# Horizontal Sliding Windows



# Commercial Horizontal Sliding Windows for Retrofit and New Construction





The Vistana - San Antonio, TX Series 527, Light Gray, Light Green, Clear Anodized

The Viridian - Los Angeles, CA Series 526, White



Mansion House - Tulsa, OK Series 526, Bone White

Carlyle Place Condos - Alexandria, VA Series 527, Almond

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



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# **HORIZONTAL SLIDING WINDOWS**

### **Standard Features**

- 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
- 7/8" Insulated glass (1" in Series 4125)
- · Extruded screen frame with fiberglass mesh
- · Operable sash lifts out for easy cleaning

### **Available Options**

- Several models available in  $2^{5}$  or  $3^{1}$  frame depth
- Dual seal
- Anodized finishes
- AAMA 2605 high-performance finishes
- Tier 2 colors at no additional charge (minimums apply)
- Hundreds of special colors
- Low-E glass; tinted glass; obscure (frosted) glass
- Spandrel glass; Insulating panels
- External applied muntins available on most models
- Wire screen mesh
- Panning, receptor systems, subsills, snap trim and other accessories
- · Louvered stacking units
- Internal, external and special angled mullions
- Nailing fin
- Front flanged frame (Series 525/530/535; Series 526 Head/Jamb only)
- Internal muntins

### SPECIFICATIONS

#### I. GENERAL:

<u>Scope of Work</u> - Furnish all necessary materials, labor and equipment for the complete installation of aluminum windows for this project as shown on the drawings and herein specified. Windows shall be the "Series 525" as manufactured by Thermal Windows, Inc., Tulsa, Oklahoma. The "Series 525" is a horizontal single slider with thermally improved frame and sash consisting of an operable, removable, sliding sash and a fixed side lite. The specifications and materials for the "Series 525" 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 nominal thickness as required by ANSI/AAMA 101. Main frame shall be 2.625" in depth. Vertical sash members shall be hollow extrusions. Main frames and sash members are to be extruded aluminum with a structural thermal barrier of high density low thermal conductivity polyurethane, poured and debridged.

<u>Locks</u> - Shall consist of a cam latch at the interlocking meeting rail along with an independent spring loaded latch for the sash.

<u>Weatherstripping</u> - Shall be .250 polypile with mylar fins conforming to AAMA 701.2, Specification for Pile Weatherstrip. Weatherstripping shall be doubled at all points of contact of the sash and main frames and at the interlocking meeting rail.

#### **III. CONSTRUCTION:**

<u>Assembly</u> - Main frame shall be a mechanically joined construction. Corner joints should be "seam sealed" with a quality grade of sealant meeting the requirements of AAMA 803.3. The sashes shall be assembled with two screws at each corner. All screws at joints of sash and main frame shall be secured into integral screw ports.

<u>Glazing</u> - Glass in the operable sashes shall be factory glazed with a marine (wrap around) reusable vinyl glazing channel. The fixed side lite shall be inside glazed, using a rigid vinyl glazing bead. The insulated glass units shall be .875" overall thickness with two panes of double strength glass, separated by a .625" air space for optimum insulation. All insulated glass units shall meet the requirements of the ASTM E 2190 specification, Class "A". <u>Screens</u> - Screen frame shall be of hollow extruded aluminum frames. Finish shall match the main frames and sash. Insect screening shall be fiberglass or aluminum wire secured with a vinyl spline. Screens shall be half length.

<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 "X" sashes are operable on the "Series 525" horizontal single slider window and will slide open for ventilation. The sash rolls on four non-adjustable, bronze roller bearings and is removable from the interior for ease of maintenance.

#### **IV. PERFORMANCE:**

<u>Structural</u> - Shall meet the requirements of AAMA/WDMA/CSA 101/I.S.2/A440-08, CW-PG30-HS specification.

Thermal - Shall meet the requirements of AAMA 1503.1 CRF 51 / 54.

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

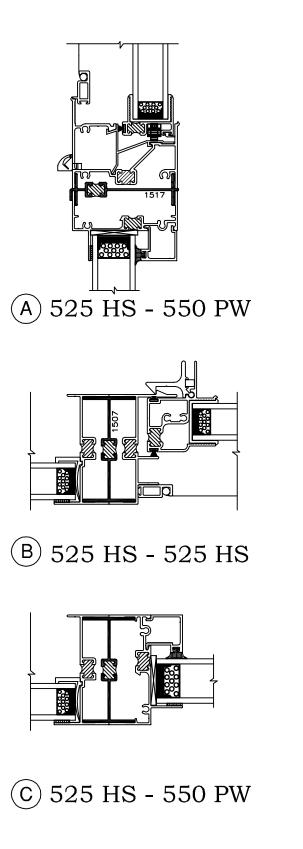
<u>Forced Entry</u> - Shall meet the requirements for ASTM F588 Load Identification Grade 10.

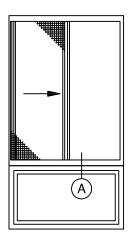
<u>Sound Transmission Class</u> - Shall meet the requirements of ASTM E90. Ratings vary depending upon glazing. See Product Selection Guide for summary.

#### V. INSTALLATION:

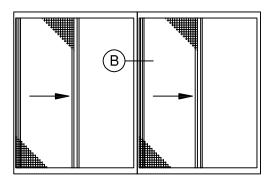
<u>Qualifications</u> - Installation shall be performed by skilled, experienced tradesmen. Units shall be installed plumb, level, square and shall be secured in accordance with detailed shop drawings. A non-hardening sealant compatible with aluminum shall be provided by the installer and applied in sufficient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

Typical Configurations (Scale: Half Size)

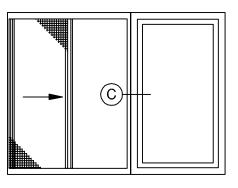




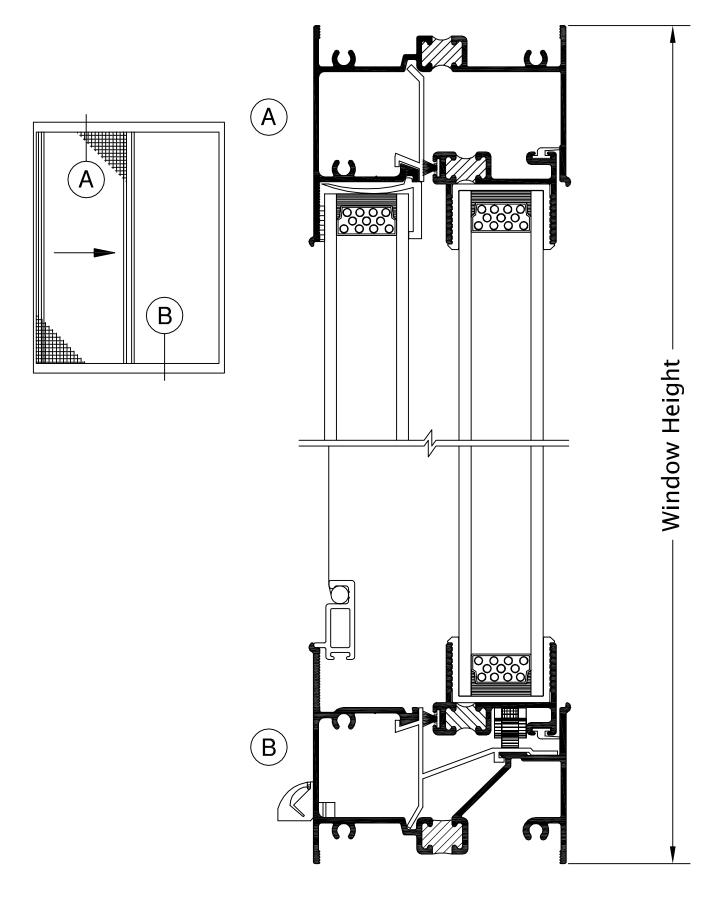
525 HS - 550 PW

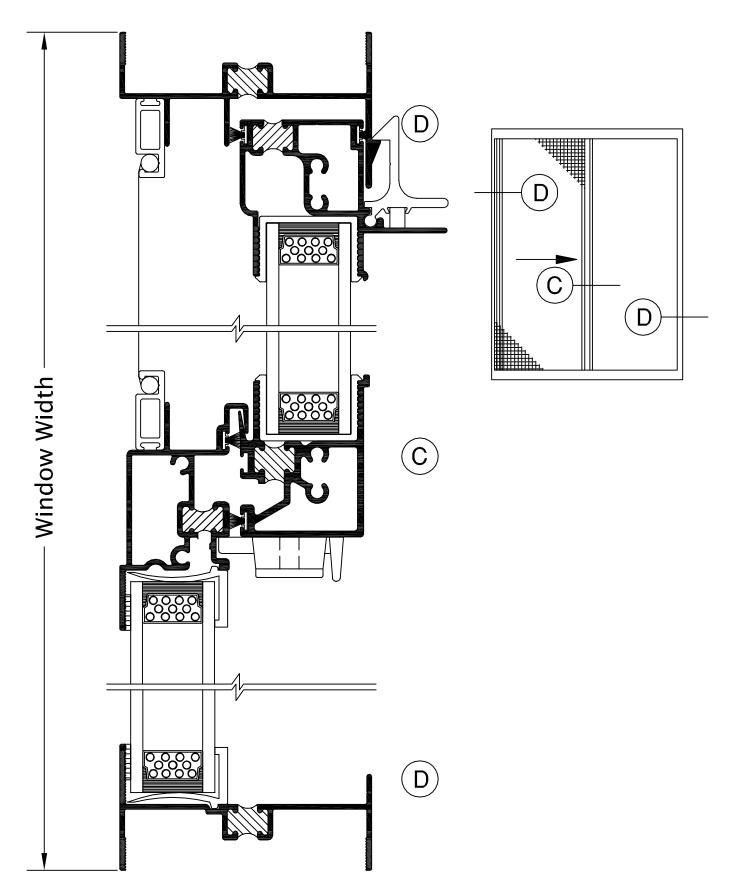


525 HS - 525 HS



<sup>525</sup> HS - 550 PW





### SPECIFICATIONS

#### I. GENERAL:

<u>Scope of Work</u> - Furnish all necessary materials, labor and equipment for the complete installation of aluminum windows for this project as shown on the drawings and herein specified. Windows shall be the "Series 525" as manufactured by Thermal Windows, Inc., Tulsa, Oklahoma. The "Series 525" is a horizontal single slider with thermally improved frame and sash consisting of an operable, removable, sliding sash and a fixed side lite. The specifications and materials for the "Series 525" 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 nominal thickness as required by ANSI/AAMA 101. Main frame shall be 3.250" in depth. Vertical sash members shall be hollow extrusions. Main frames and sash members are to be extruded aluminum with a structural thermal barrier of high density low thermal conductivity polyurethane, poured and debridged.

<u>Locks</u> - Shall consist of a cam latch at the interlocking meeting rail along with an independent spring loaded latch for the sash.

<u>Weatherstripping</u> - Shall be .250 polypile with mylar fins conforming to AAMA 701.2, Specification for Pile Weatherstrip. Weatherstripping shall be doubled at all points of contact of the sash and main frames and at the interlocking meeting rail.

#### **III. CONSTRUCTION:**

<u>Assembly</u> - Main frame shall be a mechanically joined construction. Corner joints should be "seam sealed" with a quality grade of sealant meeting the requirements of AAMA 803.3. The sashes shall be assembled with two screws at each corner. All screws at joints of sash and main frame shall be secured into integral screw ports.

<u>Glazing</u> - Glass in the operable sashes shall be factory glazed with a marine (wrap around) reusable vinyl glazing channel. The fixed side lite shall be inside glazed, using a rigid vinyl glazing bead. The insulated glass units shall be .875" overall thickness with two panes of double strength glass, separated by a .625" air space for optimum insulation. All insulated glass units shall meet the requirements of the ASTM E 2190 specification, Class "A". <u>Screens</u> - Screen frame shall be of hollow extruded aluminum frames. Finish shall match the main frames and sash. Insect screening shall be fiberglass or aluminum wire secured with a vinyl spline. Screens shall be half length.

<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 "X" sashes are operable on the "Series 525" horizontal single slider window and will slide open for ventilation. The sash rolls on four non-adjustable, bronze roller bearings and is removable from the interior for ease of maintenance.

#### **IV. PERFORMANCE:**

<u>Structural</u> - Shall meet the requirements of AAMA/WDMA/CSA 101/I.S.2/A440-08, CW-PG30-HS specification.

<u>Thermal</u> - Shall meet the requirements of AAMA 1503.1 CRF 51 / 54.

NFRC – Shall meet the requirements of NFRC 100 and 200.

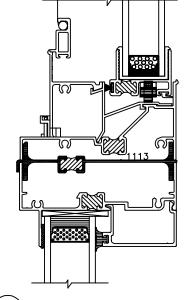
<u>Forced Entry</u> - Shall meet the requirements for ASTM F588 Load Identification Grade 10.

<u>Sound Transmission Class</u> - Shall meet the requirements of ASTM E90. Ratings vary depending upon glazing. See Product Selection Guide for summary.

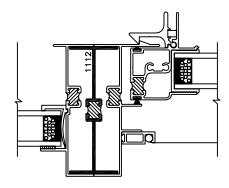
#### V. INSTALLATION:

<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.

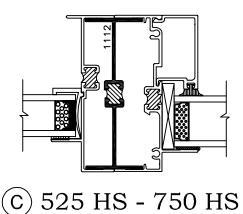
Typical Configurations (Scale: Half Size)

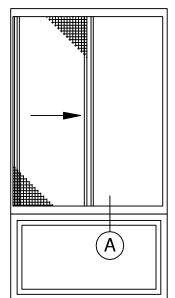


(A) 525 HS - 750 PW

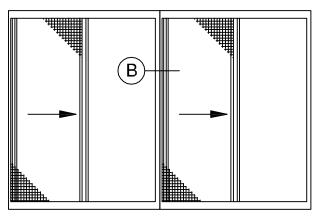


B 525 HS - 525 HS

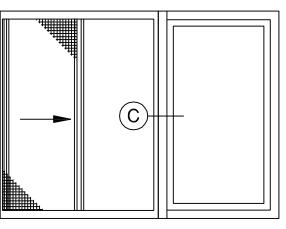


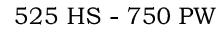


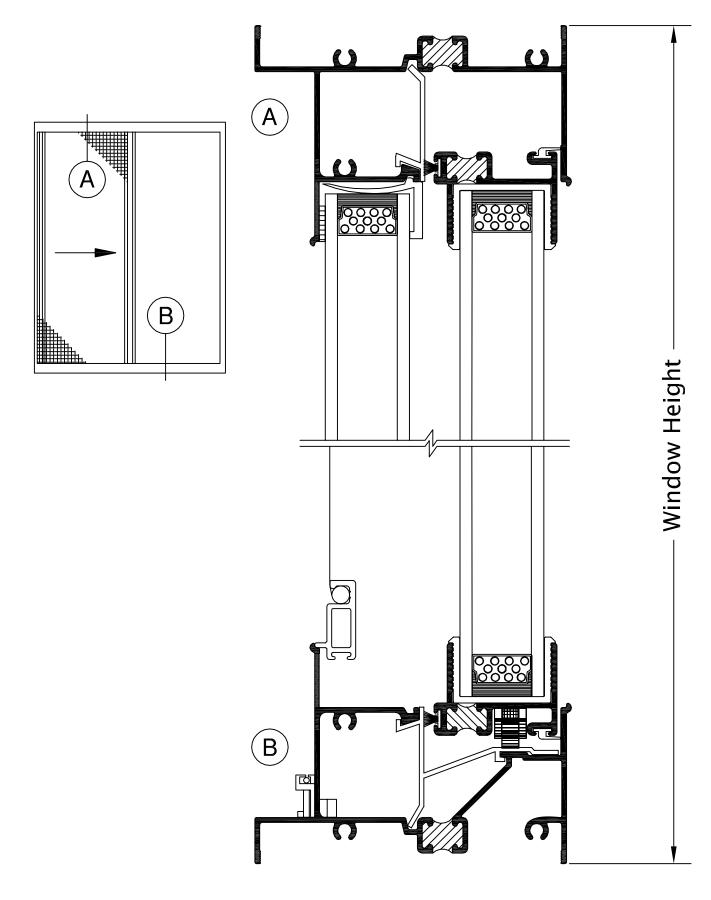
525 HS - 750 PW

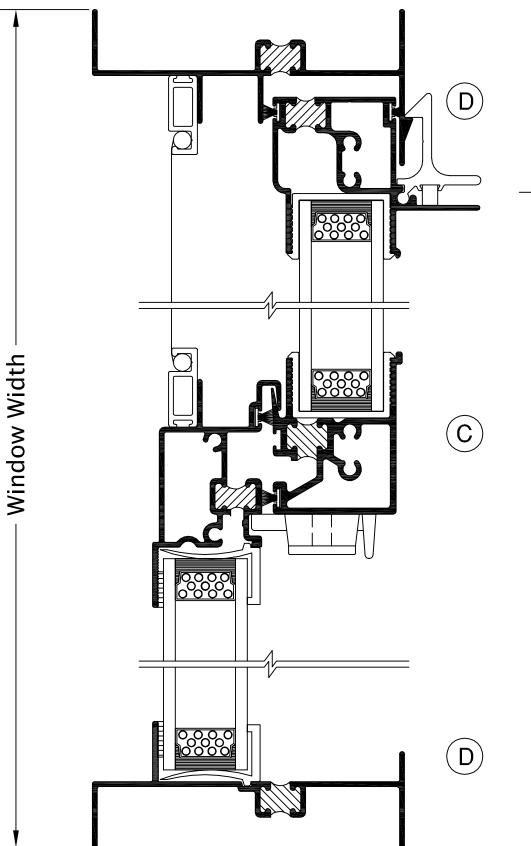


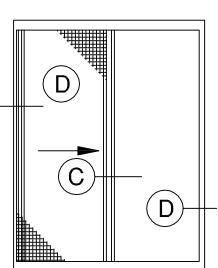
525 HS - 525 HS











### SPECIFICATIONS

#### I. GENERAL:

<u>Scope of Work</u> - Furnish all necessary materials, labor and equipment for the complete installation of aluminum windows for this project as shown on the drawings and herein specified. Windows shall be the "Series 526" as manufactured by Thermal Windows, Inc., Tulsa, Oklahoma. The "Series 526" is a horizontal single slider with thermally improved frame and sash consisting of an operable, removable, sliding sash and a fixed side lite. The specifications and materials for the "Series 526" 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 nominal thickness as required by ANSI/AAMA 101. Main frame shall be 3.25" in depth. Vertical sash members shall be hollow extrusions. Main frames and sash members are to be extruded aluminum with a structural thermal barrier of high density low thermal conductivity polyurethane, poured and debridged.

<u>Locks</u> - Shall consist of a cam latch at the interlocking meeting rail along with an independent spring loaded latch for each sash.

<u>Weatherstripping</u> - Shall be .250 polypile with mylar fins conforming to AAMA 701.2, Specification for Pile Weatherstrip. Weatherstripping shall be doubled at all points of contact of the sash and main frames and at the interlocking meeting rail.

#### **III. CONSTRUCTION:**

<u>Assembly</u> - Main frame shall be a mechanically joined construction. Corner joints should be "seam sealed" with a quality grade of sealant meeting the requirements of AAMA 803.3. The sash shall be assembled with two screws at each corner. All screws at joints of sash and main frame shall be secured into integral screw ports.

<u>Glazing</u> - Glass in the operable vent shall be factory glazed with a marine (wrap around) reusable vinyl glazing channel. The insulated glass units shall be .875" overall thickness with two lites of .125" glass, separated by a .625" air space for optimum insulation. All insulated glass units shall meet the requirements of the ASTM E 2190 specification, Class "A". <u>Screens</u> - Screen frame shall be of hollow extruded aluminum frames. Finish shall match the main frames and sash. Insect screening shall be fiberglass secured with a vinyl spline. Screens shall be half length.

<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. Standard Tier I colors available are bronze, white, creme, sandstone, and almond. Bronze anodizing, clear anodizing and high performance AAMA 2605 finishes are optional.

<u>Operation</u> - The "X" sash is operable on the "Series 526" horizontal single slider window and will slide open for ventilation. The sash rolls on four non-adjustable, bronze roller bearings and is removable from the interior for ease of maintenance. The "Series 526" is available in XO or OX configurations.

#### **IV. PERFORMANCE:**

<u>Structural</u> - Shall meet the requirements of AAMA/WDMA/ CSA 101/I.S.2/A440-05, HS-C55

<u>Thermal</u> - Shall meet the requirements of AAMA 1503.1 CRF 51 / 54.

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

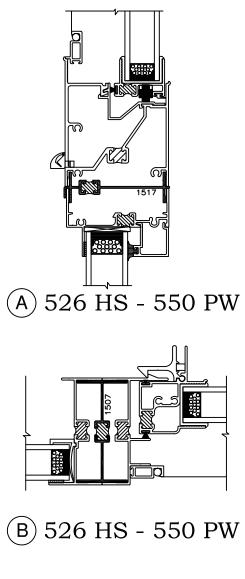
<u>Forced Entry</u> - Shall meet the requirements for ASTM F588 Load Identification Grade 10.

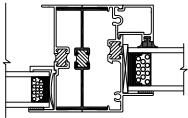
<u>Sound Transmission Class</u> - Shall meet the requirements of ASTM E90. Ratings vary depending upon glazing. See Product Selection Guide for summary.

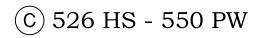
#### V. INSTALLATION:

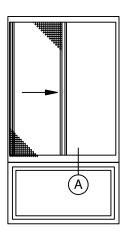
<u>Qualifications</u> - Only skilled mechanics with experience in this trade. Units shall be installed plumb, level, square and shall be secured in accordance with detailed shop drawings. A non-hardening sealant compatible with aluminum shall be provided by the installer and applied in sufficient quantity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

Typical Configurations (Scale: Half Size)

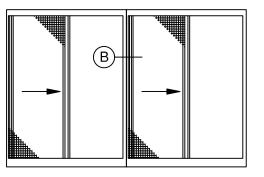




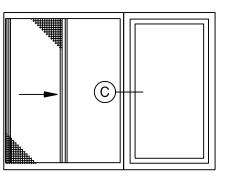




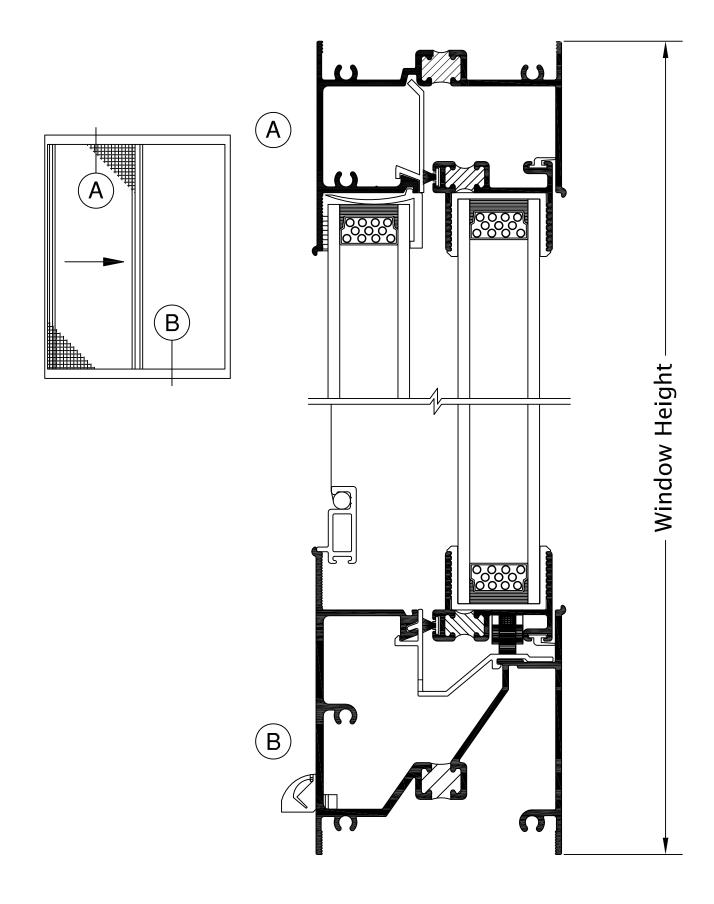
526 HS - 550 PW

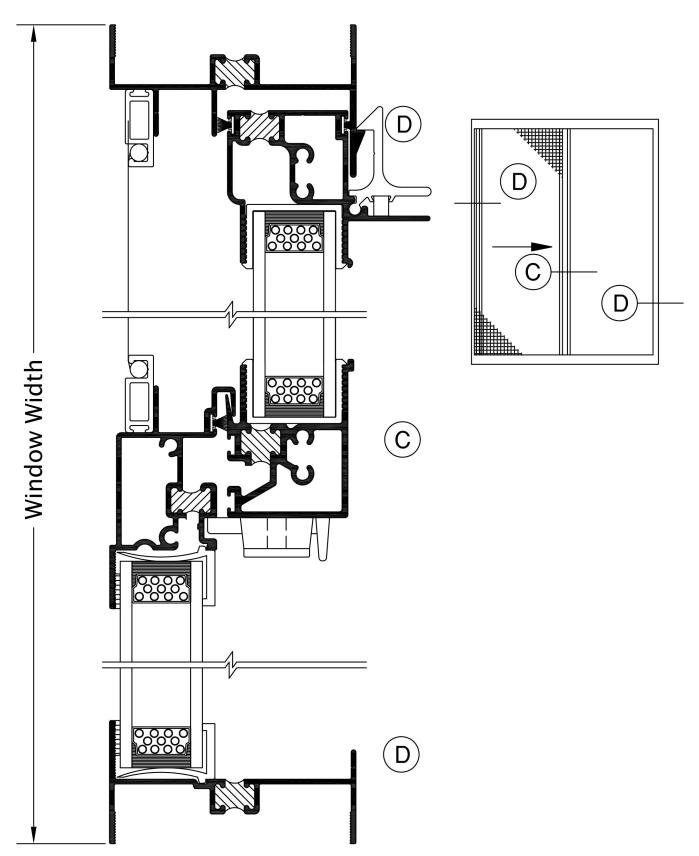


526 HS - 550 PW



526 HS - 550 PW





### SPECIFICATIONS

#### I. GENERAL:

<u>Scope of Work</u> - Furnish all necessary materials, labor and equipment for the complete installation of aluminum windows for this project as shown on the drawings and herein specified. Windows shall be the "Series 526B" as manufactured by Thermal Windows, Inc., Tulsa, Oklahoma. The "Series 526B" is a horizontal single slider with thermally improved frame and sash consisting of an operable, removable, sliding sash and a fixed side lite. The specifications and materials for the "Series 526B" 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 nominal thickness as required by ANSI/AAMA 101. Main frame shall be 3.25" in depth. Vertical sash members shall be hollow extrusions. Main frames and sash members are to be extruded aluminum with a structural thermal barrier of high density low thermal conductivity polyurethane, poured and debridged.

<u>Locks</u> - Shall consist of a cam latch at the interlocking meeting rail along with an independent spring loaded latch for each sash.

<u>Weatherstripping</u> - Shall be .250 polypile with mylar fins conforming to AAMA 701.2, Specification for Pile Weatherstrip. Weatherstripping shall be doubled at all points of contact of the sash and main frames and at the interlocking meeting rail.

#### **III. CONSTRUCTION:**

<u>Assembly</u> - Main frame shall be a mechanically joined construction. Corner joints should be "seam sealed" with a quality grade of sealant meeting the requirements of AAMA 803.3. The sash shall be assembled with two screws at each corner. All screws at joints of sash and main frame shall be secured into integral screw ports.

<u>Glazing</u> - Glass in the operable vent shall be factory glazed with a marine (wrap around) reusable vinyl glazing channel. The insulated glass units shall be .875" overall thickness with two lites of .125" glass, separated by a .625" air space for optimum insulation. All insulated glass units shall meet the requirements of the ASTM E 2190 specification, Class "A". <u>Screens</u> - Screen frame shall be of hollow extruded aluminum frames. Finish shall match the main frames and sash. Insect screening shall be fiberglass secured with a vinyl spline. Screens shall be half length.

<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. Standard Tier I colors available are bronze, white, creme, sandstone, and almond. Bronze anodizing, clear anodizing and high performance AAMA 2605 finishes are optional.

<u>Operation</u> - The "X" sash is operable on the "Series 526B" horizontal single slider window and will slide open for ventilation. The sash rolls on four non-adjustable, bronze roller bearings and is removable from the interior for ease of maintenance. The "Series 526B" is available in XO or OX configurations.

#### **IV. PERFORMANCE:**

<u>Structural</u> - Shall meet the requirements of AAMA/WDMA/ CSA 101/I.S.2/A440-05, HS-C70.

<u>Thermal</u> - Shall meet the requirements of AAMA 1503.1 CRF 51 / 54.

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

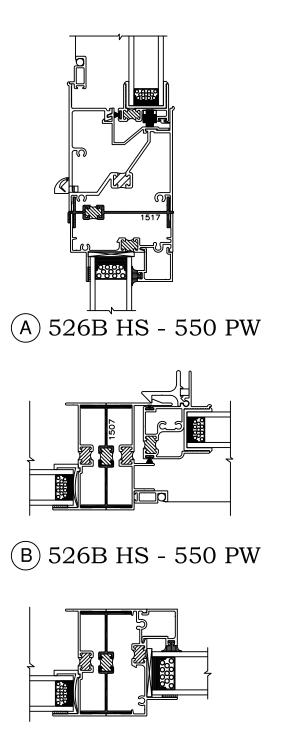
<u>Forced Entry</u> - Shall meet the requirements for ASTM F588 Load Identification Grade 10.

<u>Sound Transmission Class</u> - Shall meet the requirements of ASTM E90. Ratings vary depending upon glazing. See Product Selection Guide for summary.

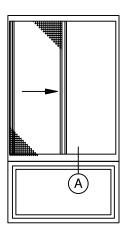
#### V. INSTALLATION:

<u>Qualifications</u> - Only skilled mechanics with experience in this trade. 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.

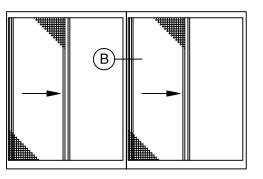
Typical Configurations (Scale: Half Size)



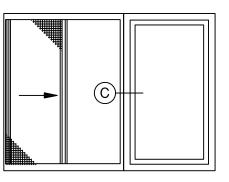




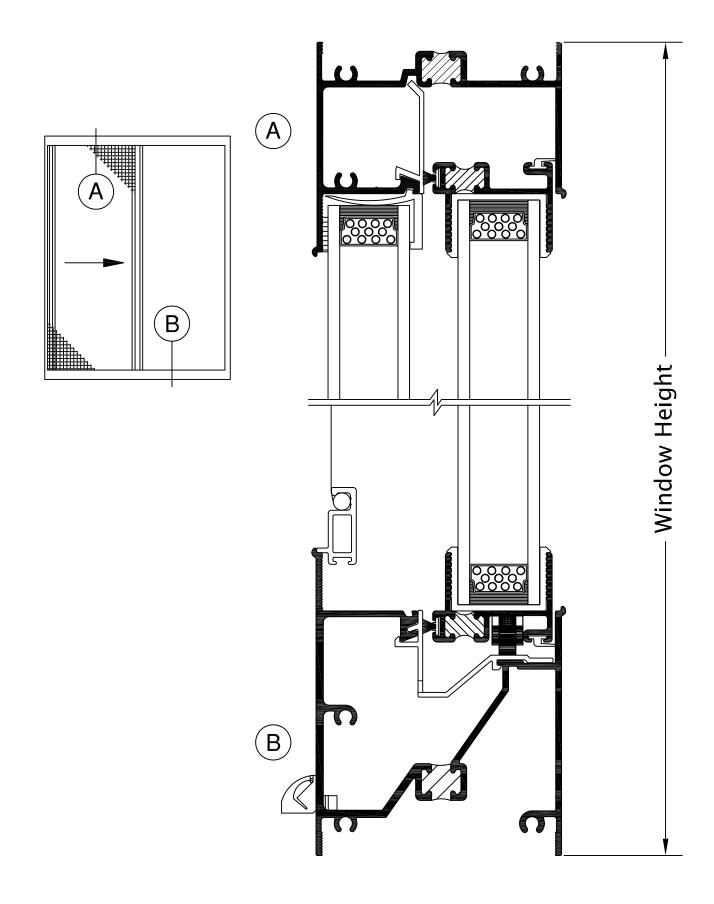
526B HS - 550 PW

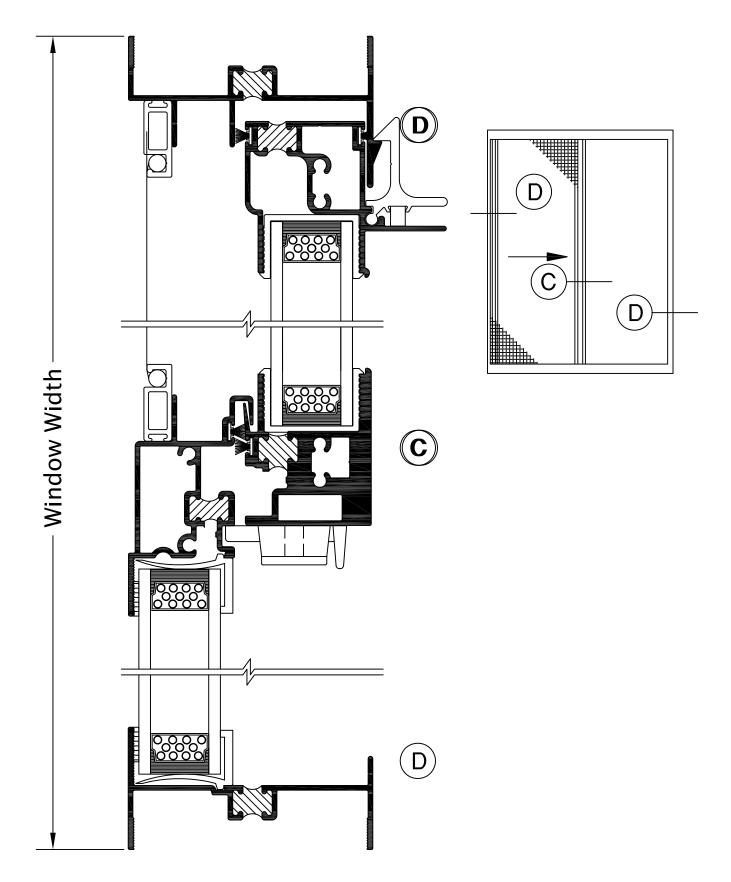


526B HS - 550 PW



526B HS - 550 PW





### SPECIFICATIONS

#### I. GENERAL:

<u>Scope of Work</u> - Furnish all necessary materials, labor and equipment for the complete installation of aluminum windows for this project as shown on the drawings and herein specified. Windows shall be the "Series 526" as manufactured by Thermal Windows, Inc., Tulsa, Oklahoma. The "Series 526" is a horizontal single slider with thermally improved frame and sash consisting of an operable, removable, sliding sash and a fixed side lite. The specifications and materials for the "Series 526" 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 nominal thickness as required by ANSI/AAMA 101. Main frame shall be 2.625" in depth. Vertical sash members shall be hollow extrusions. Main frames and sash members are to be extruded aluminum with a structural thermal barrier of high density low thermal conductivity polyurethane, poured and debridged.

<u>Locks</u> - Shall consist of a cam latch at the interlocking meeting rail along with an independent spring loaded latch for each sash.

<u>Weatherstripping</u> - Shall be .250 polypile with mylar fins conforming to AAMA 701.2, Specification for Pile Weatherstrip. Weatherstripping shall be doubled at all points of contact of the sash and main frames and at the interlocking meeting rail.

#### **III. CONSTRUCTION:**

<u>Assembly</u> - Main frame shall be a mechanically joined construction. Corner joints should be "seam sealed" with a quality grade of sealant meeting the requirements of AAMA 803.3. The sash shall be assembled with two screws at each corner. All screws at joints of sash and main frame shall be secured into integral screw ports.

<u>Glazing</u> - Glass in the operable vent shall be factory glazed with a marine (wrap around) reusable vinyl glazing channel. The insulated glass units shall be .875" overall thickness with two lites of .125" glass, separated by a .625" air space for optimum insulation. All insulated glass units shall meet the requirements of the ASTM E 2190 specification, Class "A". <u>Screens</u> - Screen frame shall be of hollow extruded aluminum frames. Finish shall match the main frames and sash. Insect screening shall be fiberglass secured with a vinyl spline. Screens shall be half length.

<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. Standard Tier I colors available are bronze, white, creme, sandstone, and almond. Bronze anodizing, clear anodizing and high performance AAMA 2605 finishes are optional.

<u>Operation</u> - The "X" sash is operable on the "Series 526" horizontal single slider window and will slide open for ventilation. The sash rolls on four non-adjustable, bronze roller bearings and is removable from the interior for ease of maintenance. The "Series 526" is available in XO or OX configurations.

#### **IV. PERFORMANCE:**

<u>Structural</u> - Shall meet the requirements of AAMA/WDMA/ CSA 101/I.S.2/A440-08, CW-PG40-HS.

<u>Thermal</u> - Shall meet the requirements of AAMA 1503.1 CRF 51 / 54.

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

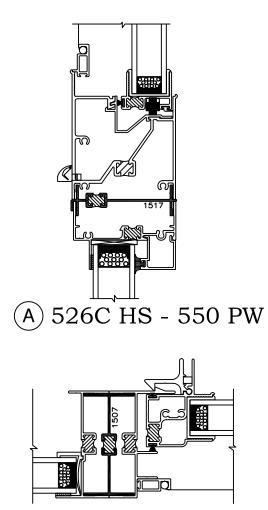
<u>Forced Entry</u> - Shall meet the requirements for ASTM F588 Load Identification Grade 10.

<u>Sound Transmission Class</u> - Shall meet the requirements of ASTM E90. Ratings vary depending upon glazing. See Product Selection Guide for summary.

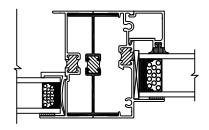
#### V. INSTALLATION:

<u>Qualifications</u> - Only skilled mechanics with experience in this trade. 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.

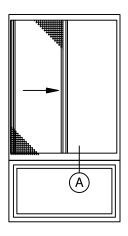
Typical Configurations (Scale: Half Size)



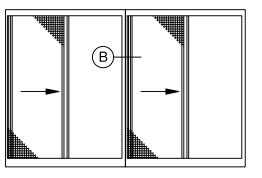
(B) 526C HS - 550 PW



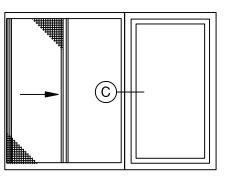




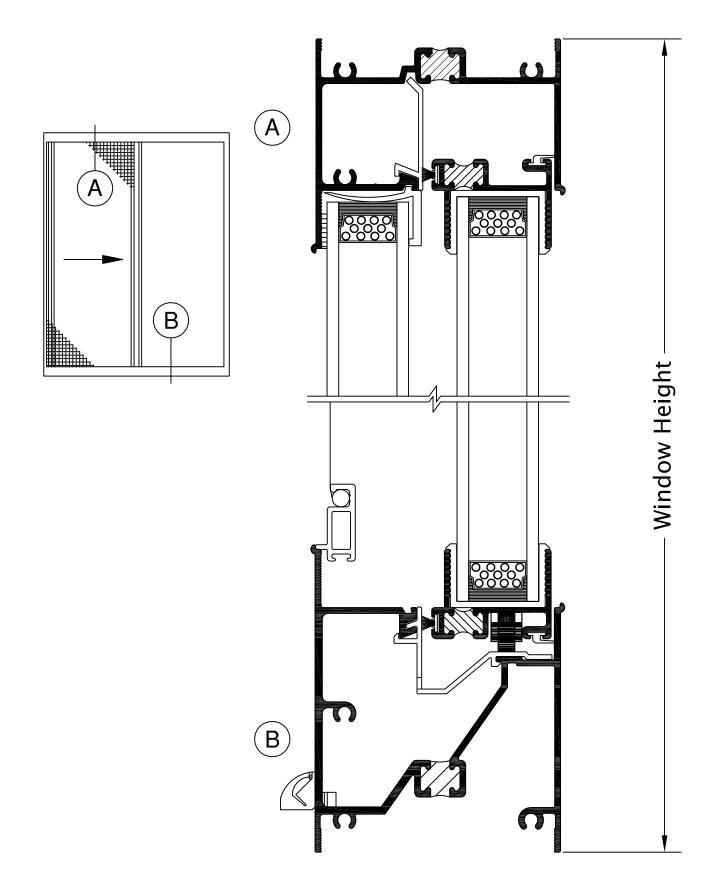
526C HS - 550 PW

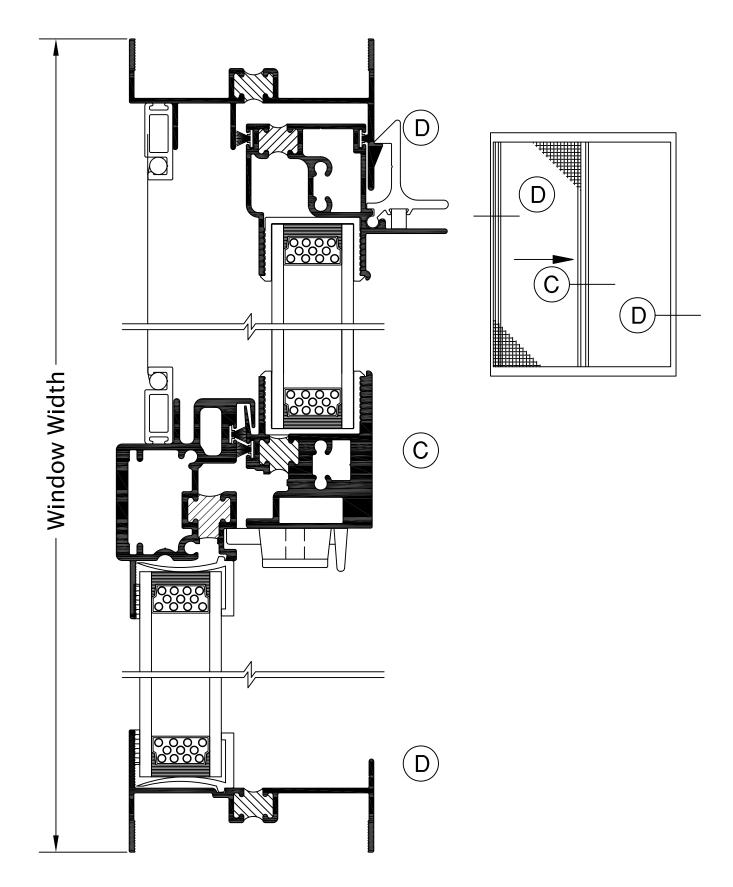


526C HS - 550 PW



526C HS - 550 PW





### SPECIFICATIONS

#### I. GENERAL:

<u>Scope of Work</u> - Furnish all necessary materials, labor and equipment for the complete installation of aluminum windows for this project as shown on the drawings and herein specified. Windows shall be the "Series 527" as manufactured by Thermal Windows, Inc., Tulsa, Oklahoma. The "Series 527" is a horizontal single slider with thermally improved frame and sash consisting of an operable, removable, sliding sash and a fixed side lite. The specifications and materials for the "Series 527" 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 nominal thickness as required by ANSI/AAMA 101. Main frame shall be 2.625" in depth. Vertical sash members shall be hollow extrusions. Main frames and sash members are to be extruded aluminum with a structural thermal barrier of high density low thermal conductivity polyurethane, poured and debridged.

<u>Locks</u> - Shall consist of a cam latch at the interlocking meeting rail along with an independent spring loaded latch for the sash.

<u>Weatherstripping</u> - Shall be .250 polypile with mylar fins conforming to AAMA 701.2, Specification for Pile Weatherstrip. Weatherstripping shall be doubled at all points of contact of the sash and main frames and at the interlocking meeting rail.

#### **III. CONSTRUCTION:**

<u>Assembly</u> - Main frame shall be a mechanically joined construction. Corner joints should be "seam sealed" with a quality grade of sealant meeting the requirements of AAMA 803.3. The sash shall be assembled with two screws at each corner. All screws at joints of sash and main frame shall be secured into integral screw ports.

<u>Glazing</u> - Glass in the operable sash shall be factory glazed with a marine (wrap around) reusable vinyl glazing channel. The fixed side lite shall be inside glazed, using a rigid vinyl glazing bead. The insulated glass units shall be .875" overall thickness with two panes of double strength glass, separated by a .625" air space for optimum insulation. All insulated glass units shall meet the requirements of the ASTM E 2190 specification, Class "A". <u>Screens</u> - Screen frame shall be of hollow extruded aluminum frames. Finish shall match the main frames and sash. Insect screening shall be fiberglass or aluminum wire secured with a vinyl spline. Screens shall be half length.

<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 "X" sash is operable on the "Series 527" horizontal single slider window and will slide open for ventilation. The sash rolls on four non-adjustable, bronze roller bearings and is removable from the interior for ease of maintenance. The "Series 527" is available in XO or OX configurations.

#### **IV. PERFORMANCE:**

<u>Structural</u> - Shall meet the requirements of AAMA/ WDMA/CSA 101/I.S.2/A440-05, HS-C55 specification.

<u>Thermal</u> - Shall meet the requirements of AAMA 1503.1 CRF 51 / 54.

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

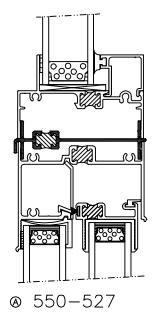
<u>Forced Entry</u> - Shall meet the requirements for ASTM F588 Load Identification Grade 10.

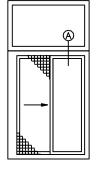
<u>Sound Transmission Class</u> - Shall meet the requirements of ASTM E90. Ratings vary depending upon glazing. See Product Selection Guide for summary.

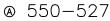
#### V. INSTALLATION:

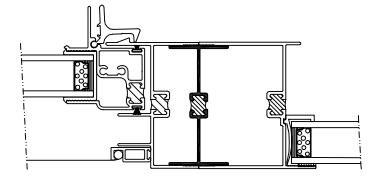
<u>Qualifications</u> - Installation shall be performed by skilled, experienced tradesmen. Units shall be installed plumb, level, square and shall be secured in accordance with detailed shop drawings. A non-hardening sealant compatible with aluminum shall be provided by the installer and applied in sufficient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

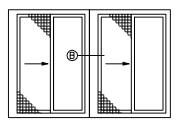
### Typical Configurations (Scale: Half Size)

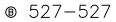


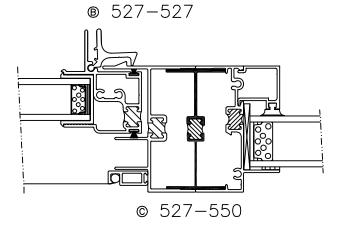


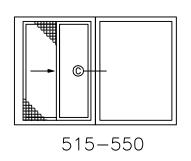


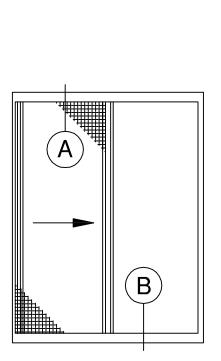


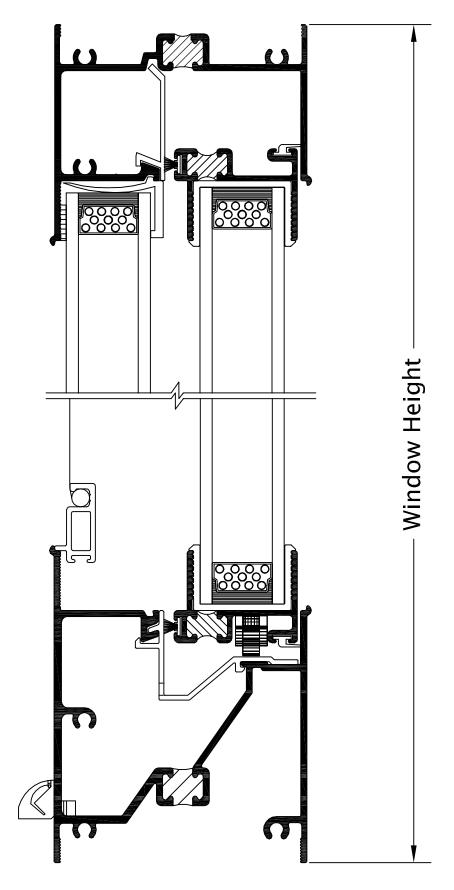




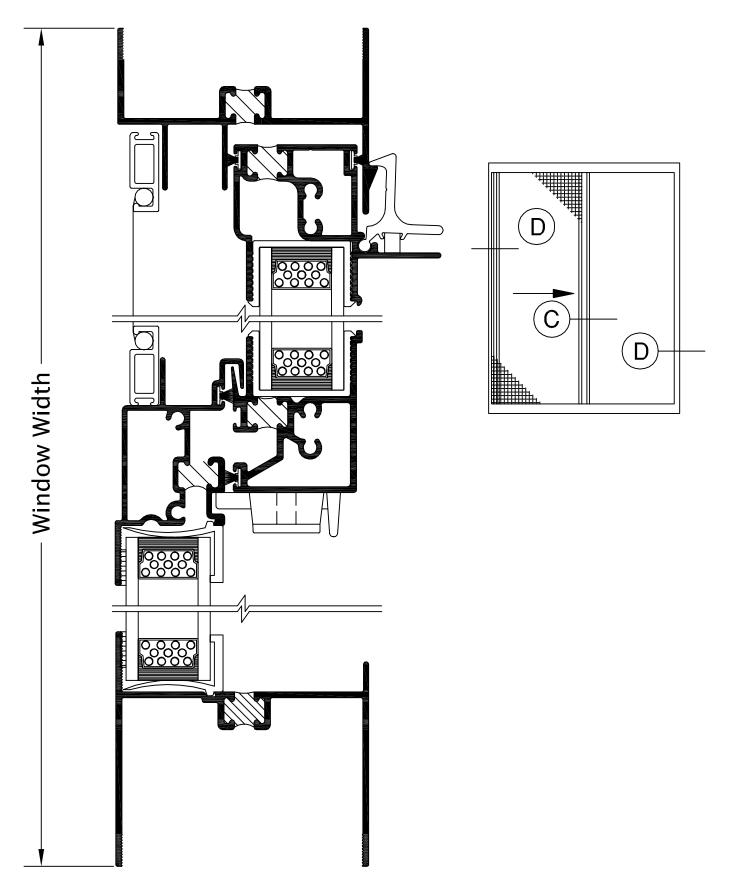








Product Details (Scale: Full Size)



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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 windows for this project as shown on the drawings and herein specified. Windows shall be the "Series 725" as manufactured by Thermal Windows, Inc., Tulsa, Oklahoma. The "Series 725" is a horizontal double slider with thermally improved frame and sash consisting of two operable, removable and sliding sash. The specifications and materials for the "Series 725" 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 nominal thickness as required by ANSI/AAMA 101. Main frame shall be 3.25" in depth. Vertical sash members shall be hollow extrusions. Main frames and sash members are to be extruded aluminum with a structural thermal barrier of high density low thermal conductivity polyurethane, poured and debridged.

<u>Locks</u> - Shall consist of a cam latch at the interlocking meeting rail along with an independent spring loaded latch for each sash

<u>Weatherstripping</u> - Shall be .250 polypile with mylar fins conforming to AAMA 701.2, Specification for Pile Weatherstrip. Weatherstripping shall be doubled at all points of contact of the sash and main frames and at the interlocking meeting rail.

#### **III. CONSTRUCTION:**

<u>Assembly</u> - Main frame shall be a mechanically joined construction. Corner joints should be "seam sealed" with a quality grade of sealant meeting the requirements of AAMA 803.3. The sash shall be assembled with two screws at each corner. All screws at joints of sash and main frame shall be secured into integral screw ports.

<u>Glazing</u> - Glass in the operable sash shall be factory glazed with a marine (wrap around) reusable vinyl glazing channel. The insulated glass units shall be .875" overall thickness with two panes of double strength glass, separated by a .625" air space for optimum insulation. All insulated glass units shall meet the requirements of the ASTM E 2190 specification, Class "A". <u>Screens</u> - Screen frame shall be of hollow extruded aluminum frames. Finish shall match the main frames and sash. Insect screening shall be fiberglass or aluminum wire secured with a vinyl spline. Screens shall be full length.

<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> - Each sash is operable on the "Series 725" horizontal double slider window and will slide open for ventilation. Both sash roll on four non-adjustable, bronze roller bearings and are removable from the interior for ease of maintenance.

#### IV. PERFORMANCE:

<u>Structural</u> - Shall meet the requirements of AAMA/WDMA/CSA 101/I.S.2/A440-08, CW-PG30-HS.

Thermal - Shall meet the requirements of AAMA 1503.1 CRF 53 / 45.

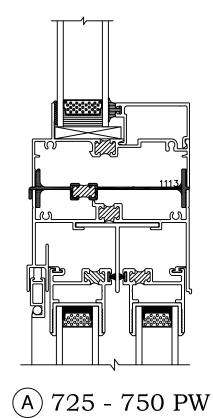
 $\underline{NFRC}$  – Shall meet the requirements of NFRC 100 and 200.

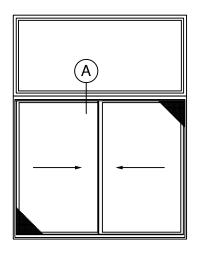
<u>Forced Entry</u> - Shall meet the requirements for ASTM F588 Load Identification Grade 10.

#### V. INSTALLATION:

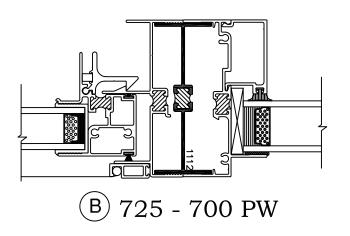
<u>Qualifications</u> - Installation shall be performed by skilled, experienced tradesmen. Units shall be installed plumb, level, square and shall be secured in accordance with detailed shop drawings. A non-hardening sealant compatible with aluminum shall be provided by the installer and applied in sufficient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

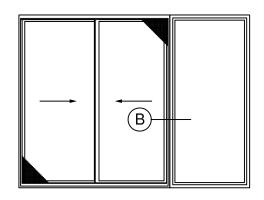
Typical Configurations (Scale: Half Size)



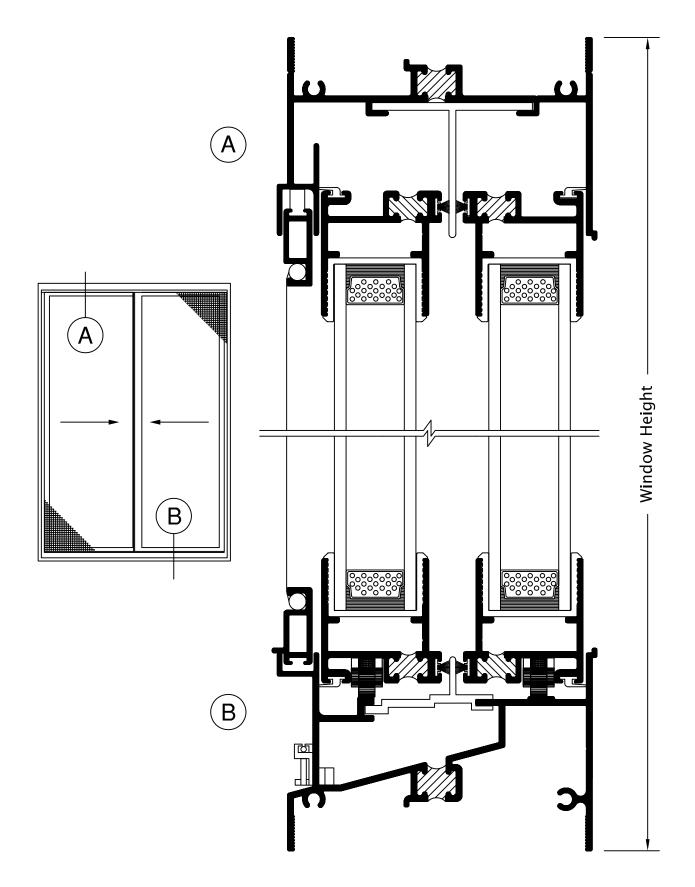


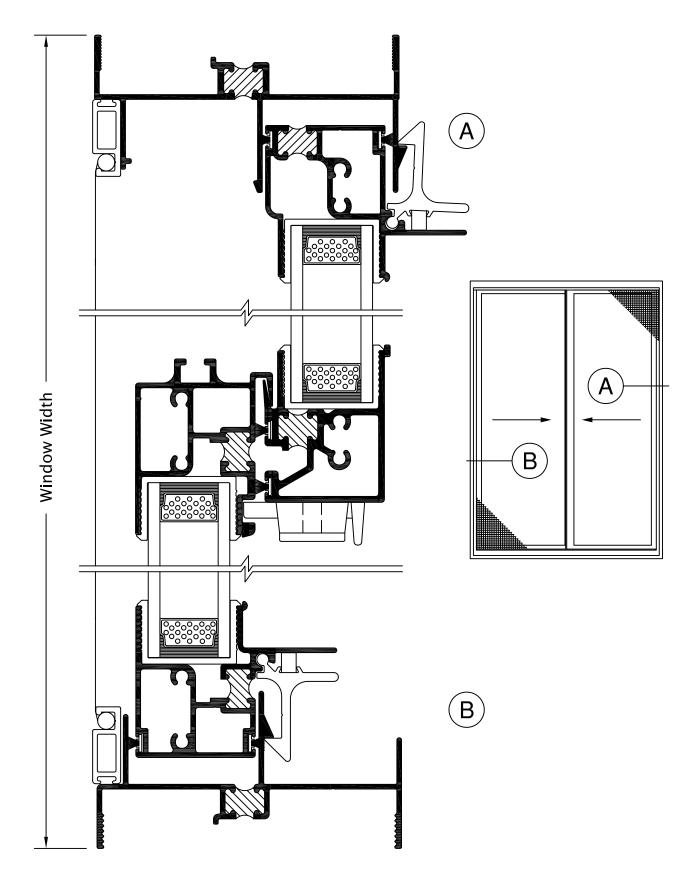
725 - 750 PW





725 - 750 PW





### SPECIFICATIONS

#### I. GENERAL:

<u>Scope of Work</u> - Furnish all necessary materials, labor and equipment for the complete installation of aluminum windows for this project as shown on the drawings and herein specified. Windows shall be the "Series 4125" as manufactured by Thermal Windows, Inc., Tulsa, Oklahoma. The "Series 4125" is a horizontal double slider with thermally improved frame and sash consisting of two operable, sliding, removable top load sashes. The specifications and materials for the "Series 4125" 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 nominal thickness as required by ANSI/AAMA 101. Main frame shall be 4.000" in depth. Vertical sash members shall be hollow extrusions. Main frames and sash members are to be extruded aluminum with a structural thermal barrier of high density low thermal conductivity polyurethane, poured and debridged.

<u>Locks</u> - Shall consist of a white bronze cam latch at the interlocking meeting rail along with an independent spring loaded latch for each sash.

<u>Weatherstripping</u> - Shall be .250 polypile with mylar fins conforming to AAMA 701.2, Specification for Pile Weatherstrip. Weatherstripping shall be doubled at all points of contact of the sash and main frames and at the interlocking meeting rail.

#### **III. CONSTRUCTION:**

<u>Assembly</u> - Main frame shall be a mechanically joined construction. Corner joints should be "seam sealed" with a quality grade of sealant meeting the requirements of AAMA 803.3. The sashes shall be assembled with two screws at each corner. All screws at joints of sash and main frame shall be secured into integral screw ports.

<u>Glazing</u> - Glass shall be factory glazed with an interior extruded aluminum glazing bead with a vinyl wedge gasket. The insulated glass units shall be 1.000" overall thickness with two panes of glass, separated by an air space. All insulated glass units shall meet the requirements of the ASTM E 2190 specification, Class "A". <u>Screens</u> - Screen frame shall be of hollow extruded aluminum. Finish shall match the main frames and sash. Insect screening shall be fiberglass or aluminum wire secured with a vinyl spline. Screens shall be full width.

<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> - Each sash is operable on the "Series 4125" Horizontal SLIDING window and will slide open for ventilation. The dual sashes roll on lubricated zinc ball bearing rollers. Each sash is removable from the interior for ease of maintenance.

#### IV. PERFORMANCE:

<u>Structural</u> - Shall meet the requirements of AAMA/WDMA/CSA 101/I.S.2/A440-05, HC/AW60 specification.

Thermal - Shall meet the requirements of AAMA 1503.1.

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

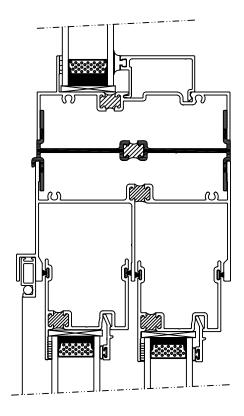
<u>Forced Entry</u> - Shall meet the requirements for ASTM F588 Load Identification Grade 10.

<u>Life Cycle</u> – Product meets the criteria including passing air and water tests at the conclusion of the cycle test requirements of AAMA 101 and AAMA 910.

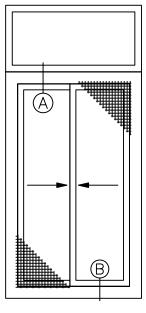
#### V. INSTALLATION:

<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.

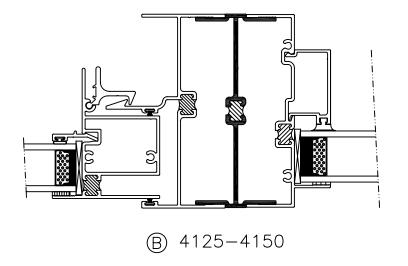
### Typical Configurations (Scale: Half Size)

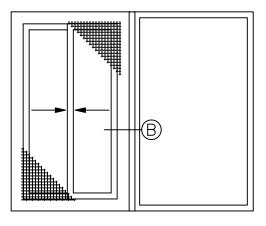


A 4125-4150



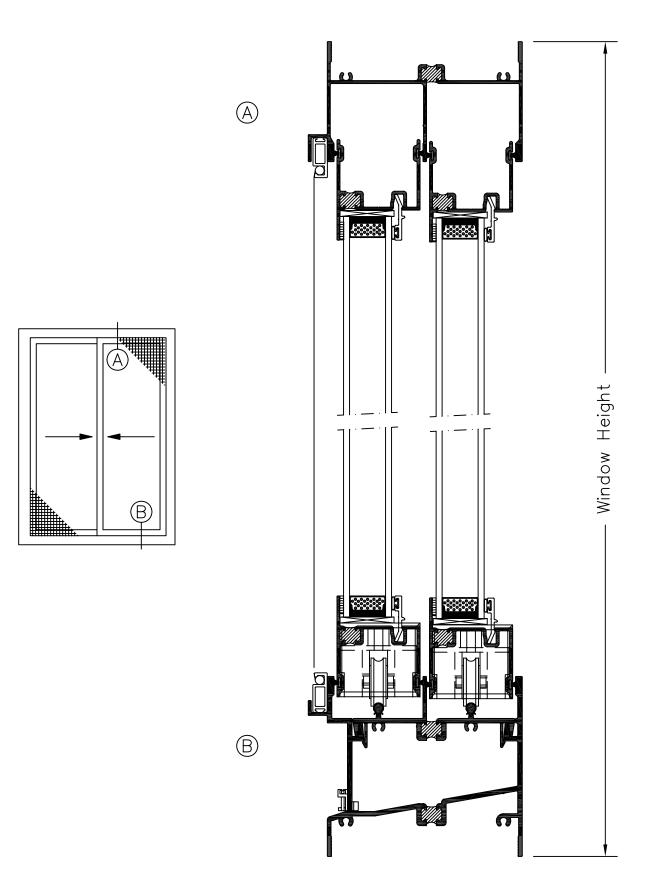
4125-4150





4125-4150

### Product Details (Scale: Half Size)



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