

INFINITYPAVE

ROX BINDER ASPHALT INSTALLATION GUIDE

Vehicle-Grade Resin Bound System Over Asphalt

Type: Polyurethane/Polyaspartic Hybrid Resin Bound Aggregate System

Warranty: Yes — eligible when installed by an InfinityPave Certified Installer

Purpose: Designed for residential and commercial driveways, parking spaces, walkways, and high-traffic exterior surfaces laid over new or aged asphalt. Provides a UV-stable, slip-resistant, flexible decorative finish designed to accommodate the natural movement of asphalt substrates.

Materials You'll Need

- Pressure washer
- Clean cloths / rags
- Vacuum (industrial)
- Moisture meter
- pH testing strips
- Mixing drills & paddle
- Resin bound forced-action or vertical-shaft pan mixer
- InfinityPave ROX Primer
- InfinityPave ROX Binder (UV-stable)
- Decorative kiln-dried aggregates (common sizes: approx. 1/16–1/8 in. and 1/8–1/4 in.; verify blend/system requirements)
- InfinityPave Slip-Resistant Glass Beads™ (optional)
- InfinityPave ROX Sealer
- Masking tape
- Plastic sheeting
- Resin trowels, floats, steel floats
- InfinityPave Safe Solvent or an approved thinner
- Expansion joint foam or joint tape

Additional Equipment (Optional)

- Mixing tent / canopy (for humid or hot climates)
- Forced-air heater for cold conditions
- Primer / Binder accelerator
- Mechanical surface grinder or diamond floor prep machine

Step-by-Step Application Guide

Step 1. Clean and Prepare the Asphalt Surface

- Power wash thoroughly
- Scrub with a stiff brush
- Remove moss, mud, loose stones, tire marks, and oil
- Vacuum or blow clear
- Allow surface to fully dry

Important:

New asphalt must cure for a minimum of 28 days before installing resin bound.

Step 2. Inspect and Repair the Asphalt

Check for:

- Soft or unstable areas
- Crumbling binder
- Loose top layer (fretting)
- Fatty/bleeding spots
- Potholes or deformation

Repair using:

- Asphalt Repair Mortar
- Hot asphalt patch where needed
- Cutting out and replacing failed sections

Surface must be firm, stable, and sound.

Step 3. Assess Substrate Movement and Stability

Asphalt naturally expands and contracts.

Before installation:

- Ensure adequate thickness (2–3 in. recommended; 50–75 mm)
- Confirm no active movement or surface softness
- Treat oil-contaminated patches with appropriate cleaner or lockcoat

Step 4. Remove Dust and Contamination

After cleaning:

- Sweep thoroughly
- Vacuum all loose grit
- Ensure no oily residues
- Ensure the surface is fully dry

If oil bleeding is present → apply an oil-blocking primer before Step 6.

Step 5. Tape and Protect Surrounding Areas

Mask and cover:

- Edges
- Brickwork
- Drains
- Garage entrances
- Curbs
- Landscaping

This prevents resin staining and ensures crisp borders.

Step 6. Apply Asphalt Grade Primer

Primer benefits:

- Controls bitumen bleed
- Seals porous or worn surfaces
- Improves adhesion
- Stabilizes dusty regions
- Reduces resin absorption

Wait until primer becomes tacky, not dry, before installing mesh.

Step 7. Install InfinityPave Movement Mesh (Essential for Asphalt)

Movement mesh is critical because asphalt is flexible and resin bound is semi-rigid.

Choose one:

- InfinityPave Self-Adhesive Movement Mesh (recommended)
- InfinityPave Standard Mesh (rolled into tacky primer)

Purpose:

- Absorbs expansion and contraction
- Prevents reflective cracking
- Strengthens weak asphalt
- Improves load distribution
- Extends system lifespan

Installation Guidance:

- Install into tacky primer
- Overlap strips by 2–3 in. (50–80 mm)
- Smooth flat—no bubbles or bridging
- Double-mesh high-stress areas and slopes
- Do not span active joints

Allow mesh to fully bond before resin application.

Step 8. Prepare the Resin Bound Aggregate Mix

3-Person Method Required for Driveways

Standard mix ratio:

- 220 lb kiln-dried aggregate
- 16.5 lb InfinityPave ROX Binder
- Optional: Slip-Resistant Glass Beads

Mixing Instructions:

Load aggregates into a forced-action mixer

Add binder evenly over the top

Mix 90–120 seconds

Do NOT overwet or overmix

Empty immediately into wheelbarrows and lay

Asphalt radiates heat → binder will cure faster.

Step 9. Apply the Resin Bound Aggregate

Spread the mix uniformly:

Recommended thickness:

- 3/4–1 in. (18–24 mm) for passenger vehicle traffic
- 5/8–3/4 in. (15–18 mm) for pedestrian areas

Application notes:

- Begin at highest point for drainage
- Maintain wet edges to avoid cold joints
- Use a steel float/resin trowel
- Compact fully for maximum strength
- Ensure consistent texture and color

Step 10. Trowel and Perfect the Finish

During finishing:

- Use minimal solvent mist (if needed)
- Do not over-trowel
- Ensure a smooth, even finish
- Keep edges straight and clean
- Remove trowel drag marks while wet

Step 11. Allow Full Curing

Curing times vary with temperature and substrate heat:

- Foot traffic: 6–8 hours
- Vehicle traffic: 24–48 hours
- Full cure: 5–7 days

Protect from:

- Rain
- Debris
- Tires
- Pets
- Dust
- Overnight moisture

Cover if rain is forecast.

Step 12. Apply InfinityPave ROX Sealer (Optional but Recommended)

Applied after resin bound surface has cured (usually 24 hours).

• Roller Application

- Coverage: approx. 0.5–0.7 oz/ft² (150–200 g/m²)
- Additives: Up to 10% ROX Thinner (if required for penetration)

Benefits:

- Enhances UV resistance
- Protects from oil & fuel staining
- Increases slip resistance
- Improves long-term durability

Allow to dry before vehicle use.

Step 13. Final Inspection

Check for:

- Even thickness
- Consistent texture
- No thin or exposed areas
- No reflective cracks
- Proper compaction
- Full curing

Once approved, the surface is ready for vehicle use.

Important Tips

- Do not install over fresh asphalt (must cure 28+ days).
- Avoid installation during very hot weather.
- Use mesh on every asphalt job — no exceptions.
- Keep aggregates bone-dry.
- Never use a standard concrete mixer; use a forced-action or vertical-shaft pan mixer only.
- Maintain continuous batching and laying.
- Protect surface from contamination while curing.

Problems & How to Avoid Them

Cracking:

Caused by asphalt movement → always use movement mesh.

Brown staining:

Caused by bitumen bleeding → prime with correct asphalt primer.

Loose stones:

Caused by under-mixing or incorrect binder ratio.

Whitening:

Caused by water during cure → protect surface for 24 hours.

Uneven finish:

Caused by slow installation → use proper team workflow.

DISCLAIMER

Customers must follow all instructions to ensure optimal system performance.

Information provided is based on extensive testing and field data but may not cover all substrate conditions.

InfinityPave accepts no liability for misuse, incorrect application, or failure of underlying asphalt.

A test patch must always be performed prior to full installation.

Color variations may occur between aggregate or binder batches.