Milgard Windows & Doors

Training Module
Retrofit Installation-Zbar
Z-bar

- Flush fin window installed over a pre-existing window frame
- Typically used in stucco applications where pre-existing window frame is aluminum
- Used only if current weather resistant barrier is adequate and wall is in good condition
- Available on most Milgard windows and doors
  - Not available on aluminum casement/awning or Ultra/WoodClad DH
- Replacement Installation Instructions:
  - [http://pro.milgard.com/installation/](http://pro.milgard.com/installation/)
  - AAMA 2410-03: Standard Practice for Installation of Windows and Doors with an Exterior Flush Fin over an Existing Window Frame
Measuring for Z-bar Windows

- Measure narrowest and shortest portion of existing window frame
  - This gives you the smallest DLO (Day Light Opening)
- Always measure Width x Height
- Take at least 3 measurements for width and height
- Deduct ¼” from the narrowest of these measurements to allow for plumbing, leveling, squaring of new window
  - If current window is grossly out of square, you may need to take a greater deduction
- Measure inside opening, rock to rock, for ordering interior trim
Removal of Existing Window

- Re-measure opening and new window to ensure proper fit
- Cover the fixed glass with tape in case of breakage
- For Picture Windows
  - Remove fixed glass
- For Vertical or Horizontal Slider Windows
  - Remove operable vent and screen
  - Remove center meeting bar by removing screws or sawing out if necessary
  - Remove the fixed sash
- Never remove the perimeter frame of the existing window
Prepare Opening

- If needed, trim down z-bar flange with a small circular or table saw
- Without applying the sealant, center the new window in the opening
- Mark the stucco with a pencil
- Seal off interior of house to contain dust and debris
  - Heavy Plastic Sheet taped to the interior casing
- Sand or grind the stucco smooth for a better seal
- Remove any exterior drip flanges that may protrude from the existing window
Seal Exterior Frame

- Seal the existing aluminum frame using a high quality 30 to 50 year elastomeric polyurethane butyl-type sealant.
- Apply to the head and jambs of the aluminum frame with a continuous 3/8” nominal bead. Leave a gap in the caulk bead at the existing weep holes on the bottom of the old window frame.
  - This will provide a secondary weep protection if any water collects in the old window frame.
- Install a continuous shim on the window sill to support the weight of the new vinyl window. Shim should be 1/8” taller than the height of the existing aluminum flange.
Install New Window

- Place the new window in the opening. Make sure the window is plumb, level, square and centered in the opening.
- Secure in the opening by screwing through the new window frame into the building frame. Use stainless steel or zinc coated screws 2-½ inches or longer.
- Screws should be placed approximately every 8 -12 inches around the jamb from inside the house.
- Place shims behind the screws between the new window and the dry wall to avoid pulling the window out of shape.
- Avoid using any screws in the head and sill. (If necessary, use sealant on the screws).
- Install the vent and sight the reveal to see if window is square in the frame.
Interior Trim

- Insert backer rod or fiberglass insulation (loosely packed) in the gap between the old and new window from the interior if desired.
- Trim the interior with vinyl trim available from Milgard.
  - Optional wood trim can also be used.
- The interior trim should be wide enough to cover the old frame and gap plus approximately 5/8 inch of the replacement window frame.
Key Takeaways

- Z-bar windows used to jump old aluminum windows in stucco applications
- Always refer Home Owner to the Website for the AAMA 2410-03: Standard Practice for Installation of Windows and Doors with an Exterior Flush Fin over an Existing Window Frame
- Not to be used if existing window leaks
- Never collapse the existing frame
- No extended lead time or up-charge for custom size Milgard windows