

# Dual Low-E Glazing

## Overview

- Dual Low-E is an essential component for our Pinnacle wood clad products to meet the ENERGY STAR® criteria. Dual Low-E glass has a very thin Low-E coating that is integral to the interior glass surface (surface #4). This hard, durable, low emissivity coating gives the product improved thermal insulation performance compared to clear insulated glass or standard LoE insulated glass.
- Dual Low-E is a good solution for homes at high altitude, where argon gas may not be a viable solution due to the need for capillary tubes to equalize the pressure between the panes of glass, which prevents the use of argon gas.
- Dual Low-E is also an excellent ENERGY STAR solution, since the two layers of Low-E coating help retain more heat inside the home, delivering a better insulating value than single layer LoE glazings.
- Dual Low-E is becoming important for the fenestration industry to meet the stringent energy targets.

## Benefits

- Delivers thermal performance superior to standard LoE products.
- Serves as a high-altitude alternative to LoE with argon.

## Factors to Consider

**Condensation** – Cardinal i89 LoE used on the interior glass pane prevents it from warming to room temperature, as much as a standard LoE product would. This may increase the possibility of room-side condensation. Indoor humidity levels should be monitored to eliminate the possibility of condensation.

**Color** – Since there is an additional Low-E coating on products with Dual Low-E, the color of the glass will be slightly darker than standard LoE products.

**Scratching** – As with any glass, special care will need to be taken to not scratch the glass surface during the construction process.

## Glass Samples

- **PART #9764** (*Glass Sampler*) – (14) 4" x 4" samples of different glazing options, including Dual Low-E.

## Cleaning Tips

Products purchased with the Dual Low-E glazing option have a Low-E coating applied to the room-side of the windows. Never use a metallic object to remove debris from the Low-E coating. The room-side Dual Low-E glass surface is to be cleaned with a solution of vinegar and water, soap and water, or a standard household window cleaner, such as Windex®. Caution should be taken when using anything abrasive on the Dual Low-E room-side surface.



**NEVER** use a razor blade or other metallic object to clean or remove residue from your window or door products.

## Recommended Routine Cleaning

- Use a vinegar-based solution (10% vinegar and 90% water) or commercially available ammonia-free and alcohol-free cleaner, such as Sparkle® Glass Cleaner.
- Apply a thin film of cleaner to the glass surface.
- Rub the glass surface with a lint-free cloth or paper towel to clean.
- Wipe dry with a clean, dry, lint-free cloth or paper towel.
- Avoid getting cleaning agents on any non-glass components.

## Recommended Spot Cleaning

- To remove stubborn dirt or foreign material that has adhered to the glass surface, first follow the Routine Cleaning instructions above.
- If contaminants remain, apply a small amount of non-abrasive cleaner (such as Bar Keeper's Friend®) or organic solvent (such as Goof Off®) to a clean, dry, lint-free cloth or paper towel. Do not apply cleaner directly to the glass.
- On the affected area, work the cloth in multiple directions until the spot is removed.
- Avoid getting cleaning agents on any non-glass components. Repeat the Routine Cleaning instructions to remove any residue.



Dual Low-E glazing combines Cardinal LoE 366 soft coat on surface #2 with Cardinal i89 LoE on surface #4 to create an insulated glazing solution with superior performance.

