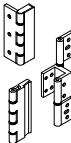
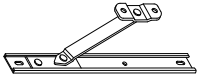
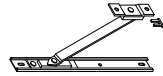


## Architectural Windows

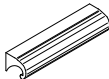
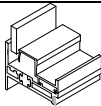
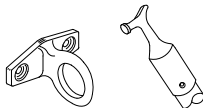
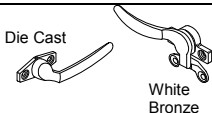
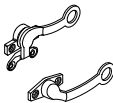
## Projected and Casement

| COMPONENT                                                                                                                                                       | MATERIAL        | FINISH                        | WINDOW SERIES     |                  |                   |                 |              |                      |                 |                  |                     |                   |                    |                |            |                |                   |                  |                 | FEATURES                                                                                                                                                                                                                                    |                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------|-------------------|------------------|-------------------|-----------------|--------------|----------------------|-----------------|------------------|---------------------|-------------------|--------------------|----------------|------------|----------------|-------------------|------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                 |                 |                               | 2-3-4250i INvent™ | All -XLT INvent™ | 2250 Insert Vents | 2-3-4250 Series | 2250-E Epic™ | 4250i Sim. Dbl. Hung | 2250i-BHM Blast | 3250-H Heritage™ | 3-4250i-V Visuline™ | 3250-HP Hurricane | 3250i-HP Hurricane | 4000i-DT Psych | 3250-Z ZSL | 4250-OS Offset | 4250-Z Multi-lock | TD-4250i Terrace | 2200 (Web only) |                                                                                                                                                                                                                                             |                                                                                                                                                                                                             |
| HINGES                                                                                                                                                          |                 |                               |                   |                  |                   |                 |              |                      |                 |                  |                     |                   |                    |                |            |                |                   |                  |                 |                                                                                                                                                                                                                                             |                                                                                                                                                                                                             |
| <b>Four-Bar Hinges</b><br><br>10"<br>16"<br>24"<br><br>                        | Stainless Steel | Uncoated                      | ●                 | ●                | ●                 | ●               | ●            | ●                    | ●               | ●                | ○                   | ●                 | ●                  | ●              | ●          | ●              | ●                 | ●                | ●               | Our most popular hinge selection. High performance concealed hinges with friction adjustment. Recommended casement vent weight limit is 115 lbs. Projected weight limits vary, please consult with Wausau on projected vents over 15 sq ft. |                                                                                                                                                                                                             |
| <b>Butt Hinges</b><br><br>Half-Mortise<br>Concealed<br>Surface Mounted<br><br> | Aluminum        | Exposed Surfaces Match Window | ○                 | ○                | ○                 | ○               | ○            | ○                    | ○               | ○                | ●                   | ●                 | ●                  | ○              | ○          | ○              | ○                 | ●                | ○               | High strength extruded aluminum hinges with coated stainless steel pins, nylon separators and end caps. Recommended for egress or large vent size. Always used in conjunction with friction adjusters.                                      |                                                                                                                                                                                                             |
| VENT CONTROL DEVICES                                                                                                                                            |                 |                               |                   |                  |                   |                 |              |                      |                 |                  |                     |                   |                    |                |            |                |                   |                  |                 |                                                                                                                                                                                                                                             |                                                                                                                                                                                                             |
| <b>Friction Adjuster</b><br><br>                                              | Stainless Steel | Uncoated                      | ○                 | ○                | ○                 | ○               | ○            | ○                    | ○               | ○                | ●                   | ●                 | ●                  | ○              | ○          | ○              | ○                 | *                | ○               | Limits casement swing to 85°. Adjusting set screw applies friction for smooth operation. Always use with butt hinges.<br><small>* Terrace doors are fitted with LCN 4040 closers.</small>                                                   |                                                                                                                                                                                                             |
| <b>Limited Opening Device</b><br><br>                                        |                 |                               | ○                 | ○                | ○                 | ○               | ○            | ○                    | ○               | ○                | ●                   | ●                 | ●                  | ○              | ○          | ○              | ○                 | *                | ○               | Limits opening for low sills, child safety, buffeting wind, limited projection or emergency ventilation. Keyed release to extend opening.<br><small>* Terrace doors are fitted with LCN 4040 closers.</small>                               |                                                                                                                                                                                                             |
| <b>Keyed Support Arm</b><br><br>                                             |                 |                               | ○                 | ○                | ○                 | ○               | ○            | ○                    | ○               | ○                | ○                   | ○                 | ○                  | ○              | ○          | ○              | ○                 | ○                | ○               | ○                                                                                                                                                                                                                                           | Used on top-hinged-inswing vents if height exceeds 25" or if weight is a concern. First setting locks at 1 ½" extension; key release for extended opening. Consult Wausau for recommended usage on awnings. |
| <b>Limited Opening Stop Block</b><br><br>                                    | Aluminum        | Mill                          | ○                 | ○                | ○                 | ○               | ○            | ○                    | ○               | ○                | ○                   | ○                 | ○                  | ○              | ○          | ○              | ○                 | ○                | ○               | Installed in track of four-bar hinge to limit opening, as an alternate to a separate limited opening devices.                                                                                                                               |                                                                                                                                                                                                             |

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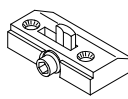
## Projected and Casement (continued)

| COMPONENT                                                                                                                                | MATERIAL      | FINISH                                            | WINDOW SERIES     |                  |                   |                 |              |                      |                 |                  |                     |                    |                    |                |            |                |                   |                  |                 | FEATURES                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------------------------------|-------------------|------------------|-------------------|-----------------|--------------|----------------------|-----------------|------------------|---------------------|--------------------|--------------------|----------------|------------|----------------|-------------------|------------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                          |               |                                                   | 2-3-4250i INVENT™ | All -XLT INVENT™ | 2250 Insert Vents | 2-3-4250 Series | 2250-E Epic™ | 4250i Sim. Dbl. Hung | 2250i-BHM Blast | 3250-H Heritage™ | 3-4250i-V Visuline™ | 3250i-HP Hurricane | 3250i-HP Hurricane | 4000i-DT Psych | 3250-Z ZSL | 4250-OS Offset | 4250-Z Multi-lock | TD-4250i Terrace | 2200 (Web only) |                                                                                                                                              |
| PULL HANDLES                                                                                                                             |               |                                                   |                   |                  |                   |                 |              |                      |                 |                  |                     |                    |                    |                |            |                |                   |                  |                 |                                                                                                                                              |
| Waterfall Pull                                          | Aluminum      | To Match Window                                   | ○                 | ○                | ○                 | ○               | ○            | ○                    |                 | ○                |                     |                    | ●                  |                | ○          | ○              | ○                 |                  | ○               | Applied to hand-operated project-out casement and awning vents when keeper locks are employed.                                               |
| Pull Bead                                               | Aluminum      | To Match Window                                   | ○                 | ○                | ○                 | ○               |              | ○                    |                 |                  |                     |                    |                    |                |            |                |                   |                  | ○               | Pull handle extruded into profile of glazing beads.                                                                                          |
| Pole Ring                                              | White Bronze  | Clear E-Coat                                      | ○                 | ○                | ○                 | ○               | ○            | ○                    |                 | ○                |                     |                    |                    |                |            |                |                   |                  | ○               | Used when vents are out of reach. Most common on hopper vents. Available for awnings. Extruded aluminum pole operator and eye hook provided. |
| LOCKS                                                                                                                                    |               |                                                   |                   |                  |                   |                 |              |                      |                 |                  |                     |                    |                    |                |            |                |                   |                  |                 |                                                                                                                                              |
| Cam Handles<br>LH or RH<br>Project-in or Project-out  | Zinc Die Cast | Brushed Copper Nickel,<br>Standard Painted Colors | ●                 | ●                | ●                 | ●               | ●            | ●                    | ●               | ○                | ●                   | ○                  |                    |                | ●          | ●              | ○                 |                  | ●               | Die cast handles are a contemporary economical alternative to the rich, smooth, retro appearance of white bronze.                            |
| Ring Cams                                             | or            | or                                                | ○                 | ○                | ○                 | ○               | ○            | ○                    | ○               | ○                | ○                   | ○                  |                    |                | ○          | ○              | ○                 |                  | ○               | Used when vents are out of reach. Most common on hopper vents. Available for awnings. Extruded aluminum pole operator and eye hook provided. |
| Handle-less Cam with Removable Key                    | White Bronze  | Clear E-Coat                                      | ○                 | ○                | ○                 | ○               | ○            | ○                    | ○               | ○                | ○                   |                    |                    |                | ○          | ○              | ○                 |                  | ○               | Used for custodial operation of casements, hoppers and awnings.                                                                              |

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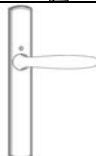
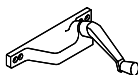
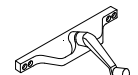
## Projected and Casement (continued)

| COMPONENT                                               | MATERIAL                                                                                            | FINISH                                | WINDOW SERIES                                  |                  |                   |                 |              |                      |                 |                  |                     |                   |                    |                |            |                |                   |                  |                 | FEATURES                                                                  |                                                                                                                                                                                             |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------|------------------------------------------------|------------------|-------------------|-----------------|--------------|----------------------|-----------------|------------------|---------------------|-------------------|--------------------|----------------|------------|----------------|-------------------|------------------|-----------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                         |                                                                                                     |                                       | 2-3-4250i INvent™                              | All -XLT INvent™ | 2250 Insert Vents | 2-3-4250 Series | 2250-E Epic™ | 4250i Sim. Dbl. Hung | 2250i-BHM Blast | 3250-H Heritage™ | 3-4250i-V Visuline™ | 3250-HP Hurricane | 3250i-HP Hurricane | 4000i-DT Psych | 3250-Z ZSL | 4250-OS Offset | 4250-Z Multi-lock | TD-4250i Terrace | 2200 (Web only) |                                                                           |                                                                                                                                                                                             |
| LOCKS (continued)                                       |                                                                                                     |                                       |                                                |                  |                   |                 |              |                      |                 |                  |                     |                   |                    |                |            |                |                   |                  |                 |                                                                           |                                                                                                                                                                                             |
| Single Point Keeper                                     |                    | Zinc Die Cast                         | Brushed Copper Nickel, Standard Painted Colors | ○                | ○                 | ○               | ○            |                      | ○               |                  | ○                   | ○                 |                    |                |            | ○              | ○                 |                  |                 | ○                                                                         | Keepers can help avoid the need for wicket screens. Die cast handles are a contemporary and economical alternative to the rich, smooth, retro appearance of white bronze.                   |
|                                                         |                    | White Bronze                          | Clear E-Coat                                   | ●                | ●                 | ●               | ●            | ●                    | ●               | ●                | ●                   | ○                 |                    |                |            | ○              | ●                 |                  |                 | ●                                                                         | Keepers are most commonly frame-mounted on project-out casements and awnings. Can also be vent-mounted on inswing casements and hoppers. White bronze is Wausau's standard hardware finish. |
| Two Point Keeper<br>(Three Point Keeper also available) | <br>Die Cast      | Zinc Die Cast                         | Brushed Copper Nickel, Standard Painted Colors | ○                | ○                 | ○               | ○            |                      | ○               |                  | ○                   | ○                 |                    |                |            | ○              | ○                 |                  |                 | ○                                                                         | Die cast handles are a economical alternative to the rich, smooth appearance of white bronze. Also available handle-less for custodial operation.                                           |
|                                                         | <br>White Bronze | White Bronze                          | Clear E-Coat                                   | ●                | ●                 | ●               | ●            | ●                    | ●               | ●                | ○                   |                   | ●                  |                |            | ○              | ●                 |                  |                 | ●                                                                         | Two- and three-point keepers allow single handle operation of taller vents, while avoiding the need for wicket screens.                                                                     |
| Concealed Lock                                          |                  | Zinc Die Cast Lock with Nylon Housing | Uncoated                                       |                  |                   | ○               | ○            |                      |                 |                  |                     | ○                 |                    |                |            | ○              | ○                 |                  |                 | ○                                                                         | Concealed flush-mount hex-keyed lock for custodial operation.                                                                                                                               |
| Tamper Resistant Concealed Lock                         |                                                                                                     |                                       |                                                |                  | ○                 | ○               |              |                      |                 |                  | ○                   |                   | ●                  | ○              | ○          |                |                   |                  | ○               | Tamper resistant hex keys require a special pin feature for lock release. |                                                                                                                                                                                             |

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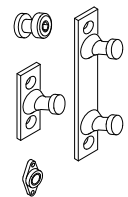
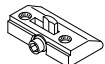
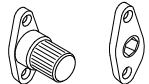
## Projected and Casement (continued)

| COMPONENT                                                                                                         | MATERIAL      | FINISH                                            | WINDOW SERIES     |                  |                   |                 |              |                      |                 |                  |                     |                   |                    |                |            |                |                   |                  | FEATURES                                                                                                                                                                                                                            |                                                                                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------|---------------|---------------------------------------------------|-------------------|------------------|-------------------|-----------------|--------------|----------------------|-----------------|------------------|---------------------|-------------------|--------------------|----------------|------------|----------------|-------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                   |               |                                                   | 2-3-4250i INvent™ | All -XLT INvent™ | 2250 Insert Vents | 2-3-4250 Series | 2250-E Epic™ | 4250i Sim. Dbl. Hung | 2250i-BHM Blast | 3250-H Heritage™ | 3-4250i-V Visuline™ | 3250-HP Hurricane | 3250i-HP Hurricane | 4000i-DT Psych | 3250-Z ZSL | 4250-OS Offset | 4250-Z Multi-lock | TD-4250i Terrace |                                                                                                                                                                                                                                     | 2200 (Web only)                                                                                                                                                             |
| LOCKS (continued)                                                                                                 |               |                                                   |                   |                  |                   |                 |              |                      |                 |                  |                     |                   |                    |                |            |                |                   |                  |                                                                                                                                                                                                                                     |                                                                                                                                                                             |
| Security Lock<br>                | Zinc Die Cast | Brushed Copper Nickel, Standard Painted Colors    |                   |                  |                   |                 |              |                      |                 |                  |                     |                   |                    |                |            |                |                   |                  | Used for additional security on inswing casement and hopper windows. Key is non-removable in the unlocked position.                                                                                                                 |                                                                                                                                                                             |
| Multi-Lock Set<br>               | Aluminum      | Clear or Bronze Anodized, Standard Painted Colors |                   |                  |                   |                 |              |                      |                 |                  |                     |                   |                    |                |            |                |                   |                  | A popular modern option for selected project-in and project-out casements, awnings and hoppers. Single-handle operation, with concealed locking points and optional corner drive units for large vents. Removable handle available. |                                                                                                                                                                             |
| Terrace Door Lock Set<br>       |               |                                                   |                   |                  |                   |                 |              |                      |                 |                  |                     |                   |                    |                |            |                |                   |                  |                                                                                                                                                                                                                                     | Verona-style terrace door handle with manual compression lock feature. Interior and exterior operation.<br><small>* Terrace doors are fitted with LCN 4040 closers.</small> |
| Terrace Door Thumb Turn<br>    |               |                                                   |                   |                  |                   |                 |              |                      |                 |                  |                     |                   |                    |                |            |                |                   |                  |                                                                                                                                                                                                                                     | Supplemental interior lock for added security on terrace doors.                                                                                                             |
| OPERATORS                                                                                                         |               |                                                   |                   |                  |                   |                 |              |                      |                 |                  |                     |                   |                    |                |            |                |                   |                  |                                                                                                                                                                                                                                     |                                                                                                                                                                             |
| Roto Operator (Single Arm)<br> | Zinc Die Cast | Brushed Copper Nickel, Standard Painted Colors    |                   |                  |                   |                 |              |                      |                 |                  |                     |                   |                    |                |            |                |                   |                  | Single arm rotos used with outswing casement vents can avoid the need for wicket screens. Always use friction adjusters if rotos are used in conjunction with butt hinges.                                                          |                                                                                                                                                                             |
| Roto Operator (Dual Arm)<br>   |               |                                                   |                   |                  |                   |                 |              |                      |                 |                  |                     |                   |                    |                |            |                |                   |                  |                                                                                                                                                                                                                                     | Dual arm rotos used with awning vents can avoid the need for wicket screens. Always use friction adjusters if rotos are used in conjunction with butt hinges.               |

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## Projected and Casement (continued)

| COMPONENT                                                                                                                                                                                                                                                                                                                                                                                               | MATERIAL                       | FINISH                             | WINDOW SERIES     |                  |                   |                 |              |                      |                 |                  |                     |                   |                    |                |            |                |                   |                  | FEATURES                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------------|-------------------|------------------|-------------------|-----------------|--------------|----------------------|-----------------|------------------|---------------------|-------------------|--------------------|----------------|------------|----------------|-------------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                         |                                |                                    | 2-3-4250i INVENT™ | All -XLT INVENT™ | 2250 Insert Vents | 2-3-4250 Series | 2250-E Epic™ | 4250i Sim. Dbl. Hung | 2250i-BHM Blast | 3250-H Heritage™ | 3-4250i-V Visuline™ | 3250-HP Hurricane | 3250i-HP Hurricane | 4000i-DT Psych | 3250-Z ZSL | 4250-OS Offset | 4250-Z Multi-lock | TD-4250i Terrace |                                                                                                                                                                                    |
| SPECIALTY                                                                                                                                                                                                                                                                                                                                                                                               |                                |                                    |                   |                  |                   |                 |              |                      |                 |                  |                     |                   |                    |                |            |                |                   |                  |                                                                                                                                                                                    |
| Egress Tags<br>                                                                                                                                                                                                                                                                                                        | Aluminum                       | Painted (Red on White)             | ○                 | ○                | ○                 | ○               | ○            | ○                    | ○               | ○                | ○                   | ○                 | ○                  | ○              | ○          | ○              | ○                 | ○                | Applied to egress windows as required. Check local codes for specific requirements.                                                                                                |
| Window Washing Restraint and Tieback<br>                                                                                                                                                                                                                                                                               | Cast Stainless Steel           | Brushed or Painted to Match Window | ○                 | ○                | ○                 | ○               | ○            | ○                    | ○               | ○                | ○                   | ○                 | ○                  | ○              | ○          | ○              | ○                 | ○                | Standard stabilizer, single post, double post or flush-mounted spring loaded. Check local codes for specific requirements, and consult with a window washing equipment specialist. |
| INTEGRAL BETWEEN-GLASS VENETIAN BLIND CONTROLS                                                                                                                                                                                                                                                                                                                                                          |                                |                                    |                   |                  |                   |                 |              |                      |                 |                  |                     |                   |                    |                |            |                |                   |                  |                                                                                                                                                                                    |
| Access Door Lock<br>                                                                                                                                                                                                                                                                                                 | Zinc Die Cast in Nylon Housing | Uncoated                           | ○                 | ○                | ○                 | ○               | ○            | ○                    | ○               | ○                | ○                   | ○                 | ○                  | ○              | ○          | ○              | ○                 | ○                | Provides custodial access to concealed raise-lower cords, and for periodic cleaning. Access doors are also equipped with pin hinges as a standard, lift-out optional.              |
| Venetian Blind Tilt Control<br>                                                                                                                                                                                                                                                                                      | Nylon                          | Black                              | ○                 | ○                | ○                 | ○               | ○            | ○                    | ○               | ○                | ○                   | ○                 | ○                  | ○              | ○          | ○              | ○                 | ○                | Occupant tilt, concealed custodial raise-lower. Available keyed, or with removable control knob.                                                                                   |
| GENERAL NOTE: Hardware Selection Guides are intended to provide an overview of Wausau's most popular hardware options. Vent size and desired functionality can play major roles in determining appropriate hardware selection, as can local code requirements. Certain hardware types can affect the Wausau Standard Limited Warranty. Please contact Wausau for more options and detailed information. |                                |                                    |                   |                  |                   |                 |              |                      |                 |                  |                     |                   |                    |                |            |                |                   |                  |                                                                                                                                                                                    |

## Architectural Windows

## Projected and Casement (continued)

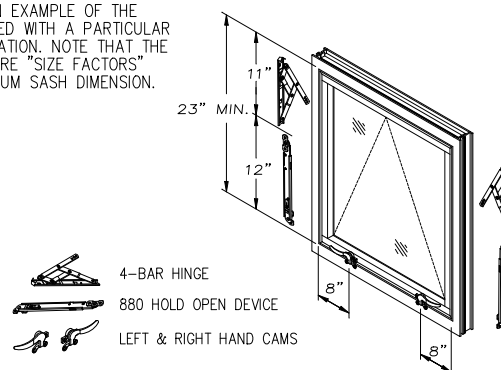
### MINIMUM VENT DIMENSIONS

SIZE FACTOR TABLE

| COMPONENT             | MINIMUM SIZE FACTOR | NOTES                                          |
|-----------------------|---------------------|------------------------------------------------|
| 10" Four-Bar Hinge    | 11"                 |                                                |
| Keeper (Single Point) | 8"                  |                                                |
| Keeper (Two Point)    | Inquire             |                                                |
| Butt Hinge            | 14"                 |                                                |
| Cam Lock              | 8"                  |                                                |
| Limit Stop            | Inquire             | Dimension Varies with Degree of Opening        |
| Support Arm           | 12"                 | Dimension Varies with Degree of Opening        |
| Friction Adjuster     | 20"                 |                                                |
| Dual Arm Roto         | 30"                 | For 10" Clear Opening                          |
| Roto/Single Arm       | 15"                 | Increases to 22" when used with Four-Bar Hinge |

DIAGRAM

THE FOLLOWING IS AN EXAMPLE OF THE LIMITATIONS PRESENTED WITH A PARTICULAR HARDWARE CONFIGURATION. NOTE THAT THE SUM OF THE HARDWARE "SIZE FACTORS" DETERMINE THE MINIMUM SASH DIMENSION.

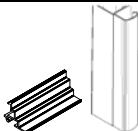
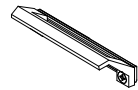


PHOTOGRAPH



## Architectural Windows

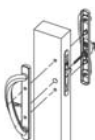
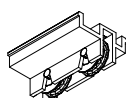
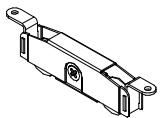
## Hung and Rolling

| COMPONENT                                                                                             | MATERIAL                       | FINISH          | WINDOW SERIES       |                      |                     |                     |                    |                    |                    |                    | FEATURES |                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------|--------------------------------|-----------------|---------------------|----------------------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                       |                                |                 | 310i-SH Single Hung | 410i-HS Single Slide | 4100i-HS Dbl. Slide | D-5100 Sl. Gl. Door | 2700-HSD(Web only) | 3100-DH (Web Only) | 3150-DHT(Web only) | 3151-SHT(Web only) |          | 4100-HS (Web only)                                                                                                                                                                                                                                                                                                  |
| BALANCES                                                                                              |                                |                 |                     |                      |                     |                     |                    |                    |                    |                    |          |                                                                                                                                                                                                                                                                                                                     |
| Block and Tackle     | Steel Housing                  |                 | ○                   |                      |                     |                     |                    | ○                  | ○                  | ○                  |          | Provides approximately 30% lifting and closing assistance, while helping to hold sash stationary. Sash weight limit 60 pounds. Sized to fit individual sash width and height. Requires periodic replacement in heavy use applications.                                                                              |
| Ultralift™ Balance  | Spring-assisted Spiral Balance |                 | ●                   |                      |                     |                     |                    | ●                  | ●                  | ●                  |          | Provides approximately 70% lifting and closing assistance, much more than block and tackle balances, while helping to hold sash stationary. Sash weight limit 115 pounds for side-load, 80 pounds for tilt. Sized to fit individual sash width and height. Requires periodic replacement in heavy use applications. |
| HANDLES                                                                                               |                                |                 |                     |                      |                     |                     |                    |                    |                    |                    |          |                                                                                                                                                                                                                                                                                                                     |
| Pull Bead          | Aluminum                       | To Match Window | ●                   | ●                    | ●                   | ●                   | ●                  | ●                  | ●                  | ●                  | ○        | Handles can be extruded as part of glazing beads and meeting rail members. Some continuous pull beads can be fitted with spring-loaded sash latches.                                                                                                                                                                |
| Sash Lift          | Zinc Die Cast                  | Black           |                     |                      |                     |                     |                    | ○                  | ○                  | ○                  | ●        | Easy-to-grip contemporary lift handle. Location is adjustable on windows without between-glass blinds.                                                                                                                                                                                                              |
|                                                                                                       | White Bronze                   | Clear Coat      |                     |                      |                     |                     |                    | ○                  | ○                  | ○                  | ○        | Easy-to-grip retro lift handle. Location is adjustable on windows without between-glass blinds.                                                                                                                                                                                                                     |

DISCLAIMER: Wausau Window and Wall Systems takes no responsibility for product selection or application, including, but not limited to, compliance with building codes, safety codes, laws, merchantability or fitness for a particular purpose; and further disclaims all liability for the use, in whole or in part, of this Hardware Selection Guide in preparation of project specifications and/or other documents. Hardware Selection Guides are subject to change at any time, without notice, and at Wausau's sole discretion. ©2013 Wausau

## Architectural Windows

## Hung and Rolling (continued)

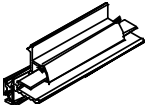
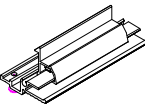
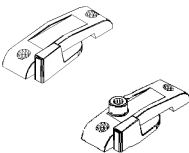
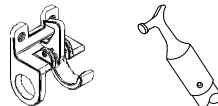
| COMPONENT                                                                                                                   | MATERIAL                                    | FINISH      | WINDOW SERIES       |                      |                     |                     |                    |                    |                    |                    | FEATURES |                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|-------------|---------------------|----------------------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                             |                                             |             | 310i-SH Single Hung | 410i-HS Single Slide | 4100i-HS Dbl. Slide | D-5100 Sl. Gl. Door | 2700-HSD(Web only) | 3100-DH (Web Only) | 3150-DHT(Web only) | 3151-SHT(Web only) |          | 4100-HS (Web only)                                                                                                                                                                                     |
| HANDLES (Continued)                                                                                                         |                                             |             |                     |                      |                     |                     |                    |                    |                    |                    |          |                                                                                                                                                                                                        |
| Surface Applied Pull Handle                | Aluminum                                    | Black       |                     |                      |                     |                     |                    |                    |                    |                    |          | Economical basic sliding glass door handle with flip latch. Available as special order only.                                                                                                           |
| Mortised "Signature" Pull Handle           | White Bronze                                | Clear Coat  |                     |                      |                     | ●                   |                    |                    |                    |                    |          | Cast profiled handle for smooth, rich, retro appearance. Available with a variety of locking features. Our recommended sliding glass door accessory.                                                   |
| ROLLERS                                                                                                                     |                                             |             |                     |                      |                     |                     |                    |                    |                    |                    |          |                                                                                                                                                                                                        |
| Sliding Window Roller Set                 | Delrin™ Tires in Nylon Housing, SS Bearings | Natural     |                     | ●                    | ●                   |                     | ●                  |                    |                    |                    | ●        | Ball bearing nylon rollers provide smooth, quiet operation. Rollers are non-adjustable. Shipping blocks prevent premature wear and damage.                                                             |
| Sliding Glass Door Tandem Roller Trucks  | Steel                                       | Zinc Plated |                     |                      |                     | ●                   |                    |                    |                    |                    |          | Adjustable heavy-duty ball bearing rollers engage in sash bottom rails, and ride on stainless steel tracks. Tandem trucks carry doors up to 500 lbs. Nylon tires are optional for doors up to 250 lbs. |
|                                                                                                                             | Stainless Steel                             | E-Coat      |                     |                      |                     | ○                   |                    |                    |                    |                    |          | Stainless roller assemblies are available for more aggressive environments.                                                                                                                            |

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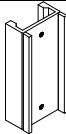
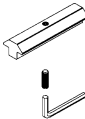
## Architectural Windows

## Hung and Rolling (continued)

| COMPONENT                                                                                                                               | MATERIAL      | FINISH     | WINDOW SERIES       |                      |                     |                     |                    |                    |                    |                    | FEATURES |                    |                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------|---------------|------------|---------------------|----------------------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|----------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                         |               |            | 310I-SH Single Hung | 410I-HS Single Slide | 4100I-HS Dbl. Slide | D-5100 Sl. Gl. Door | 2700-HSD(Web only) | 3100-DH (Web Only) | 3150-DHT(Web only) | 3151-SHT(Web only) |          | 4100-HS (Web only) |                                                                                                                                                 |
| LATCHES                                                                                                                                 |               |            |                     |                      |                     |                     |                    |                    |                    |                    |          |                    |                                                                                                                                                 |
| Spring-Loaded Bead Latch<br>(Standard Glazing)<br>     | Aluminum      | Black      | ●                   | ●                    | ●                   |                     |                    |                    | ○                  | ○                  | ○        | ○                  | Provides an automatic latching feature for inactive sash, both hung and rolling. Adjustable location.                                           |
| Spring-Loaded Bead Latch<br>(Between-Glass Blinds)<br> | Aluminum      | Black      |                     |                      | ○                   |                     |                    |                    | ○                  | ○                  | ○        | ○                  | Provides an automatic latching feature for inactive sash, both hung and rolling. Location not adjustable when between-glass blinds are used.    |
| Meeting Rail Sweep Latch<br>                          | Zinc Die Cast | Black      | ○                   | ○                    | ○                   |                     |                    |                    | ●                  | ●                  | ●        | ●                  | Contemporary and economical basic hung or rolling window latching mechanism. Provides a visual indication of lock status.                       |
|                                                                                                                                         | White Bronze  | Clear Coat |                     |                      |                     |                     |                    |                    | ○                  | ○                  | ○        | ○                  | White bronze finish for smooth, rich, retro appearance. Available with tamper-resistant set screw. Provides a visual indication of lock status. |
| Transom Latch with Pole Ring<br>                     | White Bronze  | Clear Coat |                     |                      |                     |                     |                    |                    | ○                  | ○                  | ○        |                    | Spring-loaded latch provide for automatic latching at head of hung windows. Pole operation possible. Located at centerline.                     |

## Architectural Windows

## Hung and Rolling (continued)

| COMPONENT                                                                                                                                                                                                                                                                                                                                                                                               | MATERIAL      | FINISH   | WINDOW SERIES       |                      |                     |                     |                    |                    |                    |                    | FEATURES |                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|---------------------|----------------------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                         |               |          | 310i-SH Single Hung | 410i-HS Single Slide | 4100i-HS Dbl. Slide | D-5100 Sl. Gl. Door | 2700-HSD(Web only) | 3100-DH (Web Only) | 3150-DHT(Web only) | 3151-SHT(Web only) |          | 4100-HS (Web only)                                                                                                                                                                 |
| LIMIT STOPS                                                                                                                                                                                                                                                                                                                                                                                             |               |          |                     |                      |                     |                     |                    |                    |                    |                    |          |                                                                                                                                                                                    |
| Side-Load Limit Stop                                                                                                                                                                                                                                                                                                   | PVC           | Black    |                     |                      | ○                   | ○                   |                    | ●                  |                    |                    | ○        | Placed in track to prevent balance over-extension, or to stop sash at a specified dimension. Can be attached using tamper-resistant fasteners.                                     |
| Tilt Window Limit Stop                                                                                                                                                                                                                                                                                                 | Zinc Die Cast | Uncoated |                     |                      |                     |                     |                    |                    |                    | ●                  | ●        | Hooked on frame legs, and secured with a set screw, to prevent balance over-extension, or to stop sash at a specified dimension. Can be attached using tamper-resistant fasteners. |
| Removable Limit Stop                                                                                                                                                                                                                                                                                                  | Aluminum      | Black    | ●                   | ○                    |                     |                     |                    |                    |                    |                    |          | Placed in track to prevent balance over-extension, or to stop sash at a specified dimension. Can be attached using tamper-resistant fasteners.                                     |
| Non-Take-Out Block                                                                                                                                                                                                                                                                                                   | PVC           | Black    |                     |                      | ○                   | ○                   | ○                  |                    |                    |                    | ○        | Prevents sliding sash removal. Can be attached using tamper-resistant fasteners.                                                                                                   |
| GENERAL NOTE: Hardware Selection Guides are intended to provide an overview of Wausau's most popular hardware options. Sash size and desired functionality can play major roles in determining appropriate hardware selection, as can local code requirements. Certain hardware types can affect the Wausau Standard Limited Warranty. Please contact Wausau for more options and detailed information. |               |          |                     |                      |                     |                     |                    |                    |                    |                    |          |                                                                                                                                                                                    |