

SECTION D INDEX WINDOW AND VENT FRAMING

D

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| 06 | 90 SERIES 3 1/2" (89) THERMALLY IMPROVED FIXED WINDOW SYSTEM FOR SEALED UNIT GLAZING |
| 09 | 115 SERIES 4 1/2" (114) THERMALLY IMPROVED FIXED WINDOW SYSTEM FOR SEALED UNIT GLAZING |



Windows can be divided into two classifications: fixed and operating:

Fixed windows can be designed as punched openings or horizontal strip windows, with or without vertical and horizontal intermediate mullions.

Operating windows are projected or side hinged and can be designed to open in or out. Operating windows are usually combined with fixed glazing areas and rather than attempt to achieve both the fixed and ventilating functions with one product, it is often beneficial to select a fixed window product with an operating insert vent at appropriate intervals.

Part 1 - GENERAL

Description

Work included: Furnish materials, labour and equipment for the complete installation of aluminum entrance and window frames as detailed on the drawings and specified herein.

Work not included: See Specifier list

Related work specified elsewhere: See Specifier list

Quality Assurance

Drawings and specifications for work in this section are based upon DESA _____ series framing system. (select type: 20 and/or 90, 115 series). Whenever alternative products are to be considered, submit supporting technical literature and samples for review and comparison by Consultant 10 days prior to closing date.

Performance

Framing system to fully comply with **CAN/CSA-A440, Windows**.

Air infiltration shall meet the FIXED rating for 90 & 115 Series and A3 for 20 Series.

Water infiltration shall meet the required ____ (select up to B7) rating.

Intermediate mullions and horizontals shall be designed to withstand loading in accordance with the National Building Code of Canada and/or the Alberta Building Code.

Condensation resistance temperature index of the framing shall be a minimum of 55.2.

Maintenance and Guarantee

Provide maintenance and cleaning data in accordance with instructions under General Conditions.

Provide a written guarantee from substantial completion for a period of one year on the complete installation of materials and workmanship provided under this section.

Part 2 - PRODUCTS

Materials

Extrusions shall be 6063 T6 alloy and temper, formed aluminum components shall be of suitable alloy and strength to suit their purpose and function.

Fasteners shall be made of corrosion-resistant and compatible materials and of sufficient size and strength to perform their intended function.

Glazing gaskets shall be extruded black, santoprene of durometer appropriate to perform their intended function.

Weathering shall be elastomeric or wool pile and of size and density appropriate for their intended function.

Selected framing system shall be:

-20 series 2 3/16" (56) depth thermally improved operating window framing system for sealed unit glazing..

-90 series 3 1/2" (89.0) depth thermally improved fixed window framing system for sealed unit glazing.

-115 series 4 1/2" (114.0) depth thermally improved fixed window framing system for sealed unit glazing.

Fabrication

Construct framing from extrusions of size and shape as shown on shop drawings. All framing joints shall be accurately cut and machined and sealed to allow neat watertight connections with all extrusions. Framing systems shall be designed for screw spline corner joinery.

Finish

All exposed surfaces shall be free of scratches and defects. Aluminum extrusions shall be finished as selected by Specifier.

Standard Clear Anodizing: AA-M12C22A31 Duracron Acrylic Enamel: AAMA2 603

Standard Bronze Anodizing: AA-M12C22A31 Duranar Fluoropolymer Paint: AAMA 2605

Standard Black Anodizing: AA-M12C22A44

Various Bronze Anodizing colours and Paint qualities are available upon request by the Specifier.

Installation

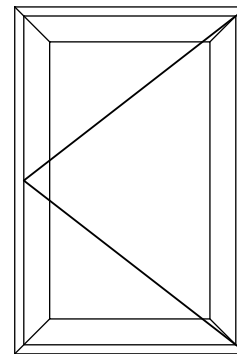
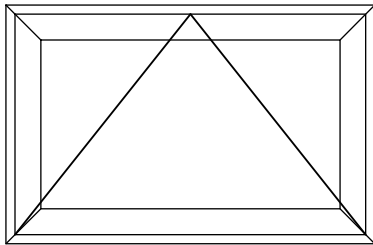
Framing shall be installed, glazed and adjusted accordingly to the manufacturer's instructions and approved shop drawings. All items in this section shall be set level, square and plumb and at their correct location and alignment with other work.



20 SERIES VENT WINDOW SYSTEM

D2

- THE 20 SERIES THERMALLY IMPROVED FRAMING SYSTEM CAN BE USED FOR BOTH PUNCHED WINDOWS AND OPERATING VENT INSERT FRAMES.
- THE MAIN WINDOW FRAME SECTIONS ARE ROLLED TOGETHER WITH A CELLULAR FOAM P.V.C. AND OFFER THE OPTION OF COMBINING DIFFERENT EXTERIOR AND INTERIOR FINISHES TO THE FRAMING COMPONENTS. OPTIONS CAN INCLUDE USING STRONG EXTERIOR COLOURS COMBINED WITH MORE NEUTRAL INTERIOR TREATMENTS.
- VENT INSERTS CAN BE EASILY ADAPTED TO EXISTING FRAMING SYSTEMS IN AREAS THAT REQUIRE IMPROVED AIR FLOW AND VENTILATION.
- THE OPERATING VENT WINDOW CAN BE EITHER TOP OR BOTTOM HUNG OR SIDE HINGED AND CAN BE SPECIFIED TO EITHER PROJECT OUT OR IN.
- COMPLETE SELECTION OF HARDWARE IS AVAILABLE FOR EITHER THE PROJECTED OR SIDE HINGED WINDOW TYPE.
- WINDOW FRAMING IS FACTORY FABRICATED AND ACCURATELY MACHINED AND ASSEMBLED WITH SCREW SPLINE JOINERY PROVIDING WATERTIGHT CONNECTIONS.
- EXTRUDED INSECT SCREEN FRAMES FINISHED TO MATCH WINDOW FRAME ARE AVAILABLE SCREENED WITH GLASSFIBRE MESH AND FITTED WITH A REMOVABLE SPLINE PERMITTING RE-SCREENING.



TOP HUNG OPEN OUT
TOP HUNG OPEN IN
BOTTOM HUNG OPEN IN

SIDE HINGED OPEN OUT
SIDE HINGED OPEN IN

| SIZE | WIDTH | HEIGHT |
|------|-------|--------|
| MIN. | 20" | 16" |
| MAX. | 60" | 42" |

| SIZE | WIDTH | HEIGHT |
|------|-------|--------|
| MIN. | 20" | 24" |
| MAX. | 30" | 64" |

TOTAL SQUARE FOOTAGE NOT TO EXCEED 12 SQUARE FEET.

TOTAL SQUARE FOOTAGE NOT TO EXCEED 12 SQUARE FEET.

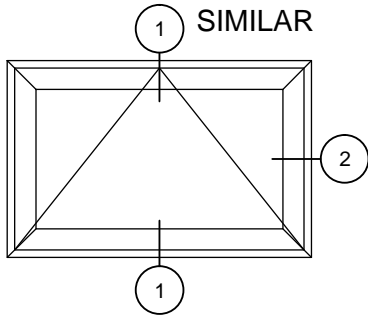
TOP HUNG OPEN OUT VENTS COMPLETE WITH UNDERSCREEN PUSHBARS STANDARD. OPTIONAL PIVOT SHOE ROTO OPERATOR WITH LOCKING HANDLES.

OPEN OUT VENTS COMPLETE WITH ROTO OPERATOR AND LOCKING HANDLE(S). OPEN IN VENTS COMPLETE WITH CAM HANDLES. ALL VENTS COMPLETE WITH INSECT SCREENS.

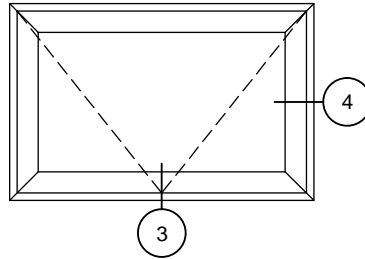


20 SERIES VENT DETAILS

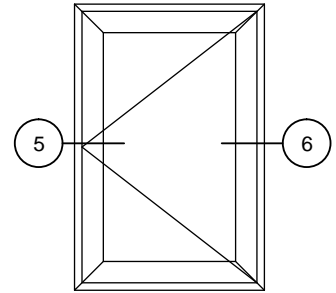
D3



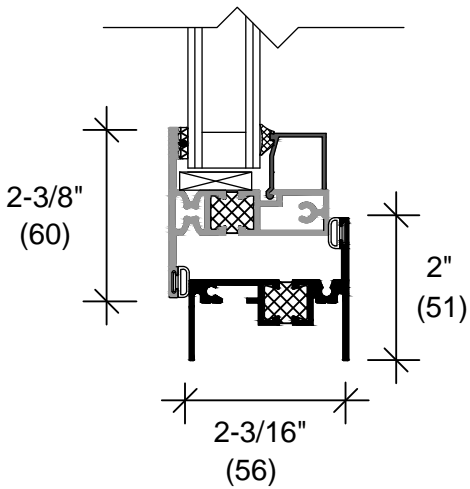
TOP HUNG OPEN OUT
AWNING



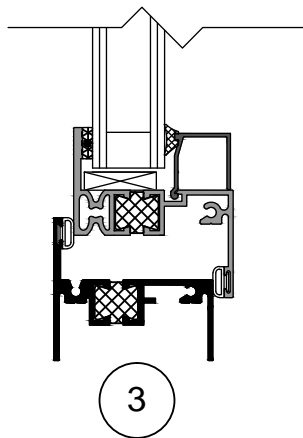
BOTTOM HUNG OPEN IN
HOPPER



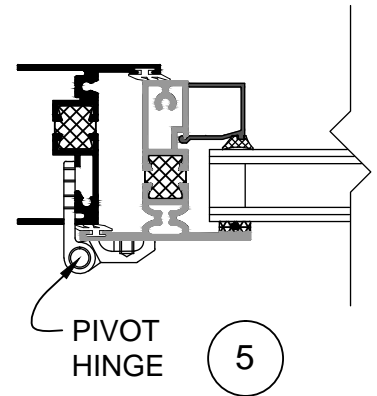
SIDE HINGED OPEN OUT
CASEMENT



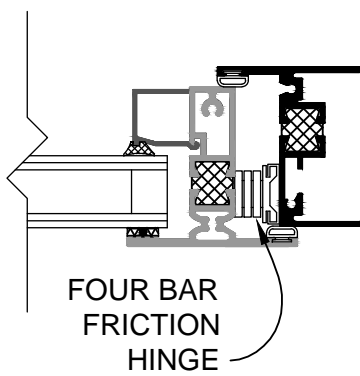
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3

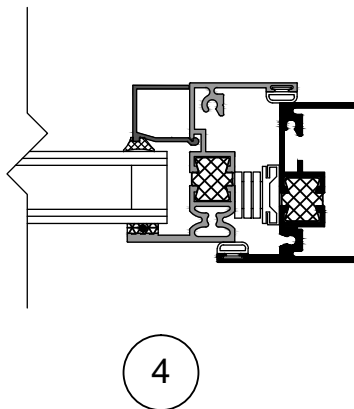


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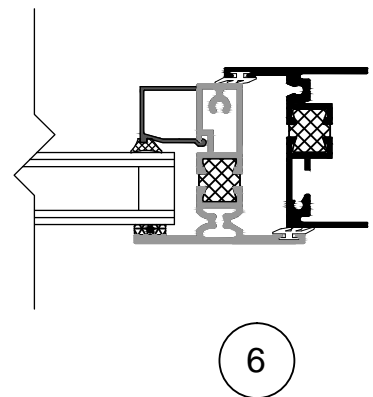


FOUR BAR
FRICTION
HINGE

2



4



6

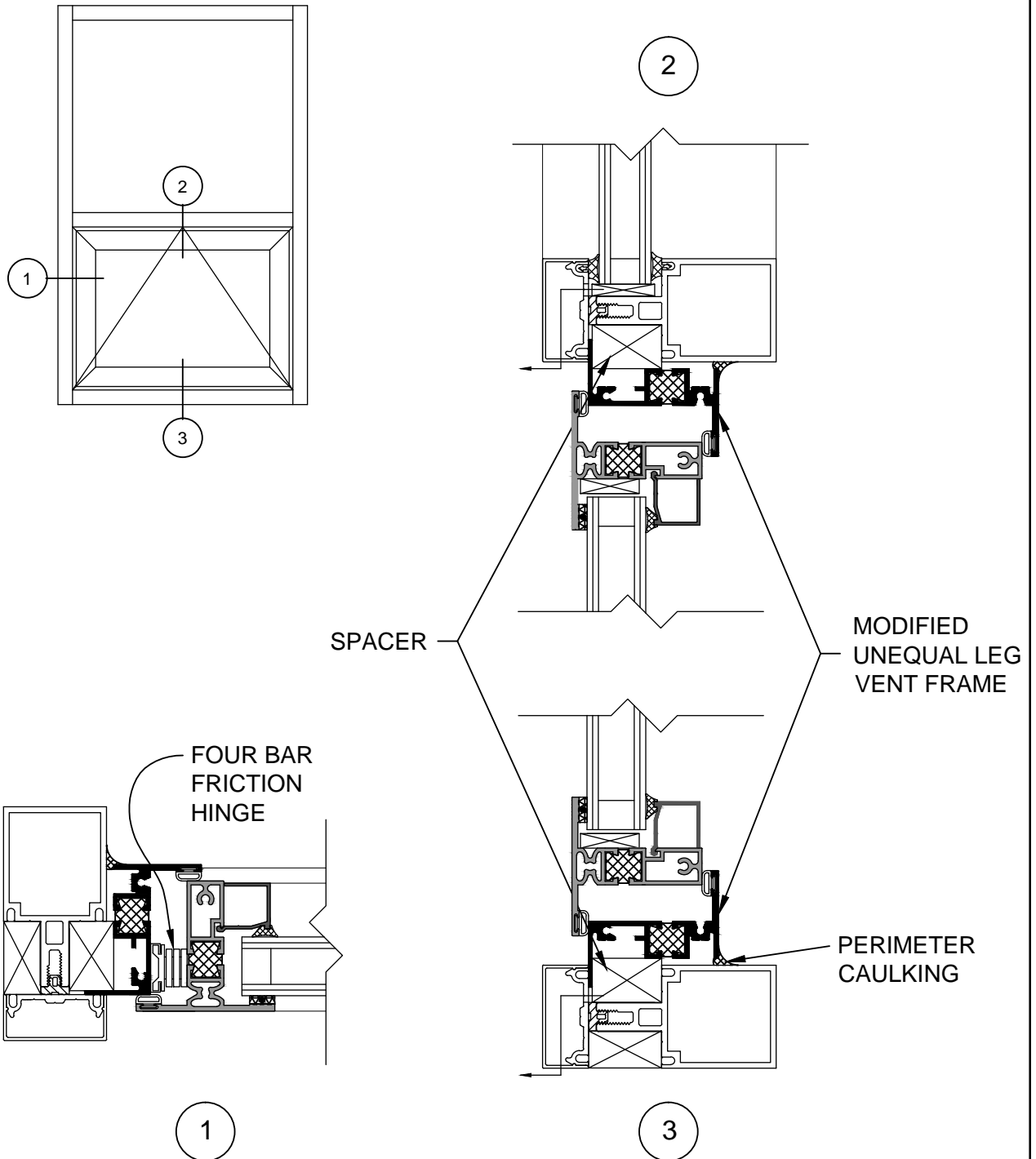
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20 SERIES VENT INSERT DETAILS IN 45 SERIES FRAMING SYSTEM

D4











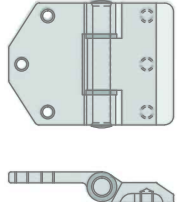
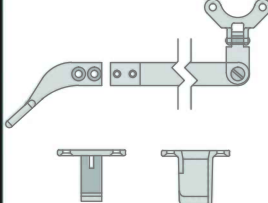
SCALE: 3/8" = 1"



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VENT HARDWARE PARTS LIST

D5

| PART | PART NO. | DESCRIPTION | | |
|---|---|---|---|--|
|  | 24-11 | TRUTH HOOK LOCK | - | |
|  | 21088 | TRUTH HOOK LOCK KEEPER | - | |
|  | DC 2500 | RING CATCH C/W KEEPER | - | |
|  | DC 620T R.H. - L.H. | CAM LOCK | - | |
|  | DC 610UU | CAM LOCK KEEPER | - | |
|  | 22.18.22.002 | TRUTH AWNING PIVOT SHOE ROTO OPERATOR | - | MINIMUM 699mm (27 1/2") WIDTH REQUIRED |
|  | 23.00.22.001 L.H. 23.00.22.002 R.H. | TRUTH CASEMENT OPERATOR | - | LH SHOWN |
|  | 4302SS10EH 10" 4302SS12EH 12" 4302SS16EH 16" | HEAVY DUTY FOUR BAR FRICTION HINGE | - | |
|  | 186-007-0122 | BRONZECRAFT CASEMENT HINGE | - | |
|  | 238-066-0122 L.H. - R.H. | BRONZECRAFT UNDERSCREEN PUSH BAR | - | LH SHOWN |

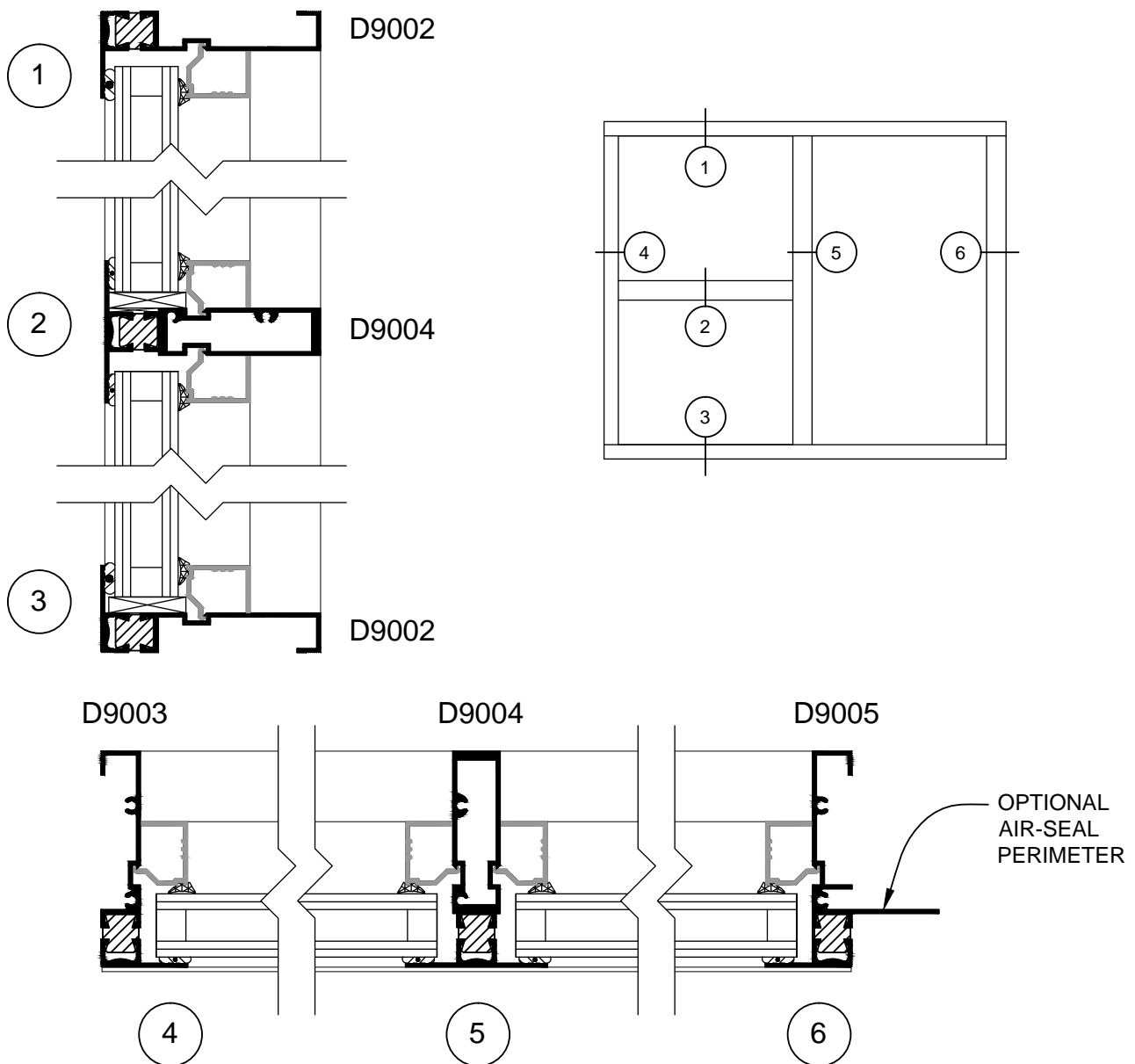


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90 SERIES WINDOW FRAMING DETAILS

D6

- 3 1/2" (88.9) THERMALLY IMPROVED FIXED WINDOW FRAMING SYSTEM FOR SEALED UNIT GLAZING.
- FRAMING SYSTEM CAN BE SPECIFIED FOR BOTH PUNCHED WINDOW AND HORIZONTAL STRIP WINDOW DESIGNS, WITH OR WITHOUT VERTICAL AND HORIZONTAL INTERMEDIATE MULLIONS.
- THE MAIN WINDOW FRAME SECTIONS ARE ROLLED TOGETHER WITH A CELLULAR FOAM P.V.C. AND OFFER THE OPTION OF COMBINING DIFFERENT EXTERIOR AND INTERIOR FINISHES TO THE FRAMING COMPONENTS. OPTIONS CAN INCLUDE USING STRONG EXTERIOR COLOURS COMBINED WITH MORE NEUTRAL INTERIOR TREATMENTS.
- THIS IS A PRIME SEAL WINDOW SYSTEM THAT EMPLOYS AN EXTERIOR PRE- SHIMMED GLAZING TAPE TO DETER AIR AND WATER INFILTRATION.
- SIMPLE SCREW SPLINE JOINERY WITH ALL FRAMING PARTS OFFERS ECONOMICAL FABRICATION AND INSTALLATION.
- SYSTEM ACCEPTS THE 20 SERIES VENT WINDOW INSERT FOR VENTILATING PURPOSES, IF REQUIRED.
- INTERIOR GLAZED SYSTEM PERMITTING EASY SEALED UNIT INSTALLATION AND REPLACEMENT FOR MULTI-STOREY BUILDINGS.



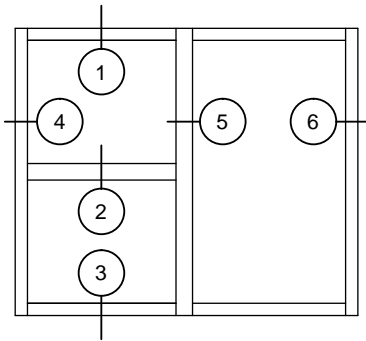
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90 SERIES WINDOW FRAMING DETAILS

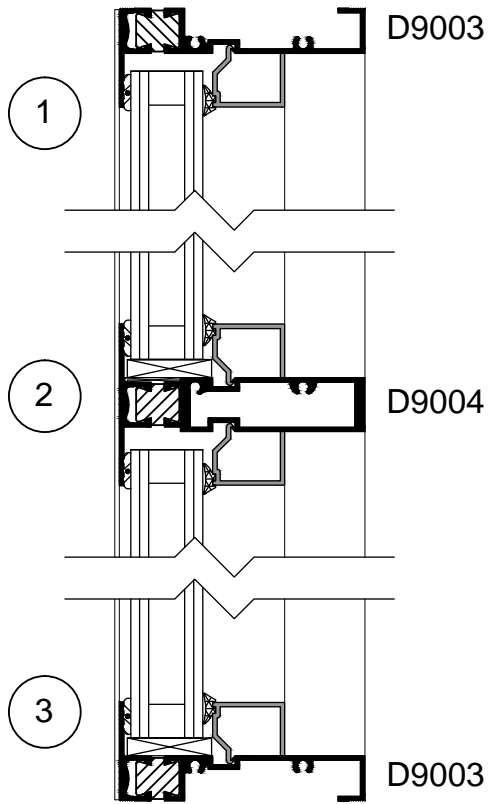
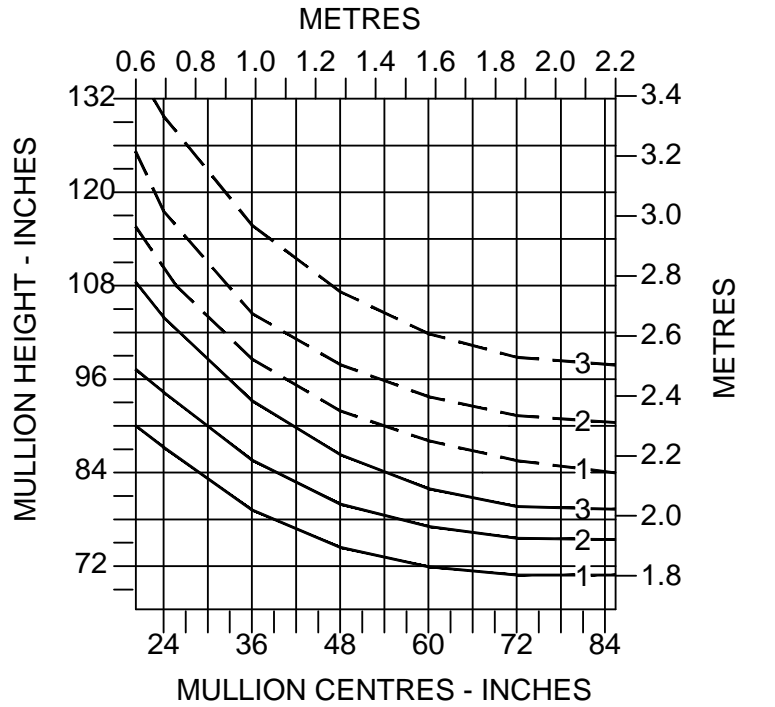
D7



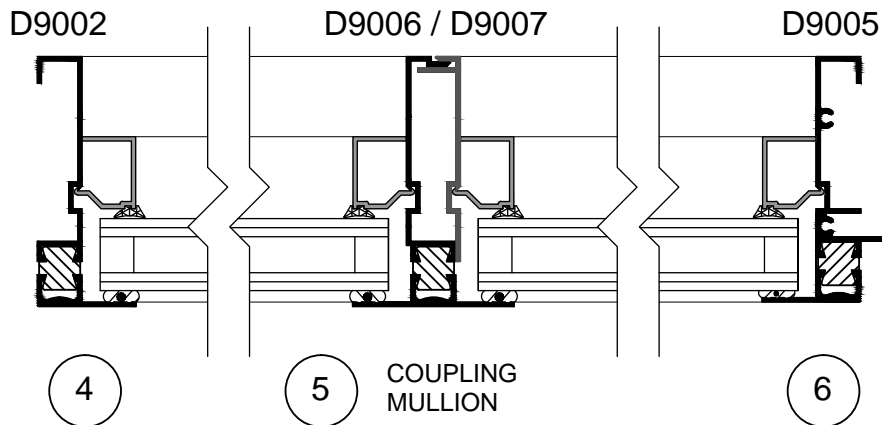
DETAILS USING 9006 - 9007 COUPLING MULLION

- WHEN USING THE COUPLING MULLION WITH 90 SERIES FRAMES, 9002 HEAD & SILL EXTRUSION AND 9003 JAMB EXTRUSION MUST BE INTERCHANGED TO ACCOMMODATE PROPER FABRICATION.

WIND LOAD CHART



- ① - 1.25 kPa (25 PSF) ——— PLAIN
- ② - 1.00 kPa (20 PSF) - - - REINFORCED
- ③ - .75 kPa (15 PSF)



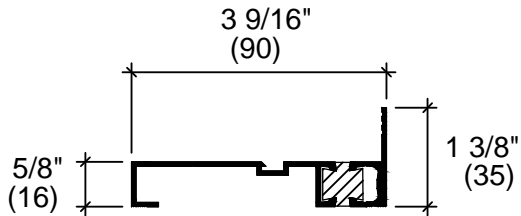
SCALE: 3/8" = 1"



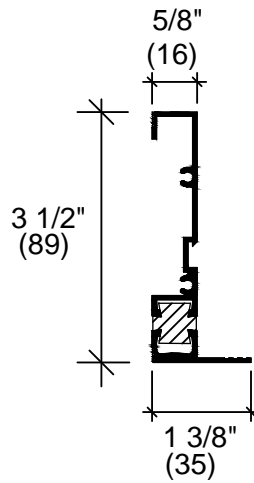
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90 SERIES WINDOW FRAMING PARTS

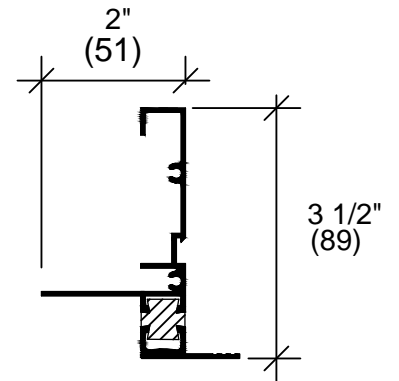
D8



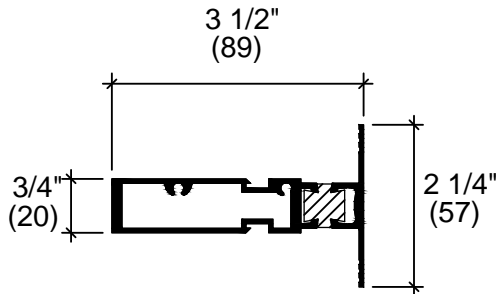
D9002
HEAD & SILL



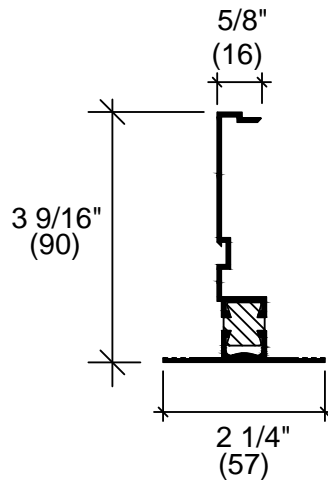
D9003
JAMB



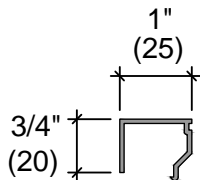
D9005
OPTIONAL AIR-SEAL
PERIMETER



D9004
MULLION



D9007
COUPLING MULLION
(FEMALE)



D9001
GLASS STOP



D9006
COUPLING MULLION
(MALE)



3/16" SHIM TAPE
FOR HEAD & SILL
9002



1/8" SHIM TAPE
FOR JAMB & MULLION
9003-9004-9005



N215
ROLL IN
GASKET FOR
1" UNITS

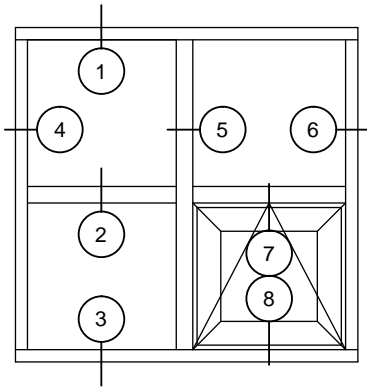
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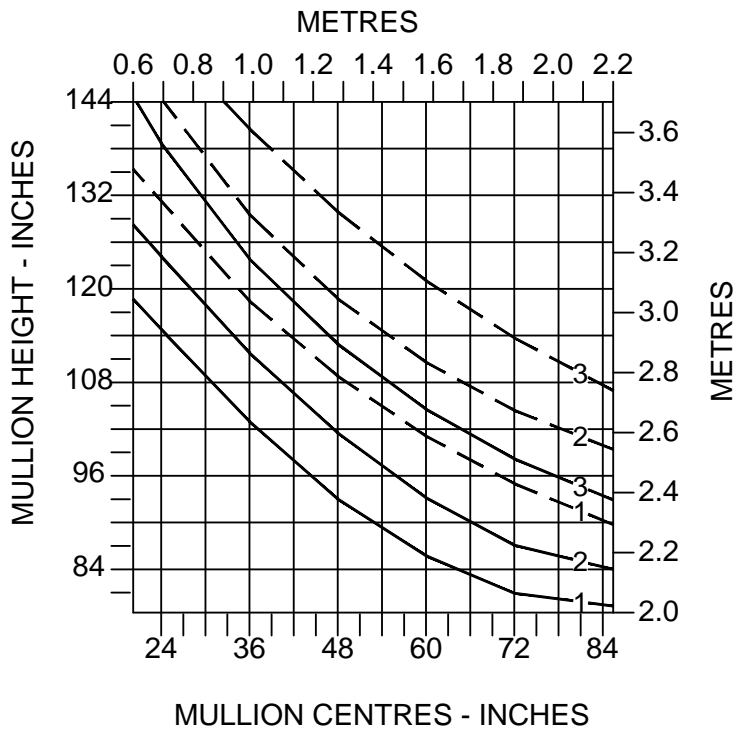
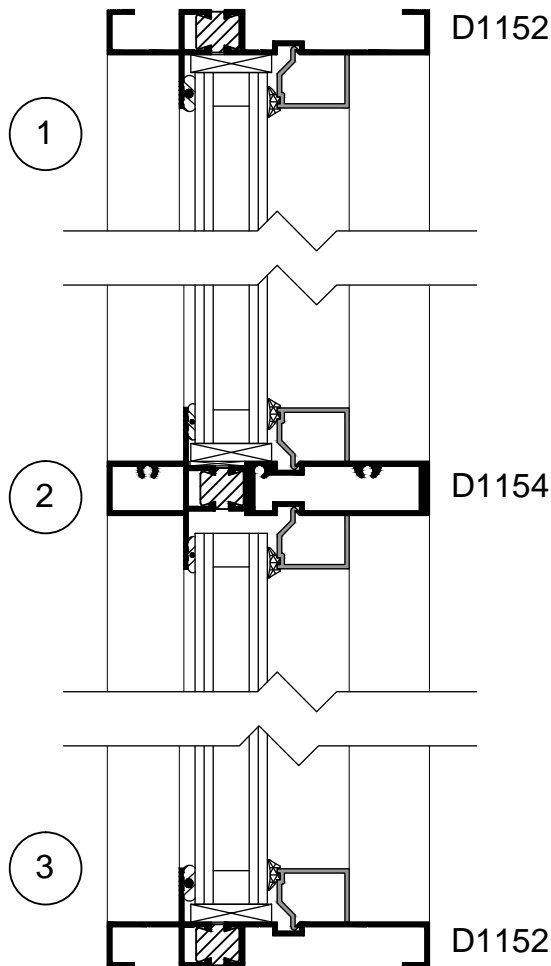
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115 SERIES WINDOW FRAMING DETAILS

D9



- 4 1/2" (114) THERMALLY IMPROVED FIXED WINDOW FRAMING SYSTEM FOR SEALED UNIT GLAZING.
- FRAMING SYSTEM CAN BE SPECIFIED FOR BOTH PUNCHED WINDOW AND HORIZONTAL STRIP WINDOW DESIGNS, WITH OR WITHOUT VERTICAL AND HORIZONTAL INTERMEDIATE MULLIONS.
- THE MAIN WINDOW FRAME SECTIONS ARE ROLLED TOGETHER WITH A CELLULAR FOAM P.V.C. AND OFFER THE OPTION OF COMBINING DIFFERENT EXTERIOR AND INTERIOR FINISHES TO THE FRAMING COMPONENTS. OPTIONS CAN INCLUDE USING STRONG EXTERIOR COLOURS COMBINED WITH MORE NEUTRAL INTERIOR TREATMENTS.
- THIS IS A PRIME SEAL WINDOW SYSTEM THAT EMPLOYS AN EXTERIOR PRE- SHIMMED GLAZING TAPE THAT MEETS OR EXCEEDS CSA STANDARD CAN/CSA - A440 WINDOW TESTS FOR AIR AND WATER INFILTRATION.
- SIMPLE SCREW SPLINE JOINERY WITH ALL FRAMING PARTS OFFERS ECONOMICAL FABRICATION AND INSTALLATION.
- SYSTEM ACCEPTS THE 20 SERIES VENT WINDOW INSERT FOR VENTILATING PURPOSES, IF REQUIRED.
- INTERIOR GLAZED SYSTEM PERMITTING EASY SEALED UNIT INSTALLATION AND REPLACEMENT FOR MULTI - STOREY BUILDINGS.



- ① - 1.25 kPa (25 PSF) ——— PLAIN
- ② - 1.00 kPa (20 PSF) - - - REINFORCED
- ③ - .75 kPa (15 PSF)

SCALE: 3/8" = 1"

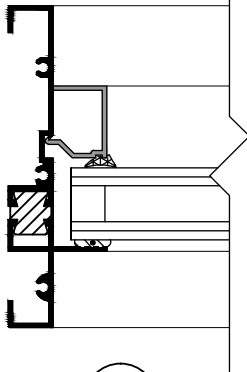


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115 SERIES WINDOW FRAMING DETAILS

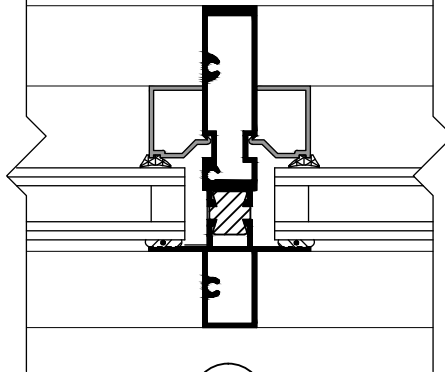
D10

D1153



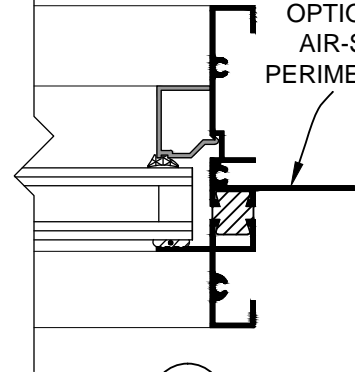
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D1154



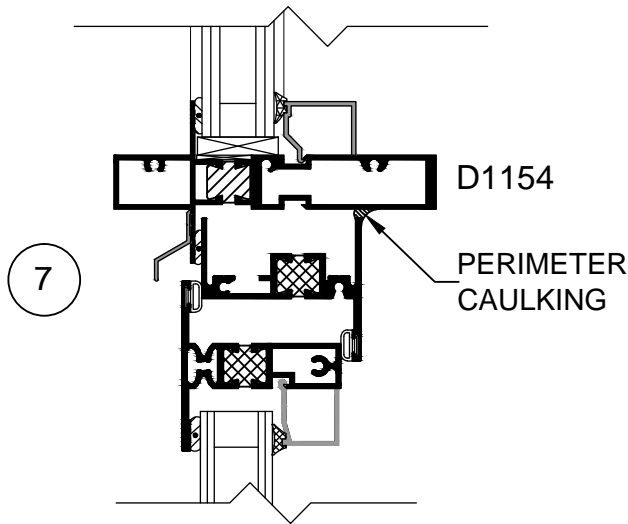
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D1155



6

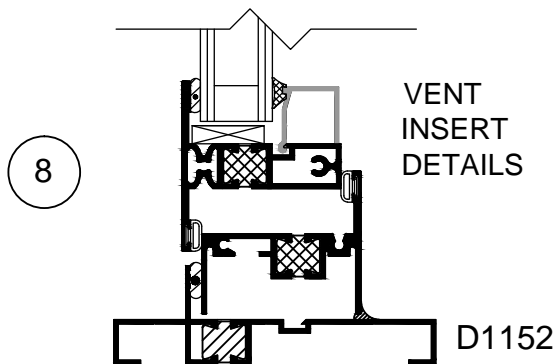
OPTIONAL
AIR-SEAL
PERIMETER



7

D1154

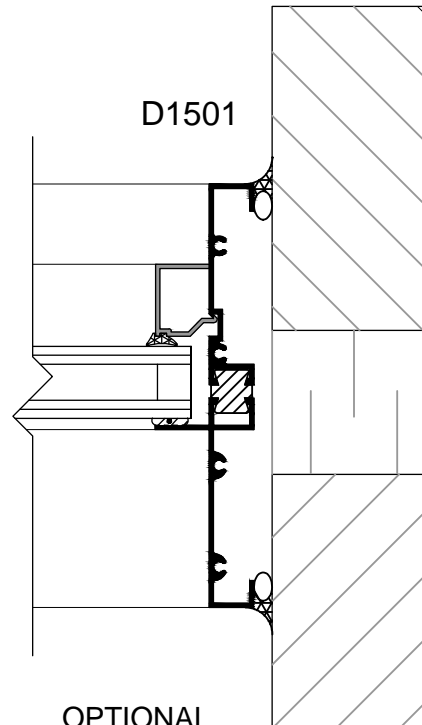
PERIMETER
CAULKING



8

VENT
INSERT
DETAILS

D1152



D1501

OPTIONAL
5 7/8"
(149)
PERIMETER

SCALE: 3/8" = 1"



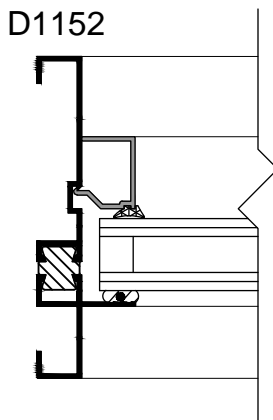
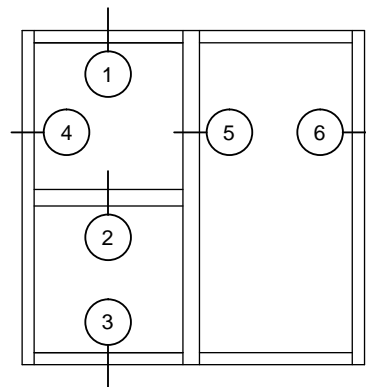
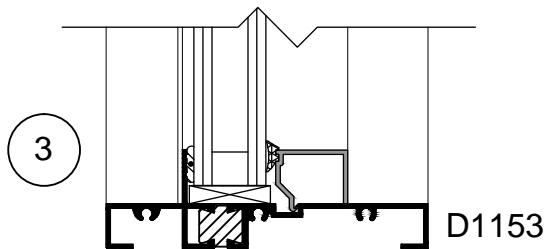
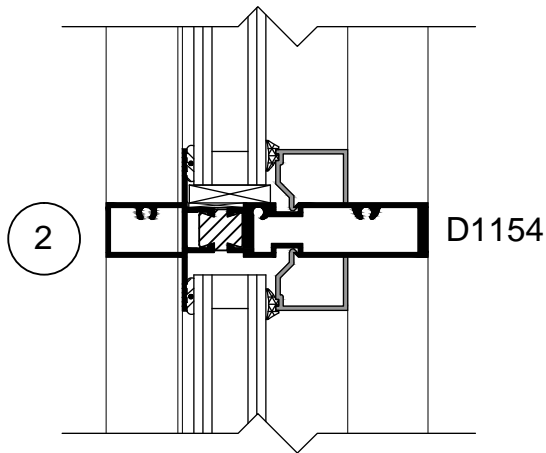
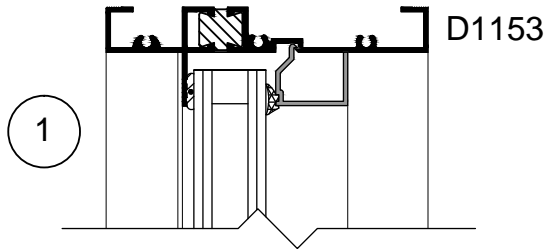
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115 SERIES WINDOW FRAMING DETAILS

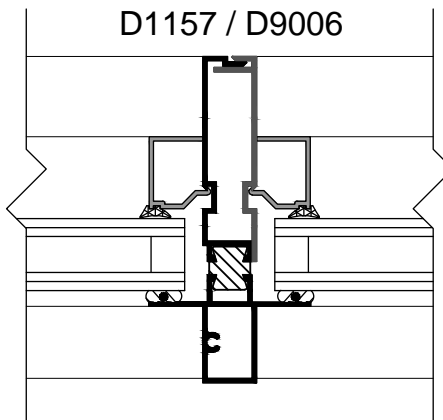
D111

DETAILS USING 9006 - 1157 COUPLING MULLION

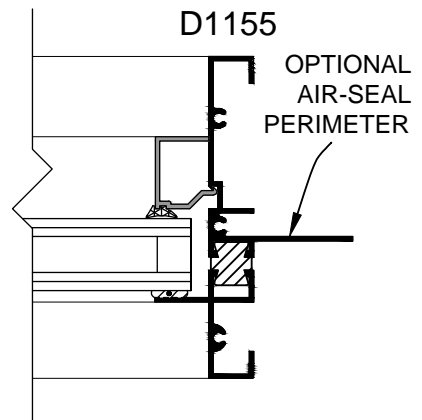
- WHEN USING THE COUPLING MULLION WITH 115 SERIES FRAMES ,
1152 HEAD & SILL EXTRUSION AND 1153 JAMB EXTRUSION MUST BE
INTER- CHANGED TO ACCOMMODATE PROPER FABRICATION.



4



5 COUPLER
MULLION



6

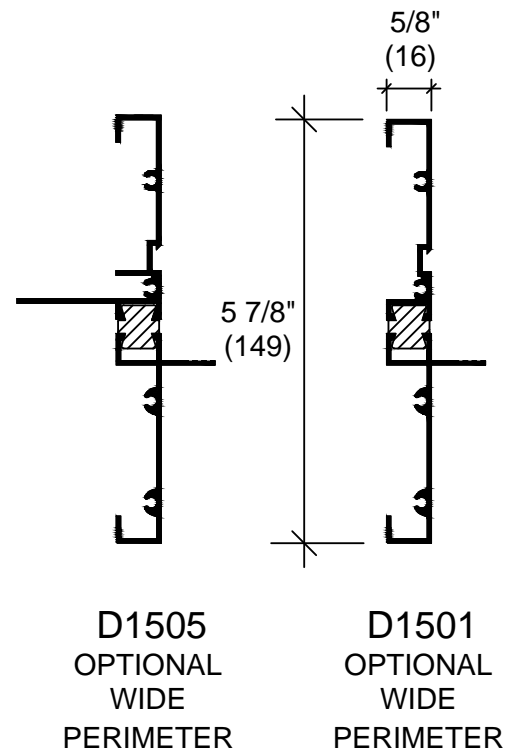
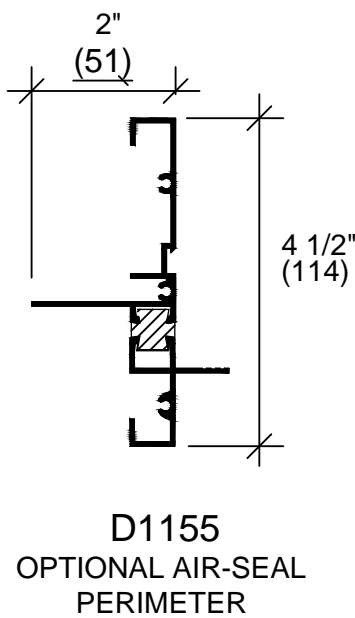
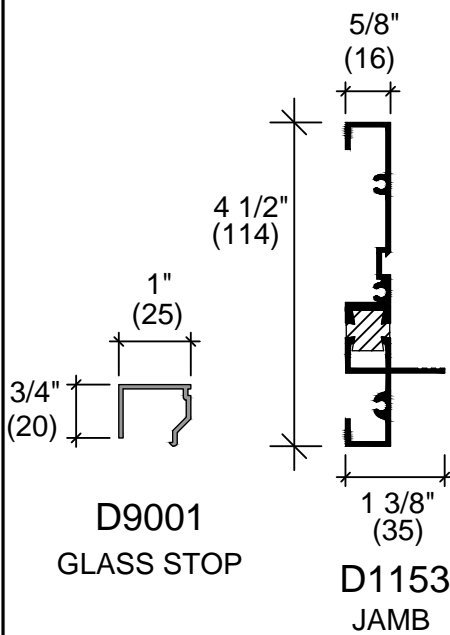
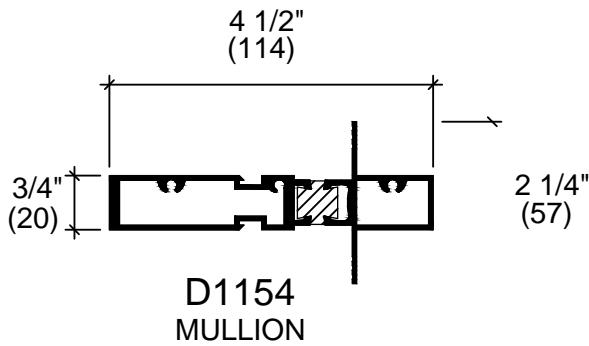
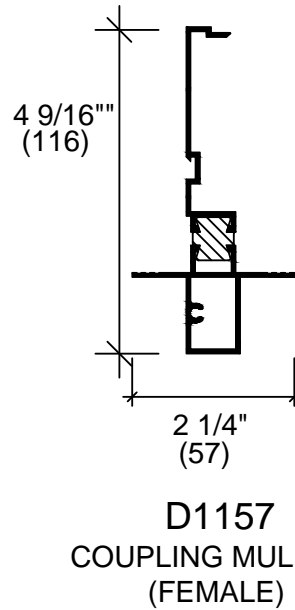
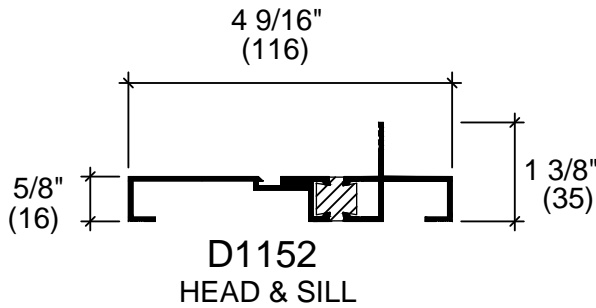
SCALE: 3/8" = 1"



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115 SERIES WINDOW FRAMING PARTS

D12




3/16" SHIM TAPE
FOR HEAD & SILL
1152


1/8" SHIM TAPE
FOR JAMB & MULLION
1153-1154-1155-1501


**N215
ROLL IN
GASKET FOR
1" UNITS**





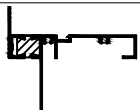

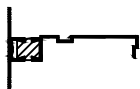
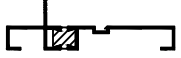

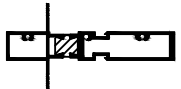

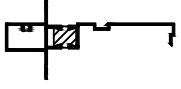
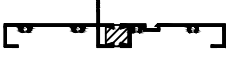
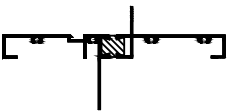
SCALE: 3/8" = 1"



providing innovative solutions that meet client needs.

90 & 115 SERIES WINDOW PARTS LIST

D13

| PART | PART NO. | DESCRIPTION | | FINISH | | |
|---|----------|---|------|----------------|-----------------|------------------------|
| | | | | CLEAR ANODIZED | BRONZE ANODIZED | BRONZE-EXT. CLEAR-INT. |
|  | D9001 | GLASS STOP | 7.39 | | | |
|  | D9002 | HEAD & SILL | 7.39 | | | |
|  | D9003 | JAMB | 7.39 | | | |
|  | D9004 | MULLION | 7.39 | | | |
|  | D9005 | OPTIONAL AIR-SEAL PERIMETER | 7.39 | | | |
|  | D9006 | COUPLING MULLION (MALE) | 7.39 | | | |
|  | D9007 | COUPLING MULLION (FEMALE) | 7.39 | | | |
|  | D1152 | HEAD & SILL | 7.39 | | | |
|  | D1153 | JAMB | 7.39 | | | |
|  | D1154 | MULLION | 7.39 | | | |
|  | D1155 | OPTIONAL AIR-SEAL PERIMETER | 7.39 | | | |
|  | D1157 | COUPLING MULLION (FEMALE) | 7.39 | | | |
|  | D1501 | OPTIONAL 5 7/8" (149) PERIMETER | 7.39 | | | |
|  | D1505 | OPTIONAL 5 7/8" (149) PERIMETER WITH AIR-SEAL | 7.39 | | | |



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