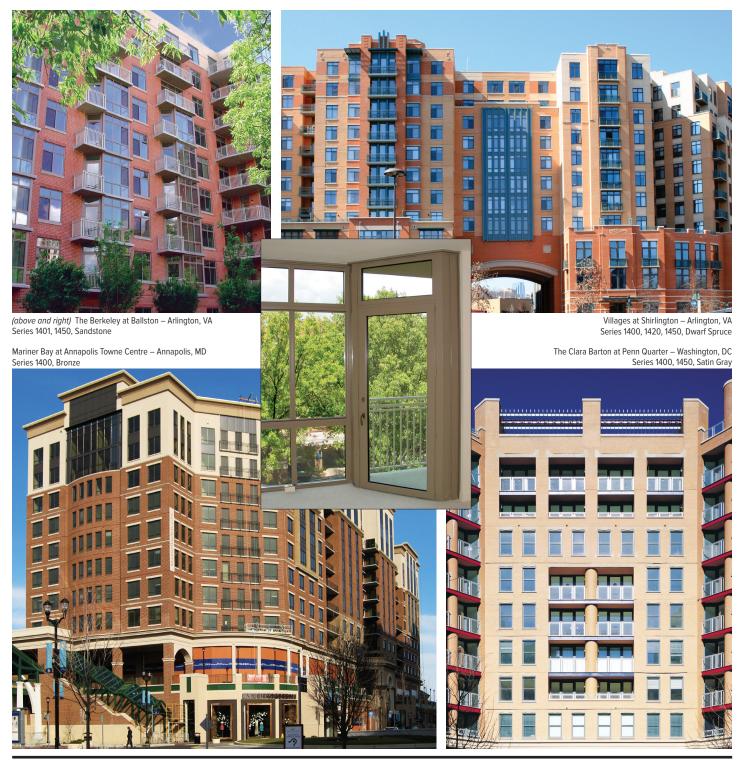
Terrace Doors



Commercial and Impact Rated Terrace Doors for Retrofit or New Construction



Manufactured by Thermal Windows, Inc. • 12805 E. 31st Street • Tulsa, OK 74146 • (800) 259-7580 • Fax (918) 665-2197 Website: www.thermalwindows.com Email: info@thermalwindows.com



12805 E. 31st St • Tulsa, OK 74146 (800) 259-7580 • Fax (918) 665-2197 Email: info@thermalwindows.com www.thermalwindows.com

TERRACE DOORS

Standard Features

- 31/4" frame depth
- Custom Sizes
- Integral Thermal Barrier throughout frame and sash
- AAMA 2604 organic powder coat finish
- 5 standard powder coat finish colors (see 'Finishes' section)
- Tested to AAMA specifications
- 1" tempered insulated glass
- · Painted or pre-finished handles
- Multipoint locking system
- Marine gasket weatherstripping for superior wind and water resistance

Available Options

- Fair Housing threshold
- X, XO, OX, XX, OXO, OXXO operating configurations
- Dual seal
- Anodized finishes
- AAMA 2605 high-performance finishes
- Tier 2 colors at no additional charge (minimums apply)
- Hundreds of special colors
- Impact-resistant glazing
- Low-E glass; tinted glass; obscure (frosted) glass
- Flat or contoured internal muntins
- Internal and external applied muntins

SPECIFICATIONS

I. GENERAL:

<u>Scope of Work</u> - Furnish all necessary materials, labor and equipment for the complete installation of aluminum hinged glass doors for this project as shown on the drawings and herein specified. Doors shall be the "Series 1400" as manufactured by Thermal Windows, Inc., Tulsa, Oklahoma. The "Series 1400" is a single vent Hinged Glass Door with thermally improved main frame and vent consisting of side hinges, locking handle and multipoint lock system. The specifications and materials for the "Series 1400" are as follows:

II. PRODUCTS:

<u>Materials</u> - Aluminum shall be of proper alloy for commercial window construction. All extruded sections shall be of 6063-T5 aluminum alloy.

<u>Frame</u> - Main frame and sash members shall be a .062" nominal thickness. Main frame shall be 3.25" in depth. Horizontal and vertical vent members shall be hollow extrusions. Main frames and vent members are to be extruded aluminum with a dual insulbar thermal barrier system creating a 5/8" wide thermal barrier.

<u>Hardware</u> – Operating handle shall be lever type connecting to a multi-point lock system. Lock system engagements shall be as follows: Two (2) at handle, one (1) 2 1/2" from each end of lock stile and one (1) centered between handle and upper locking point. Lock cannot be operated from exterior. One (1) friction catch shall be located on vent and frame to hold door closed when handle is in unlocked position. Door shall also be fitted with one (1) field adjustable limit device at head to restrict door panel travel. Limit device shall also utilize a friction adjusting screw.

<u>Hinges</u> - Shall consist of four (4) extruded aluminum butt type hinges. Hinge pins shall be ¼" diameter stainless steel with hard vinyl bushings.

<u>Weatherstripping</u> – Door panel shall close to a full perimeter EPDM weatherseal utilizing welded corner construction.

III. CONSTRUCTION:

<u>Assembly</u> – Main frame and door panel corners shall be of mitered, sealed, crimped and staked corner construction. Each corner shall consist of one extruded aluminum corner key held in place with two die cast retainer pins, one die cast corner key staked in place and one friction fit hard vinyl corner key. <u>Glazing</u> - Glass in the door panel shall be factory glazed using EPDM gasket at exterior perimeter with extruded aluminum glazing bead and EPDM wedge at interior of glass. The insulated glass units shall be 1" overall thickness with two panes .125" tempered glass, separated by a .750" air space for optimum insulation. All insulated glass units shall meet the requirements of the ASTM E 2190 specification, Class "A".

<u>Finish</u> - Shall be a factory applied baked polyurethane powder coat finish meeting the requirements of AAMA 2604 for Pigmented Organic Coating on Extruded Aluminum. Refer to "Colors and Finishes" chart for examples. Bronze anodizing, clear anodizing and high performance AAMA 2605 finishes are optional.

<u>Operation</u> - The door panel is operable to the inside and lockable from the inside. Friction catch and pull handle allow the door panel to be held closed and operated from the outside.

IV. PERFORMANCE:

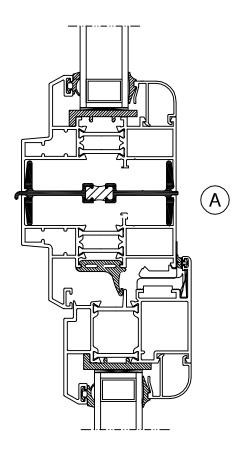
<u>Structural</u> - Shall meet the requirements of AAMA/ WDMA/CSA101/I.S.2/A440-05 ATD-HC40 specification. Fair Housing threshold with A440-08 ATD-AW60 performance available (Series 1400F).

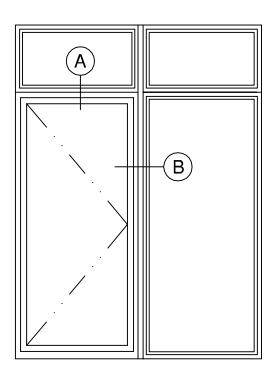
<u>NFRC</u> – Shall meet the requirements of NFRC 100 and 200.

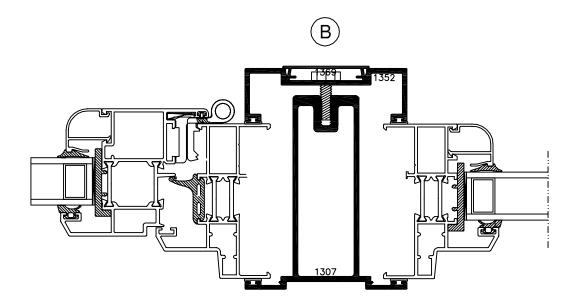
V. INSTALLATION:

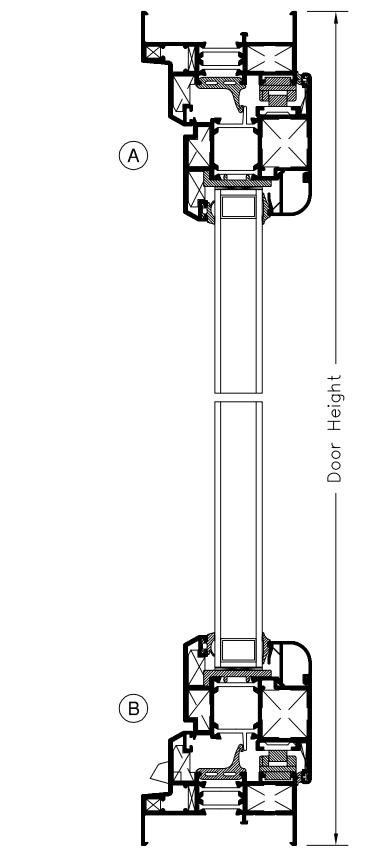
<u>Qualifications</u> - Installation shall be performed by skilled, experienced tradesmen. Units shall be installed plumb, level, square and shall be secured in accordance with detailed shop drawings. A non-hardening sealant compatible with aluminum shall be provided by the installer and applied in sufficient quantity to provide a weathertight seal between the window and surrounding construction.

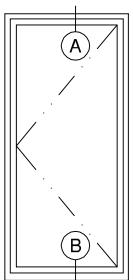
Typical Configurations (Scale: Half Size)

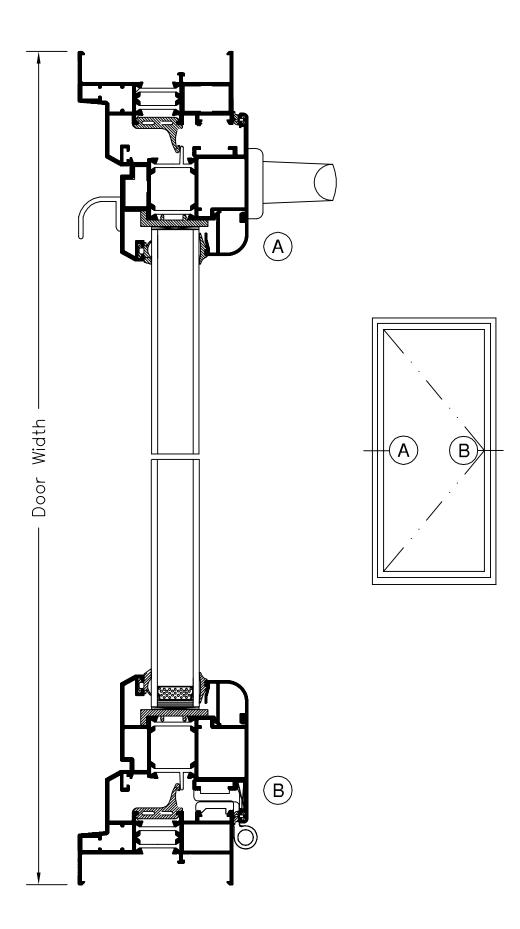




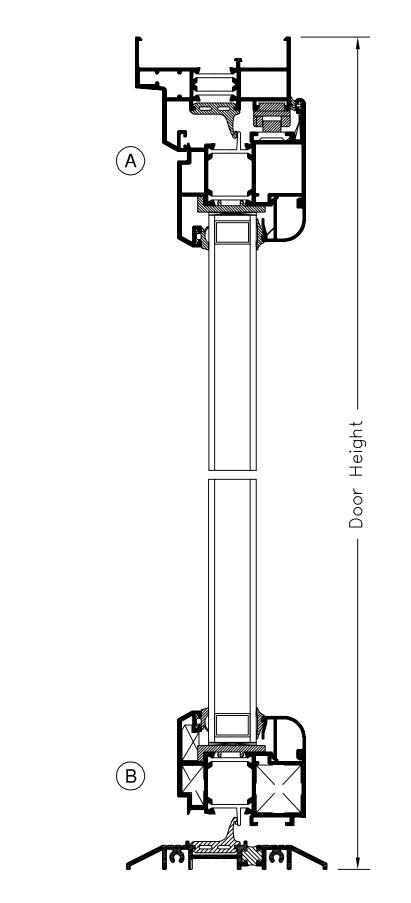


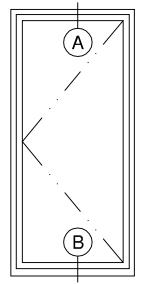




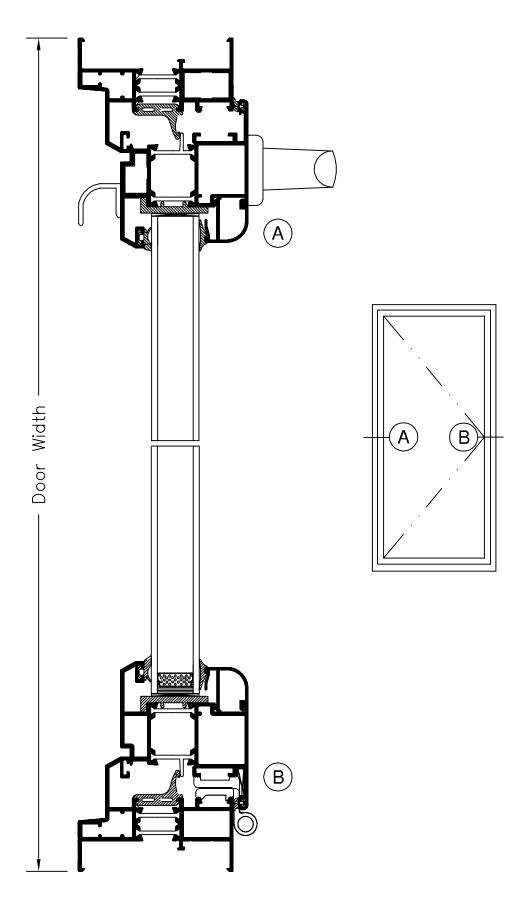


With Fair Housing sill





With Fair Housing sill



SPECIFICATIONS

I. GENERAL:

<u>Scope of Work</u> - Furnish all necessary materials, labor and equipment for the complete installation of aluminum hinged glass doors for this project as shown on the drawings and herein specified. Doors shall be the "Series 1401" as manufactured by Thermal Windows, Inc., Tulsa, Oklahoma. The "Series 1401" is a single vent Hinged Glass Door with thermally improved main frame and vent consisting of side hinges, locking handle and multipoint lock system. The specifications and materials for the "Series 1401" are as follows:

II. PRODUCTS:

<u>Materials</u> - Aluminum shall be of proper alloy for commercial window construction. All extruded sections shall be of 6063-T5 aluminum alloy.

<u>Frame</u> - Main frame and sash members shall be a .062" nominal thickness. Main frame shall be 3.25" in depth. Horizontal and vertical vent members shall be hollow extrusions. Main frames and vent members are to be extruded aluminum with a dual insulbar thermal barrier system creating a 5/8" wide thermal barrier.

<u>Hardware</u> – Operating handle shall be lever type connecting to a multi-point lock system. Lock system engagements shall be as follows: Two (2) at handle, one (1) 2.500" from each end of lock stile and one (1) centered between handle and upper locking point. Door shall also be fitted with one (1) field adjustable limit device at head to restrict door panel travel. Limit device shall also utilize a friction adjusting screw.

<u>Hinges</u> - Shall consist of four (4) extruded aluminum butt type hinges. Hinge pins shall be ¼" diameter stainless steel with hard vinyl bushings.

<u>Weatherstripping</u> – Door panel shall close to a full perimeter EPDM weatherseal utilizing welded corner construction.

III. CONSTRUCTION:

<u>Assembly</u> – Main frame and door panel corners shall be of mitered, sealed, crimped and staked corner construction. Each corner shall consist of one extruded aluminum corner key held in place with two die cast retainer pins, one die cast corner key staked in place and one friction fit hard vinyl corner key. <u>Glazing</u> - Glass in the door panel shall be factory glazed using EPDM gasket at exterior perimeter with extruded aluminum glazing bead and EPDM wedge at interior of glass. The insulated glass units shall be 1" overall thickness with two panes .125" tempered glass, separated by a .750" air space for optimum insulation. All insulated glass units shall meet the requirements of the ASTM E 2190 specification, Class "A".

<u>Finish</u> - Shall be a factory applied baked polyurethane powder coat finish meeting the requirements of AAMA 2604 for Pigmented Organic Coating on Extruded Aluminum. Refer to "Colors and Finishes" chart for examples. Bronze anodizing, clear anodizing and high performance AAMA 2605 finishes are optional.

<u>Operation</u> - The door panel is operable to the outside. Key cylinder is operable by thumb turn inside and by key outside.

IV. PERFORMANCE:

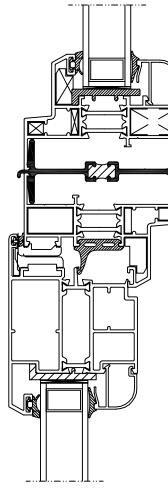
<u>Structural</u> - Shall meet the requirements of AAMA/ WDMA/CSA101/I.S.2/A440-08, ATD-AW60 specification. Fair Housing threshold with A440-08 ATD-AW60 performance available (Series 1401F).

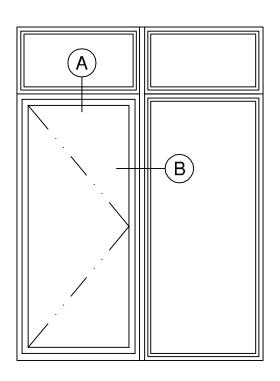
<u>NFRC</u> – Shall meet the requirements of NFRC 100 and 200.

V. INSTALLATION:

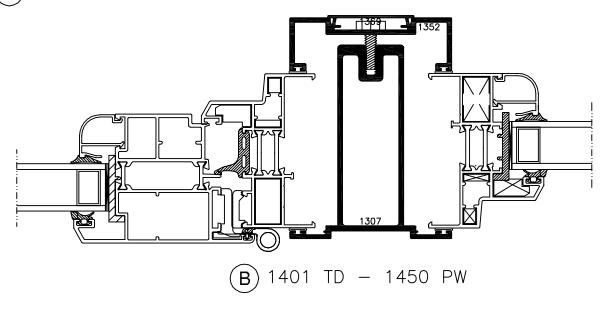
<u>Qualifications</u> - Installation shall be performed by skilled, experienced tradesmen. Units shall be installed plumb, level, square and shall be secured in accordance with detailed shop drawings. A non-hardening sealant compatible with aluminum shall be provided by the installer and applied in sufficient quantity to provide a weathertight seal between the window and surrounding construction.

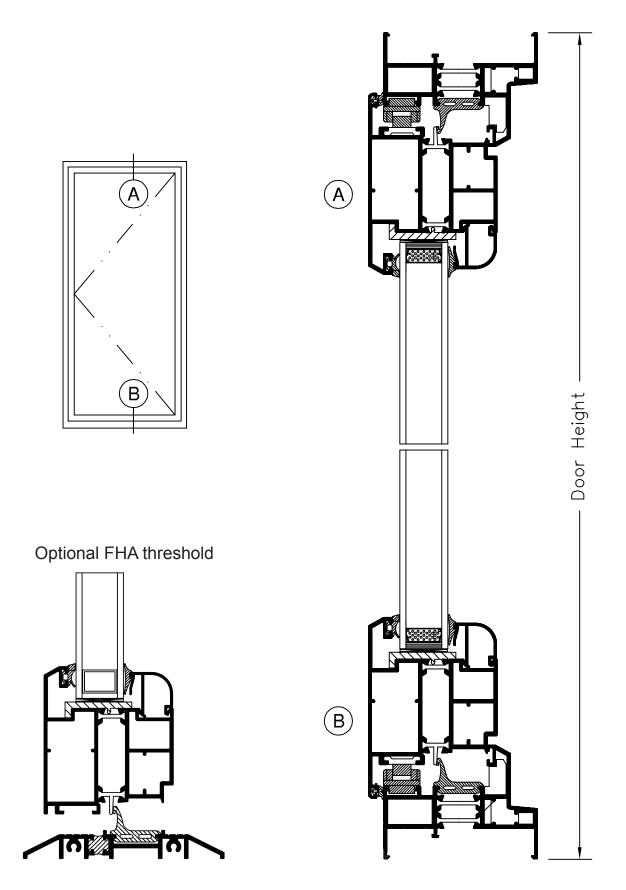
Typical Configurations (Scale: Half Size)

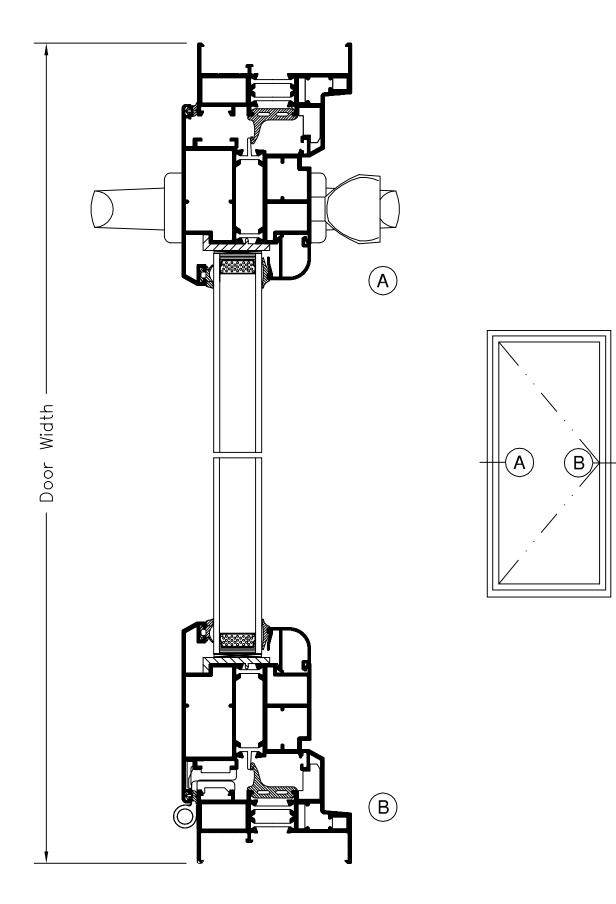




(A)1450 PW - 1401 TD







SPECIFICATIONS

I. GENERAL:

<u>Scope of Work</u> - Furnish all necessary materials, labor and equipment for the complete installation of aluminum hinged glass doors for this project as shown on the drawings and herein specified. Doors shall be the "Series 1420" as manufactured by Thermal Windows, Inc., Tulsa, Oklahoma. The "Series 1420" is a dual vent Hinged Glass Door with thermally improved main frame and vent consisting of side hinges, locking handle and multipoint lock system. The astrigal is attached to the secondary panel and the handle is attached to the primary panel only. The specifications and materials for the "Series 1420" are as follows:

II. PRODUCTS:

<u>Materials</u> - Aluminum shall be of proper alloy for commercial window construction. All extruded sections shall be of 6063-T5 aluminum alloy.

<u>Frame</u> - Main frame and sash members shall be a .062" nominal thickness. Main frame shall be 3.25" in depth. Horizontal and vertical vent members shall be hollow extrusions. Main frames and vent members are to be extruded aluminum with a dual insulbar thermal barrier system creating a 5/8" wide thermal barrier.

<u>Hardware</u> – Operating handle shall be lever type connecting to a multi-point lock system. Handle is mounted and operated from interior only. Lock system engagements shall be as follows, Primary panel: Two (2) at handle, one (1) 2 1/2" from each end of lock stile and one (1) centered between handle and upper locking point. One (1) friction catch shall be located on vent and astrigal to hold door closed when handle is in unlocked position. Secondary panel: Two (2) slide bolts are mounted to the astrigal and each engage a striker mounted at the head and sill. Slide bolts are operated individually. Door shall also be fitted with one (1) field adjustable limit device per panel at head to restrict door panel travel. Limit device shall also utilize a friction adjusting screw.

<u>Hinges</u> - Shall consist of four (4) extruded aluminum butt type hinges on each panel. Hinge pins shall be 1/4" diameter stainless steel with hard vinyl bushings.

<u>Weatherstripping</u> – Door panel shall close to a full perimeter EPDM weatherseal utilizing welded corner construction.

III. CONSTRUCTION:

<u>Assembly</u> – Main frame and door panel corners shall be of mitered, sealed, crimped and staked corner construction. Each corner shall consist of one extruded aluminum corner key held in place with two die cast retainer pins, one die cast corner key staked in place and one friction fit hard vinyl corner key.

<u>Glazing</u> - Glass in the door panel shall be factory glazed using EPDM gasket at exterior perimeter with extruded aluminum glazing bead and EPDM wedge at interior of glass. The insulated glass units shall be (1") overall thickness with exterior (.125") CL temp and interior (.125") Low E temp, separated by a (.750") air space for optimum insulation. All insulated glass units shall meet the requirements of the ASTM E 2190 specification, Class "A".

<u>Finish</u> - Shall be a factory applied baked polyurethane powder coat finish meeting the requirements of AAMA 2604 for Pigmented Organic Coating on Extruded Aluminum. Refer to "Colors and Finishes" chart for examples. Bronze anodizing, clear anodizing and high performance AAMA 2605 finishes are optional.

<u>Operation</u> - The door panel is operable to the inside and lockable from the inside only. Friction catch and pull handle allow the door panel to be held closed and operated from the outside. Astrigal is mounted to secondary panel and is held in the closed position by manually operated slide bolts.

IV. PERFORMANCE:

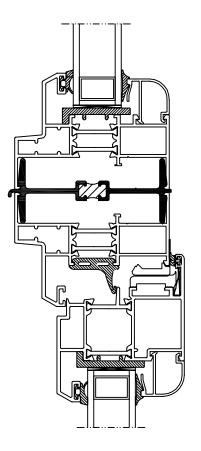
<u>Structural</u> - Shall meet the requirements of AAMA/ WDMA/CSA101/I.S.2/A440-05 ATD-HC40 specification.

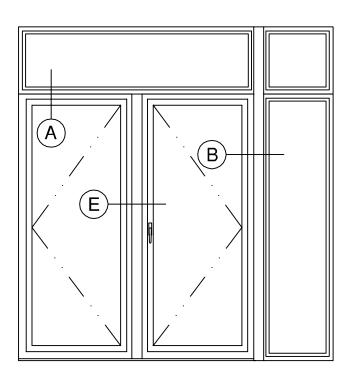
 \underline{NFRC} – Shall meet the requirements of NFRC 100 and 200.

V. INSTALLATION:

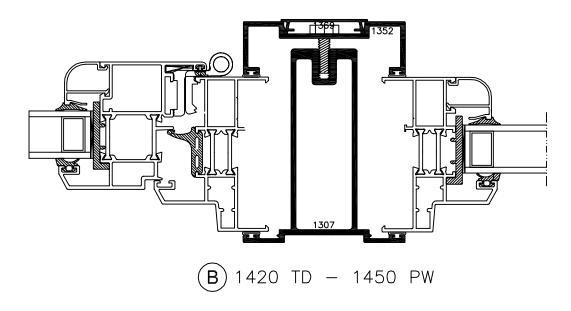
<u>Qualifications</u> - Installation shall be performed by skilled, experienced tradesmen. Units shall be installed plumb, level, square and shall be secured in accordance with detailed shop drawings. A non-hardening sealant compatible with aluminum shall be provided by the installer and applied in sufficient quantity to provide a weathertight seal between the window and surrounding construction.

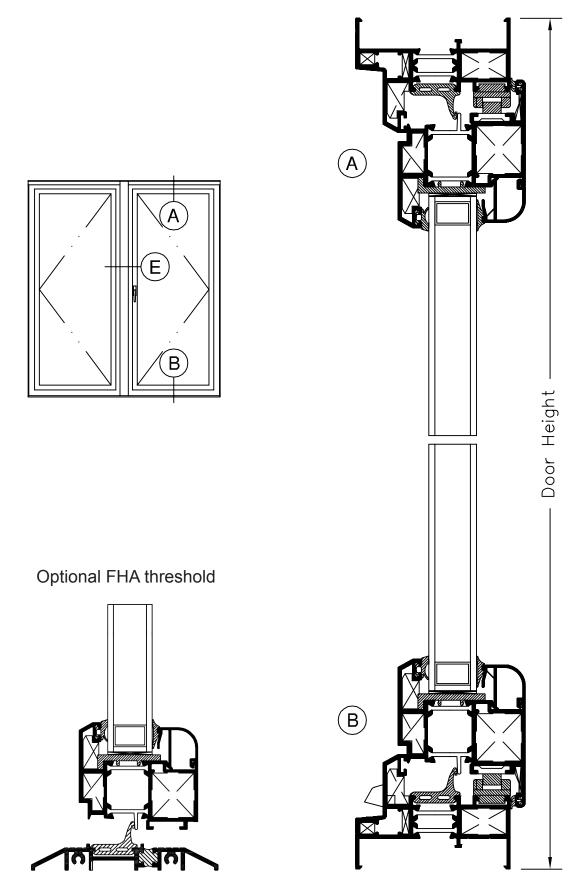
Typical Configurations (Scale: Half Size)



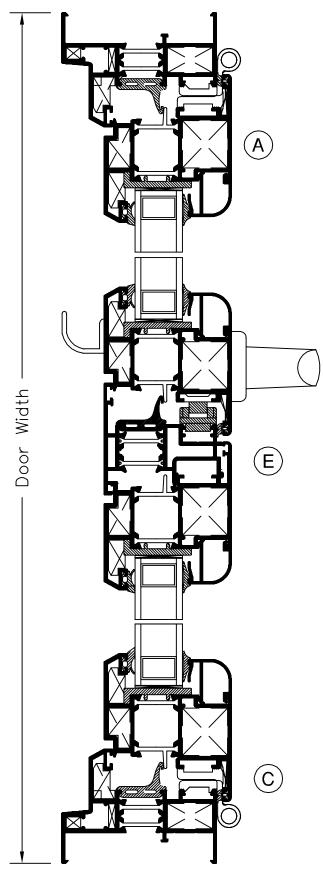


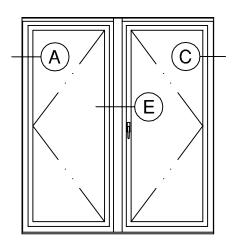
(A)1450 PW - 1420 TD





Product Details (Scale: Half Size)





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SPECIFICATIONS

I. GENERAL:

<u>Scope of Work</u> - Furnish all necessary materials, labor and equipment for the complete installation of aluminum hinged glass doors for this project as shown on the drawings and herein specified. Doors shall be the "Series 1421" as manufactured by Thermal Windows, Inc., Tulsa, Oklahoma. The "Series 1421" is a dual vent Hinged Glass Door with thermally improved main frame and vent consisting of side hinges, locking handle and multipoint lock system. The astrigal is attached to the secondary panel and the handle is attached to the primary panel only. The specifications and materials for the "Series 1421" are as follows:

II. PRODUCTS:

<u>Materials</u> - Aluminum shall be of proper alloy for commercial window construction. All extruded sections shall be of 6063-T5 aluminum alloy.

<u>Frame</u> - Main frame and sash members shall be a .062" nominal thickness. Main frame shall be 3.25" in depth. Horizontal and vertical vent members shall be hollow extrusions. Main frames and vent members are to be extruded aluminum with a dual insulbar thermal barrier system creating a 5/8" wide thermal barrier.

<u>Hardware</u> – Operating handle shall be lever type connecting to a multi-point lock system. Handle is locked by a key cylinder from the outside with a thumb turn on the inside. Lock system engagements shall be as follows, Primary panel: Two (2) at handle, one (1) 2 1/2" from each end of lock stile and one (1) centered between handle and upper locking point. Secondary panel: Two (2) slide bolts are mounted to the astrigal and each engage a striker mounted at the head and sill. Slide bolts are operated individually. Door shall also be fitted with one (1) field adjustable limit device per panel at head to restrict door panel travel. Limit device shall also utilize a friction adjusting screw.

<u>Hinges</u> - Shall consist of four (4) extruded aluminum butt type hinges on each panel. Hinge pins shall be 1/4" diameter stainless steel with hard vinyl bushings.

<u>Weatherstripping</u> – Door panel shall close to a full perimeter EPDM weatherseal utilizing welded corner construction.

III. CONSTRUCTION:

<u>Assembly</u> – Main frame and door panel corners shall be of mitered, sealed, crimped and staked corner construction. Each corner shall consist of one extruded aluminum corner key held in place with two die cast retainer pins, one die cast corner key staked in place and one friction fit hard vinyl corner key.

<u>Glazing</u> - Glass in the door panel shall be factory glazed using EPDM gasket at exterior perimeter with extruded aluminum glazing bead and EPDM wedge at interior of glass. The insulated glass units shall be (1") overall thickness with exterior (.125") CL temp and interior (.125") Low E temp, separated by a (.750") air space for optimum insulation. All insulated glass units shall meet the requirements of the ASTM E 2190 specification, Class "A".

<u>Finish</u> - Shall be a factory applied baked polyurethane powder coat finish meeting the requirements of AAMA 2604 for Pigmented Organic Coating on Extruded Aluminum. Refer to "Colors and Finishes" chart for examples. Bronze anodizing, clear anodizing and high performance AAMA 2605 finishes are optional.

<u>Operation</u> - The door panel is operable to the outside and lockable by key from the outside and thumb turn from the inside. Astrigal is mounted to secondary panel and is held in the closed position by manually operated slide bolts.

IV. PERFORMANCE:

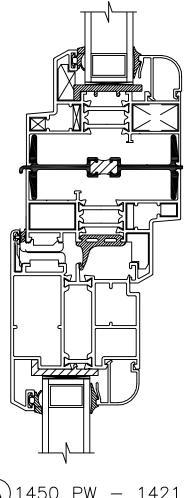
<u>Structural</u> - Shall meet the requirements of AAMA/ WDMA/CSA101/I.S.2/A440-05.

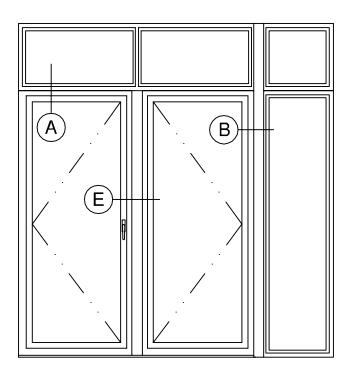
<u>NFRC</u> – Shall meet the requirements of NFRC 100 and 200.

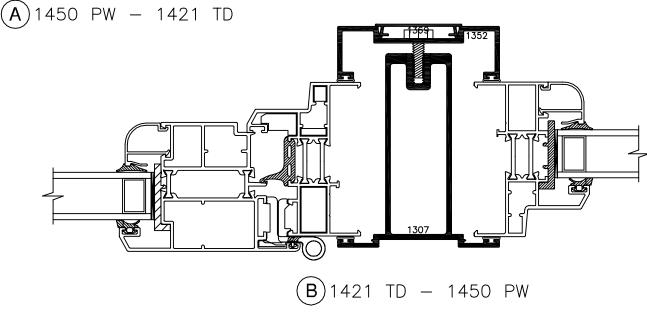
V. INSTALLATION:

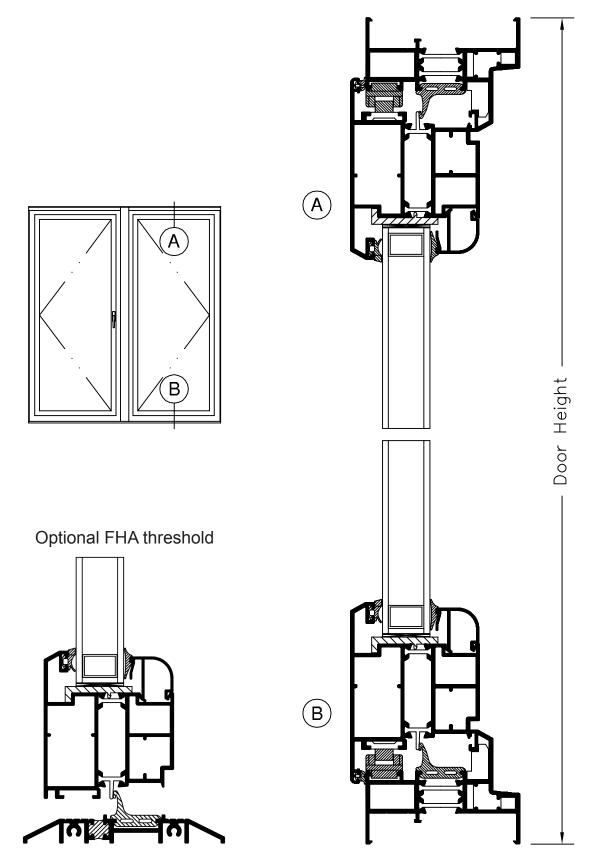
<u>Qualifications</u> - Installation shall be performed by skilled, experienced tradesmen. Units shall be installed plumb, level, square and shall be secured in accordance with detailed shop drawings. A non-hardening sealant compatible with aluminum shall be provided by the installer and applied in sufficient quantity to provide a weathertight seal between the window and surrounding construction.

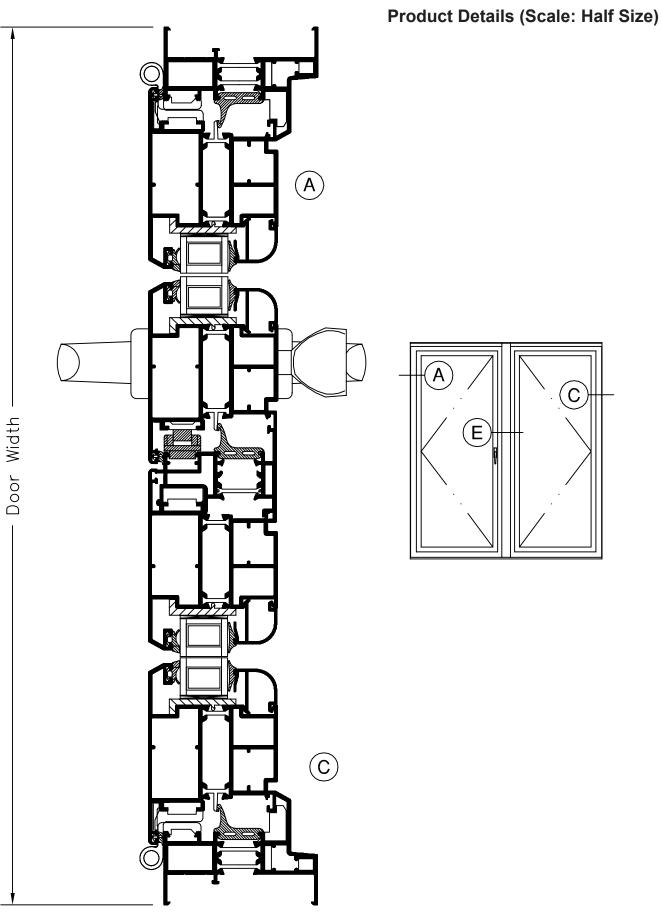
Typical Configurations (Scale: Half Size)











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