubbing pad to remove the dirt. This must be followed by cleaning with a white cloth moistened with EverGuard® TPO Cleaner. Be sure to wait for solvent to flash off prior to welding.



Seam Cleaner

Exposure-Based Contamination

— Membrane that is weathered or oxidized will require the use of EverGuard® TPO Cleaner and a mildly abrasive scrubbing pad to remove the weathered/oxidized top surface layer. This must be followed by cleaning with a white cloth moistened with EverGuard® TPO Cleaner. Unexposed membrane left in inventory for a year or more may need to be cleaned as instructed above. Be sure to wait for solvent to flash off prior to welding.

- VOC Content of 861 grams/liter.

SPECIFICATIONS	
Can size:	1 gallon
Cans per carton:	4
Weight per case:	33 lb. (14.96 kg)
Cases per pallet:	48
Product SKU	7793

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FlexSeal™ Sealant – Data Sheet

PRODUCT DESCRIPTION

FlexSeal™ Sealant is a solvent-based synthetic, flowable, elastomeric sealant that can be applied to many low-slope roof surfaces. It is durable and helps protect the substrate against damaging UV exposure.

APPROVED SUBSTRATES

FlexSeal™ Sealant can be used on metal, structural concrete, copper, SBS, APP, EPDM, BUR, PVC and TPO. It can also be used with GAF Premium Fabric on penetrations, curbs, and seams. Do not use over silicone substrates.

PACKAGING SIZES

10 oz (0.3 liter) tube
1-gallon (3.8 liter) bucket
5-gallon (18.9 liter) pail

STORAGE & SHELF LIFE

PRODUCT STORAGE TEMPERATURE: 50°F – 90°F (10°C – 32°C) Do NOT allow coating to freeze.

SHELF LIFE: 24 months from date of manufacture in unopened containers, if stored properly in a clean and well-ventilated area.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION: Roof must have positive drainage, and be clean and dry with no trapped moisture. Priming of substrate is recommended and may be required. See *Liquid-Applied Roofing Manual* at gaf.com.

MIXING: Mix prior to use as required. Do NOT attempt to thin or self-tint.

APPLICATION: Apply evenly by trowel or brush. Apply 2.0 gallons per 200 linear feet with a 6-inch width (7.6 L/61 lm with a 152 mm width). If fabric embedment is required, apply an additional top layer of flashing at 2.0 gallons per 200 linear feet (7.6 L/61 lm). Total finished dry mil thickness must be at least 21 mils without fabric and 48 mils with fabric.

Application Note: Cool temperatures and high humidity will slow cure. It is not a structural component and it is not intended to bridge large voids. Overapplication may result in slumping, dripping, or unsightly appearance. For Application Questions: Contact GAF Technical Services at 1-877-423-7663 or visit gaf.com

LIMITATIONS & PRECAUTIONS

APPLICATION AIR TEMPERATURE: Min. 50°F (10°C). Do NOT heat containers.

APPLICATION SURFACE TEMPERATURE: 50°F (10°C) and rising. Care should be taken when coating surfaces above 120°F. Contact GAF Design Services if you have application questions.

Do NOT apply if rain, dew, fog, heavy moisture, condensation, or freezing temperatures are in the 8-hour forecast to ensure proper cure. Cool temperatures/high humidity may slow curing.

SAFETY & HANDLING

For specific information regarding safe handling of this material, please refer to the Safety Data Sheet (SDS).

CLEAN UP

Use mineral spirits or xylene to thoroughly flush equipment.

For application questions, contact GAF Design Services at **1-877-GAF-ROOF**

We protect what matters most™





FlexSeal™ Sealant – Data Sheet

PHYSICAL PROPERTIES (TAS 139-95)

Table 1: Physical Property Requirements			
Type	ASTM Test Method	ASTM Minimum Values	Test Values ¹
Volume Solids	ASTM D2697	≥50%	66%
Weight Solids	ASTM D1644	≥60%	77%
Initial Percent Elongation	ASTM D412	Min. 100% @73°F	300%
Initial Tensile Strength	ASTM D412	Min. 200 psi @73°F	485 psi (3344 kPa)
Weight per Gallon/Liter	ASTM D1475	-	7.9 lbs (0.94 kg)
VOC	-	-	<300 g/L
Dry Time	ASTM D 5895	-	Approximately 24 hours
Flash Point	-	103°F (39°C)	Flash Point
Standard Colors	-	Black and White	

1. Values are approximate and subject to normal manufacturing variations. These values are not guaranteed and are provided solely as a guide.

APPROVALS

State of Florida Approved
Miami-Dade Product Control Approved





Sealant

Sealants
TPO

Description

EverGuard® One-Part Pourable Sealant is a one-part, moisture-cure, self-leveling sealant designed for use in pitch pans on single-ply roof systems. Since moisture-cure sealants cure with moisture in the air, it is suitable for application in damp and cold climates, as well as in dry climates. EverGuard® One-Part Pourable Sealant is solvent free, contains no isocyanates, and will not shrink upon curing. It does not "outgas" or bubble on damp surfaces as urethane sealants often do. EverGuard® One-Part Pourable Sealant is elastomeric and has excellent adhesion to most construction materials. It has a low durometer, which accommodates greater movement in penetration seals than typical urethane sealants.

Use

EverGuard® One-Part Pourable Sealant is designed for use with the EverGuard® Pourable Sealer Pocket on new and existing TPO roofs to seal irregular penetrations, such as metal frames, wires, and pipes. Note: EverGuard® TPO Primer is required to prime the TPO surface before use.

Advantages

- Solvent free – less than 25 g/L VOC
- 100% solid – will not shrink
- No outgassing on damp surfaces
- Self-leveling provides a smooth, professional finished look
- Good color stability
- 20-minute skinover time
- Paintable within 24 hours
- No special tools or mixing required
- Application at temperatures as low as 30°F (-1°C)



One-Part Pourable Sealant

TYPICAL PROPERTIES	
VOC (max)	<25 grams/liter
Service Temperature	-40°F (-40°C) to 200°F (93.3°C)
Full Cure	Rate of cure is dependent on atmospheric conditions. Curing proceeds at a rate of ¼" (6.35 mm) a week at 70°F (22°C) and 50% relative humidity. Lower temperature and humidity will slow the rate of cure. Higher temperature and humidity will accelerate rate of cure. Depths of more than 2" (51 mm) will cure through in 2 to 3 months.
Skin Time	Approximately 20 minutes at 70°F (22°C) and 50% relative humidity.
Shrinkage	0%
Tensile Strength	146 lbf (217 kg/m)
Elongation	300% ± 25%
Density	8.9 ± .2 lb. per gallon (1.068 g/ml)

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EverGuard[®]TPO SINGLE-PLY ROOFING SYSTEMS

Approvals & Certification

- Conforms to OTC Rule for Sealants and Caulks
- Meets requirements of California Regulations: CARB, BAAQMD, and SCAQMD
- Conforms to California Proposition 65
- Conforms to USDA Requirements for Non-food Contact

Environmental Standards

LEED[®] 2.2 for New Construction and Major Renovations:

- Low-Emitting Materials (Section 4.1) 1 Point

NAHB Model Green Home Building Guidelines:

- 5 Global Impact Points

VOC Content:

- Less than 25 grams/liter ASTM D2369 EPA Method 24 (tested at 240°F [115°C])

Application Temperature

EverGuard[®] One-Part Pourable Sealant can be applied at temperatures as low as 30°F (-1°C). In these colder temperatures, it is recommended to keep the material stored inside or in a truck before using.

Application Instructions

Surface should be clean, dry, and free of any loose materials. Remove all previously applied caulk, mastic, cement, and other contaminants from penetrations with a cleaner. All roof deck voids are to be filled with FlexSeal[™] Sealant. Prime all surfaces with EverGuard[®] TPO Primer. Allow primer to dry prior to applying EverGuard[®] One-Part Pourable Sealant. Fill the EverGuard[®] Pourable Sealer Pocket with EverGuard[®] One-Part Pourable Sealant to the top of the pocket, ensuring that all voids are filled. See GAF's published application and specifications manual for complete details.

Clean-up

Wet adhesive can be removed using a solvent, such as alcohol. Cured EverGuard[®] One-Part Pourable Sealant can be removed by abrading or scraping the substrate.

Cure Time

EverGuard[®] One-Part Pourable Sealant is a moisture-cure sealant. Rate of cure is dependent on atmospheric conditions. Curing proceeds at a rate of ¼" (6 mm) a week at 70°F (22°C) and 50% relative humidity. Lower temperature and humidity will slow the rate of cure. Higher temperature and humidity will accelerate

rate of cure. Depths of more than 2" (51 mm) will cure through in 2 to 3 months.

Packaging

- 0.53 gallon (2L) pouch
- 4 pouches/case
- 48 cases/pallet

Color

White

Storage

- Recommended storage is between 40°F–90°F (4°C–32.2°C). Store unopened containers in a cool, dry area. Protect unopened containers from water, heat, and direct sunlight. Although EverGuard[®] One-Part Pourable Sealant will not freeze, it is recommended to store indoors before using to ensure easy gunning and leveling.

Shelf Life

One year from date of manufacture when stored in recommended conditions. Elevated temperature and high relative humidity may significantly reduce shelf life.

Precautions

- Do not apply at temperatures below 30°F (-1°C).
- Do not use on TPO without EverGuard[®] TPO Primer.
- Do not use on Hypalon[®] membranes.
- Do not install if rain is anticipated within 4 hours.
- Do not use in areas subject to continuous water immersion.
- Do not use in areas where prolonged chemical exposure is anticipated.
- Do not prime bonding surfaces with asphalt primer.
- Use TOPCOAT[®] FlexSeal[™] Elastomeric Sealant as a "night sealant" around the base of the penetration. Do not use petroleum-based solvents, such as mineral spirits, for cleaning purposes.
- Maintain sealant at room temperature before applying to ensure easy gunning and leveling.
- Test and evaluate to ensure adequate adhesion.
- Dry all visible and standing water prior to applying sealant.

For Application Questions

Contact GAF Technical Services at 1-800-766-3411 or visit gaf.com.

Description

Used to clean exposed or contaminated seams prior to heat welding to remove any residual soap or revitalize aged membranes.

Application

- Do not use on “bag fresh” material that has been exposed for less than 12 hours unless it has been contaminated.
- Follow the guidance below for cleaning TPO:

Light Contamination — Membrane that has been exposed overnight or up to a few days to airborne debris, foot traffic, dew, or light precipitation can usually be cleaned with a white cloth moistened with EverGuard® TPO Cleanweld Conditioner. Be sure to wait for solvent to flash off prior to welding.

Dirt-Based Contamination — Membrane that is dirt encrusted will require the use of a low-residue cleaner, such as Formula 409®, and a mildly abrasive scrubbing pad to remove the dirt. This must be followed by cleaning with a white cloth moistened with EverGuard® TPO Cleanweld Conditioner. Be sure to wait for solvent to flash off prior to welding.



Membrane Conditioner

Exposure-Based Contamination — Membrane that is weathered or oxidized will require the use of EverGuard® TPO Cleanweld Conditioner and a mildly abrasive scrubbing pad to remove the weathered/oxidized top surface layer. This must be followed by cleaning with a white cloth moistened with EverGuard® TPO Cleanweld Conditioner. Unexposed membrane left in inventory for a year or more may need to be cleaned as instructed above. Be sure to wait for solvent to flash off prior to welding.

- VOC Content of 50 grams/liter.

SPECIFICATIONS	
Can size:	1 gallon
Cans per carton:	6
Weight per case:	52.56 lb. (23.84 kg)
Cases per pallet:	48
Product SKU	7789000WP

Flat Polyiso with GRF Facers



Description:

EnergyGuard™ Polyiso Insulation made of glass fiber reinforced cellulosic facers (GRF) bonded to a core of polyisocyanurate foam.

Features and Benefits:

- Versatile — approved component in single ply, BUR and modified bitumen systems, with a variety of attachment methods: mechanically attached, fully adhered, loose laid and ballasted
- Approved for direct application to steel decks
- High insulation value — polyiso insulation has the highest R-value per inch compared to any other type of non-polyiso insulation of equivalent thickness
- Because of its light weight, this material is easy to handle on the jobsite and installs quickly. Easy cutting in the field provides the installer with simplified fabricating on the roof deck
- Excellent dimensional stability, high moisture resistance and low water permeability

Panel Characteristics:

- Available in a variety of thicknesses from 1.0" (25.4 mm) to 4.6" (116 mm) to best suit your specifications
- Available in 4' x 4' (1.22 m x 1.22 m) and 4' x 8' (1.22 m x 2.44 m) boards
- Flute Fill and other special sizes are available upon request
- Other EnergyGuard™ products available — tapered, CGF facer and non-halogenated. See individual data sheets for more information

Codes & Compliance:

- Meets the requirements of ASTM C1289 Type II, Class 1, Grade 2 (20 psi) and also available in Grade 3 (25 psi)
- FM Approved - refer to RoofNav.com for approved assemblies
- Classified by UL in accordance with ANSI/UL 1256, 790 and 263. Refer to UL Product iQ for specific assemblies
- UL Evaluation Report UL ER1306-03
- Miami-Dade County Product Control Approved
- State of Florida Approved
- Meets the requirements of CAN/ULC 704.1, Type 2, Class 3 or Type 3, Class 3†
- UL (Canada) Evaluation Report ULC ER 1306†
- For additional information, contact GAF at 1-800-766-3411 or designservices@gaf.com

EnergyGuard™ Polyiso Insulation Thermal Values:

Size*	R-Value**	Max Flute Span (in)
1.0" (25.4 mm)	5.7	2 5/8" (66.7 mm)
1.2" (30.5 mm)	6.8	2 5/8" (66.7 mm)
1.5" (38.1 mm)	8.6	4 3/8" (111 mm)
1.75" (44.5 mm)	10.0	4 3/8" (111 mm)
2.0" (51 mm)	11.4	4 3/8" (111 mm)
2.2" (59 mm)	12.6	4 3/8" (111 mm)
2.3" (58 mm)	13.2	4 3/8" (111 mm)
2.5" (64 mm)	14.4	4 3/8" (111 mm)
2.6" (66 mm)	15.0	4 3/8" (111 mm)
2.8" (71 mm)	16.2	4 3/8" (111 mm)
3.0" (76 mm)	17.4	4 3/8" (111 mm)
3.2" (81 mm)	18.6	4 3/8" (111 mm)
3.5" (89 mm)	20.5	4 3/8" (111 mm)
3.7" (94 mm)	21.7	4 3/8" (111 mm)
4.0" (102 mm)	23.6	4 3/8" (111 mm)
4.3" (109 mm)	25.4	4 3/8" (111 mm)
4.5" (114 mm)	26.6	4 3/8" (111 mm)
4.6" (117 mm)	27.1	4 3/8" (111 mm)

* Other thicknesses available upon request.

** Long Term Thermal Resistance Values provide a 15-year time weighted average in accordance with CAN/ULC 770.

For optimal roof performance and to prevent thermal bridging GAF recommends installing two layers of Polyiso with staggered joints.



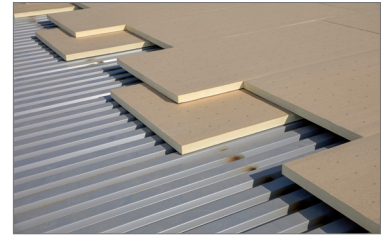
† GAF manufacturing locations in NC, PR, and CC.



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Sustainability:

- Manufactured with EPA-compliant blowing agents containing no CFCs or HCFCs; has zero ozone depletion potential (ODP) and negligible global warming potential (GWP)
- GREENGUARD Gold
- Green Circle Certified® for recycled content
- Potential LEED® Credits for Polyiso Use
- Environmental Product Declaration (EPD)



Typical Physical Property Data:

Property	Test Method	Values
Compressive Strength	ASTM D1621	Grade 2 – 20 psi min (138 kPa) Grade 3 – 25 psi min (172 kPa)
Dimensional Stability Change (length + width) ²	ASTM D2126	< 2% linear change
Flexural Strength	ASTM C203	40 psi min (275 kPa)
Tensile Strength	ASTM C209	500 psf min (24 kPa)
Water Absorption (percent by volume)	ASTM C209	1.5% max
Water Vapor Permeance	ASTM E96 Procedure A	< 1.5 perm max (85.8ng/Pa•s•m ²)
Service Temperature		-100° to 250 °F (-73.3° to 121.1 °C)
Flame Spread Index ³	ASTM E84	< 75 ¹
Smoke Developed Index	ASTM E84	< 200 ¹

¹ Foam Core

² Stated dimensional stability tolerance: Board thickness shall not diminish by more than 4% max.

³ These numerical ratings are not intended to reflect hazards presented by these or any other material under actual fire conditions.

Warnings and Limitations:

- EnergyGuard™ Polyiso Insulation is a non-structural, non load-bearing material. It is not designed for direct traffic usage unless adequately protected.
- EnergyGuard™ Polyiso Insulation should be stored protected from the elements. Bundle wrap is not for use as waterproofing for boards. No more insulation should be installed than can be completely covered with roofing on the same day.
- As unprotected polyisocyanurate will burn, fire safety precautions should be observed wherever insulation products are used.
- Direct mopping or torching of modified bitumen roofing or direct mopping of built-up roofing (BUR) to EnergyGuard™ Polyiso Insulation is not approved. A properly installed cover board or base sheet must be used.
- Refer to PIMA Technical Bulletin No. 109 Storage and Handling Recommendations for Polyiso Roof Insulation at www.polyiso.org
- Refer to the application specifications in the current membrane manufacturer's application and specifications manual for proper installation procedures.



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We protect what matters most™





Description

DensDeck® Prime Roof Board is a reinforced gypsum panel with a moisture-resistant core and coated glass mat facers. DensDeck® Prime Roof Board face and back mat provide compatibility, uniform application, and consistent performance with most roofing adhesives.¹ DensDeck® Prime Roof Board provides a high level of moisture resistance through the use of GP's patented EONIC™ Technology, and enhances the overall wind resistance² of an assembly while also increasing the hail and puncture resistance of the membrane as compared with systems with no cover board.² For full application instructions, please consult the applicable specification manual for the system being installed (available at gaf.com).

Primary Uses

DensDeck® Prime Roof Board is compatible with many types of roofing products, including: modified asphalt, single-ply, metal systems, re-cover board, polyisocyanurate, and polystyrene insulation. DensDeck® Prime Roof Board can also be used as a form board for poured gypsum concrete decks in roof applications as well as a substrate for spray foam roofing systems. DensDeck® Prime Roof Board with thicknesses of 1/2" (12.7 mm) and 5/8" (15.9 mm) may also be used in vertical applications as a backer-board or liner for the roof side of parapet walls.

DensDeck® Prime Roof Board may also allow the bonding of hot-mopped, cold mastic, and torched modified bitumen directly to the surface. For information on this application, contact GAF Technical Support at 1-877-GAF-ROOF or technicalquestions@gaf.com.

Standards and Codes Approvals

DensDeck® Prime Roof Boards are manufactured to meet ASTM C1177 and have the following approvals:

- State of Florida Approved
- Miami-Dade County Product Control Approved

Recommendations and Limitations

DensDeck® Prime Roof Boards are manufactured for use in a properly designed roof system installed in accordance with good roofing practices. The selection of DensDeck® Prime Roof Board as a roofing component in any system or assembly is the responsibility of the design professional. For full application instructions, please visit gaf.com for the applicable specification manual for the system being installed.

The need for a separator sheet between the DensDeck® Prime Roof Board and the roofing membrane must also be determined by the design professional.

Confirm any priming requirements with GAF prior to installation. When applying solvent-based adhesives or primers, allow sufficient time for the solvent to flash off to avoid damage to roofing components. DensDeck® Prime Roof Boards should not be subjected to abnormal or excessive loads or foot traffic, such as, but not limited to, use on plaza decks or under steel-wheeled equipment that may fracture or damage the panels. Take appropriate measures to protect the roofing system from physical damage (for example, laying plywood or OSB when heavy equipment will be moved across the roof).

When using DensDeck® Prime Roof Boards for hot-mopped applications, a maximum asphalt application temperature of 425°F (218°C) – 450°F (232°C) is recommended. Application temperatures above these recommended temperatures may adversely affect roof system performance. For full application instructions, please consult the applicable specification manual for the system being installed, available at gaf.com. When using DensDeck® Prime Roof Board as a substrate for torch applications, ensure that the product is dry and that the proper torching and safety requirements are followed by professionals experienced in torch applications. Limit the heat to the DensDeck® Prime Roof Board. Maintain a majority of the torch flame directly on the roll.

Installation conditions such as inclement weather conditions, dew, application temperatures outside of the designated installation temperature range, and improper installation techniques may cause adverse effects in roofing systems.

Handling and Use – CAUTION

WARNING: Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. Observe good industrial hygiene practices. Use only in well-ventilated areas. Wear appropriate NIOSH/MSHA approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking. See the product Safety Data Sheet for more information.

Moisture Management

DensDeck® Prime Roof Boards, like other components used in roofing systems, must be protected from exposure to moisture before, during, and after installation.

Remove the plastic packaging from all DensDeck® Prime Roof Board immediately upon receipt of delivery. Failure to remove the plastic packaging may result in entrapment of condensation or moisture inside the packaging. DensDeck® Prime Roof Board stored outside must be stored level and off the ground and protected by a breathable waterproof covering. DensDeck® Prime Roof Board must be covered with roofing material the same day it's installed.

Although DensDeck® Prime Roof Boards are engineered with fiberglass facings and high-density gypsum cores, the presence of free moisture can have a detrimental effect on the performance of the product and the installation of roofing membranes.

For example, hot asphalt applications can blister; torched modified bitumen may not properly bond; and adhesives for single-ply membranes may not dry and bond properly. Moisture accumulation may also significantly decrease wind uplift and vertical pull resistance in the system or assembly.

(continued on next page)



¹ GAF warranties and guarantees provide coverage for wind speeds up to 55 miles per hour only. See applicable guarantee or warranty, available at gaf.com, for complete coverage and restrictions. Enhanced wind coverage may be available for purchase for eligible systems. Contact GAF for more information.

² GAF warranties and guarantees do not provide coverage against hail except where additional hail or puncture resistance coverage is purchased on eligible jobs. Refer to gaf.com for more information on warranty and guarantee coverage and restrictions.



Fire Resistance Classifications

DensDeck® Prime Roof Boards are excellent fire barriers over combustible and noncombustible roof decks, including steel decks.

UL 790 Classification. DensDeck® Prime Roof Boards have been classified by Underwriters Laboratories LLC (UL) for use as a fire barrier over combustible and noncombustible decks in accordance with the ANSI/UL 790 and ULC CAN-S114 test standard. The UL classification includes a comprehensive Class A, B, or C rating. For additional information concerning the UL 790 classification, see UL Product IQ at productiq.ulprospector.com/.

UL 1256 Classification. DensDeck® Prime Roof Boards have also been classified by UL in roof deck constructions for internal (under deck) fire exposure in accordance with the ANSI/UL 1256 Steiner Tunnel test. For additional information concerning the UL 1256 classification, consult UL Product IQ at productiq.ulprospector.com/.

FM Class 1 Approvals. DensDeck® Prime Roof Boards are included in numerous roofing assemblies with a Factory Mutual (FM) Class 1 fire rating. 1/4" (6.4 mm) DensDeck® Prime Roof Boards have passed testing under the FM Calorimeter Standard 4450 and have been approved by FM as such for insulated steel

deck roofs when installed according to the conditions identified by FM. For more information concerning FM Approvals and FM Class 1 assemblies with DensDeck® Prime Roof Boards, consult FM or see roofnav.com for specific assemblies.

Type X. 5/8" (15.9 mm) DensDeck® Prime Roof Boards are manufactured to meet the "Type X" requirements of ASTM C1177 for increased fire resistance beyond regular gypsum board.

UL Fire Resistance Ratings. 5/8" (15.9 mm) DensDeck® Prime Roof Boards are designated as Type DD by UL and included in assembly designs investigated by UL for hourly fire resistance ratings. 5/8" (15.9 mm) DensDeck® Prime Roof Boards may also replace any unclassified 5/8" (15.9 mm) gypsum board in an assembly in the UL Fire Resistance Directory under the prefix "P."

Flame spread and smoke developed. When tested in accordance with ASTM E84, DensDeck® Prime Roof Boards had Flame Spread 0, Smoke Developed 0.

Wind Uplift

DensDeck® Prime Roof Boards are included in numerous assemblies evaluated by FM or other independent laboratories for wind uplift performance. For information concerning such assemblies, please visit roofnav.com.

PHYSICAL PROPERTIES			
PROPERTIES	1/4" (6.4 mm)	1/2" (12.7 mm)	5/8" (15.9 mm)
Thickness, nominal	1/4" (6.4 mm) ± 1/16" (1.6 mm)	1/2" (12.7 mm) ± 1/32" (0.8 mm)	5/8" (15.9 mm) ± 1/32" (0.8 mm)
Width, standard	4' (1,219 mm) ± 1/8" (3 mm)	4' (1,219 mm) ± 1/8" (3 mm)	4' (1,219 mm) ± 1/8" (3 mm)
Length, standard	4' (1,219 mm) & 8' (2,438 mm) ± 1/4" (6.4 mm)	4' (1,219 mm) & 8' (2,438 mm) ± 1/4" (6.4 mm)	4' (1,219 mm) 8' (2,438 mm) ± 1/4" (6.4 mm)
Weight nominal, lb./sq. ft. (kg/m²)	1.2 (5.9)	2.0 (9.8)	2.5 (12.2)
Surfacing	Fiberglass mat with non-asphaltic coating	Fiberglass mat with non-asphaltic coating	Fiberglass mat with non-asphaltic coating
Flexural Strength ¹ , parallel, lbf. min. (N)	≥40 (178)	≥80 (356)	≥100 (444)
Flute Spanability ²	2 5/8" (66.7 mm)	5" (127 mm)	8" (203 mm)
Permeance ³ , perms (ng/Pa•S•m²)	>30 (>1710)	>23 (>1300)	>17 (>970)
R-Value ⁴ , ft²•°F•hr/BTU (m²•K/W)	.28	.56	.67
Lineal Variation with Change in Temp., in/in °F (mm/mm/°C)	8.5 x 10 ⁻⁵ (15.3 x 10 ⁻⁶)	8.5 x 10 ⁻⁵ (15.3 x 10 ⁻⁶)	8.5 x 10 ⁻⁵ (15.3 x 10 ⁻⁶)
Lineal Variation with Change in Moisture	6.25 x 10 ⁻⁵	6.25 x 10 ⁻⁵	6.25 x 10 ⁻⁵
Water Absorption ⁵ , % max	5	5	5
Compressive Strength ⁵ , psi nominal	900	900	900
Surface Water Absorption, grams, nominal ¹	1.0	1.0	1.0
Flame Spread, Smoke Developed (ASTM E84, UL 723, CAN/ULC-S102)	0/0	0/0	0/0
Bending Radius	4' (1,219 mm)	6' (1,829 mm)	8' (2,438 mm)

¹ Tested in accordance with ASTM C473 method B.

² Tested in accordance with ASTM E661.

³ Tested in accordance with ASTM E96 (dry cup method).

⁴ Tested in accordance with ASTM C518 (heat flow meter).

⁵ Specified values per ASTM C1177.

⁶ Tested in accordance with ASTM C473.

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DRILL-TEC™ #12 FASTENER

Description

Drill-Tec™ #12 Fastener is designed to secure insulation to steel (18 ga. – 24 ga.) and wood. It is available in lengths from 1-5/8" – 8" (41.3 mm – 203 mm). The Drill-Tec™ Standard #12 Roofing Fastener is Factory Mutual and Miami-Dade County Product Control approved.

Application

The Drill-Tec™ #12 Fastener must penetrate steel decks a minimum of 3/4" (19.1 mm), wood plank decks a minimum of 1" (25.4 mm), and 1/2" (12.7 mm) through the underside for plywood decks. Using a screw gun, drive the fastener until the screw head is seated securely; with very rigid insulation boards, watch for the plate to dimple.

Note: Be careful not to overdrive the fastener and fracture the skin of the insulation. Fastener must be tight enough so that the plate doesn't turn.

For steel decks, Factory Mutual requires that the fastener penetrate the deck at the top flute.

To speed installation, this fastener is also available as a labor saving assembled screw and plate. See Drill-Tec ASAP® 3S.

Code Approvals



Advantages

- Heavier shank & thread diameters than most "standard" roofing fasteners.
- Deep buttress thread for high pull-out resistance.
- Extra sharp drill point for quick installation in new or reroof applications.
- Available with Hex Head or #3 Phillips Truss Head.

Plates & Accessories

- Use 3" (76 mm) steel or plastic plates, depending upon the application.
- For best installation results, use a variable speed 0-2500 rpm screw gun.

Specifications

The fastener will be a Drill-Tec™ #12 Fastener with a thread diameter of .220"

(5.58 mm). The fastener must have 12.5 buttress threads per inch (per 25.4 mm) and a 30° drill point. Also, the fastener must be heat treated per specification OMG-1. The Drill-Tec™ #12 Fastener will be used with a Factory Mutual-approved, Drill-Tec™ Round Pressure Plate or Pressure Bar. The fastener must be Factory Mutual approved.

Coating Requirement

The fastener will be coated with the Drill-Tec™ CR-10 corrosion-resistant coating. When subjected to 30 Kesternich cycles (DIN 50018), the fastener must show less than 15% red rust and surpass Factory Mutual Approval Standard 4470.

Note: ASAP® is a registered trademark of OMG.

Product Data

Thread Diameter	.220" (5.58 mm)
Head Diameter	
Truss Head	.435" (11.04 mm)
Hex Head	.390" (9.91 mm)
Head Style	#3 Phillips Truss Head* 1/4" (6.35 mm) Hex Head*
Coating	CR-10

*#3 Phillips bit or Hex Head drive included in each bucket.

Length	Thread Length	Packaging (Bucket)	Weight
1 5/8" (41.3mm)	Full	1,000	12 lb (5.44 kg)
2 1/4" (57.1 mm)	Full	1,000	15 lb (7.71 kg)
3" (76 mm)	Full	1,000	24 lb (10.89 kg)
4" (102 mm)	3" (76 mm)	1,000	28 lb (12.70 kg)
5" (127 mm)	3" (76 mm)	1,000	35 lb (15.88 kg)
6" (152 mm)	4" (102 mm)	1,000	40 lb (18.14 kg)
7" (178 mm)	4" (102 mm)	1,000	48 lb (21.77 kg)
8" (203 mm)	4" (102 mm)	1,000	50 lb (22.68 kg)

Note: All sizes are nominal.

Drill-Tec™
#12 Fastener



Example: Drill-Tec™ #12 Fastener Length Selection Procedure

1. If applicable, determine thickness of existing roofing material.
2. Add thickness of new insulation.
3. Add 3/4" (19.1 mm) minimum fastener penetration.
4. If odd size requirement, always size up in length, not down. See example below.

Example

Existing Roofing:	1 3/4" (44.4 mm)
New Insulation:	+ 1/2" (12.7 mm)
Min. Embedment:	+ 3/4" (19.1 mm)
Total Fastening Range:	= 3" (76 mm)

The proper #12 Fastener for the example is 3 1/4" (82.6 mm).

Use this format to calculate correct fastener size:

Existing Roof:	
New Insulation:	+
Min. Embedment:	+ 3/4" (19.1 mm)
Total Fastening Range:	=

The proper #12 Fastener is:



DRILL-TEC™ #14 FASTENER

Description

Drill-Tec™ #14 Fastener is designed to secure insulation to heavy steel decks (18 ga.– 20 ga.), wood decks, and structural concrete. It is available in lengths from 1-1/4" – 16" (31.8 – 406 mm). The Drill-Tec™ #14 Fastener is Factory Mutual and Miami-Dade County Product Control approved.

Application

The Drill-Tec™ #14 Fastener must penetrate steel decks a minimum of 3/4" (19.1 mm), wood plank decks a minimum of 1" (25.4 mm), and 1/2" (12.7 mm) through the underside for plywood decks. The Drill-Tec™ #14 Fastener requires a minimum embedment of 1" (25.4 mm) penetration into structural concrete. Predrill a 3/16" (4.76 mm) pilot hole using a carbide-tip SDS bit. The predrilled pilot hole must be a minimum of 1/2" (12.7 mm) deeper than the fastener embedment (at least a 2" [51 mm] deep pilot hole recommended). Using a screwshooter, drive the fastener until the screw head is seated securely; with very rigid insulation boards, watch for the plate to dimple.

Note: Be careful not to overdrive the fastener and fracture the skin of the insulation. Fastener must be tight enough so that the plate doesn't turn.

Code Approvals



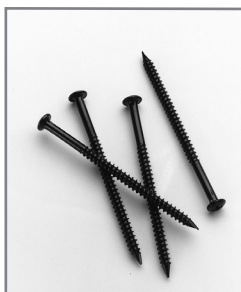
Advantages

- Heavier shank & thread diameters than most "heavy duty" roofing fasteners.
- Deep thread for high pull-out resistance.
- Extra sharp drill point for quick installation in new or reroof applications.

Plates & Accessories

- Use 3" (76 mm) steel or plastic plates, depending upon the application.
- For best installation results, use a variable speed 0-2500 rpm screw gun.

Drill-Tec™ #14
Fastener



Specifications

The fastener will be a Drill-Tec™ #14 Fastener with a shank diameter of .190 (.423 mm) and a thread diameter of .245 (6.22 mm). The fastener must have 10 threads per inch (per 25.4 mm) and have a 30° drill point. Also, the fastener must be heat treated per specification OMG-1. The Drill-Tec™ #14 Fastener will be used with a Factory Mutual-approved, Drill-Tec™ Round Pressure Plate. The fastener must be Factory Mutual approved.

Coating Requirement

The fastener will be coated with the Drill-Tec™ CR-10 corrosion-resistant coating. When subjected to 30 Kesternich cycles (DIN 50018), the fastener must show less than 15% red rust and surpass Factory Mutual Approval Standard 4470.

Product Data

Thread Diameter	.245" (6.22 mm)
Shank Diameter	.190" (.423 mm)
Head Diameter	.435" (11.04 mm)
Head Style	#3 Phillips Truss Head*
Coating	CR-10

*#3 Phillips bit included in each carton or bucket

Length	Thread Length	Packaging	Weight
1 1/4" (31.8 mm)	Full	1,000*	13 lb (5.90 kg)
1 3/4" (44.4 mm)	Full	1,000*	17 lb (7.71 kg)
2" (51 mm)	Full	1,000*	19 lb (8.62 kg)
3" (76 mm)	Full	1,000*	27 lb (12.25 kg)
4" (102 mm)	3" (76 mm)	1,000*	35 lb (15.88 kg)
5" (127 mm)	4" (102 mm)	500*	23 lb (10.43 kg)
6" (152 mm)	4" (102 mm)	500*	26 lb (11.79 kg)
7" (178 mm)	4" (102 mm)	500*	30 lb (13.61 kg)
8" (203 mm)	4" (102 mm)	500*	34 lb (15.42 kg)
9" (227 mm)	4" (102 mm)	500**	37 lb (16.78 kg)
10" (254 mm)	4" (102 mm)	500**	40 lb (18.14 kg)
11" (279 mm)	4" (102 mm)	500**	44 lb (19.96 kg)
12" (305 mm)	4" (102 mm)	250**	25 lb (11.34 kg)
14" (357 mm)	4" (102 mm)	250**	29 lb (13.15 kg)
16" (406 mm)	4" (102 mm)	250**	38 lb (17.24 kg)
18" (457 mm)	4" (102 mm)	250**	41 lb (18.6 kg)
20" (508 mm)	4" (102 mm)	250**	47 lb (21.32 kg)
22" (558.8 mm)	4" (102 mm)	250**	51 lb (23.13 kg)
24" (609 mm)	4" (102 mm)	250**	56 lb (24.4 kg)

*Bucket **Box
Longer Lengths Available Upon Request.
Call GAF For Information.

Example: Drill-Tec™ #14 Fastener Length Selection Procedure

1. If applicable, determine thickness of existing roofing material.
2. Add thickness of new insulation.
3. Add 3/4" (19.1 mm) minimum fastener penetration.
4. If odd size requirement, always size up in length, not down. See example below.

Example

Existing Roofing:	1 3/4" (44.4 mm)
New Insulation:	+ 1/2" (12.7 mm)
Min. Embedment:	+ 3/4" (19.1 mm)
Total Fastening Range:	= 3" (76 mm)

The proper #14 Fastener for the example is 3" (76 mm).

Use this format to calculate correct fastener size:

Existing Roof:	
New Insulation:	+
Min. Embedment:	+ 3/4" (19.1 mm)
Total Fastening Range:	=

The proper #14 Fastener is:



DRILL-TEC™

XHD FASTENER (#15)

Description

Drill-Tec™ XHD (Extra Heavy Duty) Fastener (#15) is a specialized, high-performance fastener designed to secure insulation and single-ply membrane to steel, O.S.B., or aluminum roof decks.

Application

The Drill-Tec™ XHD Fastener (#15) should always be tested on site by a GAF representative to determine performance and proper installation procedure. Call GAF to schedule testing.

Note: Make sure not to overdrive the fastener. Fastener must be tight enough so that the plate doesn't turn. Factory Mutual requires that the fastener penetrates the steel deck at the top flute.

Advantages

- Oversized heavy shank and thread diameters for enhanced pull-out resistance in steel and aluminum roof decks.
- Deep buttress threads further increase pull-out resistance.
- Miniature drill point penetrates decks quickly and contributes to exceptional resistance to backout as well as pullout.

Plates & Accessories

A variety of plates are available. Contact GAF to determine the appropriate plate for your application.

Specifications

The fastener will be a Drill-Tec™ XHD Fastener (#15) with a thread diameter of .275" (6.99 mm). The fastener must have 13 threads per inch (per 25.4 mm) and a drill point. Also, the fastener must be heat-treated per specification OMG-1. The Drill-Tec™ XHD Fastener (#15) will be used with a Factory Mutual-approved, Drill-Tec™ Round Pressure Plate or Pressure Bar.

Code Approvals



Coating Requirement

The fastener will be coated with the Drill-Tec™ CR-10 corrosion resistant coating. When subjected to 30 Kesternich cycles (DIN 50018), the fastener must show less than 15% red rust and surpass Factory Mutual Approval Standard 4470.

Product Data

Head Diameter	.435" (11.04 mm)
Thread Diameter	.275" (6.99 mm)
Head Style	#3 Phillips Truss Head
Coating	CR-10

Length	Thread Length	Packaging	Weight
2" (51 mm)	Full	1,000 Bucket	21 lb (9.53 kg)
3" (76 mm)	Full	1,000 Bucket	30 lb (13.61 kg)
4" (102 mm)	3" (76 mm)	1,000 Bucket	39 lb (17.69 kg)
5" (127 mm)	4" (102 mm)	500 Bucket	25 lb (11.34 kg)
6" (152 mm)	4" (102 mm)	500 Bucket	29 lb (13.15 kg)
7" (178 mm)	4" (102 mm)	500 Bucket	33 lb (14.97 kg)
8" (203 mm)	4" (102 mm)	500 Bucket	38 lb (17.24 kg)
9" (229 mm)	4" (102 mm)	500 Box	41 lb (18.60 kg)
10" (254 mm)	4" (102 mm)	500 Box	46 lb (20.87 kg)
11" (279 mm)	4" (102 mm)	500 Box	52 lb (23.59 kg)
12" (305 mm)	4" (102 mm)	500 Box	55 lb (24.95 kg)
14" (357 mm)	4" (102 mm)	250 Box	33 lb (14.97 kg)
16" (406 mm)	4" (102 mm)	250 Box	38 lb (17.24 kg)
18" (457 mm)	4" (102 mm)	250 Box	42 lb (19.05 kg)
20" (508 mm)	4" (102 mm)	250 Box	45 lb (20.41 kg)
22" (559 mm)	4" (102 mm)	125 Box	50 lb (22.68 kg)

Note: All sizes are nominal.

Drill-Tec™ XHD
Fastener (#15)





Flat



Drill-Tec™ 3" (76 mm)
Ribbed Galvalume® Plate (Flat)



Drill-Tec™ 3" (76 mm)
Plastic Locking Plate

Recessed



Drill-Tec™ 3" (76 mm)
Steel Plate



Drill-Tec™ 3" (76 mm)
Standard Steel Plate



Drill-Tec™ 3" (76 mm)
AccuTrac® Flat Plate



Drill-Tec™ 3" (76 mm)
AccuTrac® Recessed Plate

Description:

Drill-Tec™ insulation plates are made of Galvalume®-coated steel for excellent corrosion protection. Also available in a 3" Plastic Locking Plate made of durable polypropylene to be used with the Drill-Tec™ #12 or Drill-Tec™ #14 fasteners. The plates meet the requirements of ASTM D6294, FM Approval Standard 4470, and DIN 50018. They are ideal for attaching both insulation and cover boards.

Round Plates: The round design distributes loads evenly, eliminates sharp corners that can damage the insulation or cover board, and are available in a flat profile, which is ideal for cover boards, as well as recessed profile. These plates are designed to be used with appropriate Drill-Tec™ fasteners, depending on the substrate type. For details on fasteners and substrates

please see the GAF attachment tables for TPO and PVC.

Square Plates: AccuTrac® Plates are designed to be used in the AccuTrac® Stand Up Tool, offering an ergonomic fastening solution for attaching insulation and cover boards. They are available in two designs, recessed and flat. Please refer to GAF-published application instructions for approved substrates and additional information requirements at gaf.com.

For applications not listed or for additional information, contact GAF at 877-423-7663 or designservices@gaf.com.

Galvalume® is a registered trademark of BIEC International Inc. and some of its licensed producers.

AccuTrac® is a registered trademark of OMG.

Codes and Standards:

- FM Approved per Approval Standard 4470. Refer to RoofNav.com for specific assemblies.



State of Florida Approved



GAF Attachment Tables
for TPO and PVC

Product Data

Plate	Drill-Tec™ 3" (76 mm) Standard Steel Plate	Drill-Tec™ 3" (76 mm) Steel Plate	Drill-Tec™ 3" (76 mm) Ribbed Galvalume® Plate (Flat)	Drill-Tec™ 3" (76 mm) AccuTrac® Flat Plate	Drill-Tec™ 3" (76 mm) AccuTrac® Recessed Plate	Drill-Tec™ 3" (76 mm) Plastic Locking Plate
Plate Profile						
Material/ Coating	AZ-55 Galvalume®					Polypropylene
Dimensions (Diam./Width)	3" (76 mm)					
Packaging	500 per box	1,000 per bucket	1,000 per bucket	1,000 per bucket	1,000 per bucket	1,000 per box
Weight	37 lb. (16.7 kg)	37 lb. (16.7 kg)	37 lb. (16.7 kg)	43 lb. (19.5 kg)	43 lb. (19.5 kg)	25 lb. (11.34 kg)
FM Approved	✓	✓	✓	✓	✓	✓
Miami-Dade County Product Control Approved	✓	✓	✓	✓	✓	✓
State of Florida Approved	✓	✓	✓	✓	✓	✓



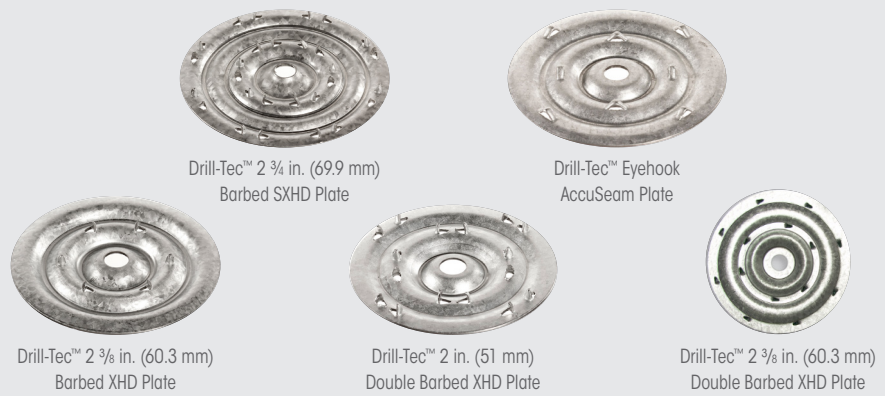
Visit gaf.com

For additional information, contact GAF Design Services at 1-877-423-7663 or designservices@gaf.com

We protect what matters most™



GAF Drill-Tec™ Membrane Seam Plates



Description:

Drill-Tec™ membrane seam plates are made of Galvalume® coated steel for excellent corrosion protection. The plates meet the requirements of ASTM D6294, FM 4470, and DIN 50018. They are ideal for attaching both TPO and PVC single-ply membranes.

The round design distributes loads evenly, eliminates sharp corners that can damage the membrane, and provides strong uplift resistance. These plates are designed to be used with appropriate Drill-Tec™ fasteners depending on the substrate type. For details on fasteners and substrates please see the GAF attachment tables for TPO and PVC.

Please refer to GAF-published application instructions for approved substrates and additional information requirements at gaf.com.

For applications not listed or for additional information, contact GAF at 877-423-7663 or designservices@gaf.com.

Galvalume® is a registered trademark of BIEC International Inc. and some of its licensed producers.

Codes and Compliance:

- FM Approved per Approval Standard 4470. Refer to RoofNav.com for specific assemblies.



State of Florida Approved



GAF Attachment Tables for TPO and PVC

Product Data

Plate	Drill-Tec™ 2 in. (51 mm) Double Barbed XHD Plate	Drill-Tec™ 2 3/8 in. (60.3 mm) Barbed XHD Plate	Drill-Tec™ 2 3/8 in. (60.3 mm) Double Barbed XHD Plate	Drill-Tec™ Eyehook AccuSeam Plate	Drill-Tec™ 2 3/4 in. (69.9 mm) Barbed SXHD Plate
Material/ Coating	AZ-55 Galvalume				
Diameter	2" (51 mm)	2 3/8" (60.3 mm)	2 3/8" (60.3 mm)	2 3/8" (60.3 mm)	2 3/4" (69.9 mm)
Packaging	1,000 per bucket	1,000 per bucket	1,000 per box	1,000 per bucket	500 per box
Weight	33 lb. (14.9 kg)	45 lb. (20.4 kg)	52 lb. (23.5 kg)	48 lb. (21.7 kg)	37 lb. (16.8 kg)
FM Approved	✓	✓	✓	✓	✓
Miami Dade Approved	✓	✓	✗	✓	✓
FBC Approved	✓	✓	✗	✓	✓



Visit gaf.com

For additional information, contact GAF Technical Support at 1-800-766-3411 or technicalquestions@gaf.com

We protect what matters most™





EverGuard® Diamond Pledge™

NDL Roof Guarantee



OWNER OF BUILDING	GUARANTEE NUMBER
NAME OF BUILDING	PERIOD OF COVERAGE
ADDRESS OF BUILDING	DATE OF COMPLETION
AREA OF ROOF (SQUARES)	GUARANTEE EXPIRATION DATE
APPLIED BY	ROOF SPECIFICATION

THE GUARANTEE/SOLE AND EXCLUSIVE REMEDY

GAF guarantees to you, the owner of the building described above, that GAF will provide “Edge To Edge” protection by repairing leaks through the GAF roofing membrane, liquid-applied membrane or coating, base flashing, high wall waterproofing flashing, insulation, expansion joint covers, preflashed accessories, and metal flashings used by the contractor of record that were designed and installed in accordance with an appropriate ES-1 certified edge detail (the “GAF Roofing Materials”) resulting from a manufacturing defect, ordinary wear and tear, or workmanship in applying the GAF Roofing Materials. There is no dollar limit on covered repairs. Leaks caused by any non-GAF materials, such as the roof deck or non-GAF insulation, are not covered.

GUARANTEE PERIOD

This guarantee ends on the expiration date listed above. **NOTE:** Lexsuco® flashings are covered by this guarantee **ONLY** for the first ten years.

OWNER RESPONSIBILITIES

Notification of Leaks

In the event of a leak through the GAF Roofing Materials, you **MUST** make sure that GAF is notified directly about the leak, in writing, within **30 days** either online at leakreporting.gaf.com, by email at guaranteeleak@gaf.com, or by postal mail to GAF Warranty Claims Department, 1 Campus Drive, Parsippany, NJ 07054, or GAF will have no responsibility for making repairs. **NOTE:** The roofing contractor is **NOT** an agent of GAF; notice to the roofing contractor is **NOT** notice to GAF.

By notifying GAF, you authorize GAF to investigate the cause of the leak. If the investigation reveals that the leak is not covered by this guarantee, you agree to pay an investigation cost of \$500. This guarantee will be cancelled if you fail to pay this cost within 30 days of receipt of an invoice for it.

Preventative Maintenance and Repairs

- A. You must perform regular inspections and maintenance and keep records of this work.
- B. To keep this guarantee in effect, you must repair any conditions in the building structure or roofing system that are not covered by this guarantee but that GAF concludes may be threatening the integrity of the GAF Roofing Materials. Any such repairs must be performed by a GAF-certified roofing contractor. Failure to make timely repairs may jeopardize guarantee coverage.
- C. You may make temporary repairs to minimize damage to the building or its contents in an emergency, at your sole expense. These repairs will not result in cancellation of the guarantee as long as they are reasonable and customary and do not result in permanent damage to the GAF Roofing Materials.
- D. Any equipment or material that impedes any inspection or repair must be removed at your expense so that GAF can perform inspections or repairs.

EXCLUSIONS FROM COVERAGE

(e.g., items that are not “ordinary wear and tear” or are beyond the control of GAF)

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 1-877-GAF-ROOF) 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 GAF Roofing Materials due to: (a) movement, cracking, or other failure of the roof deck or building; (b) improper installation or failure of any non-GAF insulation or materials; (c) condensation or infiltration of moisture through or around the walls, copings, building structure, or surrounding materials except where high wall GAF 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) moisture migration from the building interior or any building component other than the GAF Roofing Materials; (g) use of materials that are incompatible with the GAF Roofing Materials; or (h) architectural, engineering, or design defects or flaws.
- 5. Traffic of any nature on the roof unless using GAF walkways applied in accordance with GAF published application instructions.
- 6. Blisters in the GAF Roofing Materials that have not resulted in leaks.
- 7. Changes in the use of the building or any repairs, installation of any overburden, modifications, or additions to the GAF Roofing Materials after the roof is completed, unless prior written approval is obtained from GAF.
- 8. Exposure to sustained high-temperature conditions; however, for systems utilizing EverGuard Extreme® TPO membrane, exposure in excess of 195°F.

No representative, employee, or agent of GAF, or any other person, has the authority to assume any additional or other liability or responsibility for GAF, unless it is in writing and signed by an authorized GAF Field Services Manager or Director. GAF does not practice engineering or architecture. Neither the issuance of this guarantee, nor any review of the roof constructed of the GAF Roofing Materials (or the plans for the roof), by GAF shall constitute any warranty of such plans, specifications or construction, or the suitability or code compliance of the GAF Roofing Materials for any particular structure. **NOTE:** Any inspections made by GAF are limited to a surface inspection only, are for the sole benefit of GAF, and do not constitute a waiver or extension of any of the terms and conditions of this guarantee.

This guarantee MAY BE SUSPENDED OR CANCELLED IF THE ROOF IS DAMAGED BY any cause listed above as AN EXCLUSION FROM COVERAGE that may affect the integrity or watertightness of the roof.

TRANSFERABILITY

You may transfer or assign this guarantee to a subsequent owner of this building for the remaining term only if: 1) the request is in writing to GAF at the address listed below within 60 days after ownership transfer; 2) you make any repairs to the GAF Roofing Materials or other roofing or building components that are identified by GAF after an inspection as necessary to preserve the integrity of the GAF Roofing Materials; and 3) you pay an assignment fee of \$500. This guarantee is NOT otherwise transferable or assignable by contract or operation of law, either directly or indirectly.

LIMITATION OF DAMAGES; MEDIATION; JURISDICTION; CHOICE OF LAW

THIS GUARANTEE IS EXPRESSLY IN LIEU OF ANY OTHER GUARANTEES OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, and of any other obligations or liability of GAF, whether any claim against it is based upon negligence, breach of warranty, or any other theory. In **NO** event shall GAF be liable for any CONSEQUENTIAL OR INCIDENTAL DAMAGES of any kind, including, but not limited to, interior or exterior damages and/or mold growth.

The parties agree that, as a condition precedent to litigation, any controversy or claim relating to this guarantee shall be first submitted to mediation before a mutually acceptable mediator unless GAF, at its sole option, elects to waive said requirement. In the event that mediation is unsuccessful, or is waived by GAF, the parties agree that neither one will commence or prosecute any lawsuit or proceedings other than before the appropriate state or federal court in the State of New Jersey. This guarantee shall be governed by the laws of the State of New Jersey, without regard to principles of conflicts of laws. Each party irrevocably consents to the jurisdiction and venue of the above identified courts.

NOTE: GAF shall have no obligation under this guarantee unless and until all bills for installation and supplies have been paid in full to the roofing contractor and materials suppliers, and the guarantee charge has been paid to GAF.

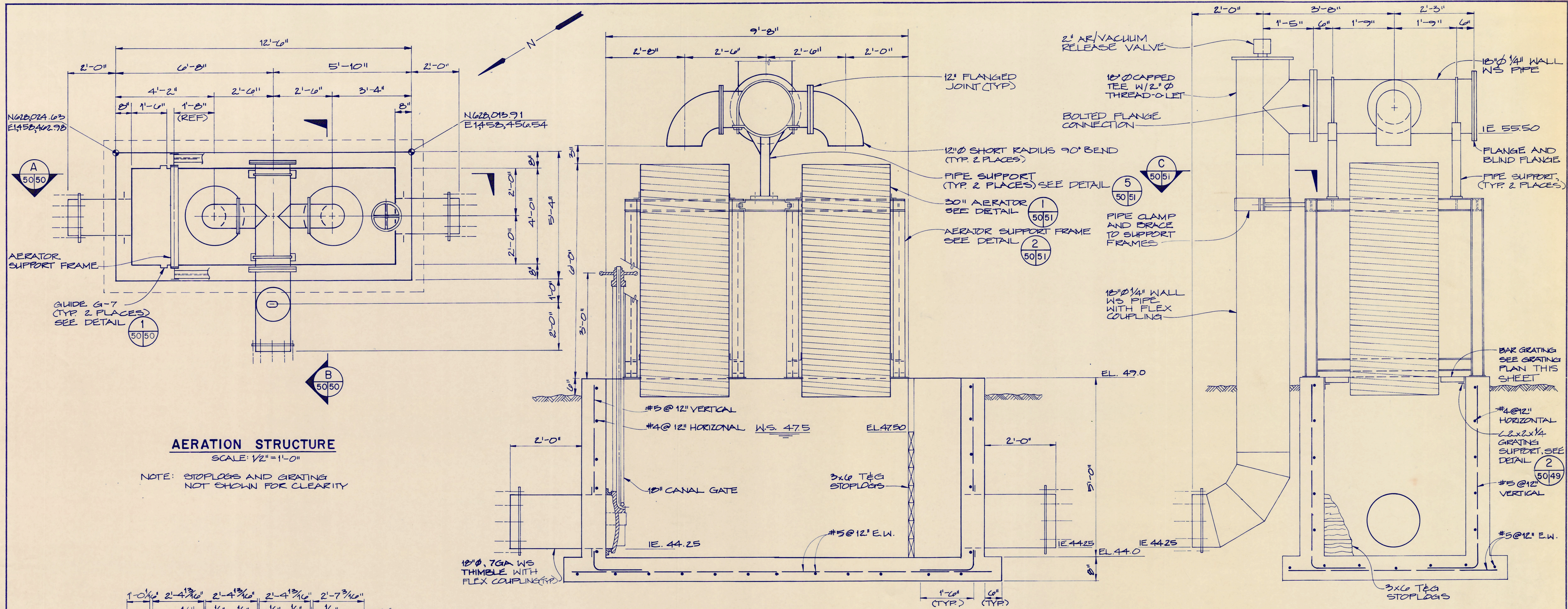
By: _____

Authorized Signature

GAF
1 CAMPUS DRIVE
PARSIPPANY, NJ 07054

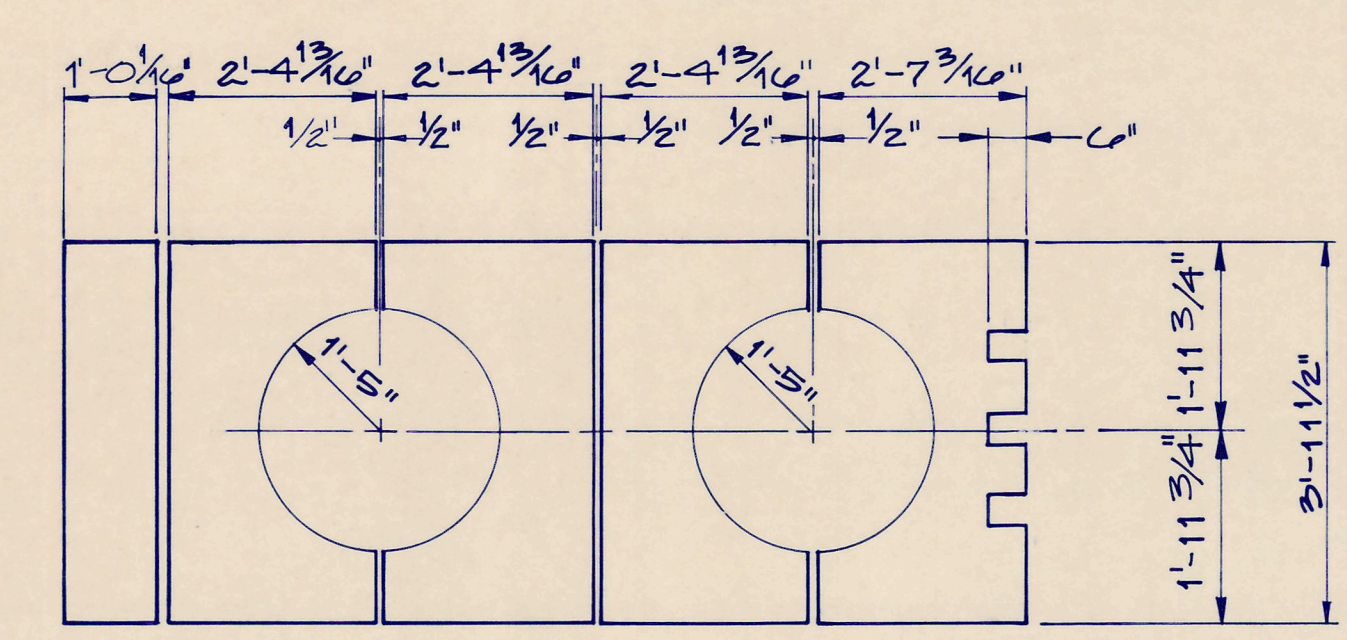
Visit [gaf.com](https://www.gaf.com)





AERATION STRUCTURE
SCALE: 1/2" = 1'-0"

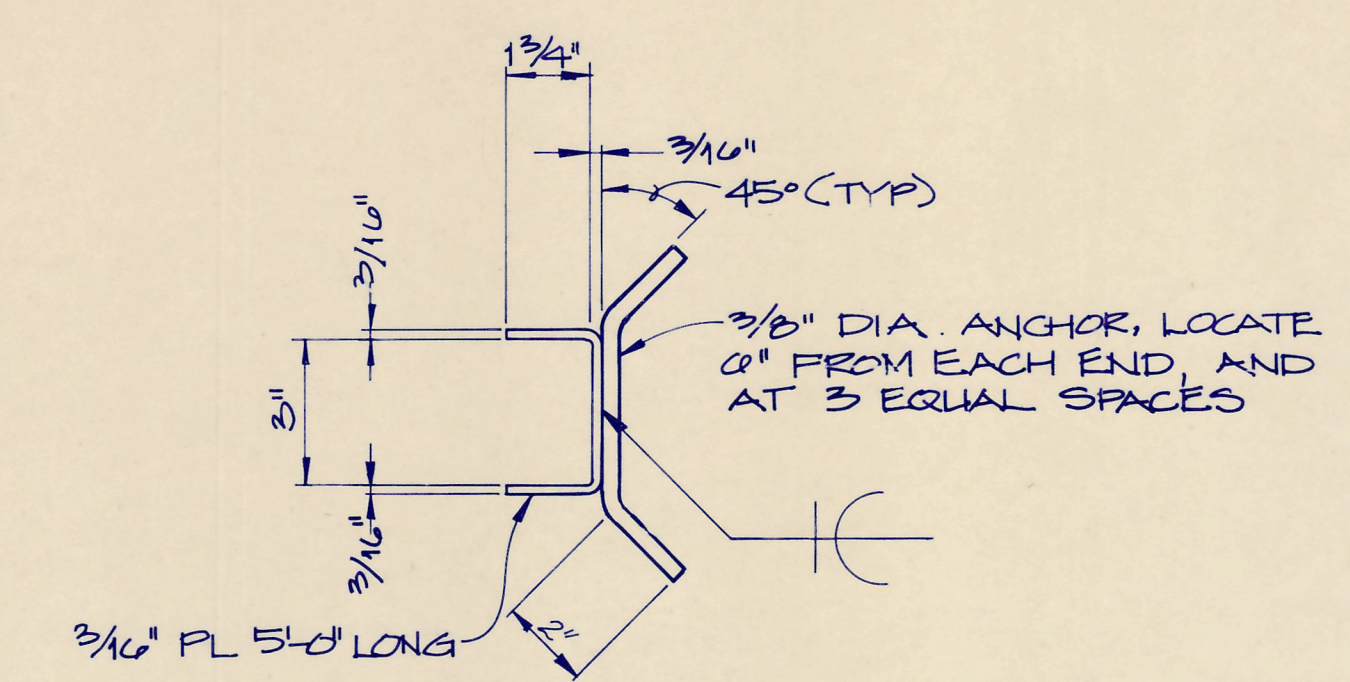
NOTE: STOPLOGS AND GRATING NOT SHOWN FOR CLARITY



GRATING PLAN
SCALE: 1/2" = 1'-0"

- NOTES:
1. FABRICATE FROM 1 1/4" x 1/8" BEARING BARS 1 3/16" OC. BAND EDGES
 2. VERIFY CUT OUT DIMENSIONS TO CLEAR AERATORS AND CANAL GATES

SECTION A
SCALE: 3/4" = 1'-0"



GUIDE G-7
SCALE: 3/4" = 1'-0"
2 REQUIRED

SECTION B
SCALE: 3/4" = 1'-0"



DESIGNED	DEP	DRAWN	EDM	CHECKED	CWC	DATE	JAN. 1988	DRAWING NO.	IF-WA-000-I-50.0
REV.	DATE								BY
NISQUALLY FISH HATCHERY									
PLAN AND SECTIONS									

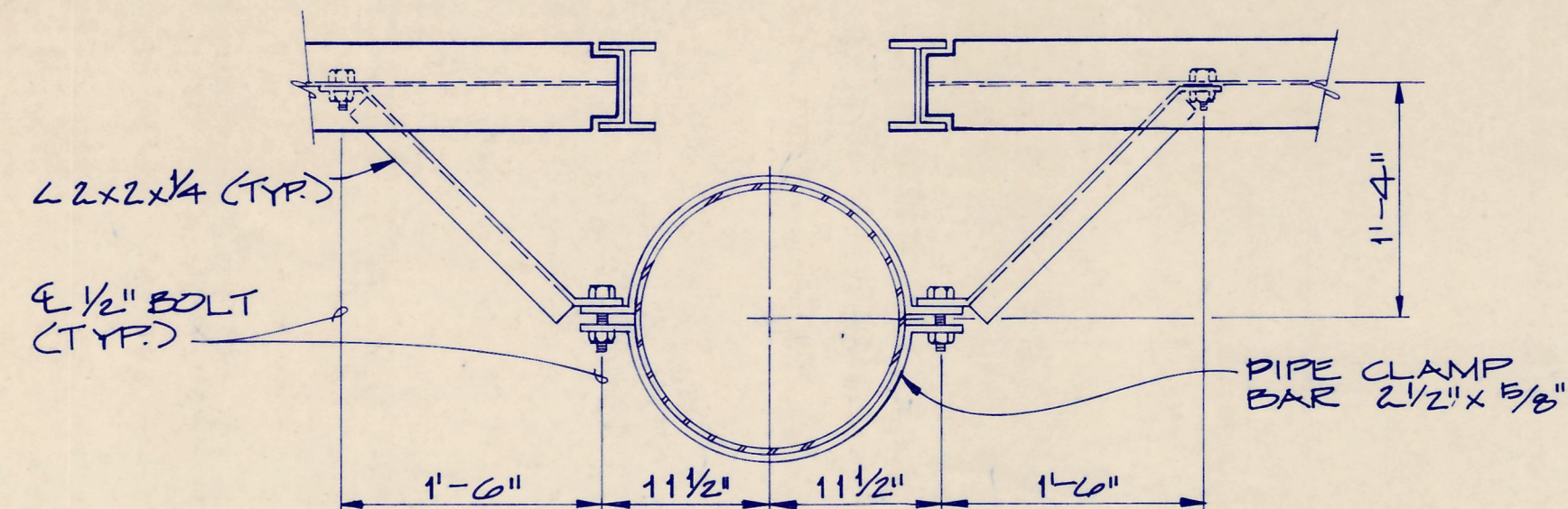
PLAN

ELEVATION

AERATOR

SCALE: 1" = 1'-0"

6 REQUIRED, FABRICATE FROM ALUMINUM

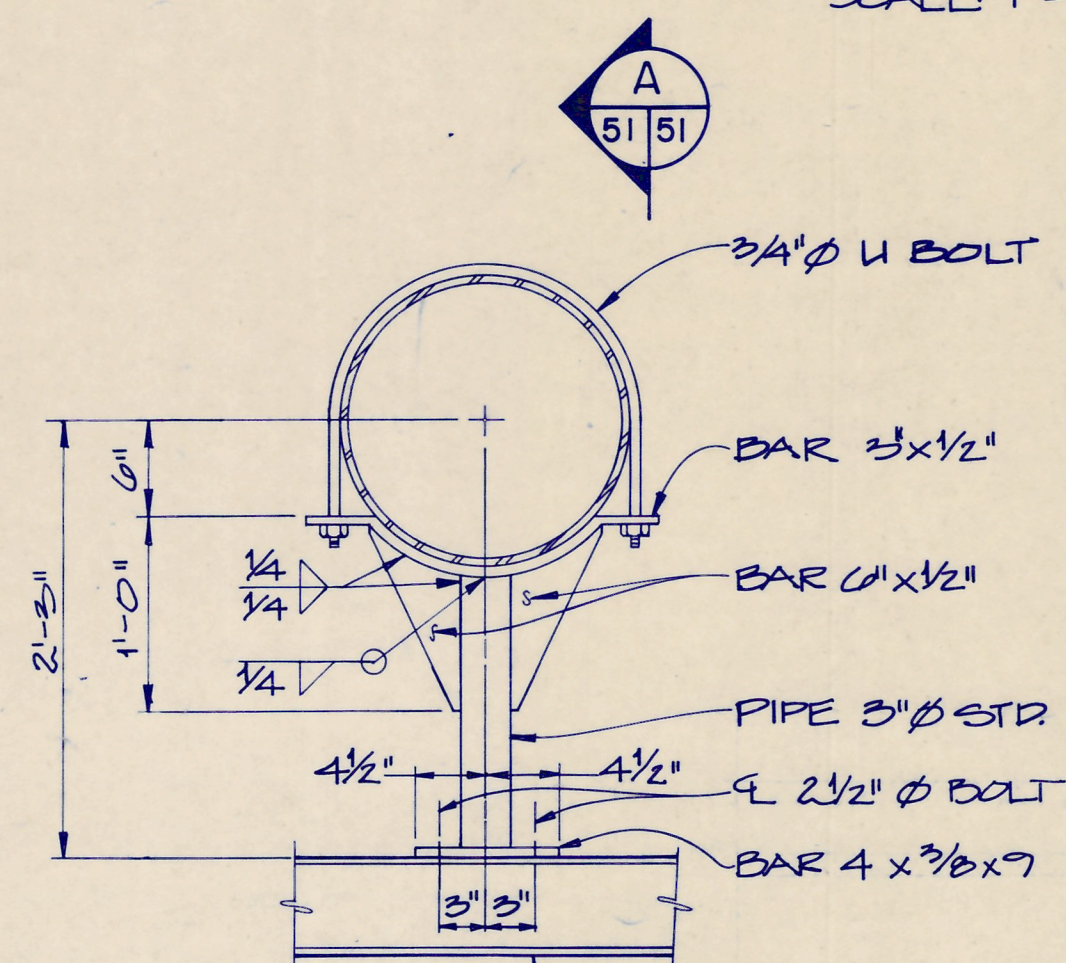


SECTION C
SCALE: 1" = 1'-0" 50 | 51

PLAN

ELEVATION

SUPPORT FRAME 2
SCALE: 1" = 1'-0"

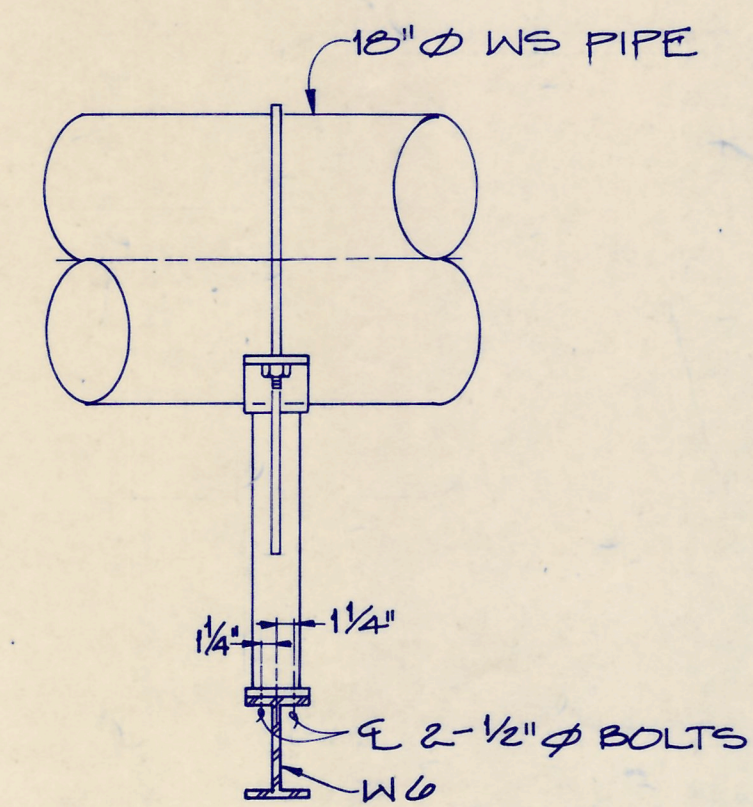


DETAIL

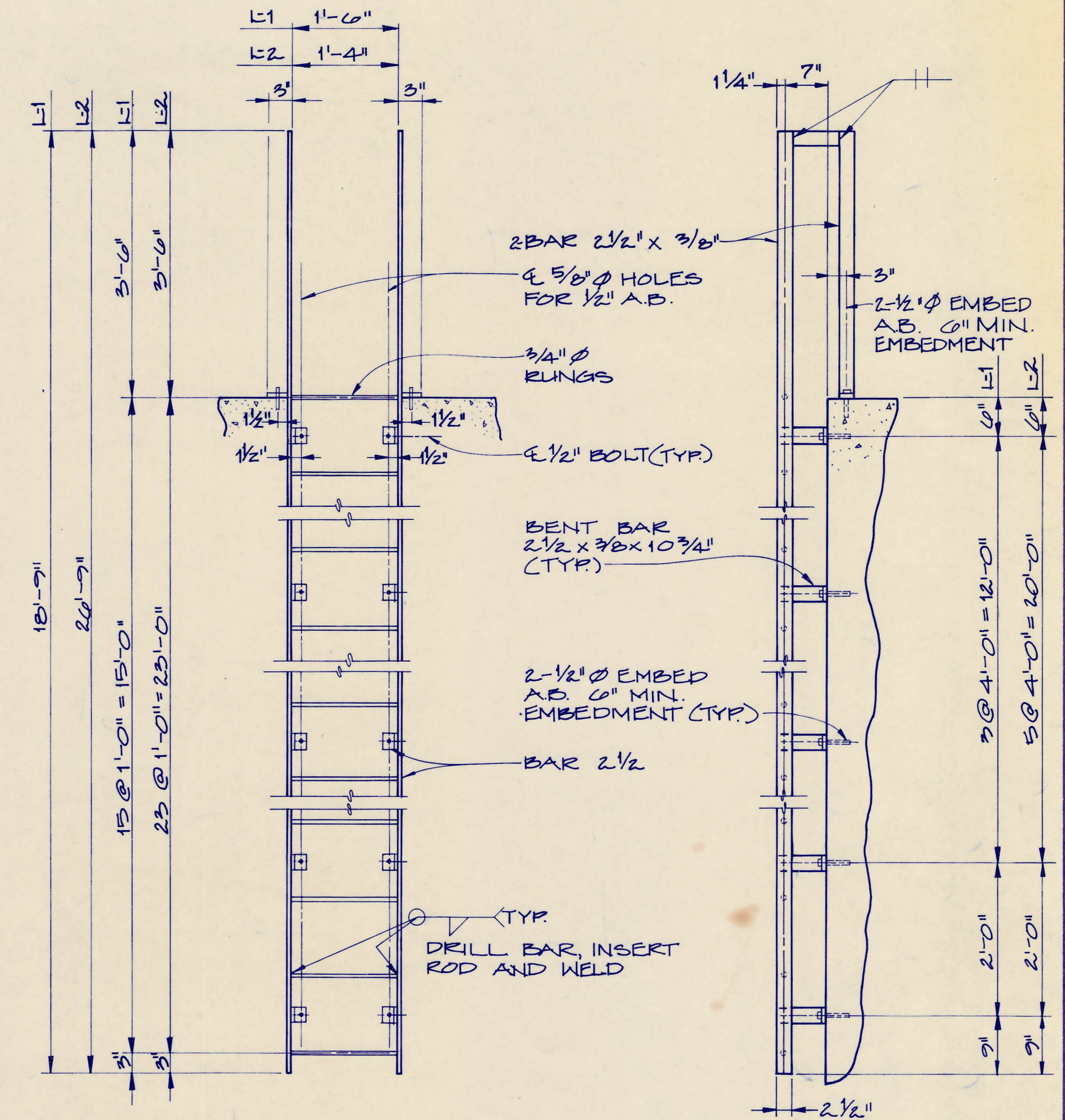
SCALE: 1" = 1'-0"

5

50 51



ELEVATION A
SCALE: 1" = 1'-0" 5 | 5



LADDER L-1

ONE REQUIRED
SCALE: $3/4" = 1'-0"$

3
47 51

LADDER L-2

TWO REQUIRED
SCALE: $\frac{3}{4}" = 1'-0"$

4
4751

NOTE:

GALVANIZE ALL FERROUS ITEMS AFTER FABRICATION.

REV.	DATE				BY
NISQUALLY FISH HATCHERY					
AERATOR AND SUPPORT FRAME					
AERATION STRUCTURE					
DESIGNED	DRAWN	CHECKED	DATE	DRAWING NO.	
D.F.P.	EDM	C.W.C.	JAN. 1988	IF-WA-000-1-51.0	