TEXSTON
ARCHITECTURAL SURFACES

Cracks Reduction Layer:
Over D.A.F.S. - Direct Applied Finish Systems Application Process in Ortex Polymer-Modified Leveler & Basecoat

Enhance strength and flexibility while significantly reducing the appearance of cracks in the finish color coat over Brown Coat.

Materials:

- **Mesh:** EIFS alkali-resistant fiber mesh (supplied by others).
  - **Recommended brands:** STO, Dryvit, Parex, Senergy, Finestone, or equivalent.
  - **Recommended mesh weight:** 4.5 oz to 10 oz (6 oz most recommended).
  - **Note:** Heavier mesh is preferred if the budget allows.
- **Admixture:** RPA Reinforced Polymer Additive.
- **Ortex Basecoat Coarse** 20/30**:** Coverage 25- 50 sq. ft. (with fiber mesh embedded in it). OR
- **Ortex Basecoat Fine** 60/70**:** Coverage, 30- 60 sq. ft. (with fiber mesh embedded in it)
  - **Note:** Yield may vary depending on the condition of the Brown Coat and the thickness of the fiber mesh.

Application Process

1. Preparation:

- **Mesh Handling:**
  - Cut the appropriate length of mesh and roll it up for easier handling.
- **Mixing:**
  - Mix 1 part RPA to 4 parts water, or **41.6oz of RPA + 166.4oz of water per 50.7 lb bag**.
  - Let's set for 5 minutes then remix and add water to achieve the desired consistency.

2. Wallboard Installation and Preparation:

- **Inspect Framing:**
  - Ensure all framing meets tolerances, with all studs 16" OC or closer.
  - *If budget allows*, metal studs are preferred to reduce dimensional changes due to lower thermal expansion.

• Install Backer-Board:

- Install backer-board (e.g., EXP, Dens-glass plywood) horizontally in a running bond pattern, staggering inside and outside corner joints.
- Attach the backer-board with rust-free screws.
- Using Ortex basecoat, fire tape and flatten all joints.

• Install AIR/WATER Resistive Barrier:

- Install AIR/WATER resistive barrier paper or liquid-applied waterproofing.

• Install Back Wrap Mesh (Edge Wrapping):

- Prior to installing the wallboard, install 6" wide, 4.5 oz. alkali-resistant detail mesh at the terminations.
- Wrap the mesh edge behind the wallboard termination, ensuring a minimum 3" return on the backside.
- This will allow the mesh to be embedded into the Ortex basecoat later, creating a reinforced edge and improved bond at terminations and transitions.

• **Install Wallboard:**

- Install wallboard (e.g., PermaBase®, Schluter) with a weep screed and control joints, ensuring a 1/8" gap between boards.
- Secure with rust-free screws every 6" to 8" in a horizontal running bond pattern, alternating joints and seams from the previous backer-board.
- Ensure back wrap mesh is exposed after wallboard installation.

3. Application:

- **Detail Mesh Embedding:**
  - Embed the detail mesh in the Ortex base coat (consider using Ortex Fine for the detail mesh) on all seams and corners, skimming smooth 12” on either side of the mesh.
  - Spot fasteners with basecoat at this time.
- **Substrate Leveling (if necessary):**
  - If the wallboards are uneven and need leveling, use a 10’ straight edge to screed and level the entire surface.
  - If necessary, apply Ortex as thick as 1/2" in one pass to level low spots.
  - Allow this layer to set firm, though it does not have to dry completely, before proceeding to the next step.
  - Let the layer set firm, then use a stucco scraper to remove any residue of the base coat and clean thoroughly.
- **Basecoat Application:**
  - Apply a coat of Ortex to the substrate, approximately 1/16” thick.
- **Full Mesh Embedding:**
  - Use 38” or 42” wide, 4.5 oz. or (if budget allows) 6oz or 10 oz. alkali-resistant full fiber mesh.
  - Apply over the complete field of wallboards, embedding the mesh in the Ortex basecoat.
- Overlap joining mesh by 2-1/2” and skim 12” on either side of the overlap connections to achieve a flat appearance free of humps.
- **Reinforce all openings** (such as windows, doors, and mechanical penetrations) by embedding additional detail mesh diagonally at each corner, ideally at a 45-degree angle, into the Ortex basecoat. Extend each piece of mesh at least 6" in both directions from the corner to help distribute stress and minimize cracking caused by movement or settling.
  - Ensure the final appearance is free of the “checkerboard” outline of the mesh weave. The mesh should be flat and fully encapsulated.
  - If needed, apply a tight basecoat layer to fully encapsulate the mesh. Do not hard trowel or burnish.

4. Crack Prevention & Application Prep – Summary (see a full version)

- Follow industry control joint standards. If omitted, take added precautions:
  - Use metal studs and heavier mesh
  - Add bracing and blocking between studs
- Reinforce openings (windows, doors) with detail mesh in the basecoat
- Ensure drywall is fully supported and fastened to framing
- Confirm all structural loads (roof, drywall, floors) are in place before applying finishes
- Avoid hammering or vibration after finish coat—prevents cracking in envelope layers
- Keep hardscape (patios, driveways) separated from the building
- Use expansion joints in hardscape to reduce stress transfer
- Stagger wall sheathing joints to prevent continuous stress lines

Revised 5/2025