DOOR SPECIFICATIONS

Part 1 - GENERAL

Scope

Metro's manufacture scope includes but is not limited to furnishing the materials, fabrication labor, assembly and installation of the company's line of aluminum doors and frames including all necessary hardware and accessories. Specific preparation will vary based on circumstances, contract or purchase agreement.

Work Not Included: Structural support for framing, wood liner, interior or exterior closures or trim. See Specifiers list / Order form for specific details

Related Work Specified Elsewhere: See Specifiers list / Order form(s)

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METRO GLASS

Design & Performance

Doors to fully comply with applicable standard specifications as typically referenced to the following requirement criteria: Air and water tightness, thermal resistance, wind and other load resistance.

Maintenance and Warranty

Upon request, Metro will provide instructions for proper cleaning and maintenance. Metro Glass Metal Products come with a two year warranty which shall begin from the day the product is shipped or from substantial completion of the installation. The warranty covers materials and workmanship as specified by drawings and customer requirements per contract or purchase agreement.

Part 2 - PRODUCTS

Materials

All materials to meet design and material specifications as applicable. Extruded aluminum is 6063 T6 alloy and temper. Any defects impairing strength, durability or appearance are not acceptable. Fasteners shall be of sufficient size and strength and made of corrosion-resistant compatible materials. Glazing gaskets shall be Polishim II Tape a 100% solid, highly adhesive and elastic, cross-linked butyl preformed tape with a continuous integral EPDM shim and extruded black santoprene designed and sized to perform their intended function. Weathering shall be manufacturers standard pile cloth with a vinyl fin of size and density appropriate for their intended function. Bottom rail to have optional manufacturers blade type sill sweeps with pile .

Fabrication

Doors are pre-assembled to ensure accurate fit tight hairline joints only. Extruded stiles and rails will be sizes and profiles specified by customer in the contract or the purchase agreement. Corner joints shall be secured with concealed brackets that are anchored with bolts and then fully welded.

Finish - Anodized 6063 Material Code Identification

Exposed surfaces shall be finished as specified by customer:

Satin Clear 14 AA-M12C22A41

Satin Medium Bronze 30 AA-M12C22A44

Satin Black 29 AA-M12C22A44

Powdercoated and various other finishes (including shades of Bronze) available upon request.

Hardware

Entrance hardware to be manufacturers standard unless otherwise specified by customer.

Installation

Doors to be installed plumb, level and square and glazed by an experienced crew in prepared openings in accordance to the manufacturers instructions and approved shop drawings, and as specified by drawings and customer requirements per contract or purchase agreement.

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Bay 108 - 1626 115 Ave. N.E. Calgary, Alberta T3K 2E4

Phone: 403-250-9290 Fax: 403-291-0599

www.metroglass.ca

METRO HP TB-350 DOOR U- VALUE REPORT

2

| | Project: | | | | Project No: | |
|---|-------------------------------------|-----------|----------|---------------|-------------|-------|
| ΙΔΥΤΟΝ | Metro HP TB-350 Door U-value Report | | | 1256-15758-01 | | |
| | Sections | | | | Client: | |
| CONSULTING LTD. SLAZING, CLADDING & SPECIALTY STRUCTURAL ENGINEERING | Metro HP TB-350 Door | | | Metro | Glass | |
| British Columbia • Alberta • Saskatchewan • Ontario NWT • Washington | Calc. by | Date | Chk'd by | Date | App'd by | Page: |
| | TW | Dec, 2020 | IC | Jan, 2021 | IC | 7 |

RESULTS

The windows are modelled following NFRC methods and the results for one glazing system are summarized in Table 2:

| - | Table 2: The | rmal Model | ling Result | |
|---|--------------|------------|-------------|--|
| | | | | |

| Frame Type | Width (mm) | Height (mm) | U-Value (W/m ² -K) | U-Value (Btu/h-ft ² -°F) | SHGC | VT |
|--------------------|---------------|----------------|----------------------------------|--|------|------|
| HP 350 Single Door | 960.00 | 2090.00 | 2.50 | 0.44 | 0.28 | 0.45 |
| HP 350 Double Door | 1920.00 | 2090.00 | 2.45 | 0.43 | 0.28 | 0.45 |

Insulated Glass Unit:

G1: SB60 Clear_6.VTA / 12.7mm 90% Ar / CLEAR_6.DAT

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CONCLUSION

The results of the NFRC U-value calculation for the fenestration systems described above show that for the Standard NFRC sizes, the Metro HP TB-350 Single Door obtained a U-value of 2.50 W/m²·K and the Double Door obtained 2.45 W/m²·K. The Solar Heat Gain Coefficient (SHGC) was calculated to be 0.28 and the Visible Transmittance was calculated to be 0.45.

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 Calgary, Alberta T3K 2E4

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Project: Project No: Metro HP TB-500 Door U-value Report 1256-16332 Sections Client: ONSULTIN G Metro HP TB-500 Door Metro Glass CLADDING & SPECIALTY STRUCTURAL E British Columbia • Alberta • Saskatchewan • Ontario Calc. by Date Chk'd by Date App'd by Page: NWT • Washington ΤW Sep 2021 IC Sep 2021 IC 7

METRO HP TB-500 DOOR

U-VALUE REPORT

3

RESULTS

The windows are modelled following NFRC methods and the results for one glazing system are summarized in Table 2:

Table 2: Thermal Modelling Result

| Frame Type | Width (mm) | Height (mm) | U-Value (W/m²-K) | U-Value (Btu/h-ft²-°F) | SHGC | νт |
|-----------------------|---------------|----------------|---------------------|---------------------------|------|------|
| HP TB-500 Single Door | 960.00 | 2090.00 | 2.59 | 0.46 | 0.26 | 0.41 |
| HP TB-500 Double Door | 1920.00 | 2090.00 | 2.53 | 0.45 | 0.26 | 0.41 |

Insulated Glass Unit:

G1: SB60 Clear_6.VTA / 12.7mm 90% Ar / CLEAR_6.DAT

METRO GLASS

PRODUCTS LTD.

CONCLUSION

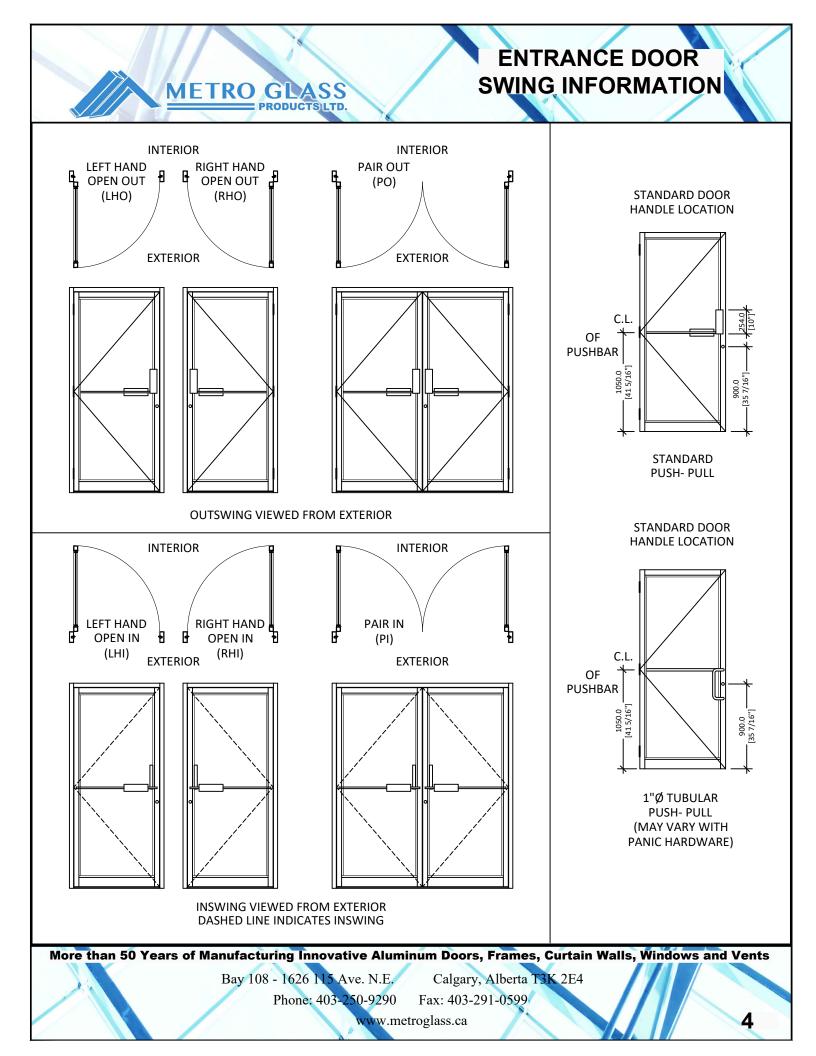
The results of the NFRC U-value calculation for the fenestration systems described above show that for the Standard NFRC sizes, the Metro HP TB-500 Single Door obtained a U-value of 2.59 W/m²·K and the Double Door obtained 2.53 W/m²·K. The Solar Heat Gain Coefficient (SHGC) was calculated to be 0.26 and the Visible Transmittance was calculated to be 0.41.

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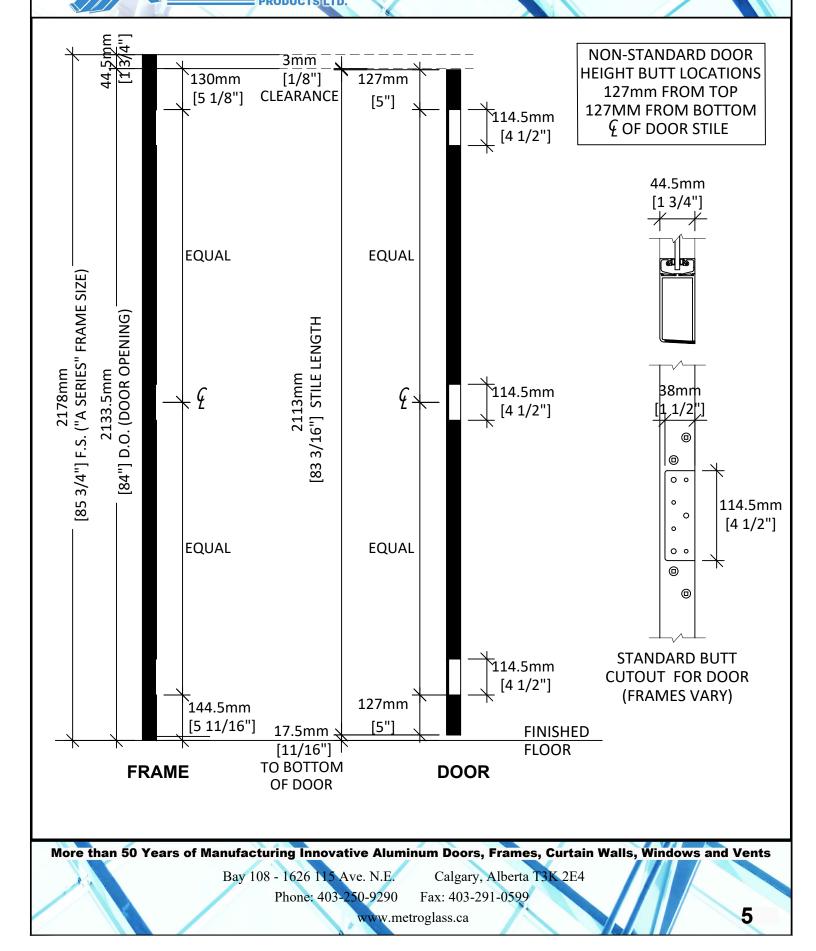
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 Fax: 403-291-0599

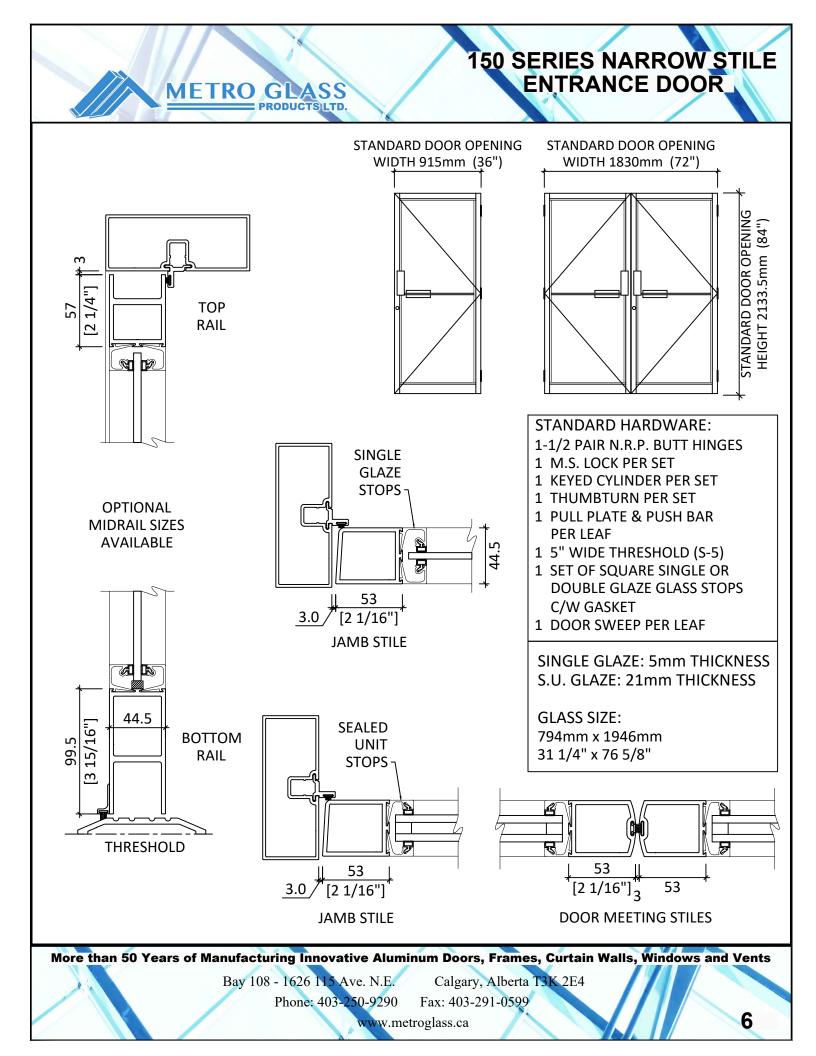
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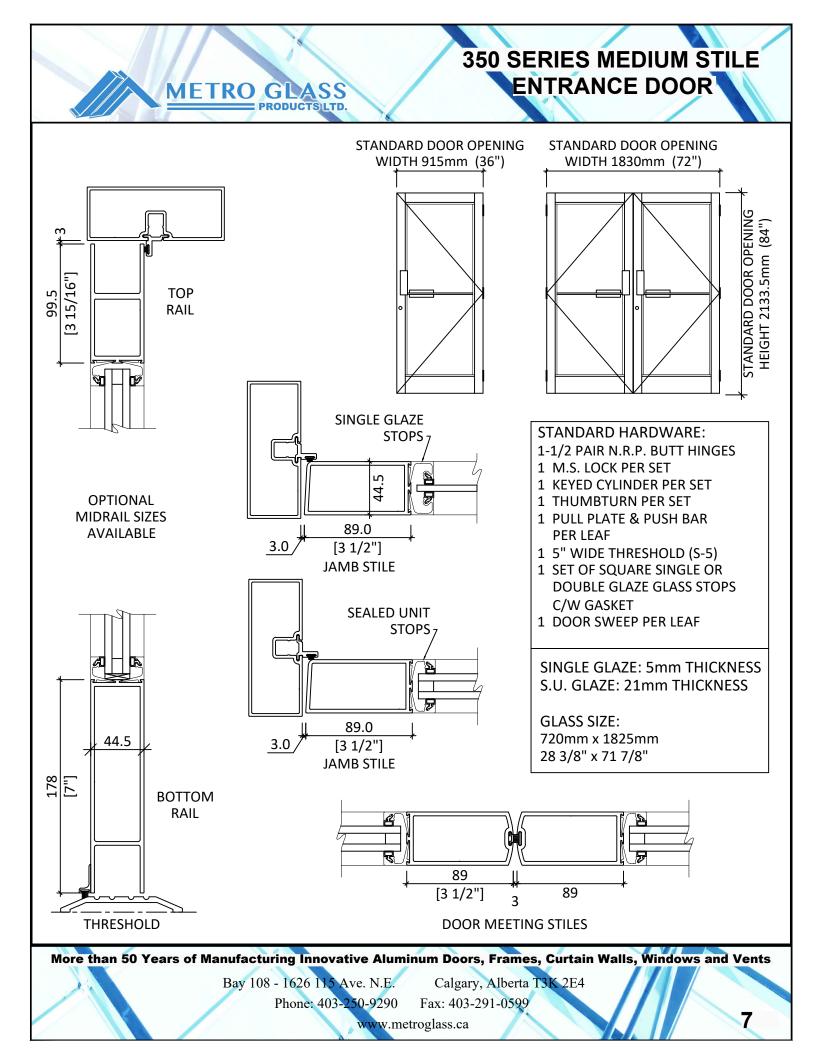


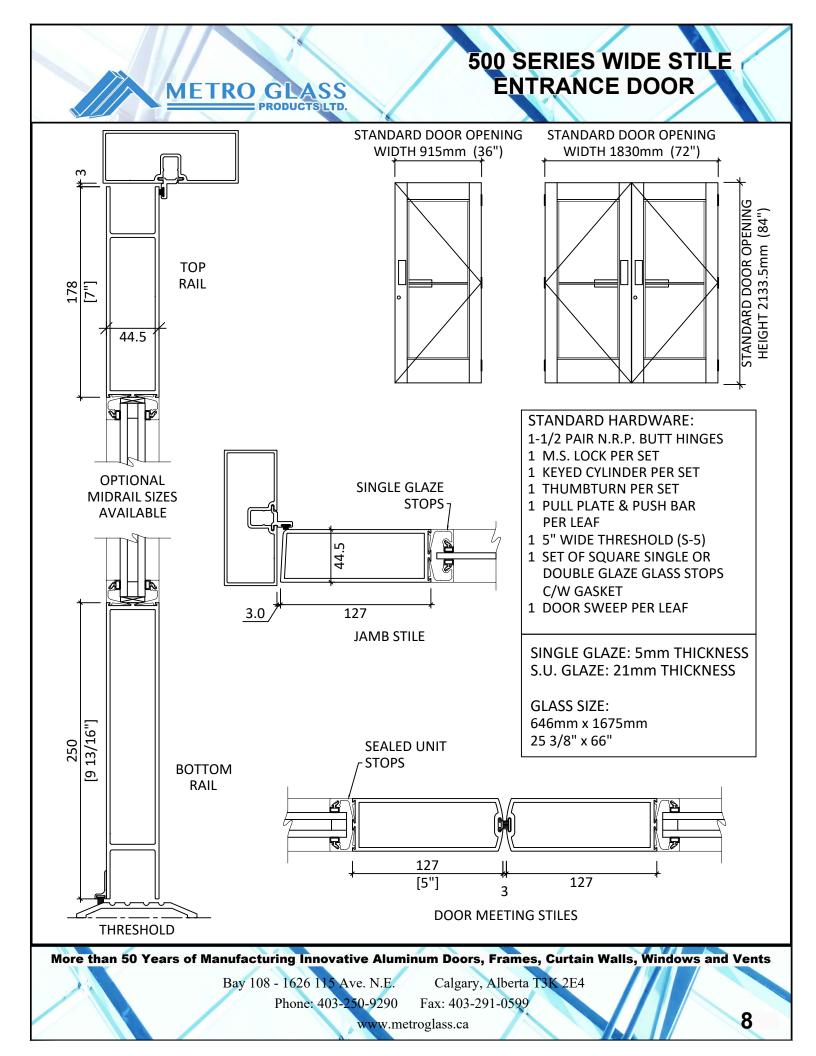
METRO GLASS

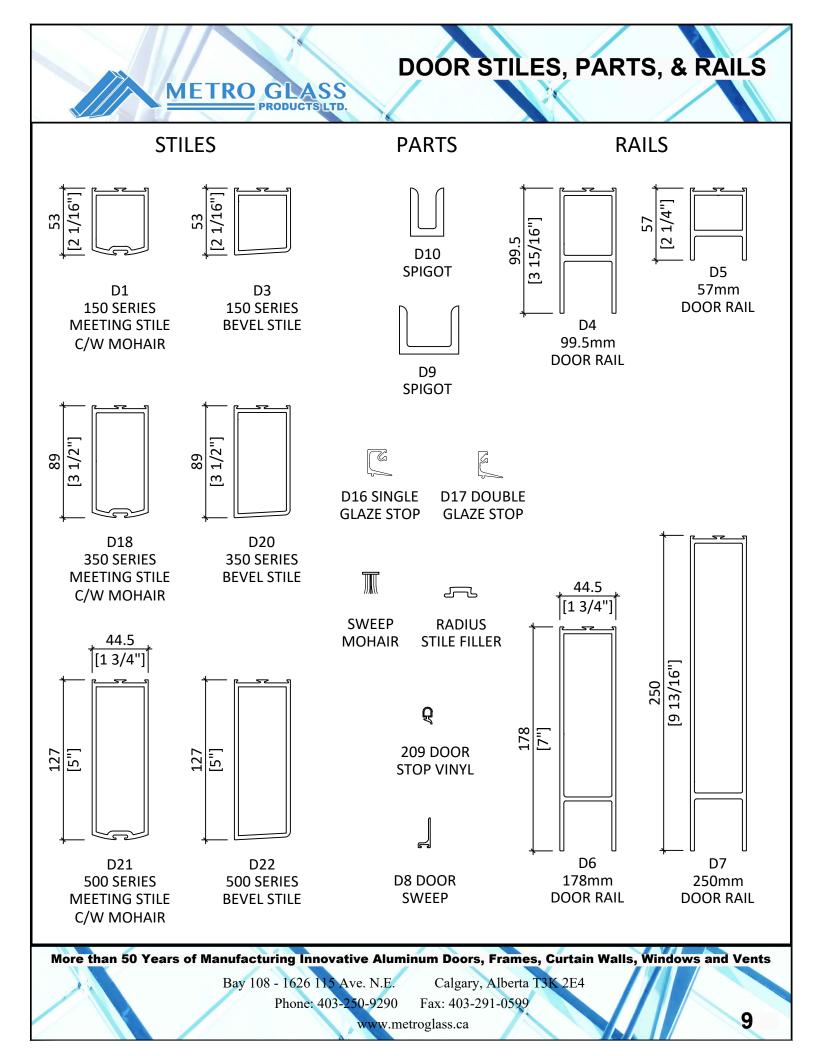
STANDARD BUTT HINGE CUTOUT

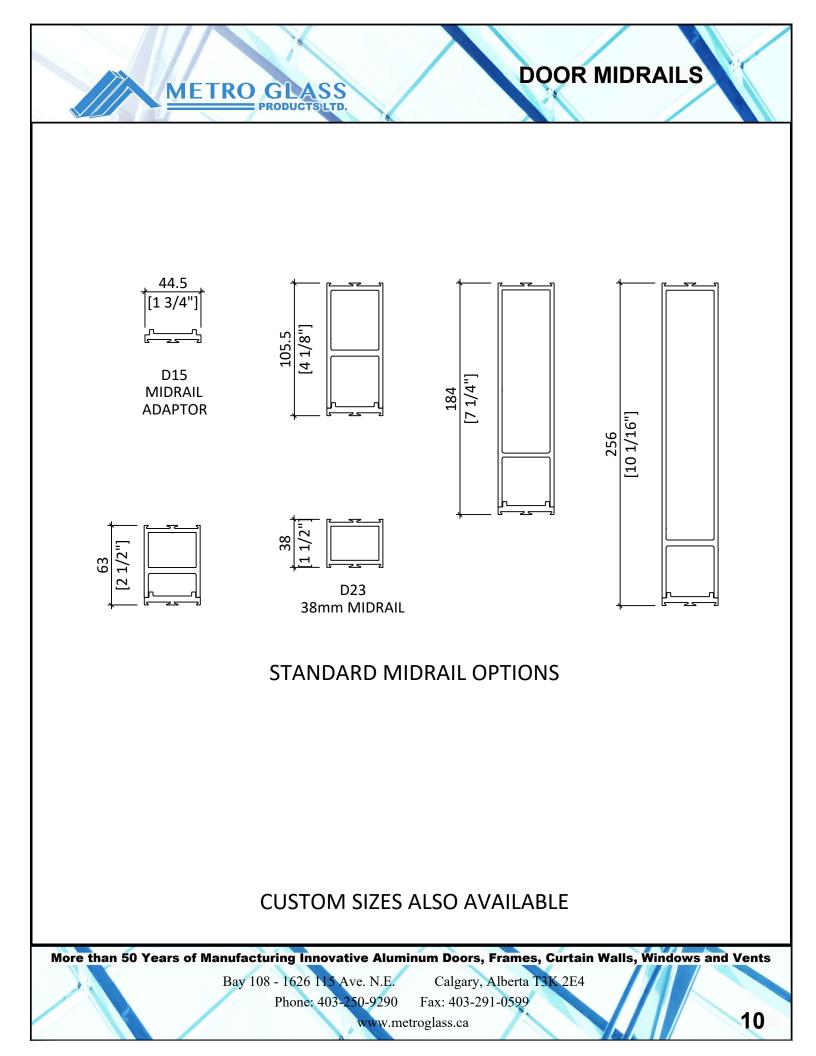






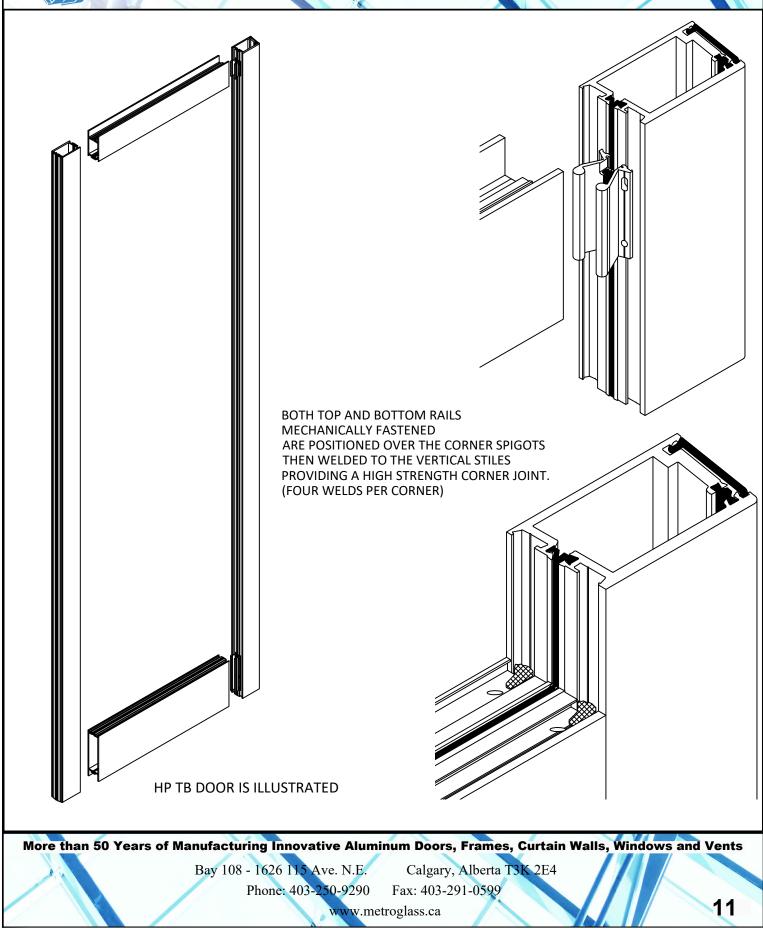


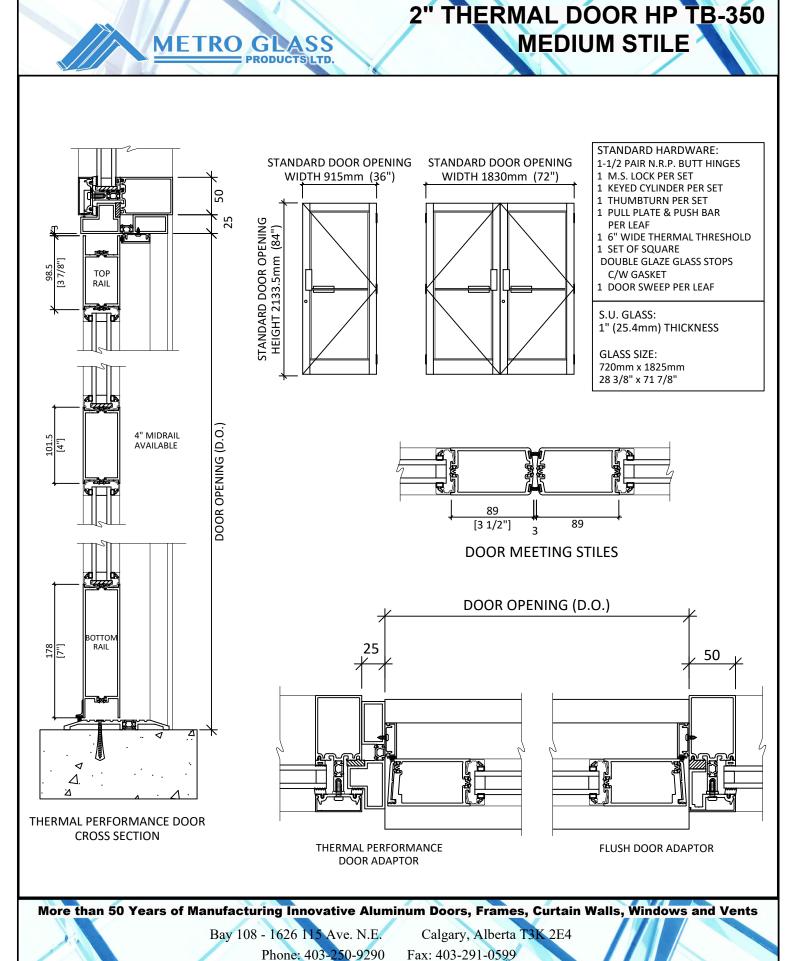






2" THERMAL DOOR CONSTRUCTION DETAILS



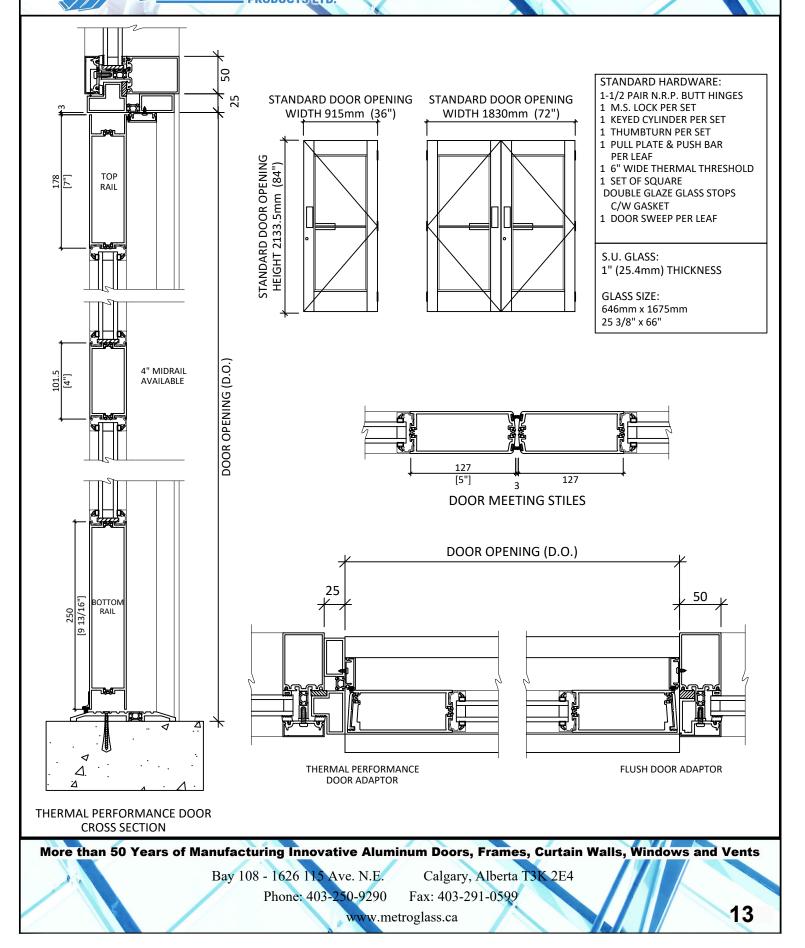


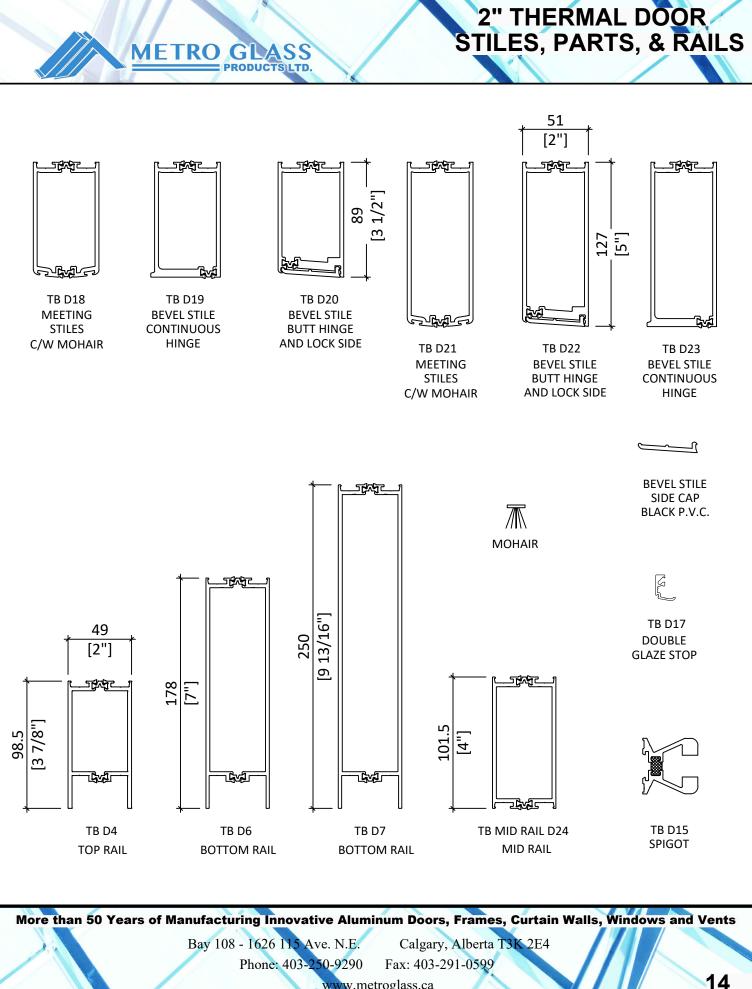
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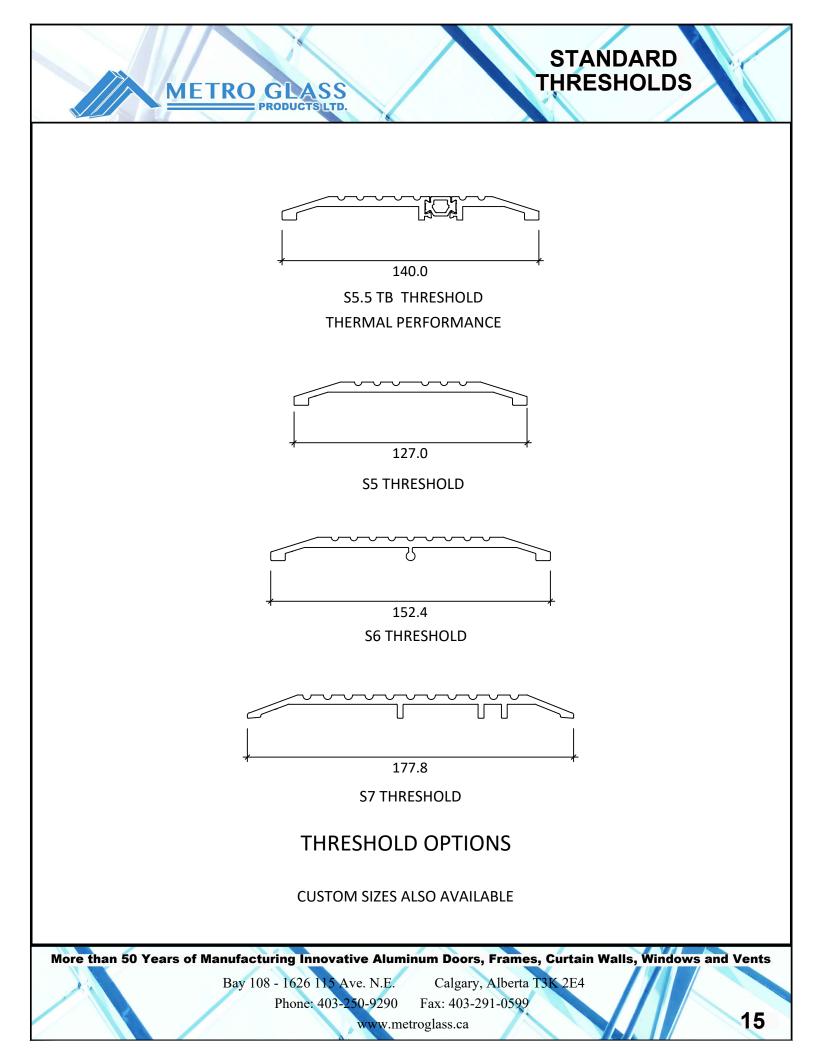
METRO GLASS

2" THERMAL DOOR HP TB-500 WIDE STILE





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DOOR HARDWARE

| | ETRO | GLASS PRODUCTSILTD. | DOOR H | ARDW | ARE | |
|----------------------|--------------------------------------|---|---|------------------------------------|--|-------------------|
| PART | NO. | DESCRIPT | ION | CLEAR ANODIZED | BRONZE ANODIZED | BLACK ANODIZED |
| | D-12 | 7/8" x 5/8" PUSH BA CUSTOM SIZES | | \checkmark | \checkmark | \checkmark |
| | D-13 | 10" STANDARD P | ULL HANDLE | \checkmark | ~ | \checkmark |
| | D-14 | STD. PUSH C/W DELUXE 10" F | \checkmark | \checkmark | \checkmark | |
| - | D-16 | 10" DELUXE PL FOR 7/8" x 5 | | \checkmark | \checkmark | \checkmark |
| | 6033 | 1"Ø SOLID TUBUL (STAINLESS STEEL SPEC | | \checkmark | \checkmark | \checkmark |
| 12" | 3009 A 3009 B 3012 A 3012 B | 1"Ø - SOLID TUBULAR PULL F (STAINLESS STEEL SPEC EXTERIOR MALE (D INTERIOR FEMALE (EXTERIOR MALE (D INTERIOR FEMALE (| ~ | ~ | ~ | |
| | | DOREX PIVC OPTIONAL OTH | _ | \checkmark | \checkmark | \checkmark |
| | | CONTINUOUS HING MORTISE & FUI | | \checkmark | | \checkmark |
| PART | D | ESCRIPTION | PART | DESCRIPTION | | |
| | | BUTT HINGE NDARD 4 1/2" x 4NRP BLE IN ZINC PLATED, S.S. | | REINFORCEMENT PLATES FOR HINGES | | |
| | | CONCEALED CLOSER c/w COVER PLATE | | | ARMS VARIOUS THICKNESSES | |
| · · · · · · | | CENTRE HINGE (WALKING BEAM) | | | LOWER PIVC FOR CENTR JNG APPLICA | E |
| More than 50 Years o | | turing Innovative Alumin 08 - 1626 115 Ave. N.E. Phone: 403-250-9290 www.metro | Calgary, Alberta T3K Fax: 403-291-0599 | | , Windows a | and Vents 16 |

| | ME | TRO GLASS PRODUCTSLTD. | DOOR HARDWARE | | | | |
|----------|----------------|---|---------------|-------------------------------|--|--|--|
| PART | NO. | DESCRIPTION | PART | NO. | DESCRIPTION | | |
| : | AR MS1853A | MAXIMUM SECURITY DEADLOCK 31/32",1-1/8", 1-1/2" BACKSET | | AR 4902 | SHORT TYPE BOX STRIKE | | |
| | AR | | | AR 4000 | TRIM STRIKE | | |
| | MS1853A-250 | 31/32",1-1/8", 1-1/2" BACKSET | | AR 4001 | TRIM AND BOX STRIKE | | |
| D | AR 4066 | THUMBTURN CYLINDER | | AR 4002 | ARMORED TRIM STRIKE | | |
| | AR 4036 | MORTISE CYLINDER | | | | | |
| | AR 1870 | LOCKING FLUSHBOLT | + AC - | AR 4603 | RECTIFIER | | |
| | | | The second | AR 4605 | TRANSFORMER 115 VAC to 12/24 VAC | | |
| | AR 4510 | STANDARD DUTY DEADLATCH 31/32", 1 1/8", 1 1/2" AVAILABLE BACKSET | | AR 7100 | ELECTRIC STRIKE (CUSTOMER SPECIFICATIONS REQUIRED) | | |
| | AR 4900 | HEAVY DUTY DEADLATCH | | DORMA KABA L65U X32D | LOW PROFILE ELECTRIC STRIKE | | |
| | AR 4901 | LONG TYPE BOX STRIKE | JO A | AR 8066 | ENTRY TRIM | | |
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| | MET | RO GLASS PRODUCTSILTD. | DQ | OR HAF | RDWARE |
|--------------|---------------|--|---|-----------------------|---|
| PART | NO. | DESCRIPTION | PART | NO. | DESCRIPTION |
| | AR 8400 | MORTISE EXIT DEVICE | | AR 4590 | PADDLE OPERATOR FOR 4900 & 4500 LATCHES |
| | AR 8600 | CONCEALED VERTICAL ROD EXIT DEVICE | | AR 4591 | PADDLE OPERATOR ERGONOMIC DESIGN FOR 4900 & 4500 LATCHES |
| | AR 8800 | SPROCKET LATCH | | AR 4593 | LATCH PULL |
| •s | AR P8800 | RIM PANIC STEEL LATCH | | | CHECK CHAIN |
| sb | AR 8099 | DUMMY PUSHBAR | | | |
| | AR 8650 | CYLINDER ESCUTCHEON KIT | | | |
| | AR MS4043 | CYLINDER GUARD | | RD CLOSER NCE 5016 | HEAVY DUTY CLOSER LAWRENCE 8016 |
| | AR 4560 | LEVER HANDLE | - | | • |
| | AR 4569 | EUROSTYLE LEVER HANDLE | EXTENDED | ROD 5016 | EXTENDED ROD 8016 |
| | AR 4565 | TURN LEVER SHORT | | | 10" METRO BLOCKER PLATE LATCH GUARD M.G. |
| | AR 4580 | CAM DISC | | HD 4-2P | NI.G. NEW METRO 1/8" THICK ALUMINUM 2 PART ASTRAGAL EASY TO CUSTOMIZE TO FIT ANY MEDIUM & WIDE STILE DOOR COMES IN ANY LENGTH UP TO 14' IN CLEAR, BRONZE, & BLACK FINISH |
| More than 50 |) Years of Ma | Bay 108 - 1626 115 Ave. N.E. Phone: 403-250-9290 www.met | num Doors, Fra Calgary, Albo Fax: 403-291-0: troglass.ca | erta T3K 2E4 | Walls, Windows and Vents |

