MASTER INSTALLATION GUIDE

Projection Screen Coatings

Surface Preparation • Priming • Application • Care

DOCUMENT	REVISION	SCOPE
POS Master Installation Guide	**October 13, 2026**	**Wall coatings (including skim-coated walls), DIY concentrate & FLOOR summary**

This guide provides the standard field procedures for Paint On Screen wall coatings and DIY powder concentrate, plus a concise overview of the FLOOR two-part epoxy system. Product-specific Technical Data Sheets (TDS) and Safety Data Sheets (SDS) govern whenever their instructions differ from this guide. Dedicated guides are available for FLOOR, for EDGE (EDGE Installation Guide), and for EDGE on skim-coated walls (EDGE Installation on Skim-Coated Walls).

IMPORTANT Read the applicable TDS and SDS before opening or applying any product. Confirm substrate compatibility, ventilation, personal protective equipment, and site conditions before work begins.

DOCUMENT SCOPE

Sections	Applies to
1–7	Standard water-based wall coatings: Radiant White, Digital Theater White, 3D4K, S1 Screen Plus, S1 Ultimate Contrast, Edge, Clear, UST-ALR, Black, Diamond, Platinum, Silver, Wall & Ceiling, Drive In, Chroma Green/Blue, Color Match, and Custom. Includes walls prepared with a standard skim coat; see Section 3.
8	DIY S1 Ultimate Contrast powder concentrate.
9	FLOOR two-part epoxy system summary. Use the dedicated FLOOR Installation Guide for the complete procedure.
10	Safety, cleanup, inspection, and handover.

BEFORE YOU BEGIN

- Verify the product, color, batch quantity, substrate, screen dimensions, and required finish before starting.
- Prepare a clean, dry, well-ventilated work area. Protect adjacent finishes, equipment, floors, and furnishings.
- Stage enough material for complete coats. Do not begin a coat unless the full projection area can be completed while maintaining a wet edge.
- Use a test area when substrate condition, adhesion, sheen, texture, color, or application method is uncertain.

QUALITY STANDARD Projection surfaces magnify defects. Surface flatness, consistent film build, clean tools, and uninterrupted finishing strokes are essential to image uniformity.

1. QUICK REFERENCE — STANDARD WALL COATINGS

Property	Standard specification
Coverage	170 sq ft per gallon at 4 mils wet / 1.4 mils dry (1 qt ≈ 40 sq ft; 5 gal ≈ 850 sq ft).
Coats	2 coats rolled; 2–4 coats sprayed. Gain and opacity may increase with coat count.
Dry to touch	1 hour at 77°F (25°C), 50% RH.
Recoat	2–4 hours. Cooler temperatures and higher humidity extend drying.
Site conditions	Above 50°F (10°C); relative humidity 85% or less; surface moisture below 15%; surface at least 5°F (3°C) above the dew point.
Roller	Fresh microfiber cover for each coat; Teflon-coated recommended; 3/8–3/4 in synthetic nap.
Airless spray	2,000 psi; .017–.021 in tip for standard liquid coatings.
Reduction	None normally required. Add water only when permitted by the product TDS.
Cleanup	Mild soap and warm water.
VOC	0 g/L (zero VOC).
Weight / volume solids	11.45 lb/gal; 34.2% by volume.
Vehicle	Vinyl-acrylic elastomeric.
Storage	40–90°F; protect from freezing; 12 months unopened.

APPLICATION LIMIT Interior use only. Do not apply below 50°F. Avoid brushing except in tight areas; roll as close to edges as possible.

2. PLAN THE JOB

- Measure the projection area. Confirm that the ordered quantity covers the entire area for the specified number of coats.
- Keep the room above 50°F and at or below 85% RH throughout application and drying.
- Confirm substrate moisture is below 15% and the surface is sound, clean, dry, smooth, and free of contamination.
- Gather fresh microfiber roller covers, roller frame, extension pole, painter’s tape, drop cloths, mixing tools, wet-film gauge, and approved spray equipment if applicable.
- Wear safety glasses or goggles and gloves. Add an N95 or better respirator for sanding and approved respiratory protection when spraying.
- Mark the exact projection boundary. Complete any light-absorbing border only after the screen surface is cured.

Material estimate

Use the product label and current TDS as the final authority. As a planning reference, one gallon typically supports approximately 170 sq ft of finished screen area for the standard two-coat system; one quart supports approximately 40 sq ft; five gallons support approximately 850 sq ft.

3. SURFACE PREPARATION

LEAD WARNING — EXISTING PAINTED SURFACES Scraping, sanding, or removing old paint may release toxic lead dust. Children and pregnant women are especially vulnerable. Use a NIOSH-approved respirator, contain dust, and clean with a HEPA vacuum and wet methods. Before starting, contact the National Lead Information Center at 1-800-424-LEAD or visit epa.gov/lead.

General preparation — all surfaces

- Remove dirt, dust, grease, oil, soap residue, wax, and other contamination with an appropriate cleaner. Rinse thoroughly and allow to dry.
- Scrape loose or peeling coatings. Sand checked, glossy, or uneven surfaces to a sound, dull, uniform finish.
- Seal water, grease, smoke, and other stains with the appropriate stain-blocking primer.
- Remove mildew with a commercial mildew remover, following the manufacturer's safety instructions. Mildew left in place can grow through the coating.
- Patch holes, cracks, seams, and imperfections. Sand repairs flush and remove all dust.

Substrate requirements

Substrate	Preparation requirement
Drywall	Joint compound must be fully cured. Fill and sand repairs smooth, then remove all sanding dust. Surface smoothness directly affects projected-image quality.
Skim-coated walls (Level 5)	Each skim coat must dry completely (at least 24 hours per coat under normal conditions; longer if thick, cool, or humid) and read below 15% moisture. Sand smooth with 180–220 grit, inspect under raking light, repair and re-sand, remove all dust, then prime. See the EDGE Installation on Skim-Coated Walls guide.
Plaster	Allow bare plaster to cure and harden. Treat soft, porous, textured, or powdery plaster with 1 pint household vinegar per gallon of water; repeat until hard, rinse, and dry.
Masonry / concrete / block	Allow new work to cure per supplier instructions, normally about 30 days. Remove form-release and curing agents. Fill rough areas. If work cannot wait 30 days, allow at least 7 days and use an approved concrete and masonry primer.
Wood	Sand exposed wood to a fresh surface. Patch defects with wood filler or putty and sand smooth.
Glass / non-porous	Clean and degrease completely. Confirm adhesion with a test patch and use Paint On Screen Adhesive Primer.
Previously coated	Verify adhesion. Remove unsound coatings, dull glossy areas, feather edges, repair defects, and spot-prime as required.

Skim-coated walls (Level 5 finish)

A skim coat is a thin, full-surface layer of joint compound (or gypsum finish plaster) applied over drywall or plaster to produce a smooth, uniform Level 5 finish. Projection walls are viewed in raking light, so a Level 5 finish is recommended. Skim-coated surfaces are very absorbent and must be sanded, dusted, and primed before any Paint On Screen coating is applied.

- Confirm the skim coat is complete, bonded, free of cracks and blisters, and fully dry. Allow at least 24 hours for each coat of ready-mixed compound at about 70°F and 50% RH; allow longer for thick coats or cool, humid conditions.
- Sand with 180–220 grit using light pressure. Do not sand through to the paper facing.
- Inspect under raking light (a bright work light held at a shallow angle to the wall). Mark and repair ridges, tool marks, pinholes, and low spots, let repairs dry, and re-sand.
- Remove all dust: vacuum with a soft brush attachment, then wipe with a barely damp microfiber cloth. Let the wall dry. Never prime over dust.
- Apply 2 coats of Paint On Screen Primer to the entire wall, using the same method (roll or spray) planned for the finish coats. Lightly sand and dust again if the primed surface feels rough.
- Apply a 2–3 sq ft test patch of the finish coating and inspect it under raking light before coating the wall.

PRIME THE ENTIRE WALL Unprimed skim coat absorbs coating unevenly and causes flashing: dull and shiny patches that show clearly under projection. Never apply a finish coat directly to skim coat.

4. PRIMER SELECTION

Substrate	Primer system	Finish system
Drywall	2 coats Paint On Screen Primer	2 coats rolled or 2–4 coats sprayed.
Skim-coated walls	2 coats Paint On Screen Primer over a fully dry, sanded, dust-free skim coat	2 coats rolled or 2–4 coats sprayed.
Wood	2 coats Paint On Screen Leveling Primer	2 coats rolled.
Block / masonry	1 coat Paint On Screen Filler Primer	2 coats rolled or sprayed.
Glass / non-porous	1 sprayed coat Paint On Screen Adhesive Primer	2 sprayed coats after adhesion is confirmed.

WHY PRIMING MATTERS A uniform primer system controls absorption and levels the substrate so finish coats develop consistent color, sheen, and gain. Allow every primer coat to dry fully.

5. ROLLER APPLICATION

CRITICAL TECHNIQUE Work continuously from one side of the projection area to the other. Maintain a wet edge and finish every pass in the same direction.

1. Stir the product thoroughly before and during use. Do not thin unless the current product TDS specifically permits it.
2. Install a clean microfiber roller cover (Teflon-coated recommended, 3/8–3/4 in synthetic nap). Use a fresh cover for every coat.
3. On smooth or skim-coated walls, use the 3/8 in end of the nap range to avoid roller texture.
4. Cut in only where necessary. Keep brushwork confined to tight areas and roll as close to all boundaries as possible.
5. Apply a generous, even vertical layer across the surface, working left to right. Target 4 mils wet-film thickness and check periodically with a wet-film gauge.

6. Allow the coating to begin setting for approximately one minute.
7. Make continuous vertical finishing strokes from top to bottom. Overlap the previous stroke by approximately 50% and keep consistent pressure. Use horizontal strokes only on pre-curved screen structures.
8. Inspect immediately under broad, raking light. Correct holidays, lap lines, lint, drips, or uneven film while the surface remains workable.
9. Allow the coat to dry. Observe the 2–4 hour recoat window, then apply the next coat with a fresh roller cover using the same method.

Roller quality checks

Check	Acceptance criterion
Wet edge	No dry lap boundaries during application.
Direction	Final strokes are parallel and consistent from edge to edge.
Film build	Uniform wet-film thickness without thin areas or ridges.
Contamination	No lint, dust, debris, bubbles, runs, or embedded material.
Lighting inspection	Surface appears uniform under both normal viewing and raking light.

6. AIRLESS SPRAY APPLICATION

- Standard liquid coatings: use a conventional airless sprayer at approximately 2,000 psi with a .017–.021 in tip.
- DIY mixed concentrate: use 2,000–3,000 psi with a 415, 417, 515, or 517 tip.
- Strain material only when allowed by the current product instructions. Confirm a uniform fan pattern before spraying the screen.
- Apply even, overlapping passes to a uniform 1.5–2 mil wet film per coat. Keep gun distance, angle, speed, and overlap consistent.
- Sprayed drywall systems may require 2–4 coats to reach full uniformity.
- Maintain ventilation and use respiratory protection approved for the application and work environment.
- After soap-and-water cleaning, flush spray equipment with a compliant cleanup solvent when needed to prevent corrosion. Follow the solvent manufacturer’s safety instructions.

7. DRYING, COATS & FINAL FILM

Stage	Standard wall coating — 77°F, 50% RH
Dry to touch	Approximately 1 hour.
Recoat	2–4 hours.
Rolled system	2 coats standard.
Sprayed system	2–4 coats as needed for uniformity.
Film build	1.5–2 mils wet film per sprayed coat (rolled coats: 4 mils wet).
DIY system	Exactly 2 coats, 1 hour between coats; target 3–4 mils total dry film.

Cooler temperatures, high humidity, limited airflow, and heavier film extend drying. Do not judge readiness by touch alone when environmental conditions differ from the reference conditions.

OPTICAL PERFORMANCE Additional coats can change gain and opacity. For example, published UST-ALR gain may increase with coat count, while transparent products such as Clear become progressively more opaque. Follow the product-specific TDS and approved project specification.

8. DIY S1 ULTIMATE CONTRAST — POWDER CONCENTRATE

DIY S1 Ultimate Contrast is a dry powder concentrate blended into one gallon of white water-based paint to create a high-contrast gray-silver projection surface.

MANDATORY POWDER SAFETY Wear chemical-splash or dust-tight goggles and an N95 or higher respirator. Work in a well-ventilated area and minimize airborne dust. Site temperature must be above 50°F, RH at or below 85%, and substrate moisture below 15%.

Mechanical mixing

10. Before opening, gently massage the sealed pouch to break up clumps caused by storage or transit.
11. Pour 4–6 fl oz from the gallon of white water-based paint into a clean container to create headroom.
12. Slowly add the powder near the can rim to minimize dust.
13. Insert a drill-driven mixing paddle to the bottom before starting the drill. Mix at high speed for 3–5 minutes, moving slowly around the can and sweeping the bottom edges.
14. Continue until the mixture is a uniform neutral gray-silver with no clumps, dry pockets, or white separation.
15. Slowly return the displaced paint and mechanically mix for another 60 seconds.

DO NOT HAND-SHAKE Hand shaking and conventional paint shakers do not provide adequate dispersion and may produce streaking or railroad patterns from particulate settling.

Application

- Apply exactly 2 coats using the roller method in Section 5, with a fresh cover for each coat, or spray at 2,000–3,000 psi with a 415/417/515/517 tip.
- Allow 1 hour between coats and target 3–4 mils total dry film. The completed two-coat system covers up to approximately 170 sq ft.
- Seal unused mixed product tightly and store in a cool, dry area protected from freezing.

9. FLOOR — TWO-PART EPOXY SYSTEM SUMMARY

FLOOR is a two-component water-based epoxy floor coating for immersive projection environments, simulators, theaters, commercial installations, training facilities, and multi-projector systems. This section is a field summary only.

USE THE DEDICATED GUIDE Read the current FLOOR Installation Guide, Technical Data Sheet, and Safety Data Sheet before mixing. Those documents control the complete substrate-preparation and application procedure.

Property	Current FLOOR specification
Mix ratio	4 parts Part A to 1 part Part B by volume.
Induction / sweat-in	None. Apply after thorough mixing.
Application	Brush, roller, or airless spray as approved by the dedicated guide.
Wet / dry film	5.0–10.0 mils wet; 2.0–4.0 mils dry per coat.
Coverage	160–320 sq ft/gal per coat; theoretical 656 sq ft/gal at 1 mil DFT.
Pot life	8 hr at 50°F; 5.5 hr at 77°F; 3.5 hr at 120°F.
Recoat / dry	See temperature schedule below; maximum recoat is 30 days.
Traffic	Foot traffic: 18 hr; heavy traffic: 48 hr under reference conditions.
Storage	Part A: 24 months; Part B: 36 months. Store indoors at 40–100°F.
Cleanup	Water. Clean tools and spills promptly.
VOC	Less than 50 g/L.

Reference drying schedule — 7 mils wet

Temperature	Dry to touch	Minimum recoat	Maximum recoat
50°F	1 hour	8 hours	30 days
77°F	45 minutes	6 hours	30 days
120°F	25 minutes	3 hours	30 days

FLOOR field sequence

16. Prepare and profile the substrate exactly as specified in the dedicated FLOOR Installation Guide. Confirm it is clean, dry, sound, and suitable for adhesion.
17. Pre-mix each component separately. Measure 4 parts Part A and 1 part Part B by volume.
18. Combine and mix thoroughly, scraping the sides and bottom. Do not add a sweat-in period.
19. Apply within the stated pot life at the required wet-film thickness. Mix only the amount that can be placed within the working time.
20. Observe the temperature-specific minimum recoat time and the 30-day maximum recoat interval.
21. Protect the finished surface until traffic and service requirements are satisfied.

DO NOT USE LEGACY FLOOR VALUES Earlier instructions listing a 3:1 mix ratio, a 10–15 minute induction period, 200–300 sq ft/gal coverage, or a 2–3 hour pot life are superseded.

10. SAFETY, CLEANUP & HANDOVER

General safety

- Use with adequate ventilation. Open doors and windows or provide mechanical fresh-air exchange throughout application and drying.

- If eye watering, headache, dizziness, or other symptoms occur, increase fresh air, use appropriate respiratory protection, and leave the area when necessary.
- Sanding or abrading dried film may release respirable dust, including crystalline silica. Use dust controls and approved particulate respiratory protection.
- Avoid eye and skin contact. Wash thoroughly after handling. Flush eyes with clean water and seek medical attention if irritation persists.
- If swallowed, contact Poison Control, an emergency department, or a physician immediately. Do not take internally.
- Keep out of reach of children. Keep containers closed and do not transfer material into unmarked containers.

Cleanup

- Clean spills, spatters, hands, and tools promptly using the method stated in the applicable product instructions.
- For standard water-based wall coatings and FLOOR, use soap and warm water unless the current product documentation states otherwise.
- Dispose of residue, wash water, used covers, and containers in accordance with local requirements. Do not discharge coating waste into storm drains.

Final inspection & handover

Inspection item	Confirm before handover
Surface uniformity	No visible lap lines, streaks, holidays, runs, ridges, lint, debris, or patchy sheen.
Coverage	Projection boundary is complete and matches approved dimensions.
Cure	Required dry, recoat, and service times were observed for actual temperature and humidity.
Optical check	Projected test image is visually uniform from intended viewing positions.
Records	Product, batch/lot, coat count, application dates, site conditions, installer, and deviations are recorded.
Documents	Owner receives the applicable TDS, SDS, care instructions, and this installation guide.

Care after installation

Allow the coating to cure fully before cleaning or service. Use mild soap, water, and a soft non-abrasive cloth or mop. Avoid aggressive chemicals, abrasive pads, and concentrated scrubbing unless specifically permitted by the product documentation.

TECHNICAL SUPPORT For product selection, unusual substrates, environmental limits, or application questions, contact Paint On Screen before proceeding.

PAINT ON SCREEN

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