

England Enterprises, Inc.

General Contractors

8295 Wildwood Road
Vaughan, MS 39179
662-673-1644
englandenterprisesinc@gmail.com

February 23, 2022

Mr. Paul Bagley
JH&H Architects
1047 North Flowood Drive
Flowood, MS 39232-9533

Re: 19140B Madison County Annex Exterior Repairs
Proposed Change Request 1: Roof Redesign – No Cost Change

Paul,

As we have discussed, due to the constraint of the screen wall around the clock tower, we request to change the roof system from the 3-ply cold processed roofing to a TPO roofing system. The roofing process is described in the attached letter from Guaranteed Roofing Company. We will also remove and replace any deteriorated OSB decking and existing blocking as required to reattach the screen wall posts. The TPO material is available and we can complete this work next week weather permitting.

If we get approval to proceed no later than February 25th to make this change, there will be no request for additional time or additional money. If approval takes longer, due to equipment rental costs, we reserve the right to revised our pricing and request additional days be added to the contract. Please let us know as soon as possible so that we can obtain materials and schedule the work. If you have any questions, give me a call.

Thanks,



David England

Attachments

- Guaranteed Roofing letter
- TPO Roofing Submittal

Guaranteed Roofing Co., Inc.

3540 I-55 South
Jackson, MS 39212
Office 601-939-2848
Fax 601-939-2782
page27@hotmail.com

2-23-2022

England Enterprises, Inc.
8295 Wildwood Road
Vaughan, MS 39179

RE: Madison County Annex Exterior Repairs

David,

We are proposing the following roofing in lieu of installing the 3 Ply Cold Process roofing:

Remove the existing EPDM roofing, flashing and ½" wood fiber down to the deck and dispose of debris.

Install a 1/8" per foot tapered Poly-iso insulation system

Install a Secure Rock Roofing cover-board over the tapered insulation

Install a 60 Mil, white, fully adhered TPO roofing system

Flashing roof penetrations with TPO flashings including the rail supports.

Install 24-gauge, dark bronze flashing at roof edge over the shingles

Install TPO flashing at the clock tower with termination bar and counter flashing

Provide a 20-year Manufacturer's warranty on the TPO roofing system

Provide a two-year workmanship warranty.

Let me know if this is acceptable.

Page Smith
Project Manager



EVERGUARD® TPO

MEMBRANE

60 MIL

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

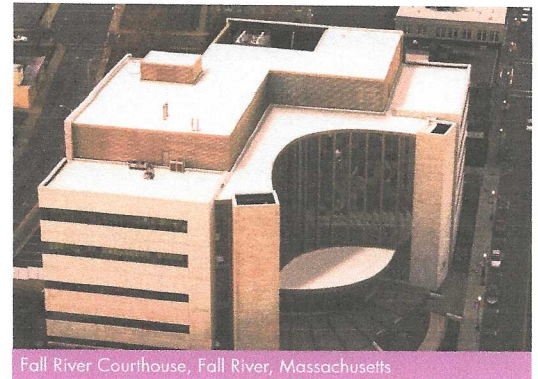
gaf.com

Why TPO

- Great Value—Excellent performance at a cost-effective price
- Excellent Seam Strength—Heat-welded seams provide greater seam strength to taped and other seams
- Long-term Weathering—Excellent long-term heat and UV resistance
- Energy Saving—Highly reflective and emissive white roof can help reduce energy costs and urban heat island effect
- CREST Energy Savings Calculator—See your potential savings at cool.gaf.com
- Versatile Application Method

Why GAF EverGuard® TPO

- Outperforms standard TPO in heat aging and UV tests—the best predictors of TPO performance
 - After accelerated heat aging at 275°F (135°C) for 105 days, EverGuard® TPO showed no cracking—while every one of the competitors' samples had failed! **See below:**
 - UV testing—Greater than 2.5 times the industry standard (ASTM D6878 weather resistance test)
- Guarantees are available up to 25 years when using EverGuard® TPO 60 mil Membrane.*
- Easier to install due to:
 - Large welding window
 - Most complete line of accessories
 - 10' (3.05 m) wide sheets



Fall River Courthouse, Fall River, Massachusetts

Installation

EverGuard® TPO 60 mil Membrane is suitable for all types of single-ply systems:

- Mechanically Attached Application...for a quick and cost-effective system that can be installed practically year-round.
- RhinoBond® Application...can be applied without using adhesives and installed practically year round. Qualifies for the same guarantee length as an adhered system.*
- Adhered Application...can be installed with EverGuard® 1121 Solvent-Based Adhesive, EverGuard® Low VOC Adhesive, or EverGuard® WB181 Water-Based Adhesive for the smoothest appearance. Provides excellent wind uplift performance.

Accessories

Field fabrication of TPO accessories is time-consuming, costly, inconsistent, and can lead to unreliable details that compromise a watertight roofing system. EverGuard® TPO prefabricated accessories deliver consistent quality and eliminate the worry and problems often associated with field fabrication. They can also boost productivity up to 200%,** while reducing installed cost by up to 12%.

*See applicable guarantees for complete coverage and restrictions.

**Based on GAF estimate to field-fabricate flashing details.



U.S. only



California Title 24 Compliant



TPO membranes meet the performance requirements of ICC ER-6030

EverGuard® TPO 60 mil Membrane

Applicable Standards

UL Listed, FM Approved, Miami-Dade County Product Control Approved, State of Florida Approved, CRRC Rated, Title 24 Compliant*, ENERGY STAR® Certified**, ASTM D6878.

Physical Properties	ASTM Test Method	ASTM D6878 Minimum	EverGuard® Typical Test Data
1. Certain data is provided in MD (machine direction) x CMD (cross machine direction) format. 2. Data is based upon typical product performance, and is subject to normal manufacturing tolerance and variance.			
Nominal Thickness	ASTM D751	0.039" (min.) (0.99 mm)	0.060" (1.52 mm)
Breaking Strength	ASTM D751 Grab Method	220 lbf/in. (38.5 kn/m)	305 lbf x 290 lbf (454 x 432 kg/m)
Factory Seam Strength	ASTM D751	66 lbf (98.34 kg/m)	135 lbf (membrane failure) (201.1 kg/m)
Elongation at Break	ASTM D751	15%	30%
Heat Aging	ASTM D573	90% Retention of Breaking Strength and Elongation at Break	100%
Tear Strength	ASTM D751 8" x 8" (203 x 203 mm) Sample	55 lbf (81.95 kg/m)	75 lbf x 130 lbf (111.8 x 193.7 kg/m)
Puncture Resistance	FTM 101C Method 2031	Not Established	380 lb. (172 kg)
Cold Brittleness	ASTM D2137	-40°C	-40°C
Permeance	ASTM E96	Not Established	0.08 Perms
Dimensional Change	ASTM D1204 @158°F (70°C), 6 hrs.	+/-1%	0.4%
Water Absorption	ASTM D471 @158°F (70°C), 1 week	+/-3.0% (top coating only)	0.7%
Hydrostatic Resistance	ASTM D751 Method D	Not Established	430 psi
Ozone Resistance	ASTM D1149	No visible deterioration @ 7 x magnification	No visible deterioration @ 7 x magnification
SRI (Solar Reflectance Index) Initial/Aged	N/A	N/A	94/81 83 Aged Title 24
Reflectivity (white) Initial/Aged	ASTM C1549 ASTM E903	N/A N/A	0.76/0.68 81.9% Reflectance
Emissivity (white) Initial/Aged	ASTM C1371 ASTM E403	N/A N/A	0.90/0.83 0.94
Weather Resistance	ASTM G155/D6878	10,080 kJ/(m ² · nm) at 340 nm	>25,000 kJ/(m ² · nm) at 340 nm
Heat Aging	ASTM D573	240°F (115°C) for 32 weeks	60 weeks
Thickness Above Scrim	ASTM D7635	Min 30% of Total Thickness	22.1 mil (Nominal)
Guarantee			
Up to 25 years			

*White, Energy Gray, and Energy Tan Membranes Only

**ENERGY STAR® only valid in the U.S.

Product Data

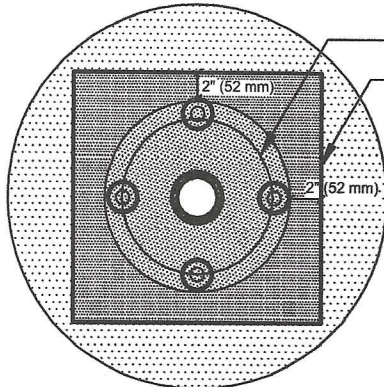
	5' x 100'	6' x 100'	8' x 100'	10' x 100'	12' x 100'
Roll Size	(1.52 x 30.5 m) (500 sq. ft. [46.5 sq.m])	(1.83 x 30.5 m) (600 sq. ft. [55.74 sq.m])	(2.44 x 30.5 m) (800 sq. ft. [74.3 sq.m])	(3.05 x 30.5 m) (1,000 sq. ft. [92.9 sq.m])	(3.65 x 30.5 m) (1,200 sq. ft. [111.484 sq.m])
Roll Weight	162 lb. (73.5 kg)	194.4 lb. (88.2 kg)	257 lb. (117 kg)	322 lb. (146.1 kg)	386.4 lb. (175.3 kg)
Colors	White, Tan, Gray				
Storage	Store rolls on their sides on pallets or shelving in a dry area.				
Safety Warning	Membrane rolls are heavy. Position and install by at least two people.				
Note: Membrane rolls shipped horizontally on pallets, stacked pyramid-style and banded. Product sizes, dimensions, and widths are nominal values and are subject to normal manufacturing/packaging tolerance and variation.					

RhinoBond® is a registered trademark of OMG.



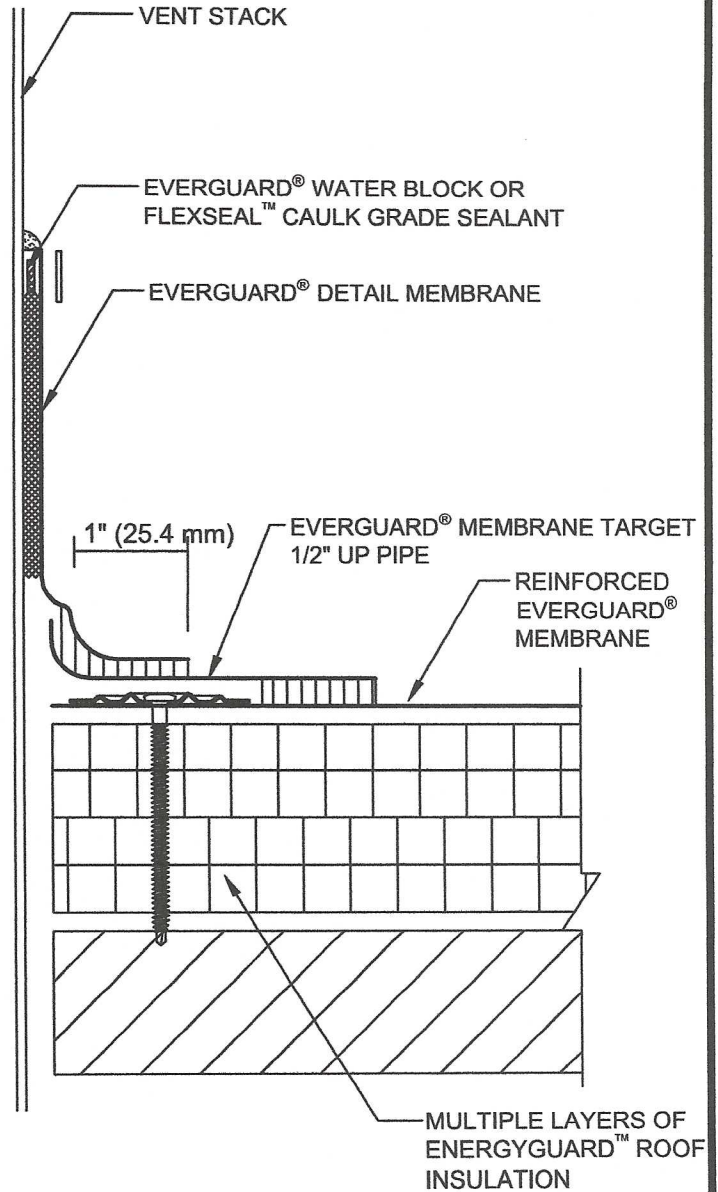
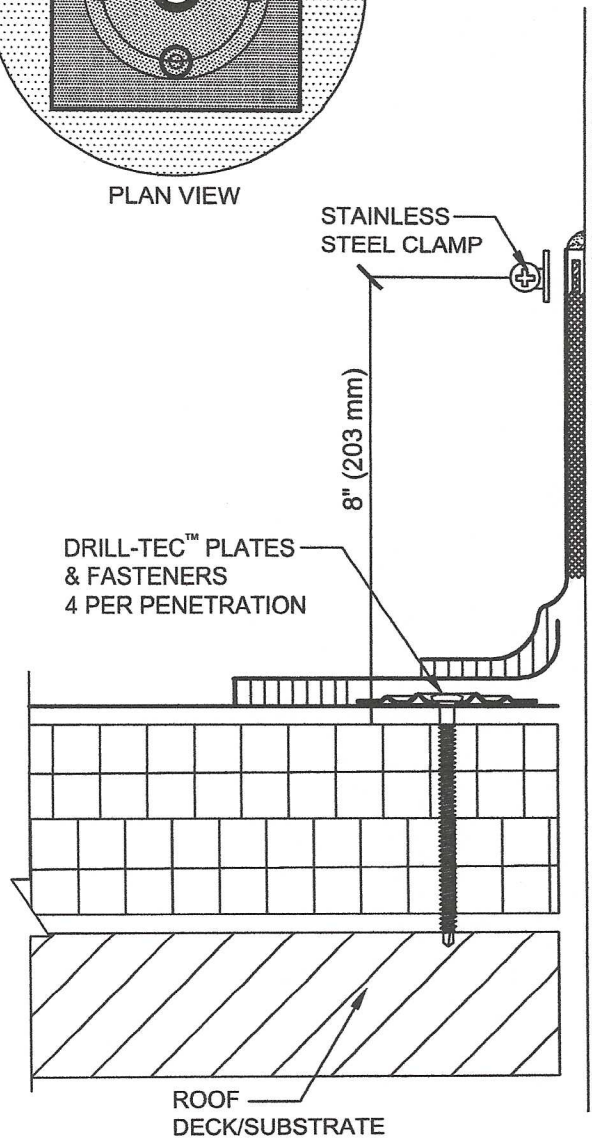
gaf.com

Root Penetrations



PLAN VIEW

EVERGUARD® PREMOLDED VENT BOOT
 TARGET MADE FROM REINFORCED EVERGUARD® MEMBRANE



NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
2. APPLY HEAT TO UNREINFORCED DETAIL MEMBRANE AND FORM BY HAND PRIOR TO HOT AIR WELDING.



FIELD-WRAPPED PENETRATION FLASHING DETAIL

DRAWING #
507

THIS DETAIL APPLIES TO:
 ALL SYSTEMS

ISSUE / REVISION DATE
 8/17/20

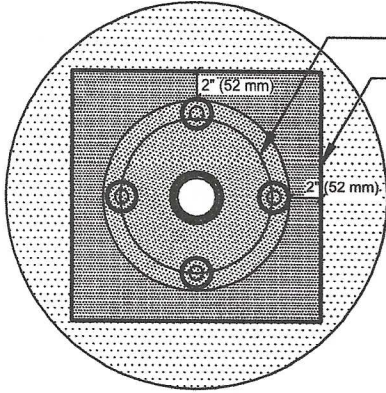
SCALE
 N.T.S.

LEGEND

- HEAT-WELDED
- FLEXSEAL™ CAULK GRADE SEALANT
- EVERGUARD® BONDING ADHESIVE (OPTIONAL)

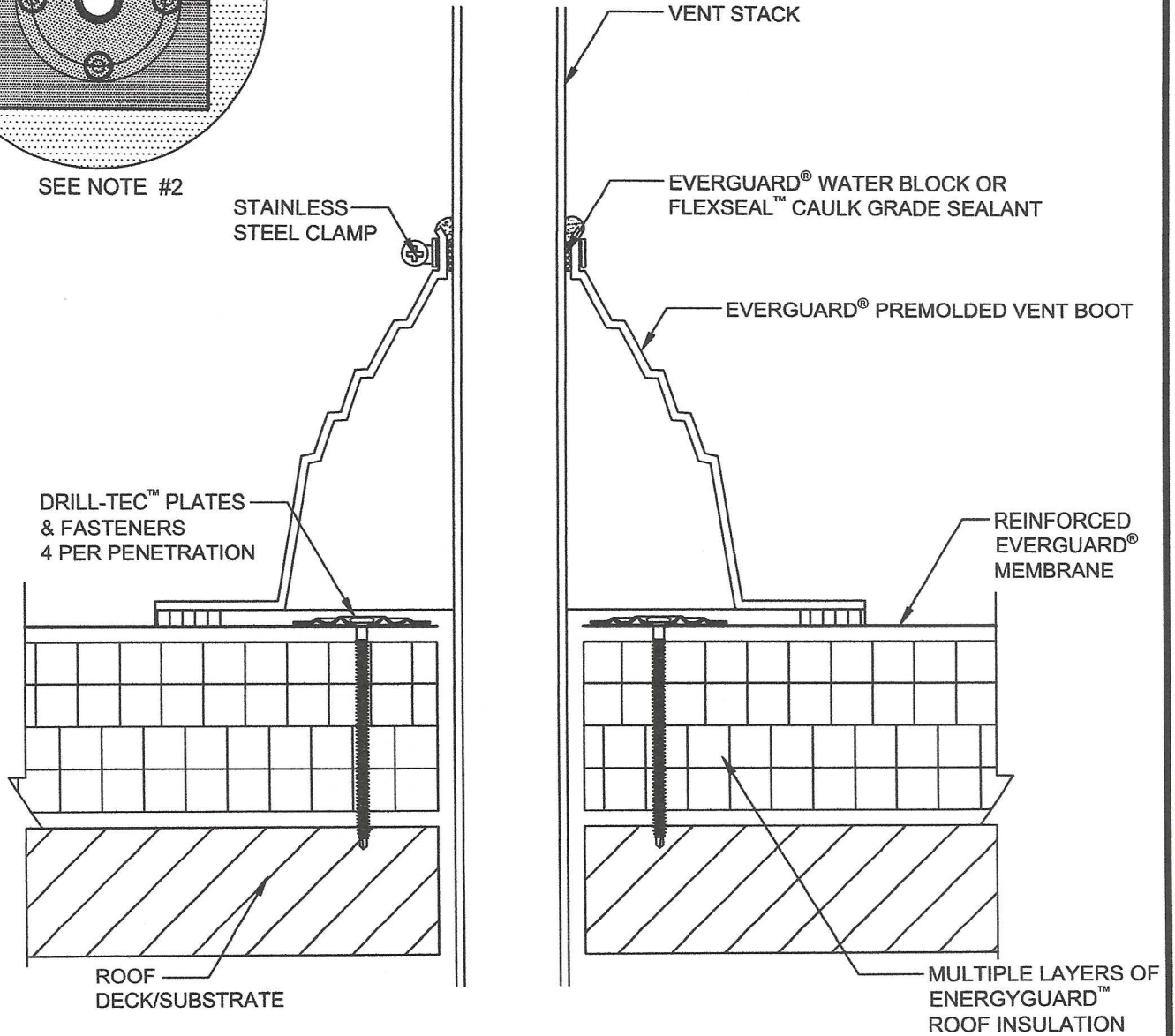
Root Penetrations

ALTERNATE INSTALLATION



EVERGUARD® PREMOLDED VENT BOOT
 TARGET MADE FROM REINFORCED
 EVERGUARD® MEMBRANE

SEE NOTE #2



NOTE:

1. DO NOT CUT SIDE OF PREMOLDED BOOT. IT MUST BE PULLED OVER VENT PIPE.
2. IF THE PLATES AND FASTENERS INTRUDE INTO BOOT FLANGE AREA, THEN A TARGET MUST FIRST BE INSTALLED OVER PLATES AND FASTENERS BEFORE BOOT INSTALLATION.
3. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
4. 25 YEAR GUARANTEES AND ABOVE MUST USE EXTREME ACCESSORIES.



PREMOLDED VENT BOOT FLASHING DETAIL

DRAWING #
506A

THIS DETAIL APPLIES TO:
 ALL SYSTEMS

ISSUE / REVISION DATE
 8/17/20

SCALE
 N.T.S.

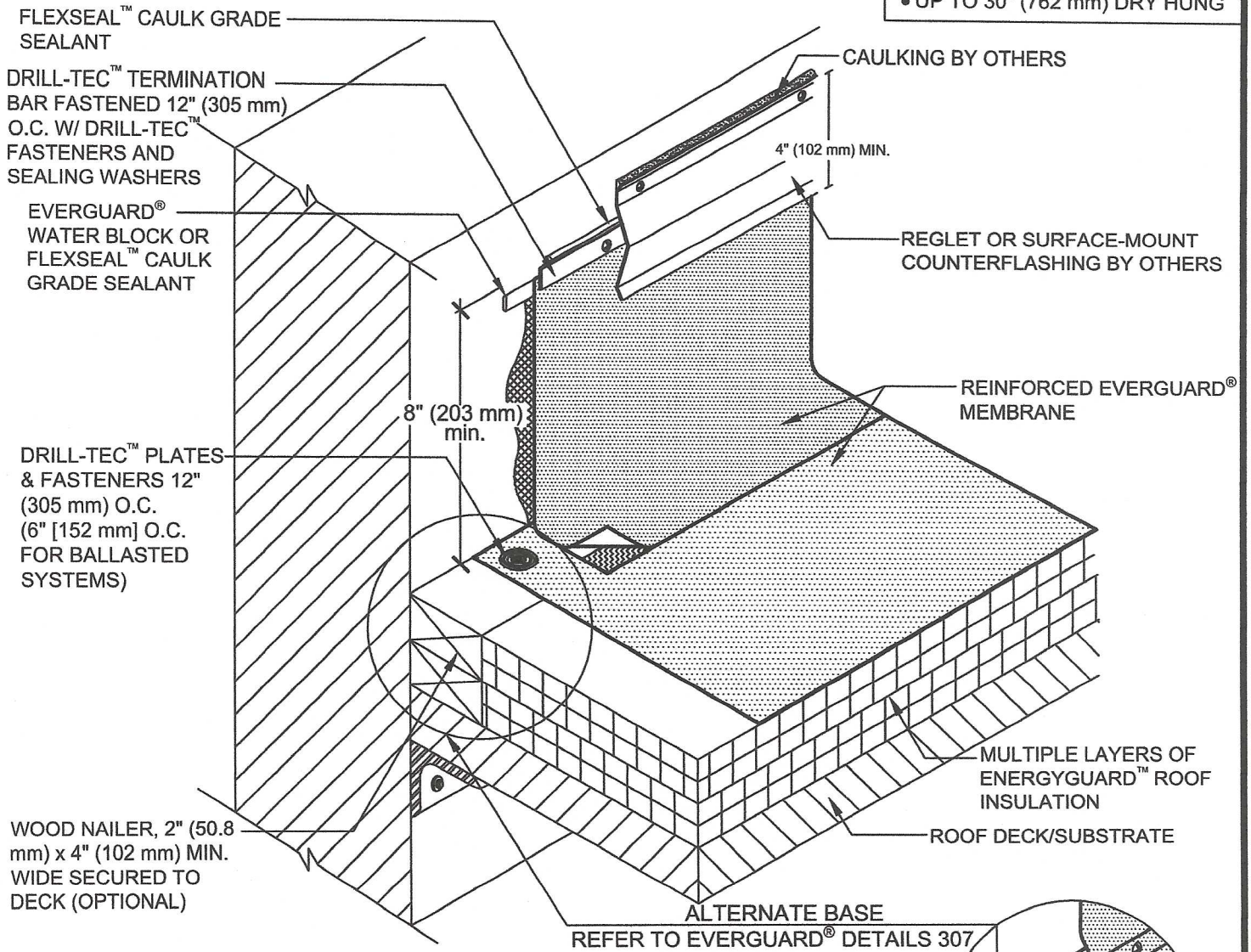
LEGEND

- HEAT-WELDED
- FLEXSEAL™ CAULK GRADE SEALANT

At Clock Tower

FLASHING KEY

- 30" - 66" (762 mm - 1.68 m) REQUIRES BONDING ADHESIVE
- UP TO 30" (762 mm) DRY HUNG



NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY FASTENED SYSTEMS ONLY.
2. EXISTING REGLET IS ACCEPTABLE IF METAL IS IN GOOD CONDITION.
3. IF EVERGUARD® FREEDOM MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.
4. EXPOSED WALLS/CURBS MUST BE WATERPROOFED AND MAINTAINED ABOVE THE BASE FLASHING IN ORDER FOR ANY SURFACE-MOUNTED TERMINATION TO BE EFFECTIVE.



WALL FLASHING WITH COUNTERFLASHING

DRAWING #
301A

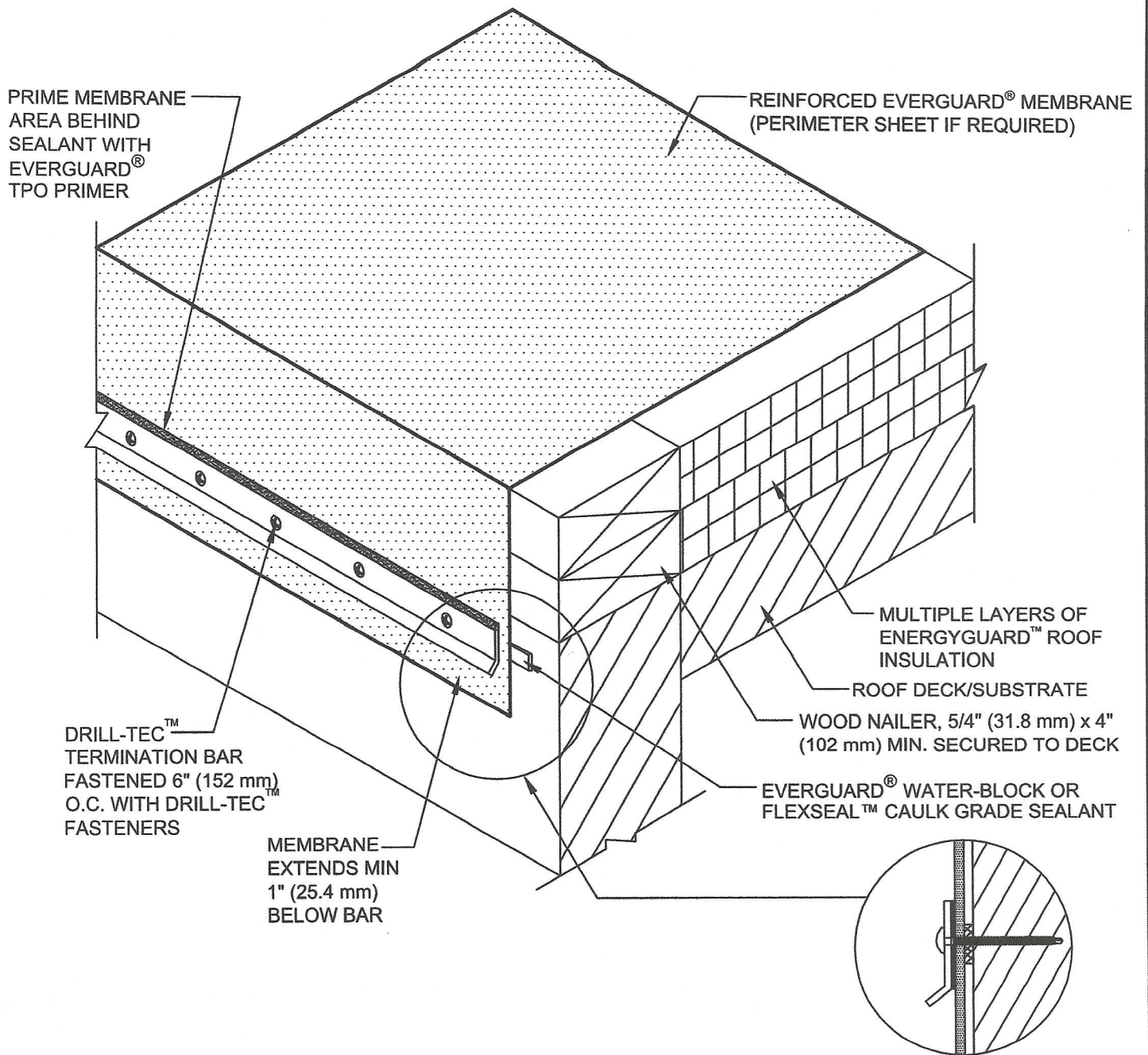
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

- HEAT-WELDED
- EVERGUARD® BONDING ADHESIVE



NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A HARD BOARD IS REQUIRED ON MECHANICALLY FASTENED SYSTEMS ONLY.
2. TERMINATION BAR MUST BE FASTENED 6" (152 mm) O.C. FOR THIS DETAIL.



MEMBRANE AT ROOF EDGE WITH TERMINATION BAR


DRAWING #
208

THIS DETAIL APPLIES TO:
ADHERED SYSTEMS
MECHANICALLY FASTENED SYSTEMS

ISSUE / REVISION DATE
8/24/20

SCALE
N.T.S.

LEGEND

 FLEXSEAL™ CAULK GRADE SEALANT

GAF

TPO Bonding Adhesive

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

gaf.com

EverGuard® TPO

SINGLE-PLY ROOFING SYSTEMS

Description

EverGuard® 1121 Bonding Adhesive is a contact-type bonding adhesive specially designed for bonding TPO single-ply roofing membranes and flashings to various roofing substrates. EverGuard® 1121 Bonding Adhesive is a general purpose rubber-based bonding adhesive for attaching TPO-based single-ply membranes to various substrates, including polyisocyanurate insulation and gypsum-based cover boards.

Features and Benefits

- Excellent coverage up to 70 sq ft per gallon of bonded membrane
- Fast-drying solvent system
- Easy application using roller or brush
- Spray application also possible
- High initial tack

Physical Properties

Base: Synthetic polymer
Solvent: Hydrocarbon blend
Flash Point: 0°F (-18°C)
Weight/Gallon: 7.4 lbs
Color: Yellow
Viscosity: 2,300 - 2,700 cps
Coverage: 50-70 sq. ft./gallon

Total Solids: 25% +/- 2.5%
Voc: 611 grams/liter
Shelf Life: 1 year, unopened
Open Time: Up to 60 minutes
Dry Time: 5 - 15 minutes
Application: Roller, brush, or spray



1121 Bonding Adhesive

Ordering Information

Item Number: 778000M
Packaging: 5 gallon pails
Weight: 37 lbs/pail
Shipping: 45 pails per pallet