GAF HydroStop™ Brochure (COMCO103)

Updated: 1/16



HOROSTOP

Truly Reliable. Roofing Designed To Last.



Rethink Roofing

The "traditional" roofing industry defines "sustainable" as:

"A roofing system that is... constructed, maintained... and **demolished** ...preserving the global environment."*

To "demolish" is to put an end to. Demolishing cannot be defined as "sustainable."

9 - 10 million tons of roofing waste is sent to U.S. landfills each year.

Rethink Roofing. Specify a TRULY reliable low-slope roofing system that can contribute toward LEED[®] points so it is safer for the environment and **gives you the longevity you deserve!**

* Proceedings of the Sustainable Low-Slope Roofing Workshop, Oak Ridge National Laboratory, Oak Ridge, TN, October 1996.



Single-Source Responsibility

The HydroStop[™] PremiumCoat[®] System waterproofs most potential leak points: drains, AC curbs, laps, seams, fasteners, parapets, transitions, expansion joints, and skylights.

Keep it Simple

- No tearing off old, worn-out roof
- No heavy equipment
- No solvents
- No building closures

Savings

The roof that pays for itself

- Tax deductions, utility rebates
- Proven to reduce energy costs up to 30%



National Guard Hangar - Jacksonville, FL



▲ National Guard Hangar - Jacksonville, FL





 School Roof, GA Original PremiumCoat[®] System Roof Application: 1997, Recoated: 2008

Get The Longevity You Deserve

Roofing tear-offs result in millions of tons of waste being placed in landfills each year. By choosing to install GAF's HydroStop[™] PremiumCoat[®] Liquid-Applied Roofing System over an existing traditional system, the need for a tear-off is eliminated and significantly less waste is created.

The NASA Infrared Telescope Facility (IRTF) sits 14,000 feet above sea level on Mauna Kea in Hawaii. Mauna Kea's mountaintop experiences severe weather conditions, including 100+ mph winds and chill factors as low as 40° below zero.

> Enduring snow storms and intense, mountaintop UV rays, the HydroStop[™] PremiumCoat[®] System performs — time and time again.



Each NASA Crawler weighs 6 million pounds. The Crawler deck is 8,100 ft², and houses millions of dollars of sophisticated equipment.

When panels coated with the HydroStop[™] PremiumCoat[®] System need to be removed for access to internal systems, they are cut out, then replaced and recoated for continued water repellant integrity.

Next Generation

New age. New thinking. New ideas.

So many hot issues to consider:

Sustainable design

- Single-source responsibility
- **Budget** conscious
- Reduce greenhouse gases
- Energy cost savings
- Green roof technology
- Can contribute toward LEED® points

One cool answer. Going green has never been easier!



PremiumCoat® System on Existing Buildings

\$2 Million Savings

With an original budget of \$4.1 million dollars, HydroStop cut Tomball High School's roofing installation cost in half. Labor and material costs were significantly less than traditional roofing systems. No tear-offs were required as the PremiumCoat[®] Roof System is designed for application over various existing substrates.





"The LEED® green building certification program is the nationally accepted benchmark for the design, construction, and operation of green buildings."

235,000 ft²

PremiumCoat® System

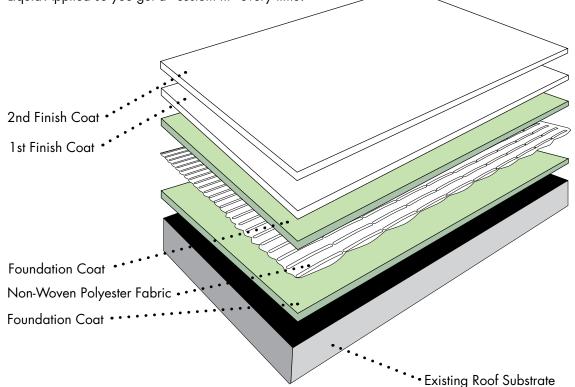
- Can contribute toward LEED® points
- Very low VOC Superior UV &
- weather resistance
- NO building closure
- Simple maintenance
- Unlimited lifespan with periodic recoating
- NO accessories required Seamless and
- self-flashing
- Brush applied
- Certified "Cool Roof"
- High solar reflectivity
- & thermal emissivity





HydroStop[™] PremiumCoat[®] Roof System:

Liquid-Applied so you get a "custom fit" every time!





PremiumCoat[®] System on New Construction

Gloria Marshall Elementary's 67,000 ft² roof is a testimony to getting the roof you deserve.

With a highly reflective white roof, the new school's energy bills will be lower.

The "clean" nature of the HydroStop™ PremiumCoat® System also lends itself to the school's rainwater collection & reuse efforts. PremiumCoat[®] System – No Limitations:



Not limited by shape

1





Traditional Roofing

- 580°F tar
- High VOC
- Hot mopped or torched
- Building closure
- Requires complete tear-off & replacement

Not limited by design

50-year building?

Think 50-year roof.

With proper maintenance and recoating.

Nobody builds a brick wall with the intention of demolishing and rebuilding it every 20 years.

Why not use the same logic on the roof?

Every roof is unique.

HydroStop[™] PremiumCoat[®] Roof System is the liquid-applied acrylic elastomeric system that provides a custom fit for every application and can contribute toward LEED[®] points.

Think true reliability. HydroStop[™] PremiumCoat[®] Systems are long lasting and safer for the environment.

Solves Every Detail Problem

PremiumCoat[®] Roofing forms a monolithic system — a waterproofing membrane — that molds and adheres to roof details including: curbs, drains, gutters, penetrations, parapet walls, and skylights.





FM 4470

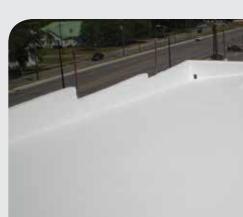
FM Class 1 4470 Roof Systems are tested for:

- 1. Water Leakage
- 2. Wind Uplift
- 3. Hail Damage
- Flame Spread
 Resistance to Foot Traffic

ASS/F/A

Class A Fire Rating ASTM E108 ASTM D6083 ASHRAE 90.1 ENERGY STAR® qualified (U.S. only) & CRRC rated.

Eligible products can contribute toward CA Title 24 compliancy, USGBC (LEED®) "cool roof" criteria, or other green building rating systems.







Pick a Substrate, any Substrate

Built-up, EPDM, insulation board, lightweight concrete, metal, plywood or single ply. New construction, existing construction...it doesn't matter.







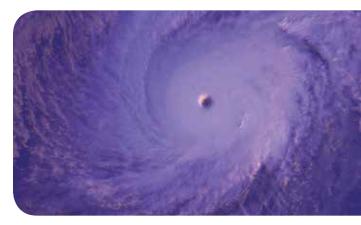
Proven Performance: Extreme Weather Resistance

Supertyphoon Paka – Guam, 1997 Sustained winds = 145 mph Wind gusts > 236 mph All 240⁺ PremiumCoat® roofs intact^{*}

Hurricane Ike – Galveston TX, 2008 Sustained winds = 110 mph Tomball ISD's PremiumCoat® roofs intact*

*See warranty for complete coverage and restrictions.

MIAMI-DADE COUNTY APPROVED



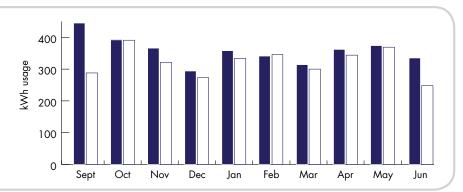
Energy Efficiency

Energy costs are 30% of a typical office building's operating expense.

Every \$ spent on energy costs is a \$ LOST

Every \$ spent on a HydroStop[™] PremiumCoat[®] System is a \$ INVESTED

- Invested in the life cycle of the building
- Invested against future energy costs



Savings You Can See

Tomball High School, Texas – comparison between 2008 and 2009's kilowatt usage. Over \$28,000 saved in energy costs in one school year.

Note: Cost savings are variable and depend on factors such as region and climate.

PremiumCoat[®] System White Reflectivity



What is a Cool Roof?

"A cool roof **reflects and emits the sun's heat** back to the sky **instead of transferring it to the building below**. 'Coolness' is measured by two properties, solar reflectance and thermal emittance...the higher the value, the 'cooler' the roof."

Source: CRRC website: www.coolroofs.org

Benefits of a Cool Roof:

- Lower internal building temperatures
- Less energy required to cool the building
- Reduces "Urban Heat Island Effect"







White PremiumCoat® System SRI 99 (Solar Reflective Index)

Reflectivity = 79% Thermal Emittance = 90%

> the higher the values, the "cooler" the roof



30%

Cool Roofs = Cool Savings

The high reflectivity (albedo) and thermal emittance (emissivity) of the PremiumCoat[®] System **lowers internal temperatures** and significantly **reduces energy costs** related to cooling a building.



Building Operating Expenses

Energy represents 30% of a typical office building's costs. It is a property's single-largest operating expense.

30% - Utilities

18% - Cleaning

- 11% Roads, Grounds, Security
- 22% Repairs & Maintenance
- 19% Administrative

Source: www.epa.gov/climateleaders — Data based on 2002 BOMA Experience Exchange Report





White = Energy Saving 250,000 ft²

College Station High School saved \$2.8 million by installing the PremiumCoat® System instead of a traditional roof.

- No tear-offs
- Installed while school was in session
- No new insulation required
- No lifting of AC units
- No raising of drains

In addition to installation savings, the school's highly reflective white roof substantially reduces the amount of energy required to cool the building.



Light-colored vs. Dark-colored Roofs

White roofs reflect the sun's energy, making them cooler than dark colored roofs, which absorb the sun's energy and transfer the heat to the building below.

Waterproof Solutions for the Building Envelope

Guarantees available up to 25 years.

One-Stop Shopping + Single-Source Responsibility =

One range of ASTM- and ASHRAE-rated and ENERGY STAR®-qualified** products.

HydroStop[™] Roofing and Waterproofing Products have current Unified Facilities Guide Specifications (UFGS) available for each of your maintenance and construction projects.

*With proper maintenance and recoating. See gaf.com for liquid-applied warranty information. **U.S. only



Unmatched Technical Support

GAF's Technical Sales Representatives will:

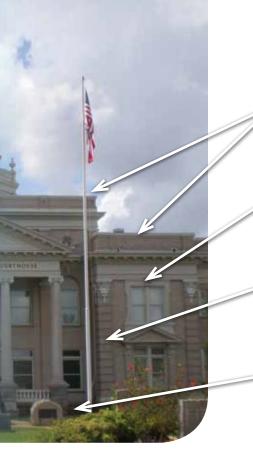
- Help evaluate problems
- Facilitate project-specific specifications for engineering and architectural departments through GAF Architectural Information Services
- Train in-house personnel in application techniques
- Recommend experienced, trained HydroStop[™] applicators
- Facilitate project inspections for guaranteed applications through GAF Field Services Representatives

Why Should You Use the HydroStop[™] PremiumCoat[®] System?

☑ The PremiumCoat[®] System complies with Federal mandate 13514:

- Reduction of greenhouse gas emissions
- Divert at least 50% of construction and demolition debris
- Introduce cost-effective, innovative strategies, such as highly reflective roofs to minimize consumption of energy
- Achieve considerably more coverage within your budget
- ☑ Reduce tear-offs
- ☑ Save on cooling energy costs
- ☑ Can contribute toward LEED[®] points
- ☑ No disturbance to the occupants during installation





Solutions for Waterproofing the Building Envelope

Roof, Parapets, Details – HydroStop[™] PremiumCoat[®] System

Water-based, non-toxic, highly UV resistant, liquid-applied sustainable roofing system. As part of ENERGY STAR[®] qualified (U.S. only) and CA Title 24 Cool Roof program, it can contribute toward LEED[®] points.

Stucco – HydroStop[™] FlexCoat Wall Coating

Water-based, non-toxic, crack-bridging elastomeric exterior wall coating. Can contribute toward LEED® points.

Masonry – HydroStop™ClearGuard Plus® System

Water-based, non-toxic, durable clear coating protects masonry, brick, terra cotta, grout, unglazed tile, and stone.

Foundation, Below Grade – HydroStop™BarrierGuard® Waterproofing



Water-based, non-toxic cementitious waterproofing system for foundation walls, concrete panels, exterior basement, and retaining walls.



GSA Advantage!®

The GSA Advantage[®] program provides contracting, building, and maintenance managers with web access to HydroStop[™] Roofing and Waterproofing Products at exclusive government pricing.

Federal contract number: GS-07F-5988R



The HydroStop[™] PremiumCoat[®] System Advantage

- **No Tear-Off**...Means no more sending old roofing materials to the landfill and the disruption and noise that goes with it
- **Proven Effective**... Monolithic and self-terminating means no more seams or complicated flashing details
- **Conserves Energy**...By reflecting heat away from the building and reducing surface temperature of the roof
- **Versatile**... Can adhere to a variety of existing roof substrates, including metal, asphaltic, single ply, and concrete
- **Tested & Guaranteed**... Meets FM 4470 and is UL classified, Miami-Dade County Product Control approved, and guaranteed up to 25 years.*



*With proper maintenance and recoating. See gaf.com for liquid-applied warranty information.



gaf.com