EverGuard® TPO Brochure (COMEG120)

Updated: 7/14







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



Roofing Systems

gaf.com

FEATURING: EverGuard Extreme® Advanced Protection® TPO

Fall River Courthouse Fall River, Massachusetts EverGuard® TPO



– EverGuard® TPO – EverGuard® Fleece-Back TPO – EverGuard® Freedom™ Self-Adhering TPO – EverGuard® Metal-Look TPO

How Reliable Is Your **Roofing System?**

Roofing Systems

If you are a facility manager, building owner, roof consultant, or architect, you've probably dealt with your share of leaky roofs. Few things can be more annoying (or expensive) than an unexpected roof leak. The disruption to tenants and damage to property can be devastating to your business.

GAF, North America's largest roofing manufacturer, understands the difference that a reliable roof system can make. That's why we designed the EverGuard® line of ultra-reliable TPO roofing systems. It incorporates the optimal combination of physical and installation characteristics that results in unsurpassed reliability:

- Exceptional seam strength and puncture resistance...for less chance of leaks
- Superior long-term weathering capability...for long-lasting protection
- Fast, easy installation...for less chance of an installation error

In addition, EverGuard[®] systems provide a highly reflective surface for potential energy savings in suitable climates. So if you are looking for the ultimate in roof reliability, with available No-Dollar-Limit (NDL) guarantees up to an industry-leading 35 years, you owe it to yourself to consider EverGuard® TPO.

Choose From **Five** EverGuard[®] TPO Options Designed To Meet All Of Your Roofing Needs...

No one offers more options for TPO roofing than GAF! Choose the system that best meets your project's needs:

- EverGuard Extreme® Advanced Protection® TPO (pg. 4) Best For: Any application (including high heat and solar applications) where you want the very best performing TPO you can get
- EverGuard® TPO (pg. 6) Best For: Standard single-ply applications where a proven, cost-effective roofing system is needed
- EverGuard[®] Fleece-Back TPO (pg. 7) Best For: Re-cover applications or where puncture and hail resistance is paramount
- EverGuard[®] Freedom[™] Self-Adhering TPO (pg. 8) Best For: Installations where the fastest, easiest, low-odor application is a key requirement
- EverGuard[®] Metal-Look TPO (pg. 9) Best For: Where the look of standing seam metal roofing is desired, but at a lower initial installed cost

For Technical Information or call 1-800-ROOF-411 (1-800-766-3411)





ENERGY STAR[®] only valid in the USA



California Title 24 Compliant





TPO membranes meet the performance requirements of ICC ER-6030

EverGuard Extreme® TPO "Advanced Protection For Your Property"

GAF FEVErGuard

GAF EverGuard Extreme® Advanced Protection® TPO is the best-performing TPO you can buy for your property. Its patent-pending technology not only results in **next-generation performance against heat aging and UV degradation** (the two key performance characteristics directly related to roof system longevity), but also exceeds all key ASTM standards for TPO membranes. Why settle for anything less when you can get the advanced protection of EverGuard Extreme® for your property?

EverGuard Extreme® TPO Far Exceeds The Performance Of Typical TPO Membranes

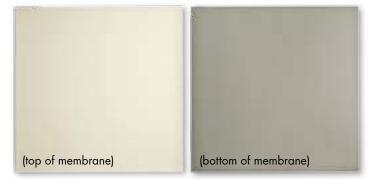
Other TPO roofing sold today simply cannot match the performance of EverGuard Extreme[®]. It uses a proprietary formulation of stabilizers and UV absorbers to achieve **performance levels far beyond current roofing standards**. To prove it, we tested EverGuard Extreme[®] against typical TPO membranes for the two key performance attributes most-highly sought after in TPO membranes: **heat aging** and **UV weathering**. The results were astounding—which is why we back EverGuard Extreme[®] with the industry's best guarantees: up to 35 years!*

EverGuard Extreme® TPO Has More Than Double The Performance Of Standard TPO Membranes In Heat-Aging Tests...

Why is this important? Because heat can severely degrade standard TPO membranes over time. So we tested EverGuard Extreme® against the three leading TPO membranes at 280°F—a temperature beyond the most rigorous proposed ASTM tests. As you can see in the chart (and the unretouched photos below), **EverGuard Extreme® TPO significantly outperformed the competition** when exposed to damaging heat.

See The Proof...

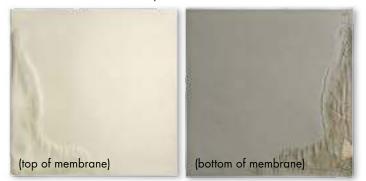
Even after the most severe accelerated heat aging at 280°F, EverGuard Extreme® TPO still looks brand new!





Roofing Systems

But **a leading competitor's standard TPO** shows severe deterioration on both the top and bottom of the membrane.



EverGuard Extreme® Far Exceeds Typical TPO Membranes In UV Weathering Tests...

Based on the ASTM D6878 Xenon Arc Weatherometer testing method, EverGuard Extreme® TPO far exceeds the performance of typical TPO membranes—**more than double in most cases.**

Why is that important? Because **the ASTM weathering test is a proxy for how well the membrane will stand up to the long-term ravages of UV degradation**, the key destroyer of long-term TPO membrane performance.

EverGuard Extreme® TPO - Typical Application

- 1. EverGuard Extreme® TPO Reinforced Membrane
- 2. EverGuard® Approved Bonding Adhesive
- 3. EnergyGuard[™] High Density Cover Board
- **4.** GAF Drill-Tec[™] Insulation Fasteners and Plates
- 5. EnergyGuard[™] Insulation
- 6. Approved Roof Deck

New For 2014!

3-yr. Emissivity: .91 3-yr. Aged Reflectance: .72

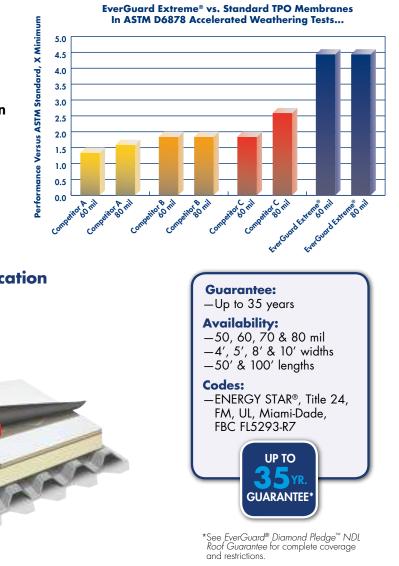


50 mil & 70 mil EverGuard Extreme®: Your "Everyday" Choices In TPO

GAF's 50 mil and 70 mil versions of EverGuard Extreme[®] Advanced Protection[®] TPO have virtually **identical weathering characteristics as our 60 mil and 80 mil versions.** EverGuard Extreme[®], which is similar in price to typical 80 mil TPO, but with superior performance. With EverGuard Extreme[®] TPO, you'll never have to ch

With EverGuard Extreme® TPO, you'll never have to choose between performance and price—you'll get both. And with our 50 mil and 70 mil versions, you'll have more design choices than ever. So why use anything else?

For Technical Information, visit gaf.com or call 1-800-ROOF-411 (1-800-766-3411)



Extreme[®]:

EverGuard® TPO "Proven Performance/Great Value"

GAF FIVErGuard

When you're looking for great performance in a value-priced TPO roofing system, look no further than classic EverGuard® TPO. It's perfect for new construction or re-roofing where superior performance is required at a cost-effective price. It features the same areat performance that all EverGuard® products offerexceptional seam strength and puncture resistance, superior long-term weathering, and easy installation—for maximum reliability.

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EverGuard® TPO Typical Mechanically Attached Application

- 1. EverGuard[®] TPO
- 2. Drill-Tec[™] Insulation Fastener and Plate(s)
- 3. Drill-Tec[™] Fastener and Membrane Plate(s)
- 4. EnergyGuard[™] Polyiso Insulation
- 5. Structural Deck

EverGuard® TPO Typical RhinoBond® Application

(same guarantee length as Fully Adhered)

- 1. EverGuard[®] TPO Reinforced Membrane
- 2. GAF's Drill-Tec[™] RhinoBond[®] Plates and Fasteners
- **3.** EnergyGuard[™] Polyiso Insulation
- 4. Structural Deck

EverGuard[®] **TPO Typical Fully Adhered Application**

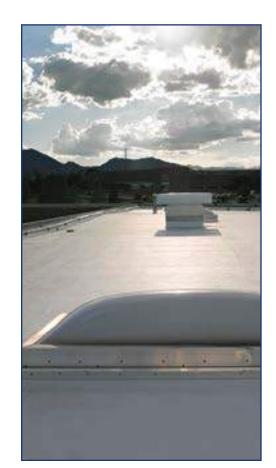
- 1. EverGuard[®] TPO
- **2.** Bonding Adhesive
- 3. Drill-Tec[™] Insulation Fastener and Plate(s)
- 4. EnergyGuard[™] Polyiso Insulation
- 5. Structural Deck



Guarantee:

Roofing Systems

*See EverGuard® Diamond Pledge™ NDI Roof Guarantee for complete coverage and restrictions.



EverGuard® Fleece-Back TPO "Your Best Option For Re-Cover Applications"

When you're looking to avoid the expense of removing an existing roofing system before installing a new one, EverGuard® Fleece-Back TPO is the perfect choice. It's also ideal for applications over abrasive surfaces such as concrete or granule-surfaced membranes, as no protective sheet is required. It also provides great installation flexibility, as it can be mechanically attached, mopped in hot asphalt, or fully adhered using either conventional or low-rise foam adhesives. EverGuard® Fleece-Back TPO even has system configurations for enhanced hail resistance.

Low-Rise Foam Adhesive Systems (shown below)

- Two-component adhesive mixed during application
- Excellent option for installation of fleece-back systems
- Significant installation time savings versus conventional adhesives
- Meets all local and national air-quality standards



For Technical Information or call 1-800-ROOF-411 (1-800-766-3411)



See EverGuard® Diamond Pledge™ NDL Roof Guarantee for complete coverage and restrictions.

EverGuard® Freedom™ TPO "Fastest Installation & No Fumes!"

EverGuard® Freedom[™] TPO is a self-adhering roofing system that is ready to install direct from the factory: just peel & stick! It's perfect for applications where VOCs or asphalt or solvent fumes are unacceptable, like for hospitals, schools, occupied buildings, etc. It's also ideal for re-roofing or smaller applications, where fast installation is paramount. Freedom[™] TPO comes with factory-applied adhesive for fast installation—just peel and stick. Plus, factory application means you'll be assured of a uniform coat of adhesive for consistent bonding. EverGuard® Freedom[™] TPO is available with two seam options: heat-welded and self-adhered RapidSeam[™]. Both versions eliminate the need for adhesives of any kind. Freedom[™] RapidSeam[™] is the fastest-installing TPO we offer—up to 300% faster than standard solvent-based adhesive installation!

EverGuard[®] Freedom[™] TPO Typical Application

GAF FILE Guard

- EverGuard[®] Freedom[™] TPO Self-Adhered Membrane
- 2. Factory Applied Adhesive
- 3. Drill-Tec[™] Insulation Fastener and Plate(s)
- Heat-Weld or RapidSeam[™] Self-Adhered Seam
- 5. EnergyGuard[™] Polyiso Insulation
- 6. Structural Deck





Guarantee: - Rapid Seam: 10 years - Heat Weld: 20 years Availability: - 45 & 60 mil - 5' & 10' widths - 50' and 100' lengths Codes: - ENERGY STAR®, Title 24, FM, UL, Miami-Dade, ICC ESR-1597, FBC FL5293-R7 UP TO QOYR. GUARANTEE*

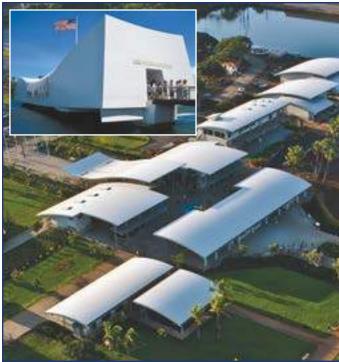
Roofing Systems

*See EverGuard[®] Diamond Pledge[™] NDL Roof Guarantee for complete coverage and restrictions.

EverGuard® Metal-Look TPO "The Look Of A Standing Seam Metal Roof... At A Fraction Of The Initial Cost!"

EverGuard® Architectural Profiles allow property owners and architects to achieve the look of standing seam metal roofing—using cost-effective, color TPO membranes—at a significant initial cost savings versus a metal roof. EverGuard® Architectural Profiles come in two styles and are easy to install on top of any EverGuard® TPO membrane. The resulting look can fool even the most knowledgeable observers.





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Product Specifications...

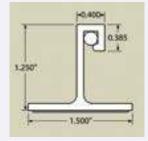
Material Composition: Semi-rigid thermoplastic

Adhesive Technology: Self-adhering pressuresensitive adhesive

Length: 10' (2.39 m)

Height/Width: See drawings below

Standing Seam Profiles for lineal installations





Packaging: 30 10'-lengths per box

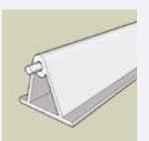
Max. Roof Pitch: Unlimited

UV resistant: Yes

End-joint connection: 3" custom plastic dowel (shown below)

Batten Seam Profiles for radial installations





It's Not Just About A Great TPO Membrane... It's About The <u>System</u>!

GAF FILE Guard

GAF roofing accessories are specially designed to work with GAF membranes to provide reliable, long-term waterproofing. At the same time, each is designed to deliver its own set of unique benefits that would improve any roofing system.

"EnergyGuard[™] Insulation **Ensures System Compatibility** And Reliable Performance!"



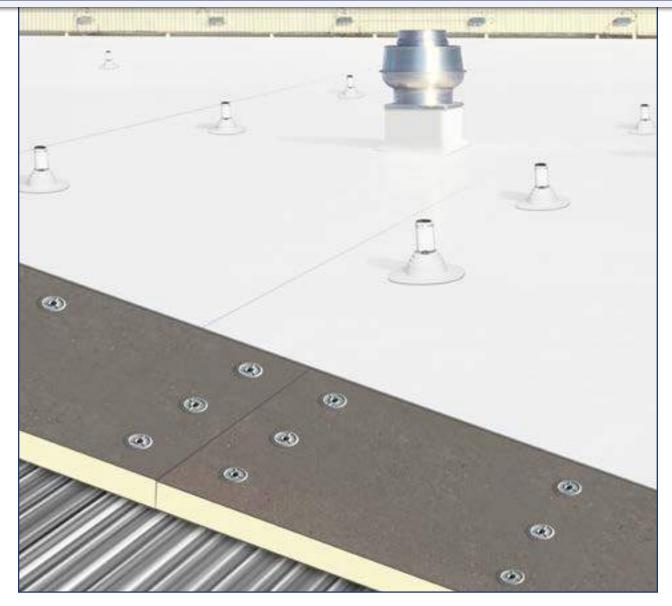
- The Problem: Energy codes are requiring an increase in R-values on the roof, so proper material selection is becoming increasingly vital to achieve all of the requirements of a low-slope roofing system.
- **The Solution:** EnergyGuard[™] Polyiso has a designed R-value of 5.7 per inch, providing a superior LTTR (Long Term Thermal Resistance) compared to any other FM Class I rated product of equivalent thickness. Furthermore, EnergyGuard[™] is designed to be installed with virtually any low-slope roofing system.
 - EnergyGuard[™] insulation options include ISO with UltraShield[™] Facer, Tapered Foam, Composite, Fiberboard, Perlite, Perlite Re-cover Board, Tapered Perlite, Tapered Edge Strip, and Cant Strip.



Roofing Systems

"Drill-Tec[™] Fasteners Are Designed For Fast Installation And Superior Performance"

- **The Problem:** Standard fasteners can rust, corrode, or even pull out under extreme weather conditions.
- The Solution: Drill-Tec[™] Fasteners with CR-10 corrosion-resistant coating exceed FMRC 4470 for superior, long-term performance; plus, their extra-heavy-duty shank and threads reduce the chance of pull-out-passes FM-1-90 at 12" o.c. for TPO and PVC.
 - Drill-Tec[™] ASAP Fasteners greatly reduce installation time—plus, locking plate resists pull-out.
 - Drill-Tec[™] RhinoBond[®] Fasteners allow you to install a TPO roof at temperatures as low as 0°F, with fewer fasteners needed to pass FM-1-90; also results in less wrinkling and flutter than standard fasteners.



"EverGuard[®] Prefabricated Accessories Can Boost Your Productivity By Up To 200%*"

The Problem:

The Solution:

- Field fabrication is time-consuming, costly, inconsistent, and can lead to unreliable details that compromise a watertight roofing system.
- EverGuard[®] prefabricated accessories deliver consistent quality and eliminate the worry and problems often associated with field fabrication.
- EverGuard[®] prefabricated accessories:
- Boost Productivity Up To 200%* - Reduce Total Installed Cost By Up To 12%
- * Based on GAF estimate to field-fabricate flashing details.

For Technical Information or call 1-800-ROOF-411 (1-800-766-3411)

"EverGuard[®] Adhesives **Help Ensure Maximum Blow-Off Resistance**"



- **The Problem:** Inconsistent quality and material incompatibility with roofing membranes can result in poor performance.
- The Solution: EverGuard® adhesives are optimized to work with EverGuard® TPO membrane systems.
 - Environmentally friendly formulations with low VOC and low odor are available.





- Eliminate Common Problems Often Associated With Field-Fabricated Details

Use EverGuard® TPO Prefabricated Accessories For A Reliable, Watertight Roofing System

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%.

T-JOINT COVER

Conforming seal for use

over T-joints in 60 and

80 mil membrane

PATCHES

applications



WALKWAY ROLL

GAF EVErGuard

Heat welds directly to TPO membrane or installed with seam tape: available in gray and yellow



Roofing Systems

CORNER CURB WRAP Four Standard sizes to flash curbs that are 24", 36", 48", and 60" in size

POURABLE SEALER POCKET

Structural foundation for EverGuard® Pourable Sealant



FLUTED CORNER For use in flashing outside corners of base and curb flashinas



UNIVERSAL CORNER Accommodates both inside and outside corners of base and curb flashinas



VENT Limits air flow to one direction, avoiding moisture buildup

TPO can be heat welded directly to the drain body, for secure installation

COATED METAL DRAIN.

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or call 1-800-ROOF-411 (1-800-766-3411)

INSIDE CORNER

Manufactured to accommodate inside corners of base and curb flashings

SCUPPER

TPO can be heat welded to the scupper, for a strong, secure installation



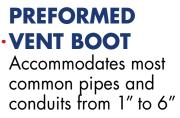


SQUARE TUBE WRAP

Tube wraps are split with overlap to wrap around square or rectangular tubing; ensures a solid weld

PREFORMED **SPLIT PIPE BOOT**

Three standard sizes accommodate most pipes and conduits









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

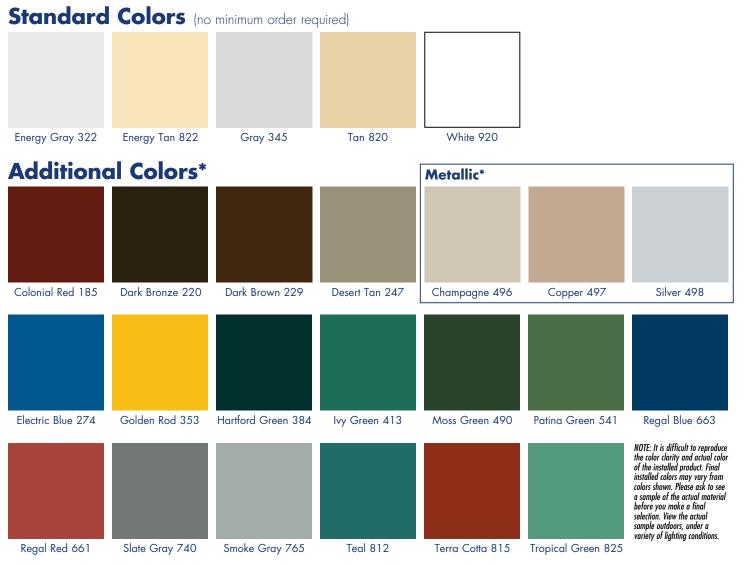
EverGuard® TPO Colors: The Industry's Largest Selection of Color Membranes

Roofing Systems

GAF's color TPO membranes can transform a traditional roof into an aesthetic attribute. With standard colors, pre-formulated colors, and virtually unlimited custom colors, no other single-ply or metal roofing manufacturer offers more color choices than GAF.

GAF EVErGuard

Decorative color membranes can complement overall building aesthetics or shingled areas. Most color choices include "Cool Color" technology, helping to increase reflectivity and reduce energy costs. The pigments have been specially selected to minimize fading.









Custom Colors Available!

 GAF can manufacture virtually any color you need – the possibilities are limitless!*

*400 square minimum order required. For more information, contact your local GAF Sales Representative.

For Technical Information, visit gaf.com or call 1-800-ROOF-411 (1-800-766-3411)

Color shown: Regal Red

These Critical Support Services Can Help To Make Your Roofing Project A Success!



GAF









The Best Roofing Contractors

GAF selects fewer than 3 out of every 100 roofing contractors for our factory-certified commercial contractor program. We provide them with extensive training tools and support to help ensure proper material installation, improve their processes, and enhance their capabilities. GAF guarantees that include coverage for workmanship are available through this elite contractor force.

Certified Maintenance Professional (CMP) and Sustainable Roofing Council (SRC) Programs

Having a maintenance program in place for your roofing asset is critical for not only optimizing its overall longevity and performance but also helping ensure you have uninterrupted guarantee coverage if issues arise. GAF Certified Maintenance Professionals (CMPs) are contractors who have not only the expertise to maintain and service your roof but also the exclusive ability to extend your Diamond Pledge[™] NDL Roof Guarantee by 25%—via the WellRoof[®] Guarantee Extension,** at no cost to you. Contact GAF Guarantee Services for details. Also, benefit from working with a member of the Sustainable Roofing Council. Educated in emerging green practices such as membrane and insulation recycling, LEED[®], and the technology behind cool roofing, an SRC member is the right choice to install your new cool roofing system.

Tapered Design Group

Tapered insulation provides a logical and economical answer for roofs that do not permit adequate positive drainage. When correctly installed, tapered insulation eliminates problems due to ponding water, and can help extend the longevity of your low-slope roofing system. GAF's Tapered Design Group provides efficient designs to reduce material costs and waste, precise layouts & material calculations, fast turnaround times for close-approaching bid dates, and easy-to-read AutoCAD-generated shop drawings for a "hassle-free" installation.

Architectural Information Services

Architects and specifiers can access an entire team devoted to assisting you with the specification process. They can answer questions and provide assistance with master specification preparation and other valuable activities at no charge to you. Call them toll free: 800-522-9224 or email AIS@GAF.com

Full-Time Field Services Team

Roofing Systems

Our nationwide team of Field Services Professionals helps ensure that your new roof is installed right the first time. They are a fulltime, professionally trained resource—not salespeople



who are asked to do inspections! Our team is a trusted source for information, installation training, and best-practice sharing to help prevent problems before they happen.

Industry-Leading Guarantees

- Diamond Pledge™ NDL Roof Guarantee... No dollar limit on your coverage; unlike competitive guarantees, provides true "edge to edge" coverage, with additional leak coverage for penetrations and metal components.*
- WellRoof® Guarantee Extension... Provides a 25% extension on a Diamond Pledge™ NDL Roof Guarantee when you participate in an annual inspection and preventative maintenance program with a GAF Certified Maintenance Professional.*
- All-American Pledge[™] Roof Guarantee...

The industry's only guarantee that covers both steepand low-slope roofing projects (in one guarantee) for single-source accountability and your convenience.*

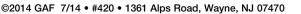


Technical Help When It Matters

Our 800-ROOF-411 hotline is available to answer technical questions live. Our Technical team can answer questions regarding installation, codes, product approvals, roof system details, and other technical issues. They are a complete technical resource dedicated to supporting proper roof installation.

*See applicable GAF roof guarantee for complete coverage and restrictions. **Guarantees of 30 and 35 years do not qualify for WellRoof® Guarantee Extension.

1-800-ROOF-411



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