

Application Guide for Infinity Effects ArmourGuard V2 Build-Up on Ferrous Metals

Type: Water-Based System

Warranty: Yes – Warrantied when installed by an Infinity Certified Installer

Purpose: Designed for ferrous metals requiring a durable, corrosion-resistant, stain-resistant, and modern decorative finish. Suitable for steel, iron, fabricated metalwork, and other non-porous metal substrates.

Materials You'll Need

- Clean, lint-free cloths or rags
 - Metal cleaner
 - Water
 - Ferrous metal degreaser
 - Fine-grit sandpaper (220–400 grit)
 - Safety goggles and gloves
 - Fusion Adhesion Promotor
 - ArmourGuard V2 Pigmentable
 - Spray machine / HVLP sprayer
 - Dust mask or respirator (if required)
 - Clean water or damp cloth
 - Dry towel or microfiber cloth
 - Deionized water
-

Additional Material You Can Use

- Power washer
 - Spray shield
 - Spray tent / booth
-

Step-by-Step Guide

Step 1. Safety First

Wear appropriate PPE before beginning:

- Safety goggles
- Protective gloves



- Respirator or dust mask (rust dust can be hazardous)
- Ensure workspace ventilation is adequate

Avoid sparks or ignition sources when working with solvents or metal dust.

Step 2. Remove Loose Rust

Use:

- Wire brush
- Wire wheel for drill or grinder

Remove:

- Loose rust
- Flaking scale
- Powdered corrosion

Continue brushing until the surface is stable and no loose particles remain.

Step 3. Clean the Surface

Clean metal using a **metal cleaner** (follow manufacturer dilution).

Remove:

- Oils
- Rust residue
- Grease
- Metal contamination
- Industrial grime

Work thoroughly to ensure deep cleaning of all metal surfaces.

Step 4. Treat Remaining Rust (If Necessary)

If heavy rust remains after brushing, apply:

- Rust remover
- or
- Rust converter

This stabilises corrosion and prevents future bleed-through.

Allow proper reaction time and rinse if required.



Step 5. Rinse Thoroughly

Rinse the surface with clean water to remove:

- Cleaner residue
- Rust remover/converter residue
- Chemical build-up

Leftover chemicals can cause adhesion issues—rinse completely.

Step 6. Dry the Surface

Dry the metal carefully using a clean cloth or towel.

Metal must be completely dry before sanding or priming.

Moisture will accelerate corrosion and cause coating failure.

Step 7. Abrade the Surface

Lightly sand the entire surface using **220–400 grit** sandpaper.

Purpose:

- Create a mechanical adhesion profile
- Remove micro-rust
- Smooth converted rust
- Improve bonding strength

Focus on areas that showed previous rust.

Step 8. Clean Up Sanding Residue

Remove sanding dust with a damp cloth, followed by a dry cloth.

No residue should remain before applying adhesion layers.

Step 9. Apply Fusion Adhesion Promotor

Apply a fine mist and wipe across the metal to ensure even coverage.

This creates a bonding layer essential for metal substrates.



Allow to fully dry.

Step 10. Inspect the Surface

Check for:

- Remaining rust
- Missed areas
- Contamination
- Moisture
- Uneven primer wipe

Correct any issues before applying ArmourGuard V2.

Step 11. Mix ArmourGuard V2 Pigment able

Mix gently until:

- Pigments fully disperse
- Smooth consistency achieved
- No bubbles or trapped air

Do not whip or aggressively stir.

Step 12. Apply ArmourGuard V2 Pigmentable

ArmourGuard V2 – Spray Settings

===== ARMOURGUARD V2 PIGMENTABLE SPRAY SETTINGS =====

- Pressure: 3–4 Bar
 - Nozzle Size: 1.4mm–1.8mm
 - Additives: None unless specified
-
-

Apply using roller, brush, or spray.

Ensure:

- Even coverage
- Smooth, continuous passes
- No roller lines
- No dry edges
- Full opacity and saturation

Work top to bottom in overlapping passes.

Step 13. Apply Additional Coats (Optional)

Apply additional coats if you need:

- Higher build
- Increased durability
- More opacity

Allow each coat to fully dry before applying the next to avoid soft spots.

Step 14. Allow Proper Curing

Allow ArmourGuard V2 to fully cure before handling or exposing to moisture.

Curing ensures long-term adhesion and corrosion resistance.

Step 15. Final Inspection

Inspect the coated metal under strong lighting.

Check for:

- Missed spots
- Inconsistent sheen
- Texture irregularities
- Clean tape edges
- Surface defects

Perform touch-ups as required.

Important Tips

- Always fully remove loose rust before proceeding.
 - Never apply over active rust — treat or remove first.
 - Maintain correct spray distance for smooth, even application.
 - Avoid moisture until the coating has completely cured.
 - Work between 10–25°C for best results.
 - Do not touch cleaned metal with bare hands (oil contamination).
-



Problems & How to Avoid Them

Poor adhesion:

Caused by skipping adhesion promotor or sanding.

→ Always clean, abrade, wipe, and apply Promotor.

Uneven finish:

Caused by inconsistent spraying or distance variations.

→ Maintain steady passes and overlap.

Rust bleed-through:

Caused by incomplete rust removal.

→ Fully remove or convert rust before coating.

Peeling:

Often due to oil, grease, or cleaner residue.

→ Thoroughly degrease and rinse before coating.

DISCLAIMER

All instructions must be followed carefully to ensure correct performance.

Information is based on testing and field data but cannot cover all real-world conditions.

Infinity Effects is not responsible for misuse, improper preparation, or substrate defects.

Always test a small section before full installation.

Colour variations may occur between batches.



INFINITY METAL SYSTEM (SPRAYED)

SYSTEM 1
(WARRANTY)
ARMOURGUARD

(WATER-BASED SYSTEM)

