



With GAF PlazaDeck  
Waterproofing Systems You Can...  
**“Expand Your  
Living Space...  
And Increase The  
Resale Value Of  
Your Property!”**



Roof Patios



Roof Gardens



Roof Recreation



Roof Entertainment



Roof Play Areas

# Understanding PlazaDeck Systems...

**C**hoosing a GAF PlazaDeck (i.e., walkable) Waterproofing System for your roof or balcony can:

- Add usable square footage to your property
- Increase resale value

All for a surprisingly modest investment!

GAF PlazaDeck Waterproofing Systems can turn an ordinary roof or balcony into:

- A sundeck or patio
- A play or recreation area
- Outdoor restaurant seating
- An employee break area
- Almost any kind of usable space

*“It’s like adding a back yard to your roof!”*



Choosing and specifying a GAF PlazaDeck Waterproofing System is easier than you think. Once you decide how you would like to use the space, just follow these four steps:

### Step 1...

Have a design professional verify your **roof substrate**

### Step 2...

Choose your **waterproofing membrane**

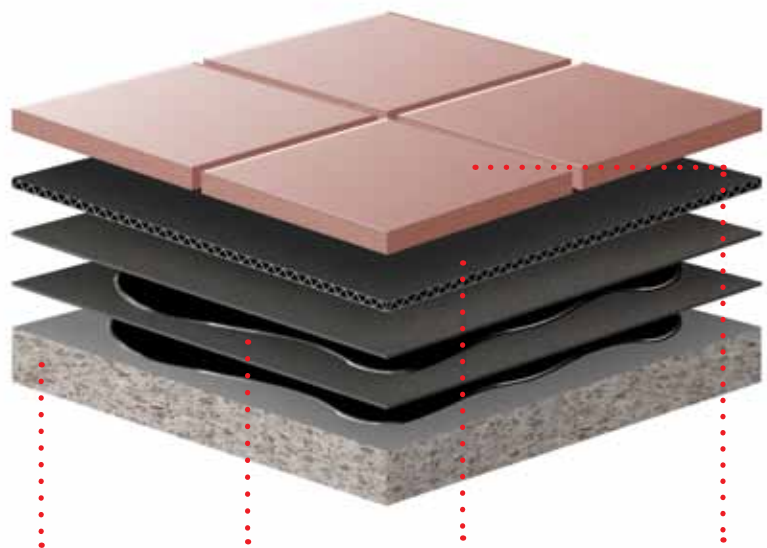
### Step 3...

Choose your **protection layer**

### Step 4...

Choose your **surfacing layer**

The choice of waterproofing membrane and surfacing layer are often made based on the final use for your PlazaDeck System. To determine the best options for your application, consult the chart titled “Putting All The Pieces Together”.



#### **Roof Substrate**

Provides the foundation on which your PlazaDeck Waterproofing System rests

#### **Waterproofing Membrane(s)**

Provides the critical waterproofing for your PlazaDeck System

#### **Protection Layer**

Protects the waterproofing membrane from damage, while (in most cases) also allowing for drainage

#### **Surfacing Layer**

Provides the final usable surface for your PlazaDeck Waterproofing System

## Step 3 Choose Your Protection Layer...

The protection layer must physically protect the roof membrane from the surfacing materials installed over it, but must not interfere with positive drainage at the membrane level. It must:

- have **exceptional resistance** to crushing failure
- **prevent direct transfer** of concentrated point loads and impact loads to the roof membrane
- provide **long-term** physical and chemical compatibility with the roof membrane

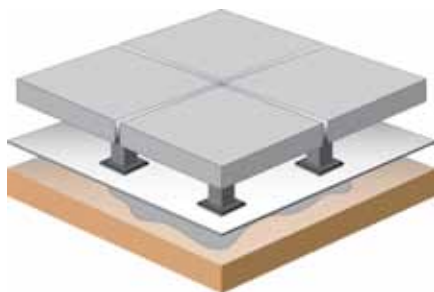
Most GAF PlazaDeck assemblies utilize one of two roof membrane protection materials:

*Rubber Pads (used with concrete paver surfacing)*

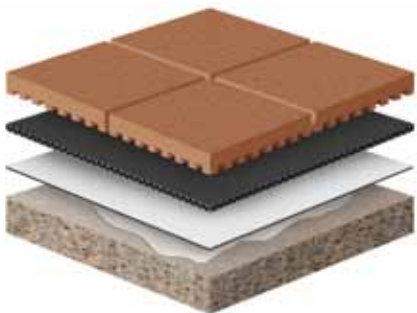
Reprocessed rubber pads, min.  $\frac{3}{16}$ " thick (installed under concrete paver pedestals and wood support blocking with concentrated point-loading).

*PVC/Polypropylene (used where surfacing load is evenly distributed)*

Heavy-duty drainage layer with knit geotextile filter fabric, min.  $\frac{1}{2}$ " thick.



Concrete paver surfacing layer on pedestals over rubber protection pads and TPO membrane.



Rubber play tiles layer over PVC/polypropylene protection layer and TPO membrane.

## Step 4 Choose Your Surfacing Layer...

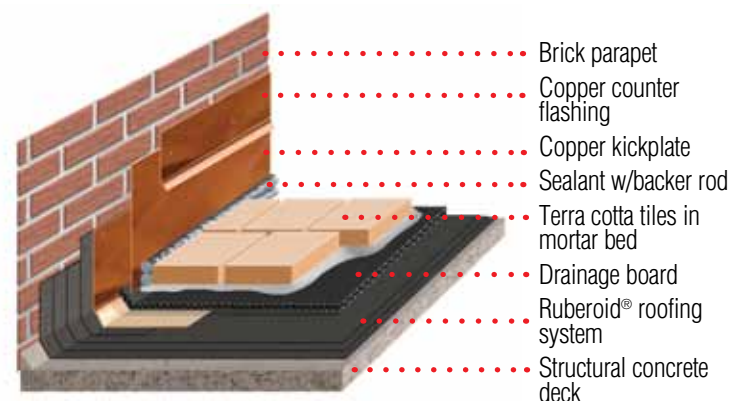
Surfacing materials selected for walkable roof applications must resist normal usage conditions, including frequency of use, impact loads and concentrated loads, and the weathering effects of the sun, rain, ice, and snow.

The surfacing materials should require minimal maintenance and repair to avoid physically disturbing the roof membrane or contaminating the roof membrane with penetrating sealants and similar treatments. The surfacing materials must be within the allowable weight capacity of the structure, and provide the desired aesthetic appearance.

GAF PlazaDeck roofing assemblies are available for use with all traditional walkable roof surfacing materials and systems, including:

- Precast concrete pavers, with or without pedestals
- Paving stones, brick, or tile, set in sand or mortar bed
- Wood decking panels
- Wood decking with wood support blocking
- Granulated rubber playsurface pavers
- Cast-in-place concrete

As an additional option, extruded polystyrene insulation board, min. 40 psi compressive strength, can be incorporated into many GAF PlazaDeck roofing assemblies between the roof membrane and surfacing materials.



A typical PlazaDeck installation/edge detail

- Brick parapet
- Copper counter flashing
- Copper kickplate
- Sealant w/backer rod
- Terra cotta tiles in mortar bed
- Drainage board
- Ruberoid® roofing system
- Structural concrete deck

# Putting **All** The Pieces Together...

This chart can help you to select/match PlazaDeck components based on your specific application...

Waterproofing Membrane	Acceptable Surfacing Layer	Typical Rooftop Use	Membrane Application Method
TPO	Pavers, wood support blocking for wood deck overlay, wood deck panels (can be combined with GAF GardenScapes™ Garden Roof System)	Lighter traffic areas that see occasional use	Fully adhered
	Rubber play tiles	Playground and recreational areas	Fully adhered
SBS, SBS HW, or APP smooth	Paving stones, brick, or tile (set in mortar or sand) or cast in place concrete	Heavy traffic (e.g., restaurants, outdoor living areas, entertainment)	Hot asphalt, cold adhesive*, or heat welded
SBS, SBS HW, or APP smooth	Rubber play tiles	Playground and recreational areas	Hot asphalt, cold adhesive*, or heat welded
	Pedestal pavers, wood support blocking for wood deck, overlay, wood deck panels	Lighter traffic areas that see occasional use; single family residential patios	Hot asphalt, cold adhesive*, or heat welded
Coatings	Ceramic tiles in mortar bed only	Balconies (up to 1,000 ft²)	Brush, roller, or spray

\*Ruberoid® Mop products only.

## GAF PlazaDeck Specifications...

With more than two dozen different available configurations, you're sure to find a PlazaDeck System that's right for your property! Contact Technical Services for additional asphaltic specs that may be used in PlazaDeck Systems. Listed below are some of the highlights.

Precast Concrete Pavers Without Paver Stands  
 Precast Concrete Pavers With Paver Stands  
 Cast In Place Concrete  
 Paving Stones, Brick Or Tile Set In Sand  
 Paving Stones, Brick Or Tile Set In Mortar With Blocking  
 Wood Deck Overlay  
 Wood Deck Panels  
 Ceramic Tile Set In Mortar  
 Pavers Set In Approved Adhesives

GAF Specification	System Description										Protection Layer <sup>3</sup>	Guarantee (yrs.) <sup>4</sup>
NN-0-2-MS(PD) or NN-0-3-MS(PD)	2 (or 3) layers of Ruberoid® Mop Smooth	●	●	●	●	●	●	●	●	●	PVC/PP <sup>1</sup>	15 Years or 20 Years
I-1-2-MS(PD) or I-1-3-MS(PD)	2 (or 3) layers of Ruberoid® Mop Smooth over SECUROCK® & EnergyGuard™ Iso <sup>2</sup>	● <sup>3</sup>	● <sup>3</sup>	● <sup>3</sup>	●	●	●	● <sup>3</sup>	● <sup>3</sup>	●	RP or PVC/PP	15 Years or 20 Years
NN-0-2-TS(PD) or NN-0-3-TS(PD)	2 (or 3) layers of Ruberoid® Torch Smooth	● <sup>3</sup>	● <sup>3</sup>	● <sup>3</sup>	●	●	●	● <sup>3</sup>	● <sup>3</sup>	●	PVC/PP	15 Years or 20 Years
I-0-2-TS(PD) or I-0-3-TS(PD)	2 (or 3) layers of Ruberoid® Torch Smooth over SECUROCK® Prime & EnergyGuard™ Iso	● <sup>3</sup>	● <sup>3</sup>	● <sup>3</sup>	●	●	●	● <sup>3</sup>	● <sup>3</sup>	●	PVC/PP	15 Years or 20 Years
NN-0-2-HWS(PD) or NN-0-3-HWS(PD)	2 (or 3) layers of Ruberoid® Heat-Weld Smooth	● <sup>3</sup>	● <sup>3</sup>	● <sup>3</sup>	●	●	●	● <sup>3</sup>	● <sup>3</sup>	●	PVC/PP	15 Years or 20 Years
I-0-2-HWS(PD) or I-0-3-HWS(PD)	2 (or 3) layers of Ruberoid® Heat-Weld Smooth over SECUROCK® & EnergyGuard™ Iso	● <sup>3</sup>	● <sup>3</sup>	● <sup>3</sup>	●	●	●	● <sup>3</sup>	● <sup>3</sup>	●	PVC/PP	15 Years or 20 Years
T-FA-N-I-N-I-60(PD)	60 mil TPO fully adhered over SECUROCK® & EnergyGuard™ Iso (insulation optional)		●					● <sup>3</sup>	● <sup>3</sup>		RP or PVC/PP	15 Years
T-FA-N-I-N-I-80(PD)	80 mil TPO fully adhered over SECUROCK® & EnergyGuard™ Iso (insulation optional)		●					● <sup>3</sup>	● <sup>3</sup>		RP or PVC/PP	20 Years
Wallcote Primer & Surface Seal	1 coat Wallcote Primer, 2 coats Surface Seal									●	N/A	10 Years
Wallcote Primer & Surface Seal with fabric	1 coat Wallcote Primer, 2 coats Surface Seal with TOPCOAT® Flashing Fabric									●	N/A	12 Years
TOPCOAT® Elastomeric Membrane	3 coats of TOPCOAT® Elastomeric Membrane									●	N/A	10 Years
TOPCOAT® Elastomeric Membrane with fabric	3 coats of TOPCOAT® Elastomeric Membrane with TOPCOAT® Flashing Fabric									●	N/A	12 Years
Surface Seal	2 coats of Surface Seal									●	N/A	10 Years
Surface Seal with fabric	2 coats of Surface Seal with TOPCOAT® Flashing Fabric									●	N/A	12 Years

RP = Reprocessed rubber pad, min. 3/16" thick PVC/PP = PVC/Polypropylene heavy-duty protection layer

<sup>1</sup>Where precast concrete pavers are used, a RP protection layer may be substituted for a PVC/PP.

<sup>2</sup>Where DensDeck® is used in hot-mopped systems, a ply of GAFGLAS® Ply 4 must be mopped to the DensDeck® prior to the installation of Ruberoid® Mop Smooth.

<sup>3</sup>Extruded polystyrene board (XPS) insulation, min. 40 psi compressive strength, can be installed in lieu of drainage board on hot-mopped, torched, and TPO installations, provided that: the XPS board compressive strength is sufficient to support the applied live and dead loads; and, the XPS board includes integral drainage channels on its underside. XPS board insulation without drainage channels must be installed over an approved drainage board.

<sup>4</sup>Guarantee covers roofing membrane only; protection layer and surfacing material covered by separate manufacturers' guarantees. (Please see applicable guarantee for complete details and restrictions.)

Note: Consult the PlazaDeck design requirements section at [www.gaf.com](http://www.gaf.com) for additional requirements and complete construction details. Some local codes may restrict the use of PlazaDeck surfacings; consult local code authorities prior to PlazaDeck construction.

## Step 1 Verify Your Roof Substrate...

PlazaDeck Systems have special *substrate* requirements. The roof deck or underlying insulation must:

- *Be Stable...* without excessive deflection that would allow the walkable roof surface to move under normal usage
- *Provide Positive Slope To Drain...* so that water does not collect either on the walkable roof surface or within the PlazaDeck assembly
- *Provide High Compressive Strength...* so that the roofing membrane will be fully supported at points of concentrated weight and impact
- *Consist Of Structural Concrete...* with minimum 2500 psi compressive strength

*Some Systems...* may require tapered isocyanurate insulation with a high density compression board, like SECUROCK® roof board or DensDeck® Prime, min. 500 psi compressive strength.

Waterproofing systems for *smaller areas* (up to 1,000 sq. feet) like balconies can omit insulation, however the surfacing options for this application are limited to tile embedded in mortar.

Before proceeding, a design professional must:

- Verify the ability of your structure to accommodate a PlazaDeck System
- Assure that the materials are compatible with each other and are installed in accordance with manufacturers' specifications
- Confirm that the design will perform as intended and meet your expectations.

## Step 2 Choose Your Waterproofing Membrane...

PlazaDeck Systems also have special *waterproofing membrane* requirements. The installation of a superior waterproofing membrane is the safest choice. The membrane must be:

- *Exceptionally strong and durable...* and have excellent waterproofing characteristics. (Unlike at-grade or below-grade waterproofing applications, for which some minor leakage can often be tolerated, walkable roof applications are usually located over finished building areas where even a minor leak is to be avoided.)
- *Resistant to damage...* for example, in the event that the surfacing materials need to be removed to allow changes or amendments to the roofing membrane, the membrane must be resistant to damage during that process.

### *Quick Tip*

#### **For Balconies...**

For 1,000 sq. feet or under, liquid-applied elastomeric membranes with or without fabric reinforcement may be the best option. GAF TOPCOAT® Surface Seal or CRT liquid membranes are especially suited to working in these confined spaces.

#### **For Roofing Applications...**

Two- or three-ply RUBEROID® polyester-reinforced modified bitumen membrane systems, hot- or cold-applied for redundancy and resiliency.

A 60 or 80 mil fully adhered TPO membrane with heat-welded seams, especially suited for PlazaDecks that may incorporate garden areas like GAF GardenScapes™ Systems.



# Maximize Your Roof Investment With These **Unique** Resources!

**Diamond Pledge™ NDL Roof Guarantee** – The industry's premier roof guarantee with true "edge-to-edge" coverage. Includes coverage for the entire Weather Stopper® Integrated Low-Slope Roofing System™. And unlike conventional guarantees, some systems are even covered for ponding water, blistering, field-fabricated metal, and much more. (See Diamond Pledge™ NDL Roof Guarantee for complete details and restrictions.)

**Well Roof™ Guarantee Extension** – The single best way to extend the life of your roof is to perform regular inspections and maintenance. GAF believes so strongly in this practice that it offers its unique Well Roof™ Guarantee Extension: a 25% extension of the length of your Diamond Pledge™ NDL Roof Guarantee—FREE—when you invest in a regular maintenance and inspection plan! (See Well Roof™ Guarantee Extension and Diamond Pledge™ NDL Roof Guarantee for complete details and restrictions.)

**Factory-Certified Contractors** – GAF selects only the top 4% of roofing contractors for membership in its factory-certified contractor program. GAF's workmanship guarantees are available only through this exclusive group.

**Green Roof Central** – Learn about leading energy-saving roofing options that can reduce your operating expenses and extend roof life. *Available free at [www.gaf.com/green](http://www.gaf.com/green).*

**Architectural Information Services** – Architects and specifiers (or property owners with in-house design departments) can access an entire team devoted to the specification process. *Available free by calling 1-800-522-9224.*

**Field Services** – Some roofing manufacturers allow their sales representatives to do the final technical inspection of your finished roof system. GAF, through Field Services, uses experienced technical representatives for these inspections.



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

East Sales Office:  
(856) 241-0241

Central Sales Office:  
(630) 296-1980

Southeast Sales Office:  
(813) 829-8880

Southwest Sales Office:  
(972) 851-0500

West Sales Office:  
(800) 445-9330

**For complete, up-to-date specifications and information, visit [gaf.com](http://gaf.com)**