

CSI 3-Part Construction SPECIFICATIONS



PART 1: GENERAL

1.1 SECTION INCLUDES

- A. Flax fiber and plant resin composite veneer specified as a wall covering, wall protection, or veneer for caseworks.

1.2 RELATED SECTIONS

- A. Division 9 Section – Wall Coverings
- B. Division 10 Section – Wall Protection
- C. Division 12 Section – Casework

1.3 REFERENCE MATERIALS

- A. W-102 (2019) WA Quality Standard for Alternative Construction Wallcovering
 - 1. ASTM D-751
 - 2. Federal Test Method Standard 191A
 - 3. ASTM D-1308
 - 4. ASTM F793
 - 5. ASTM E-84-21
- B. ANSI/KCMA A161.1-2022 "Performance and Construction Standard for Kitchen and Vanity Cabinets"

1.4 SUBMITTALS

- A. Comply with Section 01 33 00 – Submittal Procedures.
- B. Product Data: Submit manufacturer's product data, SDS, including inspection, preparation, fabrication, and installation instructions.
- C. Samples: Submit manufacturer's samples of each color/finish of ekoa® specified.

1.5 QUALITY ASSURANCE

- A. It is required to use an installer with experience in installing rigid wall protection.
- B. Credits for finishing products can be earned after calculating the combined performance of all the products used on a particular LEED project; no single product can guarantee you will obtain LEED v4 credits. ekoa® can contribute to the following LEED credits (points): Low-emitting materials.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver Lingrove products in original packaging with manufacturer's identification and printed installation instructions.

- B. Storage: Keep in a cool, dry place and out of direct sunlight, no more than 50% relative humidity.
- C. Handling: Lingrove products are packaged with protective paper to separate each sheet. During handling, keep the sheets separated with this protective paper to prevent damage.

1.7 PROJECT / SITE CONDITIONS

- A. Installation temp should be environmentally controlled by a permanent functioning HVAC system, ideally maintaining a temperature range of 65°F-75°F, with no more than 50% relative humidity.
- B. Prior to installation, the wall shall be inspected for surface contamination, or other defects that may adversely affect the performance of the materials.
- C. Substrate or walls shall be free of residual moisture. Drywall in particular can't have a moisture content >10% and should meet Level 4 or 5 standards.
- D. Substrates with voids or a rough surface should not be used.

1.8 WARRANTY

- A. Manufacturer shall warrant the product from internal delamination for a period of no less than five (5) years, provided that installation instructions were followed. No other claims will be considered due to conditions including, but not limited to, variances in atmospheric conditions, skill level of the Installer, tool defect, chemical altering, surface conditions of substrate or improper use.

PART 2: PRODUCTS

2.1 MANUFACTURER

- A. Manufacturer: Lingrove, 100 Pelican Way, San Rafael, CA 94901

2.2 MATERIAL

1. ekoa® is a durable surfacing veneer made of natural fibers (flax), plant-based resin, and a cellulose backing material for easy adhesion.
 - a) Use: Interior applications.
 - b) Conformance:
 - (1) Type III Wallcovering according to W102 WA Quality
 - (2) Standard for Alternative Construction Wallcovering with the following exceptions: Colorfastness to light, mechanical performance in the cross-fiber direction.
 - (3) Class B: ASTM E84-21a Standard Test Method for Surface Burning Characteristics of Building Materials.
 - (4) Level I (>50 ft-lbf) Impact Resistance: ASTM C1629 Standard Classification for Abuse-Resistant Nondecorated Interior Gypsum Panel Products

- (5) Low VOC (< 0.5 mg/m³ TVOCs): Intertek VOC Indoor Air Quality Certification. Includes CDPH 01350 Compliance.
- (6) 79% Biobased: Assessed by USDA BioPreferred Program under the ASTM D6866-22 standard.
- 2. Backing Material: The product is backed with a cellulose based backing paper for easy adhesion.
- 3. Acceptable Substrates:
 - a) Gypsum board for wallcovering applications.
 - b) Plywood, cellulose, hemp or fiber, for panel applications.
- 4. Adhesives: Use for bonding
 - a) Heavy duty clay wall adhesive for adhesion to gypsum board.
 - b) Polyvinyl acetate (PVA) for adhesion to plywood or other cellulose, hemp, or fiber panels in a cold press lamination process.

PART 3: EXECUTION

3.1 EXAMINATION

A. Inspection:

- 1. Inspect ekoa® surfaces before lamination to ensure they are sound, dry, clean, and free of surface defects.
- 2. Ensure that temperature and humidity requirements as stated in Section 1.7

3.2 PREPARATION

- A. Prepare ekoa® as required to provide a smooth and clean surface that is free of dirt, dust, moisture, oil, grease, or other impurities.
- B. Remove any surface imperfections to achieve Level 4 drywall standard. Wipe down drywall and back of wallcovering to remove dust.
- C. ekoa® needs to acclimate for 24 hrs in a temperature controlled environment.
 - 1. Unpack and / or unroll ekoa® to relax material on a fully supported surface.
 - 2. rough cut the material into sheets.
 - 3. Weigh down corners to help flatten it.
 - 4. DO NOT mark the back of the product with pen, pencil, or marker.

3.4 APPLICATION

- A. General: Installation shall conform to this specification and Lingrove written instructions and drawing details.
 - 1. Apply primer to the drywall surface and allow time to cure. Always follow specifications provided by the Primer supplier.
 - 2. Tack, measure and trim wallcovering to size using a sharp razor blade using the installer's preferred method.
 - 3. Size the adhesive to the wallcovering.
 - a) Apply an even coat of high-strength clay-strippable adhesive using a nap roller, allowing adhesive time to dry. Always follow specifications provided by the adhesive supplier.

4. Size adhesive to the drywall.
 - a) Apply an even coat of high-strength clay adhesive using a nap roller, allowing adhesive time to dry. Always follow specifications provided by the adhesive supplier.
5. Apply adhesive to the back of the wallcovering.
 - a) Apply an even coat of the same adhesive from steps 4 & 5. Allow time to tack dry prior to applying to drywall. Always follow specifications provided by the adhesive supplier for tack time.
6. Apply wallcovering to the drywall.
 - a) Use a preferred method to trim the sheet to size. Align with laser level to ensure straightness. Check adhesion and finish.
7. Check for air bubbles underneath the wallcovering and remove to ensure premium surface quality.
8. Roll edges with metal seam roller as necessary.
9. Wipe down any adhesive on the wallcovering or squeeze-out.

3.5 CLEANING POST INSTALLATION

- A. Routine Cleaning: Dust ekoa surfaces regularly using a soft brush or microfiber cloth to help maintain their appearance and extend their lifespan. Dry with a microfiber cloth.
- B. Deep Cleaning: For smudges or stains, use a damp sponge or microfiber cloth with a mild soap or water-based cleaner. A diluted bleach solution (10:1 water to bleach) can also be used for tougher stains.
- C. What to Avoid: Do not use acetone or harsh solvents for cleaning. Avoid excessive moisture and do not expose ekoa to standing water or extreme temperature fluctuations. Handle thin sheets with care to prevent damage.
- D. Additional Care: For small repairs, use a polyurethane pen to correct color and a water-based polyurethane coating (such as Behr Matte Clear Water-Based Interior Fast Drying Polyurethane) to address scuffing and light scratches. If significant damage occurs, contact us for repair options.

3.6 EDGE FINISHING

- A. Color exposed edges with a finishing pen as necessary.

3.7 FINAL CHECK

- A. Monitor finish for 24 hours. If bubbles form from air that was not pressed out during installation, press as necessary. Pin prick bubbles and roller with caution and at your own risk, as surface appearance may be affected, Do not use heat to soften material.

3.8 MAINTENANCE

- A. Routine cleaning will help improve the lifespan of your ekoa® surfaces. Dust with soft brush or

microfiber cloth, as necessary. More significant cleaning can be done with a damp sponge or microfiber cloth. Do not use acetone for cleaning ekoa® surfaces.

- B. Small repairs can be made with a polyurethane pen to correct color and a water-based polyurethane coating, for example, Behr Matte Clear Water-Based Interior Fast Drying Polyurethane, to correct scuffing and light scratches. Contact us to discuss options if significant damage occurs to your ekoa® surface.