Milgard Windows & Doors

Training Module
Product Specification Protocol
Product Specification Protocol

- Industry Standards
- Basic Installation Methods
- Product Descriptions and Options
Measurement Standards - RO

- Rough Opening (RO)
  - New construction
  - Replacement down to the studs
- All openings are described from the outside looking in
- Width is always followed by Height (WxH)
- Nomenclature
  - 48”x66”
  - Four feet by five feet six inches
  - 4056
- Rough opening sizes are built to ½ inch less width and height
  - This leave ¼ inch tolerance on every side

Rough Opening Components

[Diagram of rough opening components]

- Cripple Studs
- Top Plate
- Header
- Sill Plate
- King Stud
- Trimmer Studs
- Bottom Plate
- Cripple Studs
Measurement Standards - NFS

- Net Frame Size (NFS)
  - Exact size of window
  - No deduction in size is taken from NFS
  - No up charge for special size windows
- All openings are described from the outside looking in
- Width is always followed by Height (WxH)
- Nomenclature
  - Inches and fractions, 34 ¾” x 57 ¼”
  - Industry standard is +/- 1/8” tolerance
  - Milgard builds within +/- 1/16” tolerance
Frame Applications

- **Stucco**
  - 1” nail fin setback works well
  - Some stucco applications are 1 ¼” thick and require a 1 3/8” nail fin setback
  - Plaster system of porous, drainable barrier cement
  - Common stucco is 7/8” thick
    - 3-coat surface

- **Stucco Key**
  - Small protrusion at the edge of window frame to conceal the gap
Frame Applications

- Siding
  - 1 3/8” nail fin setback is typical to allow for the thickness and layering of siding

- J-channel
  - Used to simplify installation with siding applications
  - Common for Vinyl siding
Brick/Masonry Exterior

- Openings are not framed materials, but gaps in the bricks or blocks
- A block frame or ripped fin is used on this application
  - No nail fin
- Proper fastening as sealing are critical on these installs

Tuscany &Style Line Block Frames
Z Bar Retrofit Window (Flush Fin)

- Developed in the early 1990’s to replace old single glazed aluminum frames with stucco walls
- This window inserts into the existing frame and is sealed in two key areas
  - Between the old and new frame – Primary
  - Between the fin and stucco wall – Secondary
- Flat vinyl trim can conceal the interior frame to the drywall
Wood Frames

- Traditional wood frames typically consist of a sloped sill to prevent settling water and eventual rot.
- A block frame window with a H-Bar (aluminum) or sloped sill adaptor (vinyl).
- The outermost portion of the sloped sill will remain exposed (unlike a z-bar and stucco application) and must not be rotted.
<table>
<thead>
<tr>
<th>Vinyl Frame Configuration (Half Vents)</th>
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</thead>
<tbody>
<tr>
<td><strong>Row</strong></td>
</tr>
<tr>
<td>Tuscany®</td>
</tr>
<tr>
<td>Montecito®</td>
</tr>
<tr>
<td>Style Line™</td>
</tr>
<tr>
<td>WoodClad™ Ultra™</td>
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<tr>
<td>Aluminum</td>
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<tr>
<td>Thermal Improved Aluminum</td>
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</tbody>
</table>
Mulling Process

- Remove nail fin from edges of window to be joined
- Attach a mull bar with two sided tape
- Seal the open ends with sealant
- Apply and screw a gusset plate to the mull ends and add more sealant to screws and plate
- Add waterproof label to the nail fin gap for a continuous perimeter seal
- Additional trim parts may be applied to cover the exposed mull joint area
Mull vs. IMR
Mull vs. IMR

- **Mulled Frame**
  - Mull Bar combines two separate windows into one unit

- **Divided Frame**
  - IMR divides Glass, but window shares same perimeter frame
Combination Windows

- Alternative to mulling by dividing a window into two different functional areas with one perimeter frame.
- The structural bar known as the IMR (Intermediate Meeting Rail) divides the windows within the frame.
  - Measurement is always measured through the operating portion.
True Divided Lite Bars (TDL)

- Available to divide a sash or frame into multiple glazing areas
- This option can give the appearance of different window types
Grids

- Grids Between the Glass (GBG)
  - Located between the panes of glass for a clean look and easy cleaning

![5/8" Flat](image1.png) ![1-1/16" Sculptured](image2.png)
Grids

- Simulated Divided Lite (SDL)
  - SDL grids offer a more traditional look with several different options and styles
- Craftsman and Legacy
  - Exterior applied grid with interior grid between the glass
- Vintage
  - Exterior and interior applied grid with shadow bar between glass for a true divided look
Grid patterns

- Standard grid pattern is indicated by window size for a symmetric look
- A 4040 window has a pattern of four lites wide by four lites high, or 4x4
  - The grid pattern designates the number of lites not grid bars
  - The grid pattern is the overall window unit, not per lite
- Other patterns include:
  - Marginal, Top Only, Top Half, and Valance
Milgard Grid Patterns

SG - Standard Pattern

SGTO - Standard Pattern Top Only

SGTH - Standard Pattern Top Half Only

SGVL - Standard Pattern Top Valance Only

SGFO - Standard Pattern Flankers Only

SGTOFO - Standard Pattern Top Only Flankers Only

SGTHFO - Standard Pattern Top Half Only Flankers Only

SGVLFO - Standard Pattern Top Valance Flankers Only

PGPF - Perimeter Grids Per Frame

PGPL - Perimeter Grids Per Lite

PGPLTO - Perimeter Grids Per Lite Top Only

PGPLTH - Perimeter Grids Per Lite Top Half Only

PGPFTO - Perimeter Grids Per Frame Top Only

PGPLFO - Perimeter Grids Per Lite Flankers Only

PGPFFO - Perimeter Grids Per Frame Flankers Only

PGPLTOFO - Perimeter Grids Per Lite Top Only Flankers Only

PGPLTHFO - Perimeter Grids Per Lite Top Half Flankers Only

PGPFTOFO - Perimeter Grids Per Frame Top Only Flankers Only
Product Specification Protocol

- **Measurement Standards**
  - Rough opening measure to frame opening and built ½” short
  - Net frame size measured and built to exact dimensions

- **Basic Installation Methods**
  - NHC installed with nail fin and optional stucco key or j-channel
  - Retro installed with flush fin z-bar or block frame

- **Product Descriptions and Options**
  - Windows can be combined with mull or IMR
  - Grid options include GBG, SDL, and TDL (t-bar) with various patterns