INFINITY EFFECTS

SURFACES FOR A BETTER TOMORROW

INNOVATIVE
DURABLE
BEAUTIFUL
SUSTAINABLE



ROX

RESIN-BOUND

VERTICAL SYSTEM'S

FULL VERTICAL INSTALLATION GUIDE

System 3 | All Possible Vertical Build-Ups Using Infinity Effects

POLYURETHANE & WATER-BASED SYSTEM'S

A professional decorative aggregate system offering three installation methods for vertical, inclinded and detailed resin-bound surfaces.

3 INSTALLATION OPTIONS



SHUTTERED APPLICATON



2 - PART VERTICAL



1 - PART VERTICAL

INTERNAL & EXTERNAL

DIRECT TROWEL OPTIONS

SHUTTERED OPTION

DECORATIVE FINISH

Steps Risers | Walls | Upstands | Plinths | Kerbs | Edges | Inclined Surfaces

A RANGE OF NATURAL STONE BLENDS AVAILABLE

SCAN FOR LATEST TDS, SDS & SUPPORT

CERTIFIED INSTALLERS

WARRANTIED SYSTEM

SUSTAINABLE SURFACES

GLOBAL SUPPLY

BUILT FOR A BRIGHTER TOMORROW

Warrantied when installed by an Infinity Certified Installer, subject to system requirements.



System Overview

The Complete Vertical Surfacing Solution

Infinity Effects ROX Resin-Bound Vertical System provides installers with three different methods of producing decorative resin-bound vertical and inclined surfaces.

The system has been developed so the installation method can be selected according to the substrate, required thickness, aggregate size, geometry of the surface, environmental conditions and required cure characteristics.

THREE METHODS. ONE COMPLETE VERTICAL SURFACING RANGE.

DESIGNED FOR

- Step fronts and risers
- Walls
- Upstands
- Plinths
- Kerbs and edging
- Raised planters
- Inclined surfaces
- Internal decorative features
- External decorative features

THE THREE SYSTEM OPTIONS

1 SHUTTERED SYSTEM



Temporary shutter + standard Infinity ROX UV-Stable Resin-Bound Binder + decorative aggregate.

Best where: A thicker, contained and highly compacted vertical section is required.

2 2-PART VERTICAL SYSTEM



Infinity ROX 2-Part Thixotropic Vertical Binder + decorative aggregate.

Best where: A professional direct-trowelled vertical finish with controlled chemical curing is required.

3 1-PART VERTICAL SYSTEM



Infinity ROX Single-Part Water-Based Vertical Binder + decorative aggregate.

Best where: A simple ready-to-use, air-curing direct-trowel system is preferred.

CRITICAL INSTALLATION PARAMETERS

Substrate	Clean, dry, structurally sound and suitably prepared.	**2-Part Vertical Aggregate**	Up to approximately 12 mm.
Aggregate	Clean and completely dry decorative aggregate.	**1-Part Vertical Aggregate**	6 mm or smaller recommended.
Shuttered System Thickness	Typically 8-15 mm depending on application.	**2-Part Vertical Kit**	1.75 kg.
2-Part Vertical Thickness	Typically approximately 6-8 mm, subject to aggregate size/application.	**2-Part Mix Ratio**	1:1 Part A : Part B.
1-Part Vertical Thickness	Up to approximately 12 mm, subject to aggregate size/application.	**Aggregate Capacity**	Up to 25 kg per vertical binder kit/system where specified.

SYSTEM BUILD-UP

1 SHUTTERED SYSTEM



2 2-PART VERTICAL SYSTEM



3 1-PART VERTICAL SYSTEM





Materials, Tools & Site Setup

Prepare all equipment before mixing or applying any Infinity ROX Vertical System.

Vertical resin-bound work requires good control of tack, working time, aggregate consistency and application thickness.

PREPARE
PLAN
PROTECT

FOR A PROFESSIONAL FINISH.

ESSENTIAL MATERIALS

Depending on the selected system:



(System 1) ROX UV-Stable Resin-Bound Binder



(System 2) Infinity ROX 2-Part Vertical Binder



Infinity ROX Binder Catalyst *(where specified)*



Approved decorative aggregate



(System 3) ROX Single-Part Water-Based Vertical Binder



Masking tape and protective sheeting

OPTION 1 - SHUTTER MATERIALS



MDF



Plywood



Timber



Rigid plastic sheet



uPVC sheet



Suitable release tape



Bricks



Structural weights



Props or bracing

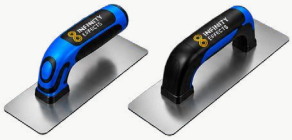
ESSENTIAL TOOLS



Mixing drill and paddle



Suitable forced-action mixer or bucket



Resin trowel



Brushes



Rollers



Measuring equipment



Straight edge



Cutting tools



PPE equipment

SITE RULE

Do not begin installation until:

- Substrate preparation is complete
- Aggregate is dry
- All materials are on site
- Environmental conditions are suitable
- The correct vertical system has been selected
- Adequate labour is available
- Shuttering/supports are prepared where required

PREPARE. PLAN. PROTECT.

HAVING EVERYTHING READY BEFORE MIXING BEGINS IS ESSENTIAL FOR A CONSISTENT VERTICAL FINISH.



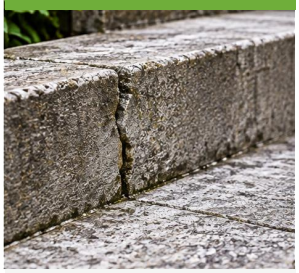
Stage 1 - Prepare the Vertical Substrate

Correct substrate preparation is essential regardless of which of the three Infinity Vertical Systems is selected.

A properly prepared substrate ensures maximum adhesion, long-term durability and the best possible finish. Take time to inspect, clean, repair and prepare the surface before installation begins.

PREPARATION CREATES PERFORMANCE.

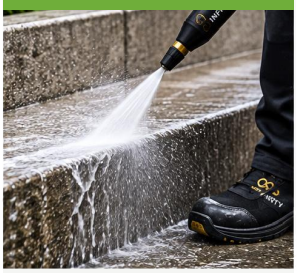
01 INSPECT THE SUBSTRATE



Check the wall, riser, step front, upstand, plinth, kerb or other surface for:

- Loose material
- Cracking
- Contamination
- Weak areas
- Moisture
- Existing coatings
- Poorly bonded material

02 CLEAN THE SURFACE

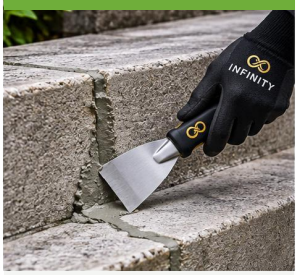


Remove all:

- Dust
- Dirt
- Grease
- Oil
- Moss
- Algae
- Loose coatings
- Contaminants

The finished substrate must be clean and capable of accepting the selected system.

03 REPAIR DEFECTS



Repair cracks, holes, loose sections and damaged areas before installation.

Remove unstable or poorly bonded material.

- Fill cracks and holes
- Repair damaged areas
- Use suitable repair mortar/products
- Ensure a sound, stable surface

04 CREATE A SUITABLE KEY



Where required, mechanically abrade or grind smooth surfaces to provide a suitable mechanical profile for adhesion.

- Grind or abrade smooth surfaces
- Create a suitable key
- Remove all dust after preparation

05 MASK & PROTECT



Protect adjacent:

- Step tops
- Walls
- Flooring
- Paving
- Edges
- Drainage
- Finished surfaces

Define clean termination points before resin work begins.

KEY POINTS

- A clean, sound and properly prepared substrate is essential for adhesion.
- Ensure the substrate is dry and free from contamination.
- Repair all defects before installation.
- Take time to prepare correctly for the best results.

DO NOT PROCEED

If the substrate is:

- WET
- CONTAMINATED
- LOOSE
- UNSTABLE
- UNSUITABLY PREPARED

PREPARE CORRECTLY. INSTALL WITH CONFIDENCE.



Stage 2A - Shuttered Vertical Application

Standard Resin-Bound Binder with Temporary Shuttering

The shuttered method allows standard resin-bound material to be installed into a controlled cavity and supported while curing. This method is ideal where a thicker, contained and highly compacted vertical section is required.

STRONGER FINISHES THROUGH CONTROLLED INSTALLATION.

01 MEASURE THE AREA



Measure the required:

- Height
- Width
- Shape
- Finished thickness

of the step front, riser, wall, kerb or vertical section.

02 CUT THE SHUTTER

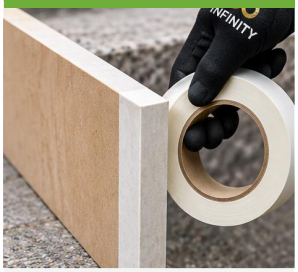


Manufacture the shutter from:

- MDF
- Plywood
- Timber
- Rigid plastic sheet
- uPVC sheet

Cut accurately to the required finished profile.

03 APPLY RELEASE PROTECTION



Where timber, MDF or plywood is used, cover the resin-contact face with a suitable smooth release/ non-stick tape.

Do not allow uncured resin to contact untreated timber where adhesion to the shutter may occur.

04 POSITION THE SHUTTER



8-15 MM

Install the shutter approximately:

from the prepared vertical substrate. Maintain a consistent cavity.

05 SUPPORT THE SHUTTER



Secure firmly using suitable:

- Bricks
- Weights
- Props
- Bracing
- Structural supports

The shutter must not move, bow or open during filling.



KEY BENEFITS

STRONG VERTICAL SECTION
Contained during curing.

CONTROLLED THICKNESS
Shutter determines finished profile.

STANDARD ROX BINDER
Uses the standard resin-bound system.

CATALYST OPTION
Cure may be accelerated where permitted by the binder TDS.

PREPARE. PLAN. PROTECT.

A PROFESSIONAL FINISH STARTS WITH THE RIGHT PREPARATION.



Stage 2B - Mix, Fill, Compact & De-Shutter

Option 1 - Shuttered Vertical Resin-Bound Application

Mix, install and compact the standard ROX resin-bound material into the shuttered cavity and allow to cure before removing the shutter.

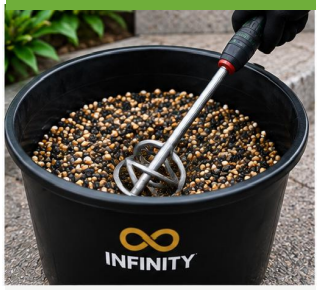
SAME GREAT SYSTEM. PROFESSIONAL RESULTS.

01 MIX ROX 2-PART BINDER



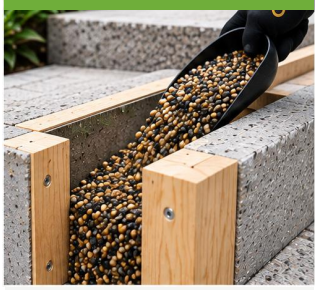
Mix the standard Infinity ROX UV-Stable Resin-Bound Binder according to its current product TDS. Ensure Part A and Part B are thoroughly combined.

02 MIX WITH AGGREGATE



Combine the binder with the specified dry decorative aggregate. Mix until every stone is evenly coated.

03 FILL THE CAVITY



Carefully feed the freshly mixed resin-bound material into the gap between the substrate and shutter. Work progressively along the vertical section.

04 LIGHTLY TAP & COMPACT



Lightly tap the outside face of the shutter while filling. This assists the material in:

- Settling
- Compacting
- Filling voids
- Following the shutter profile
- Producing a uniform vertical face
  Continue until completely filled.

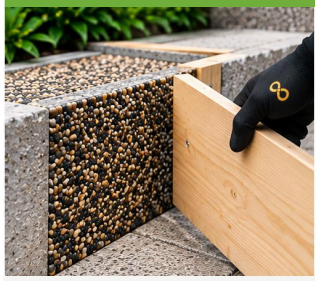
05 ALLOW TO CURE



Leave all shuttering and supports securely in place until the resin-bound material has developed sufficient strength.

DO NOT REMOVE THE SHUTTER PREMATURELY.

06 REMOVE THE SHUTTER



Once sufficiently cured:

1. Remove supports.
2. Carefully release the shutter.
3. Inspect the finished face.
4. Complete any permitted finishing work.

OPTION 1 SUMMARY

METHOD:	Shuttered / contained
TYPICAL DEPTH:	8-15 mm
BINDER:	Standard ROX UV-Stable Binder
CURE:	2-Part chemical cure
CATALYST:	Where permitted
BEST FOR:	Risers, edges and thicker vertical sections

FILL. COMPACT. CURE. RELEASE.



PROFESSIONAL VERTICAL FINISHES

The shuttered method provides a strong, contained and highly compacted vertical section with a clean, consistent finish.



Stage 3 - 2-Part Thixotropic Vertical Binder

Professional Direct-Trowel Vertical Application

Infinity ROX Vertical Binder is a professional two-part thixotropic polyurethane binder developed specifically for direct application of decorative aggregate onto vertical and inclined surfaces.

DIRECT TROWEL APPLICATION PROFESSIONAL RESULTS.

PRODUCT DATA

Kit Size	1.75 kg
Mix Ratio	1:1 Part A : Part B
Aggregate Capacity	Up to 25 kg
Aggregate Size	Up to approximately 1-6 mm
Typical Thickness	Approximately 4-8 mm, subject to aggregate/application
Cure	Two-part chemical cure
Catalyst	ROX Binder Catalyst where required
Use	Internal & External



INSTALLATION STEPS

01 MIX PART A & PART B



Combine the complete Part A and Part B. Mix thoroughly until homogeneous.

02 APPLY THE TACK COAT



Remove a small quantity of mixed binder. Brush or roll a thin, even coat onto the prepared vertical substrate. This forms the resin-rich bonding layer.

03 MIX WITH AGGREGATE



Mix the remaining binder with up to 25 kg of decorative aggregate. Ensure all stone is evenly coated.

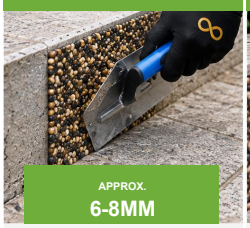
04 ALLOW TACK TO DEVELOP



Wait until the substrate coat becomes tacky and the resin/stone mix begins to clump and hold together.

Do not allow either component to fully cure.

05 DIRECT TROWEL APPLICATION



Press the aggregate mixture firmly onto the tack-coated vertical surface. Compact and flatten using a suitable resin trowel.

Typical application 6-8 mm, subject to aggregate size and project requirements.

05 WATCH FOR SAGGING



Continuously inspect for:

- Sagging
- Sliding
- Slumping
- Loss of profile
- Pulling away

Allow further tack to develop where required.

OPTIONAL ROX BINDER CATALYST



Where faster tack or curing is required, ROX Binder Catalyst may be incorporated in accordance with its current TDS.

Never arbitrarily increase catalyst dosage. Use the recommended amount based on temperature and working conditions.

KEY BENEFITS

- EXCELLENT VERTICAL HOLD
- PROFESSIONAL FINISH
- CONTROLLED CURE TIME
- CATALYST OPTION
- INTERNAL & EXTERNAL USE

PROFESSIONAL CONTROL. DIRECT APPLICATION. STRONG CHEMICAL CURE.



Stage 4 - Ready-to-Use Vertical Application

Infinity ROX Single-Part Water-Based Vertical Binder

Infinity ROX Single-Part Vertical Binder provides a simpler ready-to-use solution without separate Part A and Part B components. Unlike the two-part systems, this binder relies on air drying/curing.

**SIMPLE.
READY TO USE.
NO A/B MIXING.**

PRODUCT CHARACTERISTICS

Type	Single-Part
Chemistry	Water-Based
Mixing	Ready to use
Aggregate Capacity	Up to 25 kg
Recommended Aggregate	6 mm or smaller
Application Thickness	Up to approximately 2-8 mm, subject to aggregate/application
Cure	Air drying
Catalyst	Not applicable



- **EASY TO USE SINGLE-COMPONENT**
- **WATER-BASED LOW ODOUR**
- **INTERNAL & EXTERNAL USE**
- **ENVIRONMENTALLY FRIENDLY**
- **PROFESSIONAL DECORATIVE FINISH**

INSTALLATION STEPS

01 PREPARE THE BINDER



Open the container and thoroughly stir/mix where required by the product TDS.

02 APPLY THE TACK COAT



Remove a small amount of binder. Brush or roll a thin coat directly onto the prepared vertical substrate.

03 MIX WITH AGGREGATE



UP TO **25KG** AGGREGATE

Mix the remaining binder with up to 25 kg of decorative aggregate.

RECOMMENDED AGGREGATE: 6 MM OR SMALLER

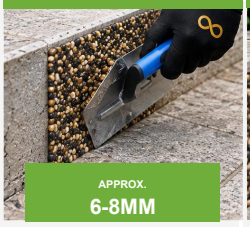
Mix until evenly coated.

04 ALLOW TACK TO DEVELOP



Allow the substrate coat and mixed aggregate to develop sufficient tack.

05 DIRECT TROWEL APPLICATION



APPROX. **6-8MM**

Firmly press and trowel the material onto the vertical surface. Compact to a uniform finish.

UP TO **12 MM**

or thinner depending on aggregate size and application.

05 AIR CURE



Allow the system to cure naturally through appropriate drying conditions.

IMPORTANT



This system cannot be accelerated using ROX Binder Catalyst.

OPTIMAL CURING CONDITIONS

Good environmental conditions will assist curing:

AIRFLOW · WARMTH · DRY CONDITIONS · VENTILATION

Cold, damp or poorly ventilated conditions will extend drying time.

IDEAL FOR

- Step fronts and risers
- Walls and upstands
- Plinths and kerbs
- Inclined surfaces
- Internal applications
- External applications
- Decorative features



Which Vertical System Should I Use?

Three systems. One complete solution. Choose the right method for your project.

Each Infinity ROX Vertical System has been developed to suit different applications, substrates and installation requirements. Use the guide below to select the most appropriate system for your project.

RIGHT SYSTEM. BETTER RESULTS.

OPTION 1
SHUTTERED APPLICATION



Choose when:

- A thicker vertical face is required
- The shape can be shuttered
- Maximum physical support during cure is beneficial
- A solid step riser or edge is being created

Key advantage:
The shutter physically contains and supports the resin-bound material.

OPTION 2
2-PART THIXOTROPIC



Choose when:

- Direct trowelling is required
- Professional cure control is important
- Strong vertical hold is required
- Faster cure may be required
- Catalyst control is beneficial

Key advantage:
Purpose-designed thixotropic polyurethane chemistry with controlled chemical curing.

OPTION 3
1-PART WATER-BASED



Choose when:

- Ready-to-use application is preferred
- No A/B mixing is desired
- Aggregate is 6 mm or smaller
- Conditions are warm, dry and ventilated
- Rapid chemically accelerated cure is not required

Key advantage:
Simple single-component application.

QUICK COMPARISON

PROPERTY	OPTION 1 SHUTTERED	OPTION 2 2-PART THIXOTROPIC	OPTION 3 1-PART WATER-BASED
Method	Shuttered	Direct Trowel	Direct Trowel
Binder	Standard ROX UV-Stable Binder	2-Part Thixotropic PU	1-Part Water-Based
Shutter	Yes	No	No
Typical Depth	8-15 mm	Approx. 6-8 mm	Up to approx. 12 mm
Aggregate	System dependent	Up to 12 mm	≤ 6 mm recommended
Catalyst	Where specified	Yes	No
Cure	Chemical	Chemical	Air drying
Cure Control	High	High	Environment dependent

PROTECT DURING CURE

Regardless of system, protect the installation from:

RAIN · WATER · FROST · CONTAMINATION · IMPACT · EXCESSIVE HEAT · PREMATURE CONTACT

⚠ **Do not put the surface into service until adequately cured.**



PROTECT TODAY
ENJOY TOMORROW



Troubleshooting & FAQs

Common issues, causes and solutions to help you achieve the best results.

If you experience any issues not listed here, refer to the relevant product TDS or contact Infinity Effects Technical Support.

QUESTIONS TODAY.
BETTER RESULTS TOMORROW.

COMMON ISSUES & SOLUTIONS

01 MATERIAL SLIDING FROM WALL



Cause:
Insufficient tack, excessive thickness, unsuitable aggregate or environmental conditions.

Solution:
Allow additional tack development, reduce lift thickness and ensure the selected aggregate is suitable.

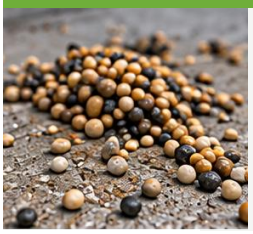
02 MATERIAL SLIDING FROM WALL



Cause:
Poor substrate preparation, insufficient tack coat or application too early.

Solution:
Stop installation and assess adhesion. Ensure the substrate is properly prepared and adequate tack has developed.

03 MATERIAL SLIDING FROM WALL



Cause:
Incorrect binder quantity, poor mixing or application before sufficient tack develops.

Solution:
Verify system quantities and thoroughly coat all aggregate.

04 MATERIAL SLIDING FROM WALL



Cause:
Resin has bonded directly to untreated timber/MDF.

Solution:
Always use suitable release tape or non-stick shutter-facing material.

05 MATERIAL SLIDING FROM WALL



Cause:
Insufficient filling or compaction.

Solution:
Fill progressively and lightly tap the shutter during installation to settle the aggregate.

06 MATERIAL SLIDING FROM WALL



Cause:
Low temperature or environmental conditions.

Solution:
Refer to the relevant ROX Binder and Catalyst TDS. Use catalyst only where permitted and at the correct dosage.

07 MATERIAL SLIDING FROM WALL



Cause:
Low temperature, high humidity or poor airflow.

Solution:
Improve controlled airflow and ventilation and maintain suitable ambient conditions.

PREVENT PROBLEMS
DELIVER PERFECT RESULTS



FREQUENTLY ASKED QUESTIONS

Q **Which is the strongest vertical method?**	All systems must be selected according to the application. The shuttered system provides physical containment during cure, while the 2-part thixotropic system provides a strong professional chemical-cure direct-trowel option.	**Q** **Can catalyst the 1-part binder?**	No. It is a water-based air-curing system.
Q **Can ROX Catalyst be used with the 2-part vertical system?**	Yes, where required and strictly in accordance with the current catalyst TDS.	**Q** **What aggregate should I use with the 1-part system?**	6 mm or smaller is recommended.
Q **How much aggregate can the vertical binders take?**	Up to approximately 25 kg where specified for the respective system.	**Q** **Can I install over any vertical surface?**	No. The substrate must be sound, stable, clean, dry and suitable for the selected binder/system.

NEED MORE HELP?

For further technical support, refer to the individual product TDS/SDS or contact Infinity Effects Technical Support.