EDGE INSTALLATION ON SKIM-COATED WALLS

Preparation, Priming and Application over a Level 5 Skim Coat

Dry • Sand • Dust • Prime • Test • Apply

DOCUMENT	REVISION	SCOPE
POS-EDGE-SKIM-01	**October 13, 2026**	**EDGE over standard skim-coated drywall and plaster walls**

This guide covers applying Paint On Screen EDGE to walls that have been prepared with a standard skim coat: a thin, full-surface layer of joint compound (or gypsum finish plaster), trowelled over drywall or plaster to give a smooth, uniform Level 5 finish. A skim coat is the recommended substrate for projection walls because the wall is viewed in critical lighting, meaning strong side light from windows or surface-mounted fixtures, which exposes any joint, tool mark, or change in absorbency. Use this guide together with the EDGE Installation Guide (POS-EDGE-IG-01), the EDGE Technical Data Sheet, and the EDGE Safety Data Sheet. If they differ, the TDS and SDS govern.

IMPORTANT A skim coat is very absorbent. Never apply EDGE directly to skim coat: it must be fully dry, sanded, dust-free, and primed first.

SEQUENCE AT A GLANCE

Step	Action	Do not continue until
1	Confirm the skim coat is ready	Every coat is bonded, crack-free, and fully dry.
2	Sand	The surface is uniform and smooth to the hand, with no paper fuzzed or exposed.
3	Inspect and repair	Raking light shows no ridges, tool marks, pinholes, or low spots.
4	Remove dust	The wall and room are free of dust.
5	Prime (2 coats)	Primer is uniform, with no dark absorbent patches.
6	Test patch	The patch is uniform in raking light and with a projected test image.
7	Apply EDGE (2 coats)	Each coat is uniform and the full recoat time has passed.
8	Final inspection	The wall passes the handover checks.

1. BEFORE YOU START

Site conditions

- Air, wall, and material temperature above 50°F (10°C); relative humidity 85% or less; wall surface at least 5°F (3°C) above the dew point; wall moisture below 15%.
- Keep the room at a steady temperature with normal ventilation while the skim coat, primer, and coatings dry. Do not force-dry with direct heat or blow air directly at the wall; rapid drying can crack the skim coat.

Tools and materials

- 180–220 grit sandpaper or sanding sponges, pole sander or dust-extraction sander, and 320 grit paper for light sanding after priming.
- Bright work light for raking-light inspection; pencil or low-tack tape to mark repairs.
- Joint compound for repairs; putty knife or trowel.
- HEPA vacuum with soft brush attachment; microfiber cloths; drop cloths and painter's tape.
- Paint On Screen Primer; EDGE; paddle and drill for mixing; wet-film gauge.
- 3/8 in microfiber roller covers (Teflon-coated recommended), one fresh cover per coat; roller frame and extension pole; airless sprayer if spraying.

Protective equipment and dust control

- Wear safety goggles and an N95 or better respirator when sanding. Joint compound dust is a nuisance dust and may contain crystalline silica.
- Seal doors and vents, cover floors and equipment, and use dust extraction or a HEPA vacuum while sanding.

LEAD WARNING If sanding could reach older paint beneath the skim coat (for example on pre-1978 buildings), follow lead-safe practices. Use a NIOSH-approved respirator, contain dust, and clean with a HEPA vacuum and wet methods. Contact the National Lead Information Center at 1-800-424-LEAD or visit epa.gov/lead.

2. CONFIRM THE SKIM COAT IS READY

- Dry time: allow at least 24 hours for each coat of ready-mixed joint compound at about 70°F (21°C) and 50% RH. Allow 48 hours or more for thick coats, cool rooms, humid conditions, or poor airflow. Follow the compound or plaster manufacturer's published drying time if it is longer.
- The wall is dry when it is a uniform color with no dark, cool, or damp-looking patches, and a moisture meter reads below 15%.
- The skim coat must be bonded and sound: no peeling, blisters, bubbles, hollow or loose areas, or cracks. Cut out and repair any defect, let the repair dry completely, and re-sand.
- The skim coat covers the whole wall, including corners and the area beyond the projection boundary, to the next natural break such as a corner or ceiling line.

HOLD POINT Do not sand, prime, or coat until the whole wall is completely dry.

3. SAND

- Sand the entire wall with 180–220 grit, using a pole sander, sanding sponge, or dust-extraction sander with light, even pressure.

- Work in overlapping passes. Do not sand through the skim coat to the paper facing; fuzzed or exposed paper will show through the finish.
- Sand inside corners and edges by hand with a sponge to keep them crisp.
- Stop when the surface is uniform and smooth to the flat of the hand. Do not polish the surface; a uniform, lightly dulled surface holds primer best.

4. INSPECT UNDER RAKING LIGHT AND REPAIR

- Switch off other lighting if possible. Hold a bright work light close to the wall and aim it along the surface at a shallow angle. Move it across the entire wall.
- Mark every ridge, trowel or tool mark, pinhole, scratch, low spot, and joint outline with pencil or low-tack tape.
- Repair: fill low spots and pinholes with a thin coat of joint compound feathered beyond the repair. Let it dry completely (at least 24 hours), sand it flush, and re-inspect.
- Hairline cracks: open slightly, fill with joint compound, let dry, sand, and re-inspect. If a crack returns, find the cause (movement, a skim coat that was too thick, or drying too fast) before coating; do not coat over active cracks.
- Repeat until raking light shows a uniform surface.

WHY RAKING LIGHT? A projector and nearby windows or fixtures light the wall at an angle. Any defect you can see in raking light now will be visible in the projected image later.

5. REMOVE ALL DUST

- Vacuum the whole wall with a HEPA vacuum and soft brush attachment, from top to bottom. Vacuum the ceiling line, window ledges, floors, and trim.
- Wipe the wall with a barely damp, clean microfiber cloth, rinsing it often. A wet cloth can soften the compound; do not use a soaked sponge.
- Let the wall dry fully, then check by running a clean, dry hand over the surface. Repeat until no powder remains.

NEVER PRIME OVER DUST Primer applied over sanding dust bonds to the dust, not to the wall. This produces a gritty finish and weak adhesion.

6. PRIME THE ENTIRE WALL

- Use Paint On Screen Primer: 2 coats over the whole wall, from ceiling line to floor and corner to corner. If you need to use a different primer, contact Paint On Screen first.
- Apply the primer the same way you will apply EDGE: roll the primer if you will roll EDGE; spray it if you will spray EDGE. Use the same roller nap or spray set-up as the finish coats.
- Spot-prime repairs first, then prime the full wall.
- Allow each primer coat to dry completely, following the primer data sheet.
- If the primed wall feels rough (raised grain or dust nibs), sand lightly by hand with 320 grit, remove the dust again as in Section 5, and apply the second coat.
- Check the primed wall under raking light. The sheen should be uniform with no dark, absorbent patches. If patches show, apply another primer coat to the affected area, or the whole wall, before continuing.

HOLD POINT Do not apply EDGE over primer that is damp or tacky. Primer applied over damp compound can blister.

7. TEST PATCH

- Choose a 2–3 sq ft area inside the projection boundary and apply two coats of EDGE, following Section 8, with the recoat time between coats.
- Let the patch dry fully, then inspect it under raking light and, if possible, with a projected test image. Look for flashing (dull or shiny patches), roller texture, joint or tool-mark outlines, and dust nibs.
- If adhesion is in question, because the skim coat or primer was dusty, glossy, or very powdery, leave the patch to dry for seven days and test with a firm tape pull before coating the wall.
- Correct any problem on the wall (see Section 10) before coating the full wall.

8. APPLY EDGE

CRITICAL TECHNIQUE Work continuously across the wall. Maintain a wet edge and finish every pass in the same direction. Do not stop in the middle of a wall.

Roller application (2 coats)

1. Mix EDGE thoroughly with a paddle and drill. Shaking is not enough. Do not thin unless the EDGE TDS permits it.
2. Use a clean 3/8 in microfiber roller cover (Teflon-coated recommended). Use a fresh cover for every coat. Thicker nap can leave texture on a smooth skim-coated wall.
3. Cut in corners and edges first, then roll as close to the cut-in line as possible.
4. Apply a generous, even vertical layer, working left to right. Target 4 mils wet-film thickness and check periodically with a wet-film gauge.
5. Allow the coating to begin setting for approximately one minute.
6. Make continuous vertical finishing strokes from top to bottom. Overlap the previous stroke by approximately 50% and keep consistent pressure.
7. Inspect immediately under raking light. Correct lap lines, lint, drips, or thin areas while the surface is still workable.
8. Allow 2–4 hours at 77°F (25°C), 50% RH before the second coat. Cooler temperatures and higher humidity extend this. Apply the second coat with a fresh cover in the same way.

Airless spray application (2–4 coats)

- Use a conventional airless sprayer at approximately 2,000 psi with a .017–.021 in tip. Confirm a uniform fan pattern before spraying the wall.
- Apply even, overlapping passes to a uniform 1.5–2 mil wet film per coat, keeping gun distance, angle, speed, and overlap consistent.
- Apply 2–4 coats as needed for uniformity, with 2–4 hours between coats.
- Use respiratory protection approved for the application, and maintain ventilation.

Coverage

Plan on 170 sq ft per gallon for the two-coat system (1 qt ≈ 40 sq ft; 5 gal ≈ 850 sq ft). Round up to the next whole container. The TDS and the product label govern.

9. FINAL INSPECTION, CURE AND HANDOVER

Item	Confirm before handover
Surface uniformity	No lap lines, streaks, holidays, runs, ridges, lint, debris, or patchy sheen in normal or raking light.
Joints and repairs	No joint outlines, tool marks, or repair shadows show through.
Coverage	The coating is complete to the projection boundary and the full wall is uniformly coated.
Cure	Required dry and recoat times were observed for the actual temperature and humidity.
Optical check	A projected test image looks uniform from the intended viewing positions.
Records	Product, batch/lot, primer and coating coat counts, dates, site conditions, installer, and deviations are recorded.

Allow the coating to cure fully before cleaning or service. Clean with mild soap, water, and a soft non-abrasive cloth. Avoid aggressive chemicals, abrasive pads, and concentrated scrubbing.

10. TROUBLESHOOTING

Symptom	Likely cause	Remedy
Dull and shiny patches (flashing)	Uneven absorbency from thin or missed primer, or uneven skim coat	Apply another primer coat to the affected area or wall, then recoat with EDGE.
Roller texture or stipple	Nap too thick, heavy pressure, or ridges in the skim coat	Use a 3/8 in cover and light pressure. Sand lightly with 320 grit, dust, and recoat.
Joint outlines or tool marks visible	Skim coat not sanded or built evenly	Sand, fill, re-prime, and recoat the affected area.
Gritty finish or dust nibs	Dust left on the wall before priming or coating	Sand lightly with 320 grit, remove dust, and recoat.
Bubbles or blisters	Coating or primer applied over damp compound, or too heavy a film	Let the wall dry. Remove blisters, repair, re-sand, re-prime, and recoat.
Hairline cracks	Skim coat too thick, movement, or drying too fast	Cut out and fill, let dry, sand, prime, and recoat. Find the cause first if cracks return.
Peeling or lifting	Dust, a damp wall, or poor bond	Remove loose material, sand, remove dust, prime, and recoat.
Streaks or railroad marks	Poor mixing, too thin a coat, too much roller pressure, or a reused roller cover	Mix with paddle and drill. Use a fresh cover each coat, apply a full wet coat, and finish with continuous strokes.

11. SAFETY AND CLEANUP

- Use with adequate ventilation. If eye watering, headache, dizziness, or other symptoms occur, increase fresh air and leave the area if necessary.

- 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 or a physician immediately.
- Keep out of reach of children. Keep containers closed and do not transfer material into unmarked containers.
- Clean spills, spatters, hands, and tools promptly with mild soap and warm water. Dispose of residue, wash water, used covers, and containers in accordance with local requirements. Do not discharge coating waste into storm drains.
- Reference standards for the skim coat: Gypsum Association GA-214 (Levels of Finish for Gypsum Panel Products), GA-216 and ASTM C840 (Application and Finishing of Gypsum Board).

TECHNICAL SUPPORT For unusual substrates, plaster skim coats, environmental limits, or application questions, contact Paint On Screen before proceeding.

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