INFINITYPAVE

ROX BASE BUILD-UP GUIDE

Vehicle Load-Bearing Permeable Driveway System

InfinityPave Reduced-Excavation Vehicle Traffic System

The InfinityPave ROX Base System is a vehicle load-bearing, environmentally friendly, permeable driveway construction method designed to create a highly durable monolithic resin bound surface.

Unlike traditional asphalt or concrete installations, the InfinityPave ROX Base System allows the installation of a fully permeable resin bound driveway directly onto a prepared open-graded permeable aggregate base, significantly reducing excavation requirements while maintaining excellent structural performance.

The system incorporates InfinityPave Reinforcement Mesh (CRM), InfinityPave ROX Binder, recycled and natural aggregates, and a decorative InfinityPave Resin Bound wearing course to provide a strong, flexible and stormwater-friendly / permeable surface suitable for vehicle traffic.

Ideal for:

- Residential driveways
- Commercial parking areas
- Private roads
- Access routes
- Courtyards
- Tree protection zones / root protection areas
- Stormwater management / permeable pavement projects

InfinityPave ROX Base Build-Up

1. InfinityPave Decorative Surface Layer

3/4 in. Minimum Depth (18 mm)

The finished wearing course consists of:

- InfinityPave Decorative Aggregate Blend
- InfinityPave ROX Binder
- Optional InfinityPave Slip-Resistant Glass Beads™

This UV-stable decorative resin bound surface provides:

- Excellent permeability
- UV resistance
- Slip resistance
- Long-term durability
- Decorative finish

2. InfinityPave CRM Structural Reinforcement Mesh (Upper Layer)

The upper InfinityPave Reinforcement Mesh spreads vehicle loads throughout the system and creates a reinforced skeleton between the base layer and decorative wearing course.

Benefits:

- Load distribution
- Crack suppression

- Increased flexural strength
- Reduced reflective cracking
- Enhanced structural performance

Install directly into the wet ROX Base Layer.

3. InfinityPave ROX Base Layer

1-1/4 in. Minimum Depth (30 mm)

The InfinityPave ROX Base Layer forms the structural base course of the system.

Composition:

- InfinityPave ROX Binder
- Recycled Aggregate
- Clean Angular Aggregate

The material is spread evenly across the surface using a lute or rake and compacted using:

- Roller
- Power Trowel
- Steel Float

This creates a strong, permeable monolithic base.

4. InfinityPave CRM Structural Reinforcement Mesh (Lower Layer)

The lower InfinityPave Reinforcement Mesh provides additional load-bearing capacity and reinforcement throughout the base structure.

Benefits:

- Increased structural stability
- Load transfer throughout the system
- Reduction of settlement movement
- Additional crack resistance

Install directly above the capping layer.

5. InfinityPave Capping Layer

1 in. Depth (25 mm)

Construct using:

- 3/16–3/8 in. clean angular stone (5–10 mm)

The capping layer must be:

- Uniformly spread
- Fully compacted
- Free-draining

The purpose of the capping layer is to create a stable working platform and distribute loads evenly into the subbase.

6. Open-Graded Permeable Aggregate Base / Clean Stone Subbase

5–9 in. Depth (125–225 mm)

Construct using:

- Open-graded permeable aggregate base

or

- Clean open-graded aggregate

Aggregate size:

3/4–2 in. (20–50 mm)

Typical installation depth:

- 5 in. standard passenger vehicle traffic (125 mm)
- Up to 9 in. (225 mm) where poor subgrade conditions exist

The subbase provides:

- Structural support
- Drainage capacity
- Frost resistance
- Long-term stability

All subbase materials must be compacted in layers.

7. Geotextile Separation Membrane

A geotextile membrane must be installed beneath the subbase and across the entire project area.

Purpose:

- Prevents contamination between subgrade soil and stone layers
- Maintains drainage performance
- Increases long-term stability
- Reduces settlement

The correct grade of geotextile should be selected based on site conditions.

8. Existing Subgrade Soil

The existing ground conditions must be assessed before construction begins.

Ground type will influence:

- Subbase depth
- Drainage requirements
- Compaction requirements
- Load-bearing capacity

Additional drainage measures may be required where ground permeability is poor.

System Benefits

✓ Fully Permeable
✓ Stormwater-friendly / permeable
✓ Reduced Excavation Requirements
✓ Suitable for Vehicle Traffic
✓ UV Stable Surface Finish
✓ Crack Reduction Technology
✓ Reinforced Structural Base
✓ Suitable for Tree protection zones / root protection areas
✓ Environmentally Friendly Construction Method
✓ InfinityPave Certified Installer Warranty Available

Typical Traffic Classification

Residential Vehicles

Suitable

Vans & Light-Duty Commercial Vehicles

Suitable

Emergency Vehicles

Suitable (subject to specification)

Heavy Trucks

Project-specific engineering specification required

Warranty

The InfinityPave ROX Base System is eligible for warranty coverage when installed by an InfinityPave Certified Installer and installed according to current InfinityPave technical specifications.

Warranty eligibility is subject to:

- Correct substrate preparation
- Approved materials
- Approved installation procedures
- Compliance with InfinityPave installation guidelines

Disclaimer

All information is provided in good faith and based on practical testing and field experience.

Site conditions, substrate quality, weather conditions, drainage performance and installation methods can significantly affect final performance.

InfinityPave accepts no responsibility for failure resulting from incorrect installation, substrate movement, contamination, inadequate drainage, or failure to follow published installation guidelines.