INFINITY EFFECTS

SURFACES FOR A BETTER TOMORROW

INNOVATION
DURABILITY
AESTHETICS
SUSTAINABILITY

PROFESSIONAL COATING SOLUTIONS

R.S WATER-BASED URETHANE NON-FERROUS METAL COATING SYSTEM

PROFESSIONAL INSTALLATION GUIDE

SYSTEM 3 | ALUMINIUM, GALVANISED STEEL, ZINC & SUITABLE NON-FERROUS METAL SURFACES



2K WATER-BASED HYBRID SYSTEM

A professional water-based hybrid urethane coating system developed for the preparation and decorative refinishing of suitable non-ferrous metal surfaces.

Designed to deliver excellent adhesion, durability, stain resistance and a smooth, professional decorative finish when applied to correctly prepared substrates.

- Excellent adhesion to non-ferrous metal surfaces
- Low VOC, low odour water-based formula
- Durable, stain resistant & long-lasting finish

DURABLE | **STAIN RESISTANT** | **PROFESSIONAL FINISH** | **WATER-BASED**

ALUMINIUM | GALVANISED STEEL | ZINC | SUITABLE NON-FERROUS METALWORK

AVAILABLE FINISHES

GLOSS | SATIN | MATT

AVAILABLE IN 1000+ COLOURS

GLOSS | SATIN | MATT

SCAN FOR LATEST TDS, SDS & SUPPORT

CERTIFIED INSTALLERS | **WARRANTIED SYSTEM** | **PROFESSIONAL FINISH** | **GLOBAL SUPPLY**

REFRESH. RECOLOUR. RESTORE.

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

PAGE 2

SYSTEM OVERVIEW

R.S WATER-BASED URETHANE
NON-FERROUS METAL COATING SYSTEM

The **Infinity Effects R.S Water-Based Urethane Non-Ferrous Metal Coating System** is a professional water-based hybrid coating system designed for the refurbishment and decorative refinishing of suitable non-ferrous metal surfaces.

The system may be used on correctly prepared aluminium, galvanised steel, zinc and other suitable non-ferrous fabricated metalwork.

Correct surface preparation is critical. All surfaces must be sound, stable, clean, dry and free from grease, oils, loose oxidation and other contamination before coating.



REFRESH. REIMAGINE. RENOVATE.

DESIGNED FOR

Professional non-ferrous metal refinishing where a durable, uniform and high-quality decorative finish is required without replacing existing suitable metalwork.

CRITICAL INSTALLATION PARAMETERS

Surface Condition	Sound, stable, clean, dry and free from contamination.
Cleaning	Thoroughly clean and degrease before mechanical preparation.
Oxidation	Remove loose, powdery or unstable oxidation.
Mechanical Preparation	220–400 grit or suitable abrasive pad.
Adhesion Preparation	Infinity Fusion Adhesion Promoter.

Application	Spray, roller or brush where appropriate.
Spray Pressure	3–4 Bar.
Spray Nozzle	1.2–1.8 mm.
Working Temperature	10–25°C.
Additional Coats	Apply where required. Allow each coat to dry sufficiently before recoating.
Final Cure	Allow the coating system to fully cure before demanding service or moisture exposure.

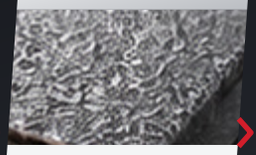
SYSTEM BUILD-UP

1 SUBSTRATE



Existing suitable non-ferrous metal surface.

2 PREPARATION



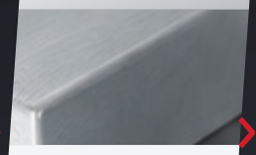
Cleaning, degreasing, oxidation removal and mechanical key.

3 ADHESION PREPARATION



Infinity Fusion Adhesion Promoter.

4 PRIMER



R.S Water-Based Urethane High Build Blocking Primer where required.

5 COLOUR COAT



R.S Water-Based Urethane Primer/Base Coat.

6 FINISH



Gloss / Satin / Matt selected finish.

PAGE 3

MATERIALS, TOOLS & SITE SETUP

RIGHT TOOLS. BETTER RESULTS.

Prepare the complete coating setup before work begins.
Good organisation, contamination control and a clean application environment are essential to **achieving a consistent professional finish.**



ESSENTIAL MATERIALS & TOOLS

PREPARE. PLAN. PROTECT.

- Infinity Fusion Adhesion Promoter
- R.S Water-Based Urethane Primer/Base Coat
- R.S Water-Based Urethane High Build Blocking Primer (where required)
- Suitable metal cleaner
- Suitable degreaser
- Clean water
- Deionised water where required
- Clean lint-free cloths
- Microfibre drying towels
- 220–400 grit abrasives
- Suitable Scotchbrite / abrasive pads
- Tack cloth where appropriate
- HVLP spray gun / suitable spray equipment
- Mechanical sander / sanding blocks
- Mixing equipment
- Masking tape
- Plastic sheeting / masking paper
- Safety goggles
- Protective gloves
- Suitable respiratory protection

OPTIONAL EQUIPMENT

- Spray booth or temporary spray enclosure
- Extraction equipment
- Spray shield
- Drying racks
- Mechanical sanding equipment

SITE RULE

- Keep the coating area clean, well ventilated and protected from contamination.
- Mask and protect surrounding surfaces before preparation and application.
- Once the substrate has been cleaned and prepared, avoid unnecessary contact with the surface.

CLEAN ENVIRONMENT. BETTER FINISH.

PAGE 4

STAGE 1: INITIAL INSPECTION, CLEANING & DEGREASING

Correct preparation is essential for adhesion, appearance and long-term coating performance.



PREPARE TODAY FOR A BETTER TOMORROW.

01 INSPECT THE SUBSTRATE



Inspect all surfaces before work begins.

Check for:

- Grease
- Oils
- Dirt
- Surface contamination
- Oxidation
- Existing coating failure
- Fabrication residues
- Surface damage
- Moisture

Determine whether the substrate is suitable for refinishing before proceeding.

02 CLEAN

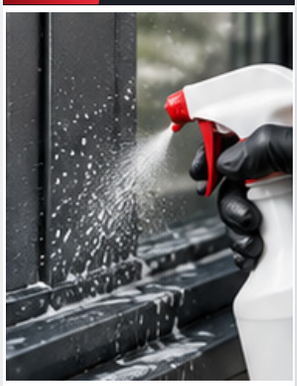


Thoroughly clean all surfaces using a suitable metal cleaner.

Pay particular attention to:

- Corners
- Profiles
- Edges
- Fabricated joints
- Frequently handled areas
- Areas exposed to oils or grease

03 DEGREASE



Thoroughly remove:

- Grease
- Oils
- Hand contamination
- Fabrication residues
- Industrial grime
- Other adhesion-inhibiting contamination

Repeat cleaning where necessary.

04 RINSE



Where the selected cleaning product requires rinsing, rinse thoroughly using clean water.

Remove all cleaner and degreaser residues.

Residual cleaning products may interfere with subsequent adhesion.

05 DRY



Dry using clean lint-free or microfibre cloths.

Allow the substrate to become completely dry before proceeding.

DO NOT PROCEED

Do not continue if the surface remains:



GREASY | WET | CONTAMINATED | UNSTABLE | OXIDISED | INADEQUATELY CLEANED



STAGE 2: OXIDATION REMOVAL & MECHANICAL PREPARATION



The quality and durability of the final coating depend heavily on the condition of the substrate beneath it.

PREPARATION CREATES THE FINISH.

01 INSPECT FOR OXIDATION



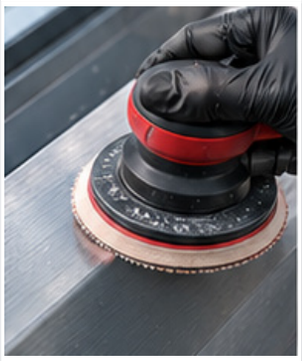
Check the complete substrate under good lighting.

Look for:

- Powdery oxidation
- Loose surface material
- Existing coating failure
- Surface deposits
- Damaged areas
- Remaining contamination

Remove unstable material before proceeding.

02 ABRADE



Mechanically abrade the complete coating area using:

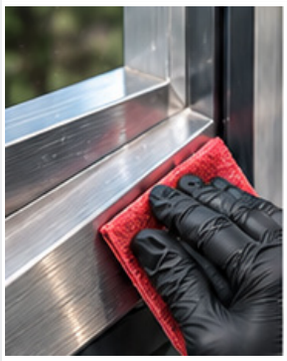
220–400 GRIT

or a suitable abrasive pad.

The purpose of mechanical preparation is to:

- Remove surface gloss
- Remove light oxidation
- Create a uniform mechanical key
- Improve coating adhesion
- Smooth surface irregularities
- Prepare the substrate for subsequent coating layers

03 PREPARE EDGES & PROFILES



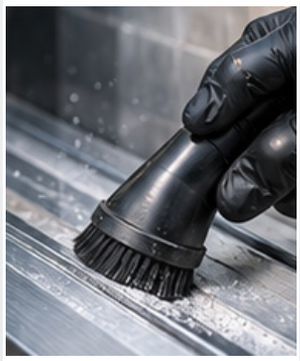
Pay particular attention to:

- Corners
- Profiles
- Folded edges
- Fabricated joints
- Difficult-to-access areas

Ensure the complete coating area is uniformly prepared.

Avoid excessive abrasion that could unnecessarily damage the substrate.

04 REMOVE SANDING RESIDUE



Remove all sanding and preparation residue.

Vacuum where appropriate and wipe using clean materials suitable for the substrate.

No loose dust or abrasive residue should remain.

05 CONTROL CONTAMINATION



Once the substrate has been prepared:

- Avoid unnecessary bare-hand contact
- Keep silicone away from the work area
- Keep oils and grease away
- Keep tools and cloths clean
- Prevent airborne contamination
- Keep the substrate completely dry

KEY POINTS

- UNIFORM MECHANICAL KEY
- NO LOOSE OXIDATION
- NO GREASE OR OIL
- NO LOOSE DUST
- NO CONTAMINATION
- READY FOR ADHESION PREPARATION

STAGE 3: APPLY INFINITY FUSION ADHESION PROMOTER

Correct adhesion preparation is particularly important when coating smooth, non-porous metal surfaces.



PREPARE. PROMOTE. PROTECT.

01 FINAL INSPECTION



Before applying the adhesion promoter, check the complete surface for:

- Dust
- Grease
- Oil
- Oxidation
- Moisture
- Missed abrasion
- Surface contamination

Correct any issues before proceeding.

02 FINAL CLEAN



Remove all remaining sanding and preparation residue.

The substrate must be:

- **CLEAN**
- **DRY**
- **SOUND**
- **UNIFORMLY ABRADED**
- **FREE FROM CONTAMINATION**

03 APPLY FUSION ADHESION PROMOTER



Apply **Infinity Fusion** Adhesion Promoter as a fine, controlled mist.

Distribute/wipe across the metal as required by the current individual product instructions to achieve even preparation.

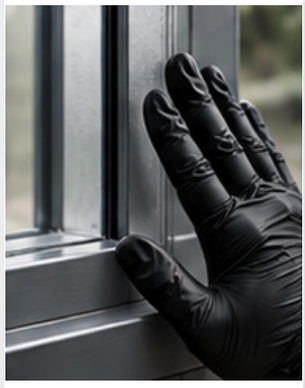
04 ALLOW TO DRY



Allow the Infinity Fusion Adhesion Promoter to dry fully before subsequent coating.

Do not apply the next coating layer onto wet adhesion promoter.

05 PROTECT THE PREPARED SURFACE



Once prepared:

- Do not contaminate
- Do not unnecessarily touch
- Keep free from dust
- Keep completely dry
- Proceed with subsequent coatings according to applicable product requirements

INSTALLER TIP

Where the substrate, existing coating or compatibility is uncertain, carry out a test area before proceeding with the complete installation.



BETTER ADHESION STARTS WITH BETTER PREPARATION.

STAGE 4: APPLY R.S WATER-BASED URETHANE HIGH BUILD BLOCKING PRIMER

WHERE REQUIRED

R.S Water-Based Urethane High Build Blocking Primer may be incorporated where required to provide additional build, levelling and a uniform prepared surface before colour coating.



SEAL. PREPARE. LEVEL. PROTECT.

01 FINAL CLEAN



Ensure the prepared surface is completely free from:

- Dust
- Loose abrasive residue
- Grease
- Oil
- Moisture
- Surface contamination

02 MASK & PROTECT



Protect adjacent surfaces that are not being coated.

Mask edges, fixtures and surrounding components as required.

03 PREPARE HIGH BUILD PRIMER



Prepare the **R.S** Water-Based Urethane High Build Blocking Primer according to its current individual product TDS.

Follow the specified:

- Component ratio
- Mixing sequence
- Viscosity adjustment
- Filtration requirements
- Application settings

04 APPLY



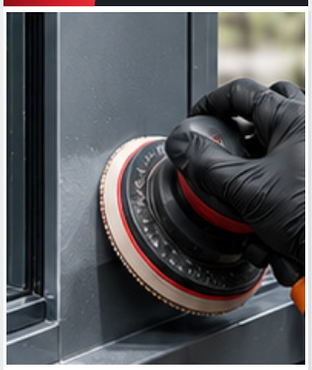
Carry out a test spray before coating the complete project.

Apply smooth, controlled and even passes.

Avoid:

- Excessive wet-film build
- Heavy edges
- Runs
- Sags
- Missed areas

05 DRY, INSPECT & SAND



Allow the primer to dry/cure according to its current individual product TDS.

Inspect for:

- Rough areas
- Dust inclusions
- Surface defects
- Missed primer
- Uneven build

Sand flat where necessary before proceeding.

WHY USE HIGH BUILD PRIMER?

HELPS LEVEL SURFACE DEFECTS

Provides additional build where surface correction is required.



CREATES A UNIFORM BASE

Helps produce a consistent substrate before colour coating.



IMPROVES FINISH UNIFORMITY

Provides a smooth foundation for subsequent coating layers.



A BETTER PREPARATION. A LONGER-LASTING FINISH.

SURFACES FOR A BETTER TOMORROW

STAGE 5: FINAL PREPARATION BEFORE COLOUR



The quality of the final finish depends heavily on the condition of the prepared or primed substrate.

PREPARATION CREATES THE FINISH.

01 INSPECT

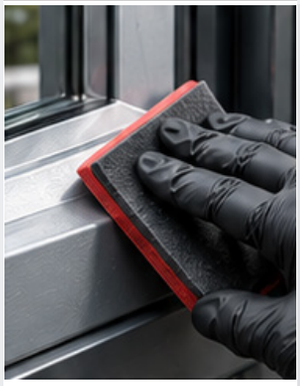


Check every surface under good lighting.

Look for:

- Scratches
- Dust inclusions
- Visible defects
- Exposed substrate
- Uneven primer
- Edge damage
- Missed preparation

02 CORRECT DEFECTS

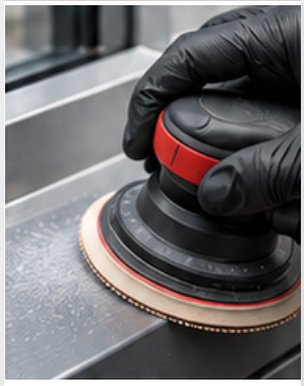


Correct defects before colour coating.

Rework, sand or spot-prime where necessary.

Ensure repaired areas are smooth and will not remain visible through the final coating.

03 FINAL SAND



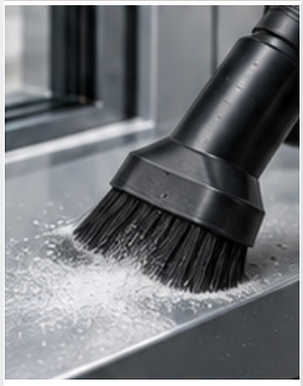
Where required, sand the primed surface flat and uniform.

Use an appropriate fine abrasive or suitable Scotchbrite.

Avoid aggressive sanding through:

- Edges
- Profiles
- Corners
- Raised details

04 REMOVE DUST



Vacuum thoroughly.

Wipe using a clean, dry cloth.

Finish with a suitable tack cloth where appropriate immediately before coating.

05 CONTROL CONTAMINATION



Keep the following away from the coating area:

- Silicone
- Oils
- Grease
- Aerosols
- Dirty tools
- Contaminated cloths
- Airborne dust

READY FOR COLOUR

- SMOOTH SURFACE
- UNIFORM PREPARATION
- NO VISIBLE DEFECTS
- NO LOOSE DUST
- NO CONTAMINATION
- READY FOR COLOUR COATING

A BETTER PREPARATION. A LONGER-LASTING FINISH.

SURFACES FOR A BETTER TOMORROW

STAGE 6: MIX & APPLY R.S WATER-BASED URETHANE PRIMER/BASE COAT

APPLICATION

R.S Water-Based Urethane Primer/Base Coat forms the primary colour coating layer within the Infinity Effects Non-Ferrous Metal Coating System.



CORRECT PREPARATION. PROFESSIONAL RESULTS.

01 PREPARE MATERIAL



Prepare the coating according to the current individual product TDS.

Mix gently until:

- Pigment is fully dispersed
- Colour is uniform
- Consistency is smooth
- Material is homogeneous

Do not aggressively mix or introduce unnecessary air.

02 TEST SPRAY



Always carry out a test spray before coating the complete project.

Confirm:

- Compatibility
- Adhesion
- Colour
- Viscosity
- Spray pattern
- Material delivery
- Finish quality

03 SPRAY SETTINGS



R.S WATER-BASED URETHANE PRIMER/BASE COAT

PRESSURE:
3–4 BAR

NOZZLE:
1.2–1.8 MM

The supplied source specifies these spray settings for the original coating system.

04 APPLY



Spray edges and profiles first where appropriate.

Apply faces using smooth, controlled and overlapping passes.

Maintain consistent:

- Spray distance
- Gun speed
- Overlap
- Material delivery

Ensure:

- Even coverage
- Smooth application
- No dry edges
- No excessive wet-film build
- Uniform opacity

05 ADDITIONAL COATS



Additional coats may be applied where required for:

- Increased opacity
- Higher build
- Increased durability
- Improved finish uniformity

Allow each coat to dry sufficiently before applying the next coat.

INSTALLER TIP

Always carry out a test panel to confirm adhesion, compatibility, colour, spray setup and final appearance before proceeding with the full project.



PREPARE RIGHT. SPRAY BETTER. ACHIEVE MORE.

STAGE 7: CURE & RETURN TO SERVICE

Correct handling during the early cure period is essential to protect the newly applied coating.



PATIENCE PROTECTS PERFORMANCE.

01 INITIAL DRY



Leave coated components undisturbed during initial drying.

Avoid premature handling.

02 BETWEEN COATS



Allow each coating layer to dry sufficiently before applying subsequent coats.

Follow the current individual product TDS for specific drying and recoat requirements.

03 PROTECT DURING CURE



Avoid:

- Stacking coated components
- Contact between freshly coated surfaces
- Moisture exposure
- Premature installation
- Heavy handling
- Abrasion
- Impact
- Aggressive cleaning

04 RETURN TO SERVICE



Do not return coated components to demanding service until sufficiently cured.

The coating must fully cure before handling or exposure to moisture in accordance with the current individual product TDS.

05 FINAL INSPECTION



Inspect the completed coating under strong lighting.

Check for:

- Missed areas
- Inconsistent sheen
- Texture irregularities
- Clean masking edges
- Surface defects
- Uniform colour
- Complete coverage

Perform appropriate touch-ups where required.

AFTERCARE

During early cure, treat all coated surfaces carefully.
Avoid unnecessary:





RIGHT CARE. LONGER LIFE. BEAUTIFUL RESULTS.

REFRESH. REIMAGINE. RENOVATE.

TROUBLESHOOTING & FREQUENTLY ASKED QUESTIONS

SOLUTIONS FOR A BETTER FINISH.



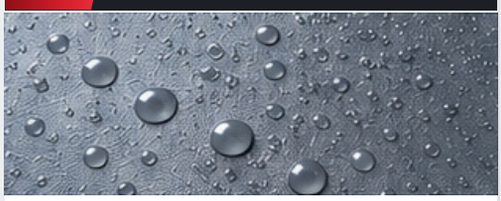
01 POOR ADHESION



Cause:
Inadequate cleaning, insufficient mechanical preparation, contamination or incorrect adhesion preparation.

Solution:
Remove affected coating. Thoroughly clean, degrease and correctly abrade the substrate before repeating the specified adhesion preparation and coating system.

02 FISHEYES / SURFACE REJECTION



Cause:
Surface contamination such as silicone, oils, grease or residues.

Solution:
Identify and remove the contamination source. Deep clean, abrade and recoat as required.

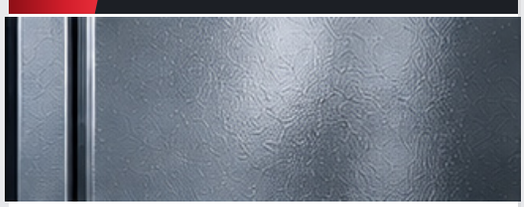
03 PEELING



Cause:
Poor substrate preparation, contamination, unstable existing coating or insufficient adhesion.

Solution:
Remove unstable coating and repeat the specified preparation and adhesion procedure.

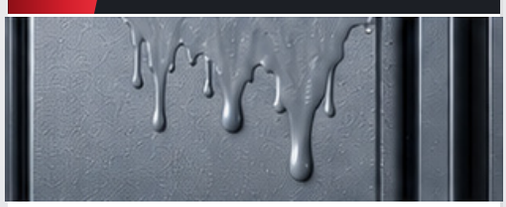
04 PATCHY / UNEVEN FINISH



Cause:
Uneven application technique, inconsistent spray distance or non-uniform underlying preparation.

Solution:
Maintain controlled application and consistent overlapping passes.

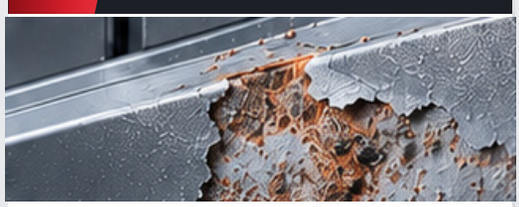
05 RUNS / SAGS



Cause:
Excessive material application.

Solution:
Allow the coating to cure and correct as appropriate. Apply subsequent coats using controlled passes and avoid excessive wet-film build.

06 OXIDATION / FAILURE BENEATH COATING



Cause:
Loose, oxidation or unstable substrate material was not adequately removed before coating.

Solution:
Remove the affected coating, correctly prepare the metal and rebuild the coating system.

FREQUENTLY ASKED QUESTIONS

WHY IS MECHANICAL PREPARATION IMPORTANT?

Correct abrasion creates the uniform mechanical key required before adhesion preparation and coating.

DO I NEED INFINITY FUSION ADHESION PROMOTER?

Infinity Fusion Adhesion Promoter forms part of this specified non-ferrous metal system and should be applied according to its current product instructions.

WHAT ABRASIVE SHOULD I USE?

The supplied system guidance specifies 220–400 grit for mechanical preparation.

CAN I COAT OVER OXIDATION?

Loose, powdery or unstable oxidation must be removed. The substrate should be sound, stable and correctly prepared before coating.

HOW LONG SHOULD I LEAVE BETWEEN COATS?

Allow each coat to dry sufficiently before recoating and follow the current individual product TDS for specific recoat requirements.

WHAT ARE THE MAIN REQUIREMENTS FOR A PROFESSIONAL FINISH?

Correct cleaning and degreasing, mechanical preparation, adhesion preparation, a clean application environment, controlled application and adequate drying and curing.

CORRECT PREPARATION. CORRECT APPLICATION. BETTER RESULTS.

REFRESH. REIMAGINE. RENOVATE.

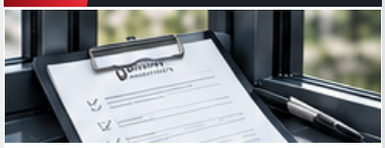
INSTALLER NOTES & DISCLAIMERS

Important information for professional installers to help achieve the intended appearance, adhesion, durability and performance of the Infinity Effects R.S Water-Based Urethane Non-Ferrous Metal Coating System.



PROFESSIONAL GUIDANCE FOR A QUALITY FINISH.

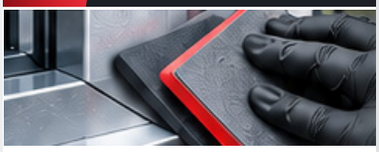
INSTALLER RESPONSIBILITY



It is the responsibility of the installer to determine whether the existing non-ferrous metal substrate and any existing coating system are suitable for refinishing.

Inspect all surfaces before work begins. Unsound, unstable, contaminated, oxidised or otherwise unsuitable substrates must be corrected before coating.

SURFACE PREPARATION



All surfaces must be:

SOUND | CLEAN | DRY
DEGREASED | PROPERLY KEYED
FREE FROM CONTAMINATION

Do not apply over grease, oil, loose oxidation, unstable coatings, cleaning residue, moisture or other contamination that may interfere with adhesion.

CLEANING & RINSING

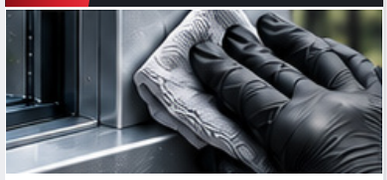


Thoroughly remove cleaning products and degreaser residues.

Where cleaning products require rinsing, rinse completely using clean water.

Allow surfaces to dry completely before proceeding.

ADHESION PREPARATION



Correct mechanical preparation and adhesion promotion are critical components of this system.

Apply Infinity Fusion Adhesion Promoter according to its current individual product instructions.

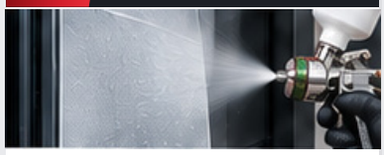
MIXING & APPLICATION



Always follow the specified:

- Component ratios
- Mixing sequence
- Product preparation
- Adhesion preparation
- Spray setup
- Application procedure
- Drying/recoat requirements
- Curing requirements

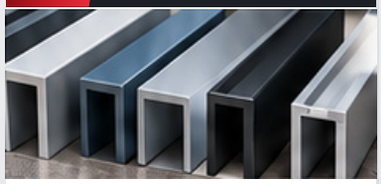
TEST APPLICATION



Carry out a test area before full application to confirm:

- Compatibility
- Adhesion
- Viscosity
- Atomisation
- Colour
- Sheen
- Spray setup
- Finish quality

SUBSTRATE VARIATION



Non-ferrous metal substrates, factory treatments, existing coatings and surface conditions can vary.

Where substrate composition, existing finish or compatibility is uncertain, carry out appropriate testing before full application.

ENVIRONMENT & CURING

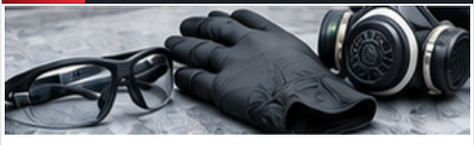
10–25°C

The supplied application guidance recommends working between **10–25°C**.

Temperature, humidity and airflow may affect application, drying and curing. Do not apply to wet substrates.

Do not expose newly coated surfaces to moisture, heavy handling, abrasion or demanding service prematurely.

SAFETY



Use appropriate PPE and adequate ventilation during cleaning, sanding, preparation and coating.

Always consult the current individual product TDS and SDS before use.

WARRANTY



Warranty applies only where the system is installed by an Infinity Certified Installer and all current system requirements and application procedures have been followed.

CRITICAL SYSTEM GUIDELINES

1. Clean & degrease surfaces correctly
2. Remove loose oxidation
3. Create a uniform mechanical key
4. Apply Infinity Fusion Adhesion Promoter
5. Prime where required
6. Prepare and apply coatings correctly
7. Allow adequate drying and curing
8. Carry out test areas before full application



FAILURE TO FOLLOW THE CORRECT SYSTEM PROCEDURE MAY RESULT IN:

- POOR ADHESION
- PEELING
- FISHEYES
- UNEVEN FINISH
- SURFACE DEFECTS
- PREMATURE COATING FAILURE
- VOIDED WARRANTY