

## HP2020 SERIES SPECIFICATIONS

#### Part 1 - GENERAL

#### Scope

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:** Structural support of framing, interior building trims, and as specified by drawings and customer requirements per contract or purchase agreement.

#### **Quality Assurance**

Drawings and specification for work in this section are based upon Metro "HP2020" Series framing system.

#### **Design & Performance**

HP2020 Series Curtainwall framing system fully complies with AAMA/WDMA/CSA 101/I.S.2/A440-08 Standard/Specification for windows, doors, and unit skylights. See detail test report included in this section.

#### **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.

#### **Fabrication**

Frame assembly to provide accurately fit tight hairline joints only. Extruded profiles to be of sizes and profiles indicated in the contract or the purchase agreement. Corner joints shall be secured with concealed shear blocks with fastening by means of anticorrosive steel screws, and as specified by drawings and customer requirements per contract or purchase agreement.

#### 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.

#### Installation

Framing 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.

More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents



### HP2020 U- VALUE REPORT



Project:		Project No:				
ı	Metro HP2020 C	1256-	15758			
Sections	Sections Client:					
Metro	HP2020 Curtain	Metro	Glass			
Calc. by	Date	Chk'd by	Date	App'd by	Page:	
TW	July, 2020	IC	July, 2020		7	

#### **RESULTS**

The windows are modelled in accordance to NFRC and the results are summarized in Table 2:

**Table 2: Thermal Modelling Result** 

	U-Value	U-Value		
Frame Type	(W/m²-K)	(Btu/h-ft²-°F)	SHGC	VT
HP2020 2.75" PP	1.736	0.306	0.362	0.647
HP2020 4.00" PP	1.751	0.309	0.362	0.646
HP2020 5.25" PP	1.767	0.311	0.363	0.647

#### Insulated Glass Unit:

G1: SB60 Clear 6.VTA / 12.7mm 90% Ar / CLEAR 6.DAT

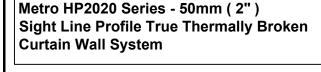
#### **CONCLUSION**

The results of the NFRC U-value calculation for the fenestration systems described above show that for the Standard NFRC sizes, the Metro 2020 Curtainwall with a pressure plate obtained a U-value of 1.736 to 1.767 W/m²-K depending on the depth of the back-section. The Solar Heat Gain Coefficient (SHGC) was calculated to be 0.36 and the Visible Transmittance was calculated to be 0.65.

www.metroglass.ca

### **HP2020 CURTAIN WALL**





#### FEATURES & BENEFITS

\*A tested curtain wall system designed to accommodate a variety of double glazed and triple glazed options along with SSG structural silicone systems.

\*Glazing weight is transfered to main frame on cantilevered chair supports.

\*Comes with a thermally bridged 25mm (1") door adaptor or Flush door adaptor.

\*Designed for use with all our door and vent systems.

\*Will meet or exceed current u-values needed in todays market place.

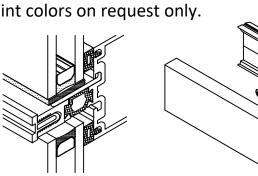
\*System can be Pre-fab for easier transporting and on site assembly.

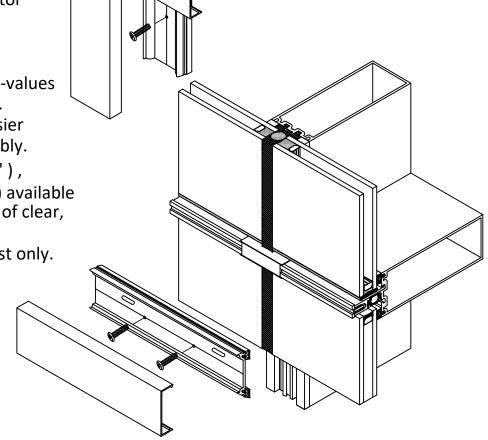
\*Mullion depths of 70mm ( $2\frac{3}{4}$ "),

102mm (4") & 133mm ( $5\frac{1}{4}$ ") available

\*Available in **CLASS 1** finishes of clear, bronze and black anodized.

\*Custom paint colors on request only.





More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

Bay 108 - 1626 115 Ave. N.E.

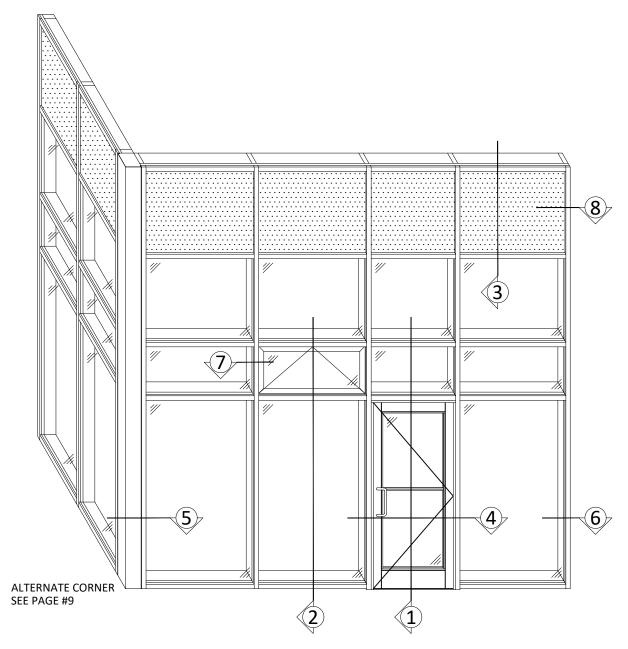
Calgary, Alberta T3K 2E4

Phone: 403-250-9290

Fax: 403-291-0599

### HP2020 CURTAIN WALL





HP2020 CURTAIN WALL SYSTEM

A HIGH PERFORMANCE DOUBLE OR TRIPLE GLAZED SYSTEM THAT BECOMES AN INTEGRAL PART OF THE BUILDING ENVELOPE. A NON STRUCTURAL, COST-EFFICIENT FRAMING SOLUTION INCORPORATING A 50mm (2") SIGHT LINE DESIGN FOR SINGLE OR MULTI STORY BUILDING APPLICATIONS. BACK SECTIONS ARE AVAILABLE IN VARIOUS DEPTHS TO MEET WINDLOADS REQUIREMENTS.

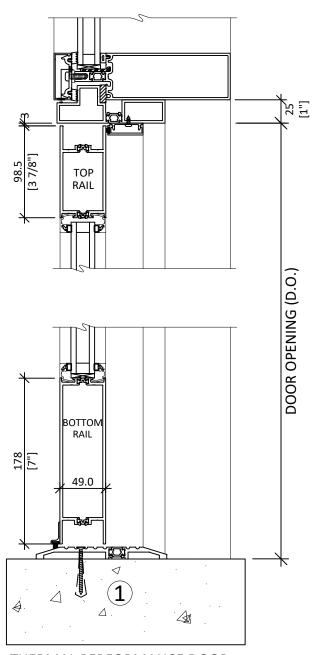
More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

Bay 108 - 1626 115 Ave. N.E.

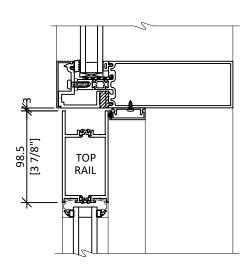
Calgary, Alberta T3K 2E4



# HP2020 CURTAIN WALL SECTION DETAILS



189 [7 1/2"] O.A. 133.5 [5 1/4"]



FLUSH DOOR ADAPTOR FOR DUAL GLAZE SYSTEM ONLY

THERMAL PERFORMANCE DOOR CROSS SECTION

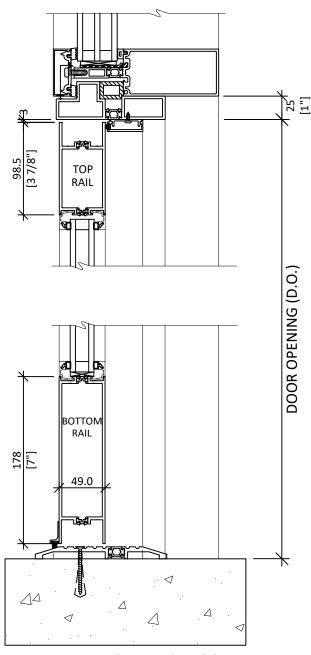
More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

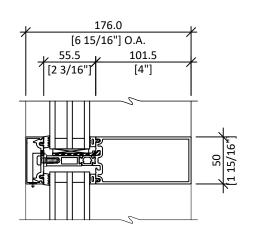
Bay 108 - 1626 115 Ave. N.E.

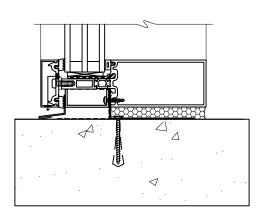
Calgary, Alberta T3K 2E4



# HP2020 TRG CURTAIN WALL SECTION DETAILS







THERMAL PERFORMANCE DOOR CROSS SECTION

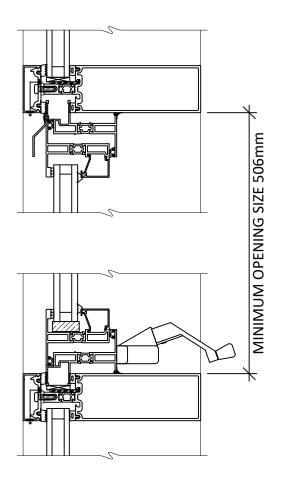
More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

Bay 108 - 1626 115 Ave. N.E.

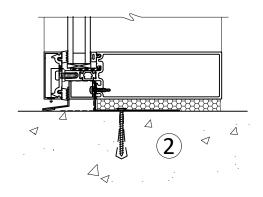
Calgary, Alberta T3K 2E4

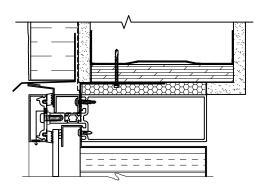


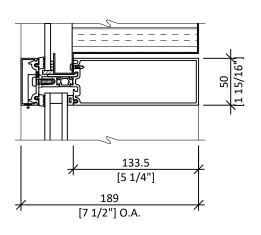
# HP2020 CURTAIN WALL SECTION DETAILS



HP2020 SERIES WITH HP GOLIATH SERIES VENT INSERT





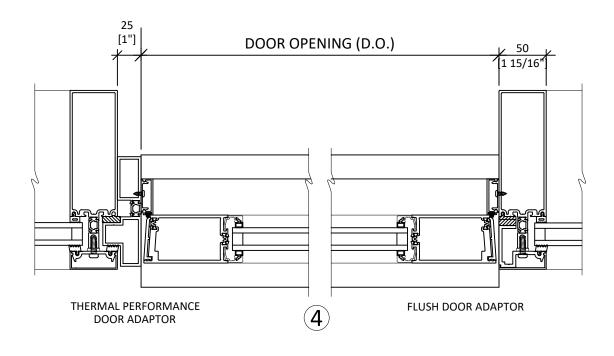


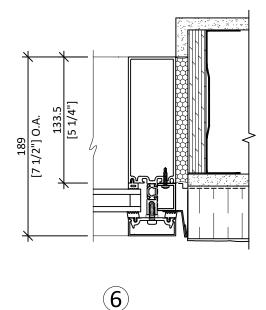
3

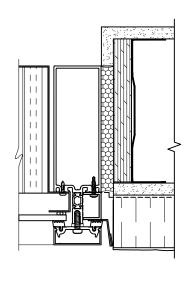
More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents



# HP2020 CURTAIN WALL PLAN DETAILS





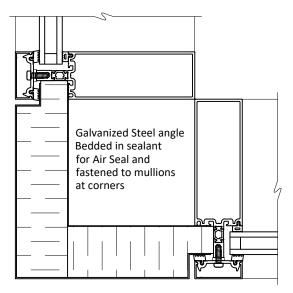


8

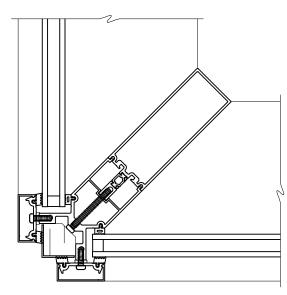
More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents



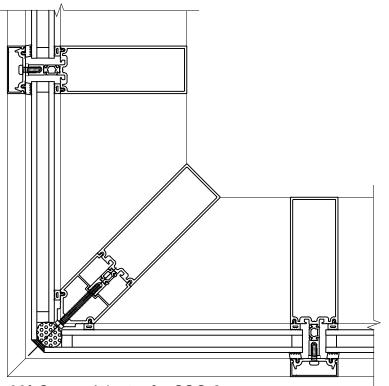
## HP2020 CURTAIN WALL PLAN DETAILS



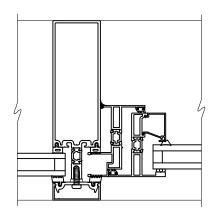
90° Corner Panel c/w Styrofoam Insulation and Flashing to match frame



90° Corner Adaptor c/w Styrofoam Insulation and Flashing to match frame



90° Corner Adaptor for SSG-2 w/ Silicone Sealant & Backer Rod



HP2020 SERIES WITH HP GOLIATH SERIES VENT INSERT



More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

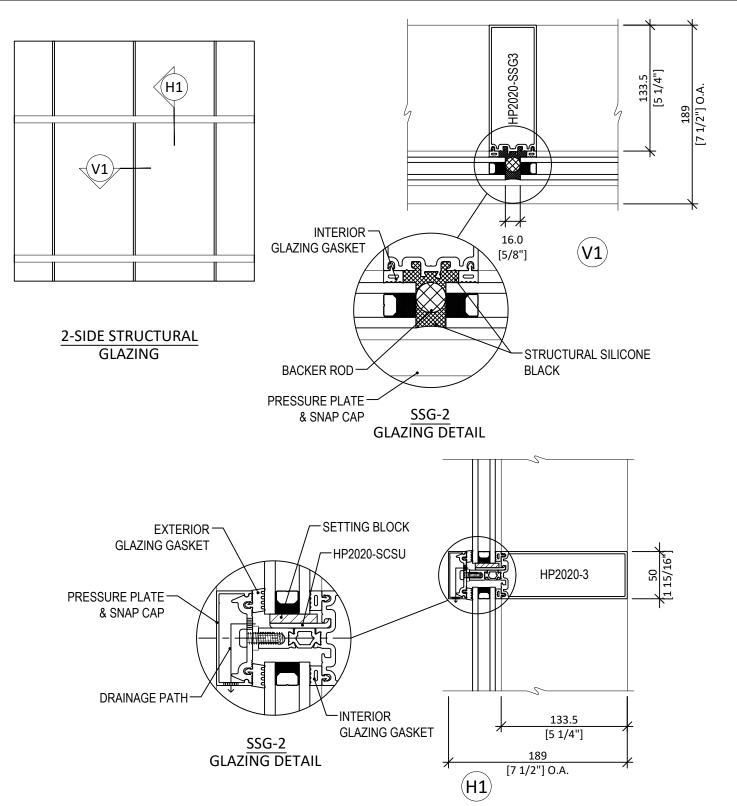
Bay 108 - 1626 115 Ave. N.E.

Calgary, Alberta T3K 2E4

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

### HP2020-SSG-2 CURTAIN WALL



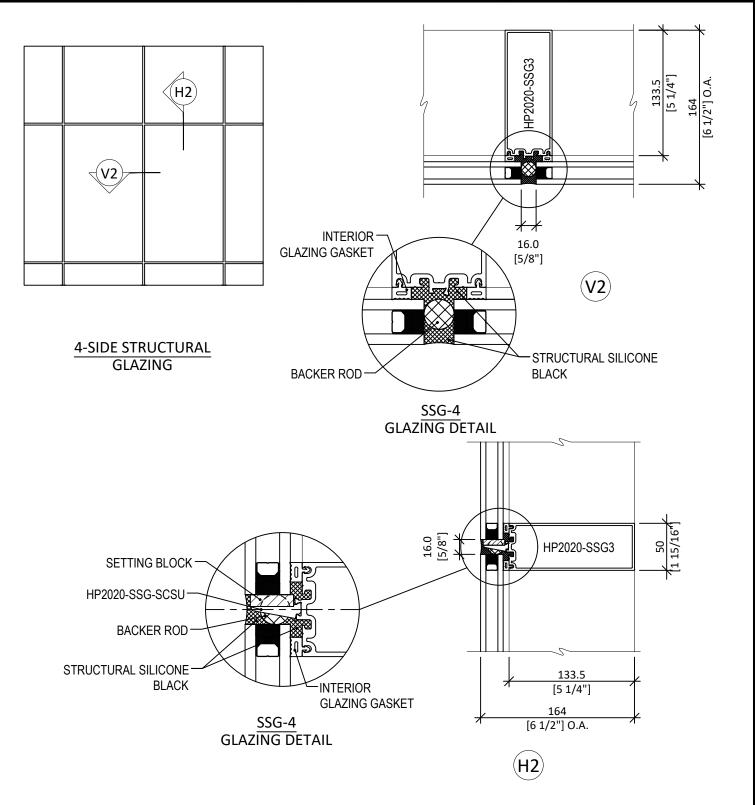


More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

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

### HP2020-SSG-4 CURTAIN WALL



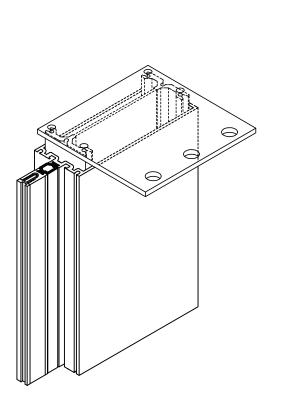


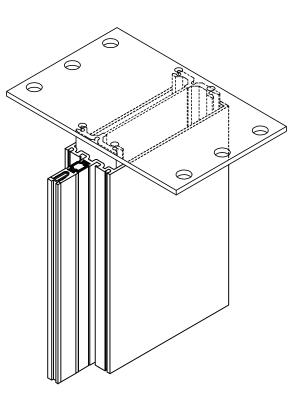
More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

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



# HP2020 CURTAIN WALL TOP AND BOTTOM SLIP ANCHORS





T ANCHOR

SIDE ANCHOR

More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

Bay 108 - 1626 115 Ave. N.E.

Calgary, Alberta T3K 2E4



PRODUCTS LTD.						
CROSS SECTION PART # DESCRIPTION		STOCK LENGTH	CLEAR ANODIZED	BRONZE ANODIZED	BLACK ANODIZED	
	HP2020-1	2" x 2 3/4" BACK SECTION (50mm x 70mm)	7.315 m	<b>✓</b>	>	<b>✓</b>
	HP2020-2	2" x 4" BACK SECTION (50mm x 102mm)	7.315 m	<b>~</b>	>	<b>✓</b>
HP2020-3		2" x 5 1/4" BACK SECTION (50mm x 133.35mm)	7.315 m	<b>✓</b>	>	<b>✓</b>
سمير	HP2020-SSG1	2" x 2 3/4" BACK SECTION (50mm x 70mm)	7.315 m	<b>✓</b>	>	<b>✓</b>
ምያ-ኒንጂ	HP2020-SSG2	2" x 4" BACK SECTION (50mm x 102mm)	7.315 m	<b>✓</b>	>	<b>✓</b>
प्रतिस्	HP2020-SSG3	2" x 5 1/4" BACK SECTION (50mm x 133.35mm)	7.315 m	<b>~</b>	<b>~</b>	<b>✓</b>
	HP2020-1TRG	2" x 2 3/4" BACK SECTION (50mm x 70mm)	7.315 m	<b>✓</b>	<b>~</b>	<b>✓</b>
	HP2020-2TRG	2" x 4" BACK SECTION (50mm x 102mm)	7.315 m	<b>~</b>	<b>~</b>	<b>✓</b>
	HP2020-3TRG	2" x 5 1/4" BACK SECTION (50mm x 133.35mm)	7.315 m	<b>~</b>	<b>~</b>	<b>✓</b>
	HP2020 -SCSU	CAPTURED SILL CHAIR ON SU	4.6 m			
~	HP2020 -SCTG	CAPTURED SILL CHAIR ON TG	4.6 m		MILL FINISH UMINUM ALI	_OY
	HP2020 SSG-SCSU	SEALED UNIT SILL CHAIR ON SSG	4.6 m	(001	TO 100mm P	IECES)
	HP2020 SSG-SCTG	TRIPLE GLAZED SILL CHAIR ON SSG	4.6 m			

More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

Bay 108 - 1626 115 Ave. N.E.

Calgary, Alberta T3K 2E4



PRODUCTSILTD.					
PART#	DESCRIPTION	STOCK LENGTH	CLEAR ANODIZED	BRONZE ANODIZED	BLACK ANODIZED
2.0-C	3/4" X 2" SNAP CAP (19mm X 50mm)	7.315 m	<b>✓</b>	<b>~</b>	<b>✓</b>
로 2.0-PP PRE PUNCHED PRESSURE PLATE		7.315 m	MILL FINISH		
D24 DOOR STOP BASE		4.6 m	<b>✓</b>		
D26 1/2" DOOR STOP COVER		4.6 m	<b>✓</b>	<b>✓</b>	<b>✓</b>
D27 5/8" DOOR STOP COVER		4.6 m	<b>✓</b>	<b>~</b>	<b>/</b>
27078	DOOR STOP COVER BULB SEAL	150 m ROLLS		SILICONE	
HP-DA	25mm SURFACE DOOR ADAPTOR	4.6 m	<b>✓</b>	<b>~</b>	<b>/</b>
TR 2543E	1/4" ROLL-IN GLAZING GASKET	150 m ROLLS		SILICONE	
CAP FOR C24 FLUSH DOOR ADAPTOR		4.6 m	<b>~</b>	<b>~</b>	<b>&gt;</b>
C23 FLUSH DOOR ADAPTOR BASE		4.6 m	<b>✓</b>	<b>✓</b>	<b>\</b>
C28	3.32 mm ALUMINUM INSTALLATION ANGLE	7.315 m		MILL FINISH	
MG1	PRE PUNCHED 25mm x 65mm INSTALLATION ANGLE	3.05 m	14	ga GALVANIZ	ED
PRE PUNCHED  3.05 m 14ga GALVANIZED  INSTALLATION ANGLE		ED			
明P2020-SB1 PREP SHEAR BLOCK 4.6 m MILL FINISH			NGTHS)		
	PART #  2.0-C  2.0-PP  D24  D26  D27  27078  HP-DA  TR 2543E  C24  C23  C28  MG1  MG2  HP2020-SB1 HP2020-SB1 HP2020-SB2	PART # DESCRIPTION  2.0-C 3/4" X 2" SNAP CAP (19mm X 50mm)  2.0-PP PRE PUNCHED PRESSURE PLATE  D24 DOOR STOP BASE  D26 1/2" DOOR STOP COVER  D27 5/8" DOOR STOP COVER  27078 DOOR STOP COVER BULB SEAL  HP-DA 25mm SURFACE DOOR ADAPTOR  TR 2543E 1/4" ROLL-IN GLAZING GASKET  C24 FLUSH DOOR ADAPTOR  C23 FLUSH DOOR ADAPTOR BASE  C28 3.32 mm ALUMINUM INSTALLATION ANGLE  MG1 PRE PUNCHED 25mm x 65mm INSTALLATION ANGLE  PRE PUNCHED 31mm x 90mm INSTALLATION ANGLE  HP2020-SB1 HP2020-SB2 PREP SHEAR BLOCK	PART #         DESCRIPTION         STOCK LENGTH           2.0-C         3/4" X 2" SNAP CAP (19mm X 50mm)         7.315 m           2.0-PP         PRE PUNCHED PRESSURE PLATE         7.315 m           D24         DOOR STOP BASE         4.6 m           D26         1/2" DOOR STOP COVER         4.6 m           D27         5/8" DOOR STOP COVER         4.6 m           27078         DOOR STOP COVER BULB SEAL ROLLS         150 m ROLLS           HP-DA         25mm SURFACE DOOR ADAPTOR         4.6 m           TR 2543E         1/4" ROLL-IN GLAZING GASKET ROLLS         150 m ROLLS           C24         FLUSH DOOR ADAPTOR         4.6 m           C23         FLUSH DOOR ADAPTOR BASE         4.6 m           C28         3.32 mm ALUMINUM INSTALLATION ANGLE         7.315 m           MG1         25mm x 65mm S0mm S0mm INSTALLATION ANGLE         3.05 m           MG2         31mm x 90mm INSTALLATION ANGLE         3.05 m           HP2020-SB1 HP2020-SB2         PREP SHEAR BLOCK         4.6 m	PART #         DESCRIPTION         STOCK LENGTH ANODIZED         CLEAR ANODIZED           2.0-C         3/4" X 2" SNAP CAP (19mm X 50mm)         7.315 m         ✓           2.0-PP         PRE PUNCHED PRESSURE PLATE         7.315 m         ✓           D24         DOOR STOP BASE         4.6 m         ✓           D26         1/2" DOOR STOP COVER         4.6 m         ✓           D27         5/8" DOOR STOP COVER         4.6 m         ✓           27078         DOOR STOP COVER BULB SEAL         150 m ROLLS           HP-DA         25mm SURFACE DOOR ADAPTOR         4.6 m         ✓           TR 2543E         1/4" ROLL-IN GLAZING GASKET         150 m ROLLS           C24         FLUSH DOOR ADAPTOR         4.6 m         ✓           C23         FLUSH DOOR ADAPTOR BASE         4.6 m         ✓           C28         3.32 mm ALUMINUM INSTALLATION ANGLE         7.315 m         7.315 m           MG1         25mm x 65mm INSTALLATION ANGLE         3.05 m         14           MG2         31mm x 90mm INSTALLATION ANGLE         3.05 m         14           HP2020-SB1         PREP SHEAR BLOCK         4.6 m         (CUT TO	PART #         DESCRIPTION         STOCK LENGTH         CLEAR ANODIZED         BRONZE ANODIZED           2.0-C         3/4" X 2" SNAP CAP (19mm x 50mm)         7.315 m         ✓         ✓           2.0-PP         PRE PUNCHED PRESSURE PLATE         7.315 m         MILL FINISH           D24         DOOR STOP BASE         4.6 m         ✓           D26         1/2" DOOR STOP COVER         4.6 m         ✓           D27         5/8" DOOR STOP COVER         4.6 m         ✓           27078         DOOR STOP COVER BULB SEAL         150 m ROLLS         SILICONE           HP-DA         25mm SURFACE DOOR ADAPTOR         4.6 m         ✓         ✓           TR 2543E         1/4" ROLL-IN GLAZING GASKET         150 m ROLLS         SILICONE           C24         FLUSH DOOR ADAPTOR         4.6 m         ✓         ✓           C23         FLUSH DOOR ADAPTOR BASE         4.6 m         ✓         ✓           C28         3.32 mm ALUMINUM INSTALLATION ANGLE         7.315 m         MILL FINISH           MG1         25mm x 65mm INSTALLATION ANGLE         3.05 m         14ga GALVANIZ INSTALLATION ANGLE           MG2         31mm x 90mm INSTALLATION ANGLE         3.05 m         14ga GALVANIZ INSTALLATION ANGLE           HP2020-582

More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

Bay 108 - 1626 115 Ave. N.E.

Calgary, Alberta T3K 2E4

Phone: 403-250-9290 Fa

Fax: 403-291-0599



PRODUCTS LTD.						
CROSS SECTION	PART#	DESCRIPTION	STOCK LENGTH	CLEAR ANODIZED	BRONZE ANODIZED	BLACK ANODIZED
	2.0-CCA	90° CAPTURED CORNER ADAPTOR	7.315 m	<b>✓</b>	<b>✓</b>	<b>✓</b>
2.0-SSGCA 90° SSG CORNER ADAPTOR		7.315 m	<b>~</b>	<b>✓</b>	<b>~</b>	
1/4" - 20 x 11/16"		MACHINE SCREWS	100 pcs		PLATED	
	3/16" x 1 1/8"	4" SETTING BLOCK	EACH		EPDM	
N3015	3M	4" 6" VAPOR BARRIER	22.8 m ROLLS		POLY	
	TREMCO	1/8" POLY SHIM GLAZING TAPE	12.1 m ROLLS		POLY	
						_

More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

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



OSS SECTION PART # DESCRIPTION		STOCK LENGTH	FINISH
DAS #1 1/8" DOOR ADA		2.2 m	RIDGID BLACK PVC
DAS #2 1/4" DOOR ADAPTOR SPACER 3.2 m RIDGID E		RIDGID BLACK PVC	
DAS #3  1" DOOR ADAPTOR SPACER FOR TRIPLE GLAZED SYSTEM  2.2 m  RIDGID BLACK PVC		RIDGID BLACK PVC	
Q183H INTERIOR GLAZING GASKET 125 m ROLLS SILICONE BLACK - 60 DUROMETE		SILICONE BLACK - 60 DUROMETER	
EP1752H EXTERIOR GLAZING GASKET 100 m ROLLS EPDM BLACK		EPDM BLACK - 70 DUROMETER	
EP1846H THERMAL BREAK 3.65 m		EPDM BLACK - 70 DUROMETER	
EP2103H CORNER BLOCK 36.5 mm EPDM BLACK - 70 DURON		EPDM BLACK - 70 DUROMETER	
EP717N	SSG CORNER BLOCK	36.5 mm HEIGHT	EPDM BLACK - 70 DUROMETER
EP717N-TG	SSG TG CORNER BLOCK	55.2 mm HEIGHT	EPDM BLACK - 70 DUROMETER
AR 22 7/8" PVC ANTI-ROTATION 3.65 m		COLOR CODE BLUE	
AR 27	1 1/16" PVC ANTI-ROTATION	3.65 m	COLOR CODE WHITE
AR 29 1 1/8" PVC ANTI-ROTATION		3.65 m	COLOR CODE BLACK
AR 30 1 3/16" PVC ANTI-ROTATION		3.65 m	COLOR CODE BROWN
AR 32 1 1/4" PVC ANTI-ROTATION 3.65 m		COLOR CODE GREY	
AR 46 1 13/16" PVC ANTI-ROTATION 3.65 m COLOR CODE GREEN		COLOR CODE GREEN	
AR 49 1 15/16" PVC ANTI-ROTATION 3.65 m COLOR CODE P		COLOR CODE PINK	
	DAS #1  DAS #2  DAS #3  Q183H  EP1752H  EP1846H  EP2103H  EP717N  EP717N-TG  AR 22  AR 27  AR 29  AR 30  AR 32  AR 46	DAS #1 1/8" DOOR ADAPTOR SPACER  DAS #2 1/4" DOOR ADAPTOR SPACER  DAS #3 1" DOOR ADAPTOR SPACER FOR TRIPLE GLAZED SYSTEM  Q183H INTERIOR GLAZING GASKET  EP1752H EXTERIOR GLAZING GASKET  EP1846H THERMAL BREAK  EP2103H CORNER BLOCK  EP717N SSG CORNER BLOCK  EP717N-TG SSG TG CORNER BLOCK  AR 22 7/8" PVC ANTI-ROTATION  AR 27 1 1/16" PVC ANTI-ROTATION  AR 29 1 1/8" PVC ANTI-ROTATION  AR 30 1 3/16" PVC ANTI-ROTATION  AR 32 1 1/4" PVC ANTI-ROTATION  AR 46 1 13/16" PVC ANTI-ROTATION	PART #         DESCRIPTION         LENGTH           DAS #1         1/8" DOOR ADAPTOR SPACER         2.2 m           DAS #2         1/4" DOOR ADAPTOR SPACER         3.2 m           DAS #3         1" DOOR ADAPTOR SPACER FOR TRIPLE GLAZED SYSTEM         2.2 m           Q183H         INTERIOR GLAZING GASKET         125 m ROLLS           EP1752H         EXTERIOR GLAZING GASKET         100 m ROLLS           EP1846H         THERMAL BREAK         3.65 m           EP2103H         CORNER BLOCK         36.5 mm           EP717N         SSG CORNER BLOCK         36.5 mm HEIGHT           EP717N-TG         SSG TG CORNER BLOCK         55.2 mm HEIGHT           AR 22         7/8" PVC ANTI-ROTATION         3.65 m           AR 27         1 1/16" PVC ANTI-ROTATION         3.65 m           AR 30         1 3/16" PVC ANTI-ROTATION         3.65 m           AR 32         1 1/4" PVC ANTI-ROTATION         3.65 m           AR 46         1 13/16" PVC ANTI-ROTATION         3.65 m

More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

Bay 108 - 1626 115 Ave. N.E.

Calgary, Alberta T3K 2E4



PRODUCTSLTD.				
CROSS SECTION	PART#	DESCRIPTION	STOCK LENGTH	FINISH
2	HP2020-1-S	SLIP/REINFORCEMENT ANCHOR (FOR 2 3/4" B.S.)	7.315 m	MILL FINISH ALUMINUM ALLOY
2	HP2020-2-S	SLIP/REINFORCEMENT ANCHOR (FOR 4" B.S.)	7.315 m	MILL FINISH ALUMINUM ALLOY
	HP2020-2-S1	SLIP/REINFORCEMENT ANCHOR ILLUSTRATES 3/8" x 2 1/2" STEEL FLAT BAR 1 SIDE		
	HP2020-2-S2	SLIP/REINFORCEMENT ANCHOR ILLUSTRATES 3/8" x 2 1/2" STEEL FLAT BAR BOTH SIDES		
	HP2020-3-S	SLIP/REINFORCEMENT ANCHOR (FOR 5 1/4" B.S.)	7.315 m	MILL FINISH ALUMINUM ALLOY
	HP2020-3-S1	SLIP/REINFORCEMENT ANCHOR ILLUSTRATES 3/8" x 3 3/4" STEEL FLAT BAR 1 SIDE		
	HP2020-3-S2	SLIP/REINFORCEMENT ANCHOR ILLUSTRATES 3/8" x 3 3/4" STEEL FLAT BAR BOTH SIDES		

More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

Bay 108 - 1626 115 Ave. N.E.

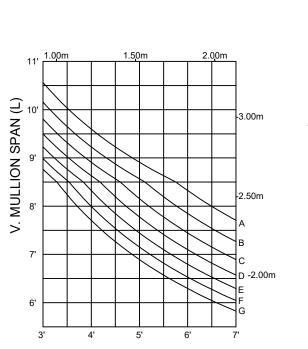
Calgary, Alberta T3K 2E4



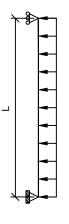
### HP2020 WIND LOAD CHARTS

#### **GENERAL NOTES:**

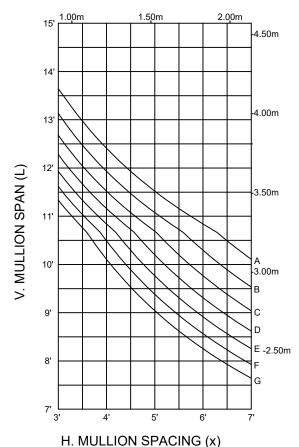
- REFERENCES IN CALCULATING THE WIND LOAD CHART ARE BASED ON THE NATIONAL BUILDING CODE OF CANADA, AAMA TIR-A11 AND CAN/CSA S157.
- 2. IT IS ALSO ASSUMED THAT LATERAL BRACING IS PROVIDED IN THE CALCULATION.
- A 95% CAPACITY WAS APPLIED TO COVER UNCERTAINTIES DUE TO CRIMPING OF POLYAMIDE AND ALUMINUM REGLET.

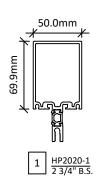


H. MULLION SPACING (x)



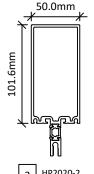
A = 20 psf B = 22.5 psf C = 25 psf D = 27.5 psf E = 30 psf F = 32.5 psf G = 35 psf





ix = 1.805 in^4 5x = 0.828 in^3

MATERIAL	ALUMINUM ALLOY 6063-T6		
DEFLECTION LIMIT	L/175 & L/240+1/4"		



tx = 3.900 in^4 5x = 1.425 in^3

2 <u>HP2020-2</u> 4" B.S.

More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

Bay 108 - 1626 115 Ave. N.E.

Calgary, Alberta T3K 2E4

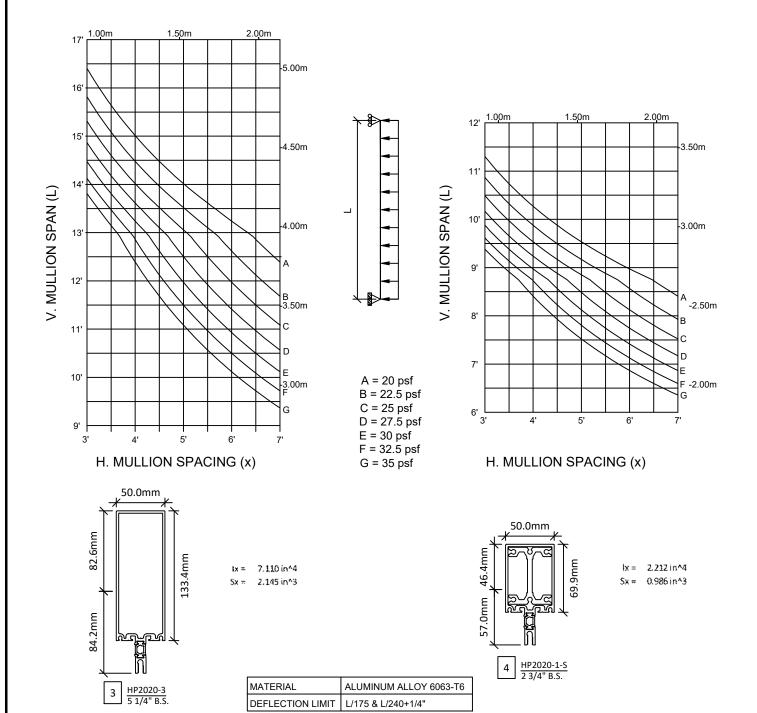
Phone: 403-250-9290 Fax: 403-291-0599



## HP2020 WIND LOAD CHARTS

#### **GENERAL NOTES:**

- REFERENCES IN CALCULATING THE WIND LOAD CHART ARE BASED ON THE NATIONAL BUILDING CODE OF CANADA, AAMA TIR-A11 AND CAN/CSA S157.
- 2. IT IS ALSO ASSUMED THAT LATERAL BRACING IS PROVIDED IN THE CALCULATION.
- A 95% CAPACITY WAS APPLIED TO COVER UNCERTAINTIES DUE TO CRIMPING OF POLYAMIDE AND ALUMINUM REGLET.



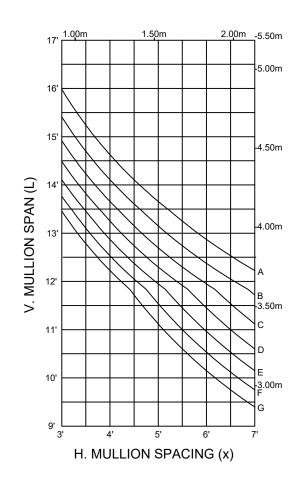
More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

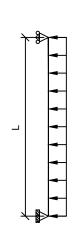
Bay 108 - 1626 115 Ave. N.E. Calgary, Alberta T3K 2E4

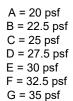
### HP2020 WIND LOAD CHARTS

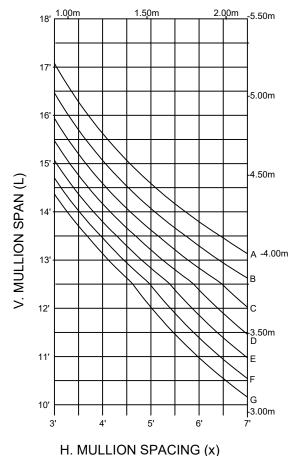
#### **GENERAL NOTES:**

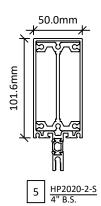
- REFERENCES IN CALCULATING THE WIND LOAD CHART ARE BASED ON THE NATIONAL BUILDING CODE OF CANADA, AAMA TIR-A11 AND CAN/CSA S157.
- 2. IT IS ALSO ASSUMED THAT LATERAL BRACING IS PROVIDED IN THE CALCULATION.
- A 95% CAPACITY WAS APPLIED TO COVER UNCERTAINTIES DUE TO CRIMPING OF POLYAMIDE AND ALUMINUM REGLET.







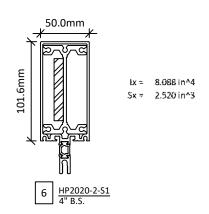




Sx = 2.155 in^3

tx = 6.528 in^4

MATERIAL	ALUMINUM ALLOY 6063-T6
DEFLECTION LIMIT	L/175 & L/240+1/4"



More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

Bay 108 - 1626 115 Ave. N.E.

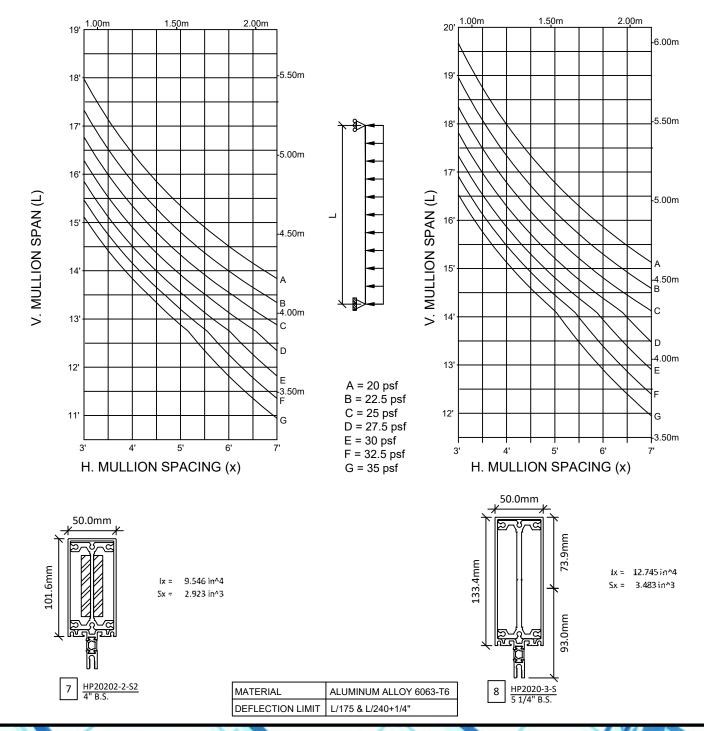
Calgary, Alberta T3K 2E4

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

### HP2020 WIND LOAD CHARTS

#### **GENERAL NOTES:**

- REFERENCES IN CALCULATING THE WIND LOAD CHART ARE BASED ON THE NATIONAL BUILDING CODE OF CANADA, AAMA TIR-A11 AND CAN/CSA S157.
- 2. IT IS ALSO ASSUMED THAT LATERAL BRACING IS PROVIDED IN THE CALCULATION.
- 3. A 95% CAPACITY WAS APPLIED TO COVER UNCERTAINTIES DUE TO CRIMPING OF POLYAMIDE AND ALUMINUM REGLET.



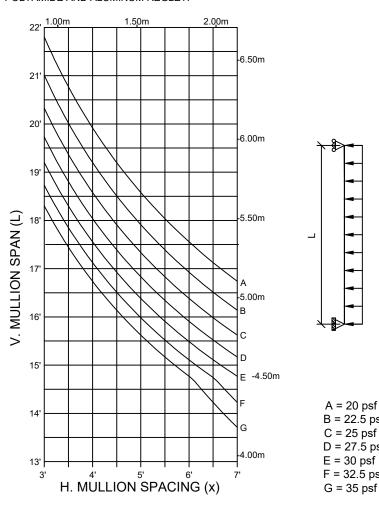
More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

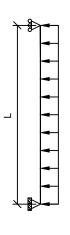
Bay 108 - 1626 115 Ave. N.E. Calgary, Alberta T3K 2E4

### **HP2020** WIND LOAD CHARTS

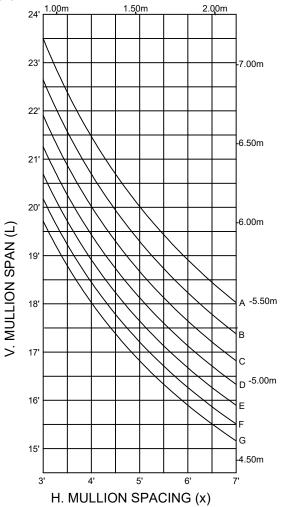
#### **GENERAL NOTES:**

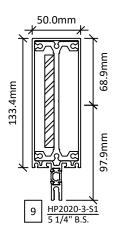
- REFERENCES IN CALCULATING THE WIND LOAD CHART ARE BASED ON THE NATIONAL BUILDING CODE OF CANADA, AAMA TIR-A11 AND CAN/CSA S157.
- IT IS ALSO ASSUMED THAT LATERAL BRACING IS PROVIDED IN THE CALCULATION.
- A 95% CAPACITY WAS APPLIED TO COVER UNCERTAINTIES DUE TO CRIMPING OF POLYAMIDE AND ALUMINUM REGLET.





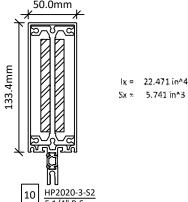
A = 20 psfB = 22.5 psfC = 25 psfD = 27.5 psfE = 30 psf F = 32.5 psf





1x = 17.685 in 4 Sx # 4.586 in^3

MATERIAL **ALUMINUM ALLOY 6063-T6** DEFLECTION LIMIT | L/175 & L/240+1/4"



5.741 in^3

More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

Bay 108 - 1626 115 Ave. N.E.

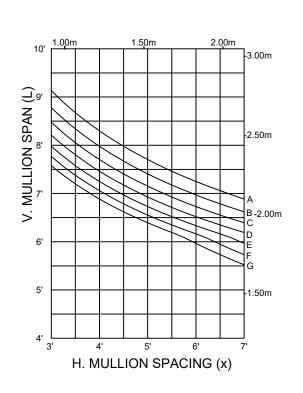
Calgary, Alberta T3K 2E4

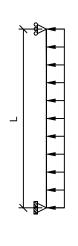
Phone: 403-250-9290 Fax: 403-291-0599

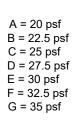
### HP2020 WIND LOAD CHARTS

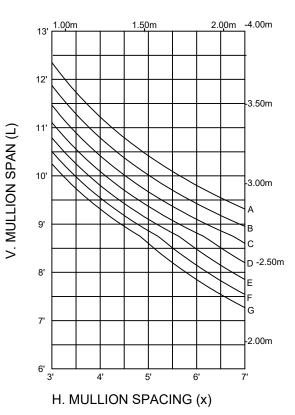
#### **GENERAL NOTES:**

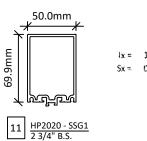
- REFERENCES IN CALCULATING THE WIND LOAD CHART ARE BASED ON THE NATIONAL BUILDING CODE OF CANADA, AAMA TIR-A11 AND CAN/CSA S157.
- 2. IT IS ALSO ASSUMED THAT LATERAL BRACING IS PROVIDED IN THE CALCULATION.





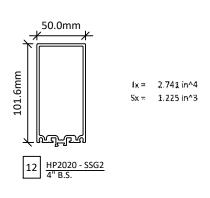






1x = 1,108 in^4 Sx = 0.707 in^3

MATERIAL	ALUMINUM ALLOY 6063-T6
DEFLECTION LIMIT	L/175 & L/240+1/4"



More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

Bay 108 - 1626 115 Ave. N.E.

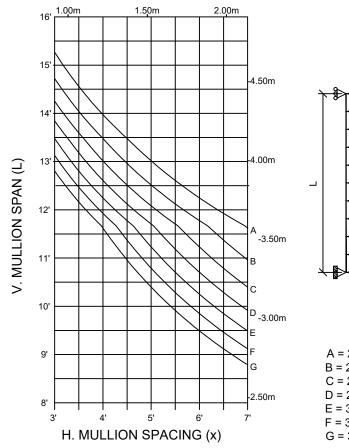
Calgary, Alberta T3K 2E4

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

### **HP2020** WIND LOAD CHARTS

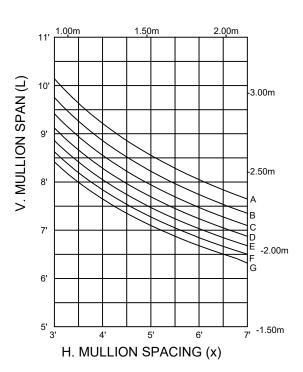
#### **GENERAL NOTES:**

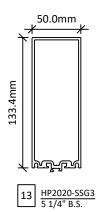
- REFERENCES IN CALCULATING THE WIND LOAD CHART ARE BASED ON THE NATIONAL BUILDING CODE OF CANADA, AAMA TIR-A11 AND CAN/CSA S157.
- IT IS ALSO ASSUMED THAT LATERAL BRACING IS PROVIDED IN THE CALCULATION.





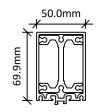
A = 20 psfB = 22.5 psfC = 25 psfD = 27.5 psfE = 30 psfF = 32.5 psfG = 35 psf





Ix = 5.344 in^4 1.846 ln\*3

> MATERIAL **ALUMINUM ALLOY 6063-T6** DEFLECTION LIMIT | L/175 & L/240+1/4"



1.517 in^4 0.925 in^3

HP2020 - SSG1-S 2 3/4" B.S.

More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

Bay 108 - 1626 115 Ave. N.E.

Calgary, Alberta T3K 2E4

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

## HP2020 WIND LOAD CHARTS

2.00m

-5.00m

4.50m

4.00m

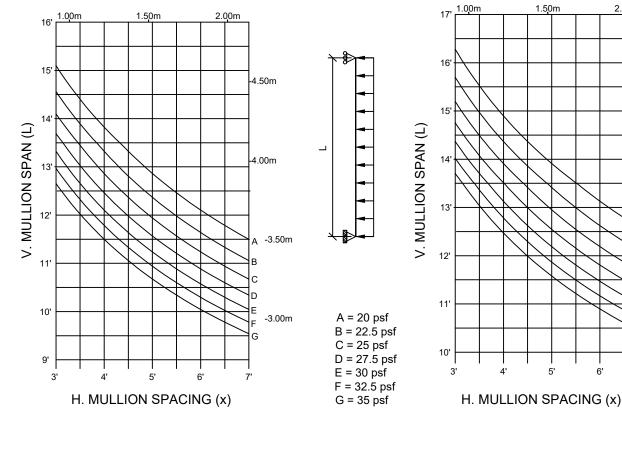
C <sub>-3.50m</sub> D

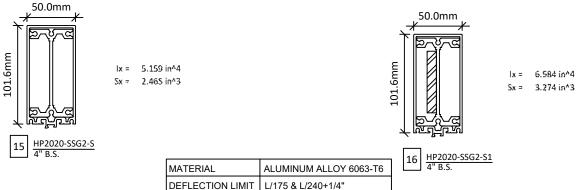
G

-3.00m

#### **GENERAL NOTES:**

- REFERENCES IN CALCULATING THE WIND LOAD CHART ARE BASED ON THE NATIONAL BUILDING CODE OF CANADA, AAMA TIR-A11 AND CAN/CSA S157.
- 2. IT IS ALSO ASSUMED THAT LATERAL BRACING IS PROVIDED IN THE CALCULATION.





More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

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

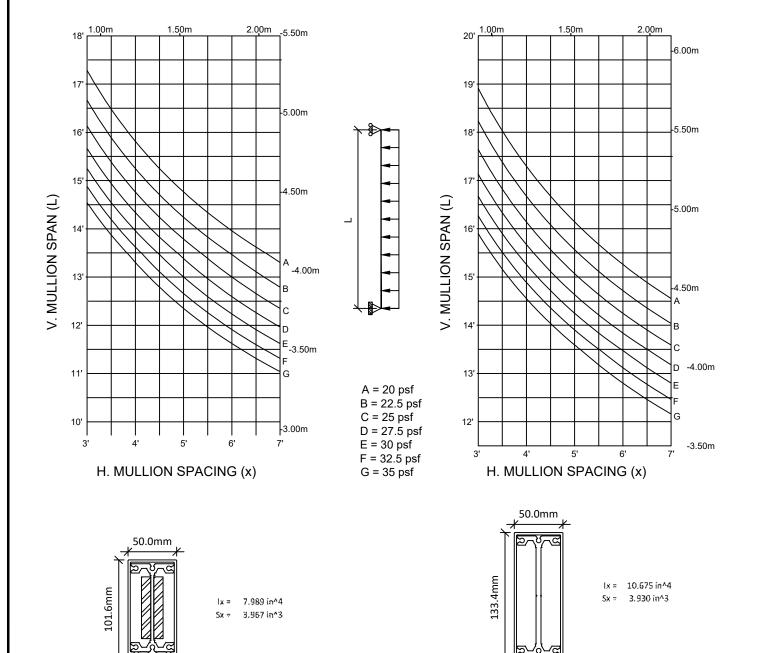
### HP2020 WIND LOAD CHARTS

#### **GENERAL NOTES:**

- REFERENCES IN CALCULATING THE WIND LOAD CHART ARE BASED ON THE NATIONAL BUILDING CODE OF CANADA, AAMA TIR-A11 AND CAN/CSA S157.
- 2. IT IS ALSO ASSUMED THAT LATERAL BRACING IS PROVIDED IN THE CALCULATION.

HP2020-SSG2-S2

MATERIAL



More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

**ALUMINUM ALLOY 6063-T6** 

18 HP2020-SSG3-S 5 1/4" B.S.

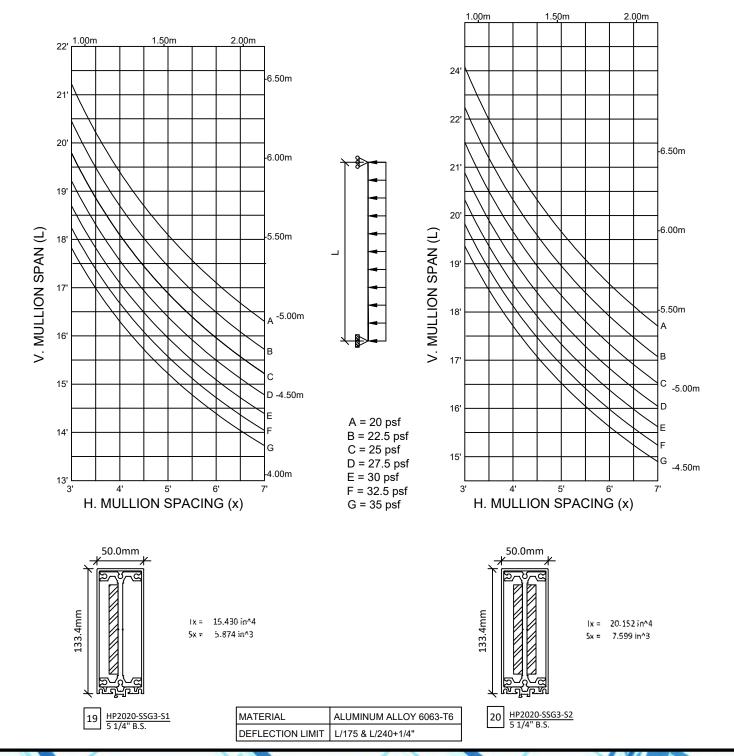
Bay 108 - 1626 115 Ave. N.E. Calgary, Alberta T3K 2E4

DEFLECTION LIMIT | L/175 & L/240+1/4"

### HP2020 WIND LOAD CHARTS

#### **GENERAL NOTES:**

- REFERENCES IN CALCULATING THE WIND LOAD CHART ARE BASED ON THE NATIONAL BUILDING CODE OF CANADA, AAMA TIR-A11 AND CAN/CSA S157.
- 2. IT IS ALSO ASSUMED THAT LATERAL BRACING IS PROVIDED IN THE CALCULATION.



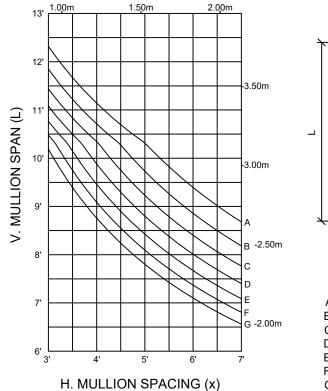
More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

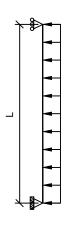
Bay 108 - 1626 115 Ave. N.E. Calgary, Alberta T3K 2E4

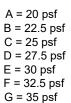
### HP2020 WIND LOAD CHARTS

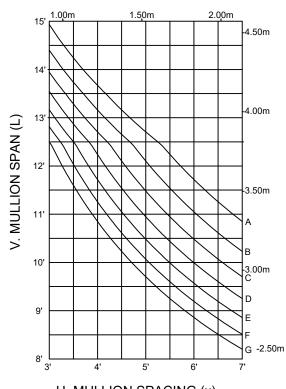
#### **GENERAL NOTES:**

- REFERENCES IN CALCULATING THE WIND LOAD CHART ARE BASED ON THE NATIONAL BUILDING CODE OF CANADA, AAMA TIR-A11 AND CAN/CSA S157.
- 2. IT IS ALSO ASSUMED THAT LATERAL BRACING IS PROVIDED IN THE CALCULATION.
- A 95% CAPACITY WAS APPLIED TO COVER UNCERTAINTIES DUE TO CRIMPING OF POLYAMIDE AND ALUMINUM REGLET.

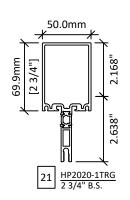






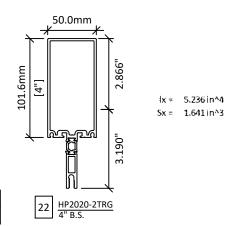






1x = 2.706 in^4 Sx = 1.026 in^3

MATERIAL	ALUMINUM ALLOY 6063-T6
DEFLECTION LIMIT	L/175 & L/240+1/4"



More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

Bay 108 - 1626 115 Ave. N.E.

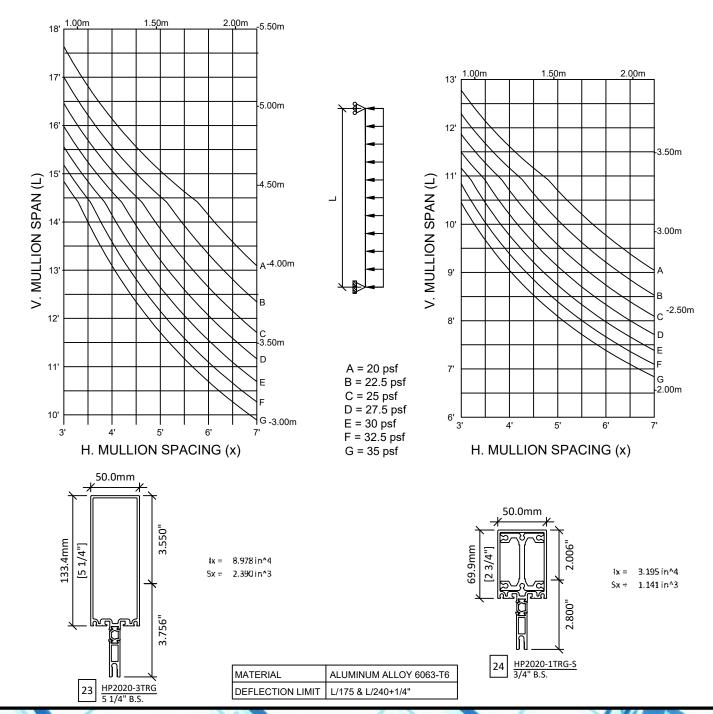
Calgary, Alberta T3K 2E4

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

### HP2020 WIND LOAD CHARTS

#### **GENERAL NOTES:**

- REFERENCES IN CALCULATING THE WIND LOAD CHART ARE BASED ON THE NATIONAL BUILDING CODE OF CANADA, AAMA TIR-A11 AND CAN/CSA S157.
- 2. IT IS ALSO ASSUMED THAT LATERAL BRACING IS PROVIDED IN THE CALCULATION.
- A 95% CAPACITY WAS APPLIED TO COVER UNCERTAINTIES DUE TO CRIMPING OF POLYAMIDE AND ALUMINUM REGLET.



More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

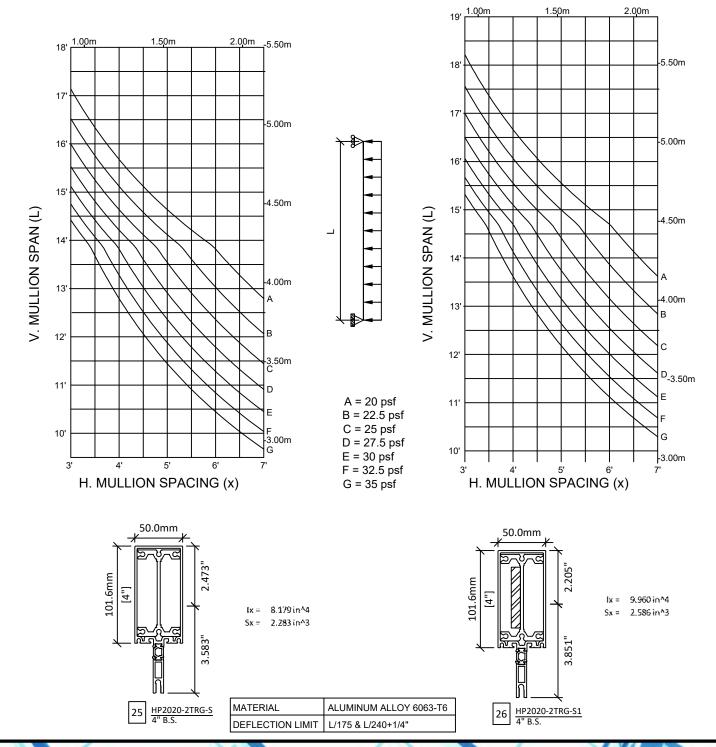
Bay 108 - 1626 115 Ave. N.E. Calga

Calgary, Alberta T3K 2E4

## HP2020 WIND LOAD CHARTS

#### **GENERAL NOTES:**

- REFERENCES IN CALCULATING THE WIND LOAD CHART ARE BASED ON THE NATIONAL BUILDING CODE OF CANADA, AAMA TIR-A11 AND CAN/CSA S157.
- 2. IT IS ALSO ASSUMED THAT LATERAL BRACING IS PROVIDED IN THE CALCULATION.
- A 95% CAPACITY WAS APPLIED TO COVER UNCERTAINTIES DUE TO CRIMPING OF POLYAMIDE AND ALUMINUM REGLET.



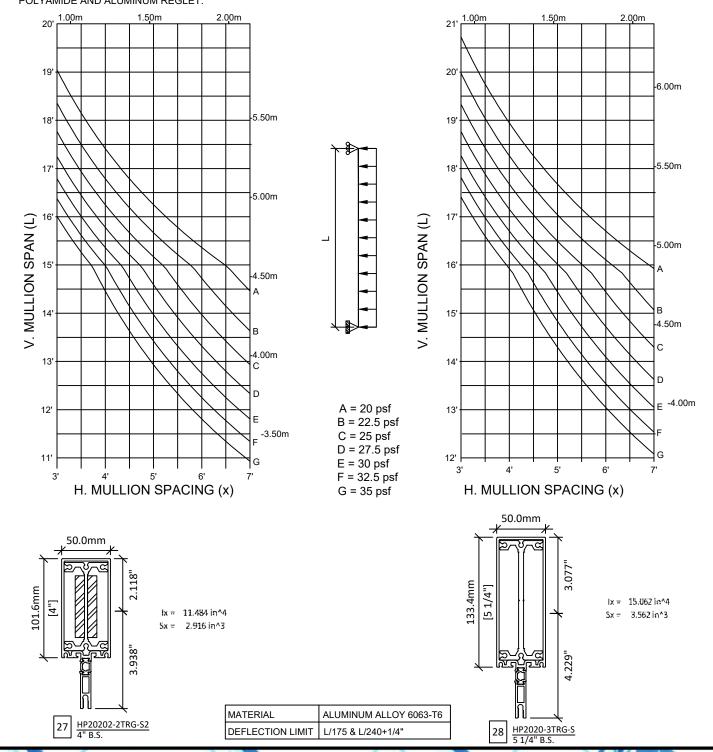
More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

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

### HP2020 WIND LOAD CHARTS

#### **GENERAL NOTES:**

- REFERENCES IN CALCULATING THE WIND LOAD CHART ARE BASED ON THE NATIONAL BUILDING CODE OF CANADA, AAMA TIR-A11 AND CAN/CSA S157.
- 2. IT IS ALSO ASSUMED THAT LATERAL BRACING IS PROVIDED IN THE CALCULATION.
- A 95% CAPACITY WAS APPLIED TO COVER UNCERTAINTIES DUE TO CRIMPING OF POLYAMIDE AND ALUMINUM REGLET.



More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

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

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



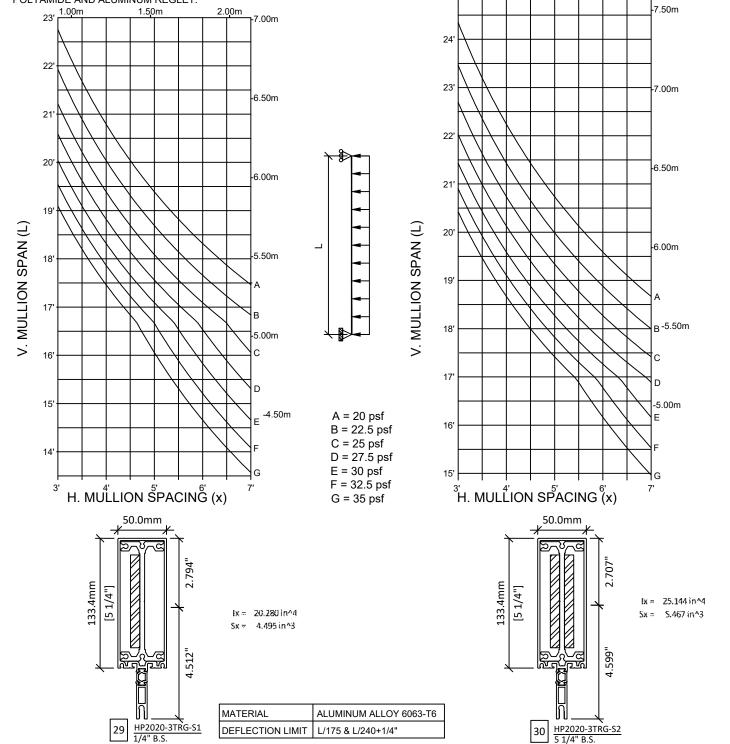
### HP2020 WIND LOAD CHARTS

-7.93m

25' 1.00m

#### **GENERAL NOTES:**

- REFERENCES IN CALCULATING THE WIND LOAD CHART ARE BASED ON THE NATIONAL BUILDING CODE OF CANADA, AAMA TIR-A11 AND CAN/CSA S157.
- 2. IT IS ALSO ASSUMED THAT LATERAL BRACING IS PROVIDED IN THE CALCULATION.
- 3. A 95% CAPACITY WAS APPLIED TO COVER UNCERTAINTIES DUE TO CRIMPING OF POLYAMIDE AND ALUMINUM REGLET.



More than 50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

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