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
Choosing 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

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”.

“IT’s like adding a back yard... to your roof!”
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. 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. 1/2" thick.

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.

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

A typical PlazaDeck installation/edge detail
Putting All The Pieces Together...

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

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

Guarantee covers roofing membrane only; protection layer and surfacing material covered by separate manufacturers’ guarantees. (Please see applicable guarantee for complete details and restrictions.)

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 aesthetic specifics that may be used in PlazaDeck Systems. Listed below are some of the highlights.

<table>
<thead>
<tr>
<th>GAF Specification</th>
<th>System Description</th>
<th>Acceptable Surfacing Layer</th>
<th>Protection Layer1</th>
<th>Guarantee (yrs.)4</th>
</tr>
</thead>
<tbody>
<tr>
<td>NN-0-2-MS(PD) or</td>
<td>2 (or 3) layers of</td>
<td>• PVC/PP1</td>
<td>15 Years or 20 Years</td>
<td></td>
</tr>
<tr>
<td>NN-0-3-MS(PD)</td>
<td>Ruberoid® Mop Smooth</td>
<td>• PVC/PP1</td>
<td>15 Years or 20 Years</td>
<td></td>
</tr>
<tr>
<td>NN-0-2-TS(PD) or</td>
<td>2 (or 3) layers of</td>
<td>• PVC/PP1</td>
<td>15 Years or 20 Years</td>
<td></td>
</tr>
<tr>
<td>NN-0-3-TS(PD)</td>
<td>Ruberoid® Torch Smooth</td>
<td>• PVC/PP1</td>
<td>15 Years or 20 Years</td>
<td></td>
</tr>
<tr>
<td>NN-0-2-HWS(PD) or</td>
<td>2 (or 3) layers of</td>
<td>• PVC/PP1</td>
<td>15 Years or 20 Years</td>
<td></td>
</tr>
<tr>
<td>NN-0-3-HWS(PD)</td>
<td>Ruberoid® Heat-Weld Smooth</td>
<td>• PVC/PP1</td>
<td>15 Years or 20 Years</td>
<td></td>
</tr>
<tr>
<td>T-FA-N-I-N-60(PD)</td>
<td>80 mil TPO fully adhered over SECUROCK® &amp; EnergyGuard® Iso (insulation optional)</td>
<td>• PVC/PP1</td>
<td>15 Years</td>
<td></td>
</tr>
<tr>
<td>T-FA-N-I-N-80(PD)</td>
<td>80 mil TPO fully adhered over SECUROCK® &amp; EnergyGuard® Iso (insulation optional)</td>
<td>• PVC/PP1</td>
<td>20 Years</td>
<td></td>
</tr>
<tr>
<td>Wallcote Primer &amp;</td>
<td>1 coat Wallcote Primer, 2 coats Surface Seal</td>
<td>• N/A</td>
<td>10 Years</td>
<td></td>
</tr>
<tr>
<td>Surface Seal</td>
<td>1 coat Wallcote Primer, 2 coats Surface Seal</td>
<td>TOPCOAT® Flashing Fabric</td>
<td>N/A 12 Years</td>
<td></td>
</tr>
<tr>
<td>TOPCOAT®-Elastomeric Membrane</td>
<td>3 coats of TOPCOAT®-Elastomeric Membrane</td>
<td>• PVC/PP1</td>
<td>10 Years</td>
<td></td>
</tr>
<tr>
<td>TOPCOAT®-Elastomeric Membrane with fabric</td>
<td>3 coats of TOPCOAT®-Elastomeric Membrane with TOPCOAT®- Flashing Fabric</td>
<td>• PVC/PP1</td>
<td>12 Years</td>
<td></td>
</tr>
<tr>
<td>Surface Seal</td>
<td>2 coats of Surface Seal</td>
<td>• PVC/PP1</td>
<td>10 Years</td>
<td></td>
</tr>
<tr>
<td>Surface Seal with fabric</td>
<td>2 coats of Surface Seal with TOPCOAT®- Flashing Fabric</td>
<td>• PVC/PP1</td>
<td>12 Years</td>
<td></td>
</tr>
</tbody>
</table>

RP = Reprocessed rubber pad, min. 3/16” thick  PVC/PP = PVC/Polypropylene heavy-duty protection layer
1Where precast concrete pavers are used, a RP protection layer may be substituted for a PVC/PP.
2Where DenseDeck® is used in hot-mopped systems, a ply of GAFGLAS® Ply 4 must be mopped to the DenseDeck® prior to the installation of Ruberoid® Mop Smooth.
3Extruded 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.
4Guarantee 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 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 SECURPOCK® 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. or
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.

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.