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Bid Receiving - PWGSC / Réception des soumissions -
TPSGC

11 Laurier St. / 11, rue Laurier

Place du Portage, Phase III

Core 0B2 / Noyau 0B2

Gatineau, Québec K1A 0S5

Bid Fax: (819) 997-9776

Revision to a Request for a Standing Offer

Révision à une demande d'offre à commandes

National Master Standing Offer (NMSO)

Offre à commandes principale et nationale (OCPN)

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Offer remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'offre demeurent les mêmes.

Comments - Commentaires

Vendor/Firm Name and Address

Raison sociale et adresse du
fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

Electrical & Electronics Products Division
L'Esplanade Laurier
East Tower, 4th floor,
Ottawa
Ontario
K1A 0S5

Title - Sujet BR Window and Door S.O.	
Solicitation No. - N° de l'invitation 08834-200071/A	Date 2020-07-29
Client Reference No. - N° de référence du client 20200071	Amendment No. - N° modif. 001
File No. - N° de dossier hn460.08834-200071	CCC No./N° CCC - FMS No./N° VME
GETS Reference No. - N° de référence de SEAG PW-\$SHN-460-78900	
Date of Original Request for Standing Offer 2020-07-10	
Date de la demande de l'offre à commandes originale	
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2020-08-20	
Time Zone Fuseau horaire Eastern Daylight Saving Time EDT	
Address Enquiries to: - Adresser toutes questions à: Guertin, Benoit	Buyer Id - Id de l'acheteur hn460
Telephone No. - N° de téléphone (613) 296-3182 ()	FAX No. - N° de FAX () -
Delivery Required - Livraison exigée	
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:	
Security - Sécurité This revision does not change the security requirements of the Offer. Cette révision ne change pas les besoins en matière de sécurité de la présente offre.	

Instructions: See Herein

Instructions: Voir aux présentes

Acknowledgement copy required Accusé de réception requis	Yes - Oui <input type="checkbox"/>	No - Non <input type="checkbox"/>
The Offeror hereby acknowledges this revision to its Offer. Le proposant constate, par la présente, cette révision à son offre.		
Signature	Date	
Name and title of person authorized to sign on behalf of offeror. (type or print) Nom et titre de la personne autorisée à signer au nom du proposant. (taper ou écrire en caractères d'imprimerie)		
For the Minister - Pour le Ministre		

This amendment (1) seeks to make the following changes as well as answer vendor questions and extend the closing date to 2020-08-20th.

- 1) At **Part 3**, add the following:

1.6 Procurement Business Number (PBN) (Canadian suppliers)

<https://buyandsell.gc.ca/for-businesses/register-as-a-supplier>

The Procurement Business Number of the supplier is: _____

NB: Not mandatory at bid closing but required precedent to issuance of standing offer.

- 2) At **Annex "A" – Statement of work**, delete in its entirety and replace with Annex "A" attached hereto.
- 3) At **Annex "B" – Basis of payment**, delete in its entirety and replace with Annex "B" attached hereto.
- 4) At **Annex "D" – Evaluation Criteria**, delete in its entirety and replace with Annex "D" attached hereto.
- 5) Questions and answers

Q1 RE: 7.1.6.4-MIL DTL-46100E-This is a military test which is usually only done for military products. In (our) experience this test is never done in conjunction with the UL752 testing. Please confirm that MIL DTL-46100E is not required.

A1: MIL-DTL-46100E is not required. Please see changes in attached Annex "A".

Q2: RE: 9.1.8- Please advise what Cushioning is required?

A2: Please see changes in attached Annex "A".

Q3: RE: 9.1.14-Please advise delivery location? Also, where does the shipping cost go? It does not appear as a line item anywhere.

A3: The delivery location will be: Boyd's Moving & Storage Ltd. (1255 Humber Place, Ottawa, Ontario K1B 3W2). As per **Part 4, 1.3 Pricing Basis** The offeror must quote firm unit prices in Canadian dollars, DDP Delivered Duty Paid (destination), Applicable Taxes extra, as applicable. Freight charges to destination and all applicable Custom duties and Excise taxes must be included.

Q4: Re: 9.1.15-Confirm that "Metals" should be "Wooden Crates" per ISPM 15.

A4: Confirmed. Please see changes in attached Annex "A".

Q5: RE: 4.2.6- Confirm that "Throat" should be "Jamb Depth".

A5: Confirmed. Please see changes in attached Annex "A".

Q6: 4.4.1-Please confirm that any time Bullet Resistant Door Assemblies is mentioned that it can mean that the Armour Plate and Glass have been tested to the required UL752 Level listed.

A6: Any reference to Bullet Resistant Door Assemblies refers to the Armour Plate and Glass having been tested to the required UL 752 Level listed.

Q7 RE: 4.7.4- Confirm that hinge should be 4.5" x 4" TA2714 26D or equivalent

A7: Confirmed. Please see changes in attached Annex "A".

Q8: RE: 5.4.9.2-Confirm that trays are to be made of stainless steel, 304 #4 finish

A8: Confirmed. Please see changes in attached Annex "A".

Q9: Kindly inform the number of call ups per year (at least an estimate) as well as the minimum value of each call up.

A9: GAC expects an average of 20-30 call-ups per year but this is an ESTIMATE NOT A GUARANTEE. There is no set minimum value for a call-up.

Q10: Could you extend the closing date for 10 more days from August 10 to August 20?

A10: Yes

Q11: All of our glass suppliers require a minimum glass order of 5 square feet. This is a fairly common practice of Glass suppliers. Would it be possible to add "Minimum 5 Sq. Ft." per order to Annex "B" line items 26 & 27

A11: Please see changes in attached Annex "B".

All other terms and conditions remain unchanged

Solicitation No. - N° de l'invitation
08843-200071/A
Client Ref. No. - N° de réf. du client
08843-200071

Amd. No. - N° de la modif.
001
File No. - N° du dossier
hn460.08843-200071

Buyer ID - Id de l'acheteur
hn460
CCC No./N° CCC - FMS No./N° VME

ANNEX "A" - STATEMENT OF REQUIREMENT

Specifications for Bullet Resistant and Forced Entry Security Products

Issued by:
Global Affairs Canada

1. SCOPE

1.1 Objective

Global Affairs Canada (GAC) has a need for robust yet cost-effective Bullet Resistant and Forced Entry windows and doors on an as and when requested basis for GAC to fulfill its mandate of ensuring a secure work environment for all employees working abroad.

1.2 Background

Global Affairs Canada (GAC) is a Government of Canada department with approximately 14,000 employees. About half of the employees work in over 170 missions outside of Canada. The Physical Security Implementation Team (AWCA) is responsible to ensure that all employees working abroad are doing so in a safe and secure environment. To meet this mandate, AWCA has many projects underway and planned that require Bullet Resistant and Forced Entry Products to ensure that safety and security are met at all locations.

2. DEFINITIONS

AISC:	American Institute of Steel Construction
ASQ :	American Society for Quality Control
ASTM:	American Society for Testing and Materials
AWCA:	Physical Security Implementation Team, responsible for ensuring that all employees working abroad are doing so in a secure work environment.
BR:	Bullet Resistant
CSA:	Canadian Standards Association
Door Assembly:	The fitting together of all manufactured parts into a complete Door Assembly. This includes Frame, door panel, hinges, threshold, weather stripping (where applicable), all components to facilitate electric wiring where electric locks or strikes are utilized, mounting hardware, and the installation of government-approved hardware to complete the assembly before installation.
EN 1627:	Pedestrian door sets, windows, curtain walling, grilles and shutters - Burglar resistance - Requirements and classification
EN 356:	Glass in the building - Security Glazing - Testing and classification of resistance against manual attack
FE:	Forced Entry
GAC:	Global Affairs Canada
IAW:	International Association Welding
ISO:	International Standards Organization
Mullion:	A mullion is a vertical element that forms a division between units of a window or screen, its primary purpose is a rigid support to the glazing of the window in cases where the required glazing size is too large for single piece of glazing to meet the bullet resistant certification.

Offeror: The organization offering the assemblies and services as described in the statement of requirements with Global Affairs Canada.

SD-STD-01.01: Forced Entry and Ballistic Resistance of Structural Systems

TT-C-490F: Federal Specification: Chemical conversion coatings and pre-treatments for Metallic Substrates (Base for Organic Coatings)

UL 752: Standards for Bullet-Resisting Equipment

Window Assembly: The fitting together of all manufactured parts into a complete Window Assembly. This includes; Glazing, frame, and all necessary gaskets, cushioning bumpers (to protect the Glazing from the frame as required) and mounting hardware to complete the assembly prior to installation.

3.0 REFERENCE DOCUMENTS

3.1 Hardware

- [Allegion, LCN 1460 Series Closer](#)
- [Allegion, LCN 4040XP Series Closer](#)
- [Assa Abloy, Corbin Russwin, ML200 Series Mortise Lock](#)
- [Assa Abloy, Folger Adam 310 Series Electric Strike](#)
- [Assa Abloy, Folger Adam 700 Series Electric Strike](#)
- [Assa Abloy, HES 1006 Series Electric Strike](#)
- [Assa Abloy, McKinney Bearing Hinges – TA2314/TA2714](#)
- [Assa Abloy, Securitron Electrical Power Transfer](#)
- [Dormakaba, Delayed Egress Model DE8310](#)
- [Gallery Specialty Hardware, Door Pulls – 1007-1009-1012](#)
- [Gallery Specialty Hardware, Door Pulls – 4007-4009-4012](#)
- [Von Duprin 98/99 Series Exit Devices](#)

3.2. Referenced Standards

- [ASQ Q9000, 2005](#)
- [ASTM A1008 / A1008M - 18](#)
- [ASTM A1011 / A1011M - 18a](#)
- [ASTM A36 / A36M - 19](#)
- [AWS D17.1/D17.1M](#)
- [CSA 0121](#)
- [CSA 0141](#)
- [CSA 0151](#)
- [CSA 0153](#)
- [CSA B111 1974](#)
- [CSA S16-09](#)
- [CSA W 59 1984](#)
- [CSA W58-2018](#)
- [EN 1627](#)
- [EN 365](#)
- [Federal Standard Quality Control System Requirements 368A](#)
- [G40.20-13/G40.21-13](#)
- [IAW CSA W47.1 Div.2.1](#)
- [ISO 9000:2015](#)
- [Mil I 45208A](#)
- [MIL-DTL-46100E](#)
- [SD-STD-01.01](#)
- [TT-C-490F](#)
- [UL 752](#)

4.0 DOOR ASSEMBLY REQUIREMENTS:

4.1 General Requirements

The work described in the following sub-sections and subsequent specifications consist of manufacturing requirements for the Bullet Resistant and Forced Entry Door Assemblies listed below are mandatory unless an equivalent can be proposed, in the bid proposal, and demonstrated to adhere to equivalent standards and specifications shown by way of certification or certified witness test:

- a) Bullet Resistant Door – UL 752 Level 1 (Multi-Lite)
- b) Bullet Resistant Door – UL 752 Level 1 (Half Lite)
- c) Bullet Resistant Door – UL 752 Level 1 (Narrow Lite)
- d) Bullet Resistant Door – UL 752 Level 1 (Flush)
- e) Bullet Resistant Door – UL 752 Level 8 (Multi-Lite)
- f) Bullet Resistant Door – UL 752 Level 8 (Half Lite)
- g) Bullet Resistant Door – UL 752 Level 8 (Narrow Lite)
- h) Bullet Resistant Door – UL 752 Level 8 (Flush Lite)
- i) Steel Door 16ga – Non-Rated (Flush)
- j) Forced Entry Door – EN 1627/30 RC2 (Half Lite) – EN356 P4A (Force Entry Glazing Standard)
- k) Forced Entry Door – EN 1627/30 RC2 (Narrow Lite) – EN356 P4A (Force Entry Glazing Standard)
- l) Forced Entry Door – EN 1627/30 RC2 (Flush) – EN356 P4A (Force Entry Glazing Standard)
- m) Forced Entry Door – EN 1627/30 RC3 (Half Lite) – EN356 P5A (Force Entry Glazing Standard)
- n) Forced Entry Door – EN 1627/30 RC3 (Narrow Lite) – EN356 P5A (Force Entry Glazing Standard)
- o) Forced Entry Door – EN 1627/30 RC3 (Flush) – EN356 P5A (Force Entry Glazing Standard)
- p) Covered stainless-steel pass-through trays
- q) STC 52 Rating (addition to door)

4.2 Physical and Mechanical Requirements of Door Assemblies

- 4.2.1 Individual Door Assemblies must be products of a single supplier or source. Unless otherwise designated, Door Assemblies must be fabricated only from products meeting the requirements referenced in sections 7.0. and 8.0.
- 4.2.2 All doors must be standard size 36" x 84" x 1.75".
- 4.2.3 All door types must be available as Flush, Half lite, Narrow Lite and Multi-Lite.
- 4.2.4 For all electrically operated doors, a four-wire terminal block must be installed in the header of the door frame approximately 6 " from the opening edge of the door. This terminal block must be concealed but fully accessible and must be protected by a 1" x 4" screw mounted terminal cover on the protected side (interior) of the door frame.

- 4.2.5 A 1/2" conduit must be installed in the frame from the terminal block to the electric device being installed using 18-gauge stranded wire. It is the Offeror's responsibility to ensure that the conduit is installed in the proper location.
- 4.2.6 The steel butt frames must be welded and have a jamb depth dimension between 4" and 4.75" for both Force Entry doors and Bullet Resistant Doors.
- 4.2.7 The Offeror must construct and insert the Glazing frame on the door. The frame must be able to accommodate the exchange of Glazing to a higher level of protection.
- 4.2.8 All doors must utilize "Z" ribbing stiffeners. Full-length vertical stiffeners must be a maximum of 6" apart. On any opaque door, ladder formation must be used.
- 4.2.9 Doors Assemblies must be fully assembled and ready for installation when shipped.

4.3 Material Requirements

- 4.3.1 The standard material for the Bullet Resistant, Forced Entry and Non-Rated doors is described below but may require additional materials depending on the Bullet Resistant or Force Entry levels required. All materials used must be compatible with and in conjunction with all Material Requirements in sections 7.0 and 8.0.
- 4.3.2 All doors must be provided with a minimum of 3 resilient silencers on the lock side.
- 4.3.3 All doors must contain IKO Enerfoil, 1 1/2" thick.
- 4.3.4 All Bullet Resistant doors must have a maximum thickness of 1.75". The base units must have a minimum skin of 14-gauge steel with armoured plating. The door frames must be built with a minimum of 12-gauge steel.
- 4.3.5 All Forced Entry and non-rated steel doors must have a maximum thickness of 1.75". The base units must have a minimum skin of 16-gauge steel. The door frames must be built with a minimum of 16 gauge steel.
- 4.3.6 All door window stops must be welded to form a monolithic frame.

4.4 Protection Standards

- 4.4.1 The full Bullet Resistant Door Assemblies must be in accordance with the UL 752 Ballistic level of Bullet Resistant protection.
- 4.4.2 The full Door Assembly must be in accordance with the SD-STD-01.01 Force Entry levels.
- 4.4.3 The full Forced Entry Door Assemblies must be in accordance with the European Committee for Standardization (CEN) EN 1627/30 Force Entry levels as identified.

4.5 Fabrication, Pre-treatment, Preparation, and Finish

- 4.5.1 The Door Assemblies must require no welding in the field.
- 4.5.2 All exposed steel welds must be ground smooth
- 4.5.3 The Door Assemblies must be free of all surface imperfections and irregularities.

- 4.5.4 The Door Assemblies must be built to include separation between dissimilar metals or the metals must be isolated using a 30 mil coating of cold-applied asphalt paint to prevent electrolysis.
- 4.5.5 Two sets of Door Assembly Anchors must be included in each shipment. The anchors must be a minimum of 3/8" diameter and 6" long. One set must be designed for installation into a concrete structure, while the second set must be designed for installation into a metal reinforcing frame. Structural frames must have predrilled holes for anchors. The cap plugs used in the frame must match frame finish.
- 4.5.6 Fastenings, including screws, nuts, bolts, washers, rivets, and other anchors, must be of suitable type and size to serve their intended function and must be compatible with metals being secured. Exposed fastenings used in conjunction with finish hardware must match the finish of the adjacent surface.
- 4.5.7 Door Assemblies must be balanced so that, when measured with a door pressure gauge, the force exerted to pull open an armoured door does not exceed 10 lbs. (4.5kgs) and not exceed 7 lbs. (3.6 kgs) for non-armoured doors.
- 4.5.8 Fabrication must include the connection of wiring to all electrical hardware and terminal strips in the door frame.
- 4.5.9 Individual Door Assembly Finishes will be identified by the Technical Authority via a purchase document. Colour specifications can be found in section 7.2.3.
- 4.5.10 Door Assembly fabrication must be in accordance with the proposed and approved referenced Offeror Shop Drawings in section 8.6, and the proposed and approved Door Assemblies.

4.6 Identification and Labelling

- 4.6.1 Door Assembly Labelling must be applied on the jamb side edge of the door and must be completely concealed when the door is in the closed position.
- 4.6.2 The label must be metal and a permanent identification for the life of the door.
- 4.6.3 The label must include the following information:
 - 4.6.3.1 Offeror's name and address
 - 4.6.3.2 Date of manufacturer.
 - 4.6.3.3 Offeror's and Glazing manufacturer's product number and serial number.
 - 4.6.3.4 Purchase document number and Mark number.
 - 4.6.3.5 Fire rating
 - 4.6.3.6 Ballistic and Forced Entry rating

4.7 Lock Hardware and Installation

- 4.7.1 The approved GAC lock hardware for BR and FE doors are found in Annex C.
- 4.7.2 The lock Hardware selected for an individual Door Assembly will be identified on a purchase document. The Hardware will be provided by GAC and must be incorporated into the Door Assembly by the Offeror.

- 4.7.3 For all Bullet Resistant Door Assemblies: The Offeror must provide and install four "blow out pins" and a Roton #780 LL.
- 4.7.4 For all other Door Assemblies: The Offeror must provide and install three McKinney Ball Bearing NRP Hinges size 4.5" x 4" TA2714 26D or equivalent
- 4.7.5 The Offeror must mount hardware units at heights indicated in the manufacturer's installation instructions.
- 4.7.6 The Offeror must install all hardware items in accordance with the Manufacturer's instructions and recommendations, predrilling and fitting for installation of surface-mounted items after finishes have been completed.
- 4.7.7 The Offeror must set door assemblies level, plumb and true to line and location, adjusting and reinforcing the attachments as necessary for proper installation and operation.
- 4.7.8 The Offeror must drill and countersink units which are not factory prepared for anchorage fasteners.
- 4.7.9 The Offeror must space fasteners and anchors in accordance with the technical specifications and instructions of the hardware chosen by the Offeror. The Offeror must cut and fit threshold and floor covers to the profile of Door Assemblies, with mitered corners and hairline joints.
- 4.7.10 The Offeror must cut smooth openings for spindles, bolts and similar items when required.
- 4.7.11 The Offeror must adjust and check each operating item of hardware and each door to ensure proper operation and function

5.0 SECURITY WINDOW ASSEMBLIES

5.1 General Requirement

The work described in the following sub-sections and subsequent specifications consist of manufacturing requirements for the Bullet Resistant and Forced Entry window assemblies. Window Assemblies listed below are mandatory unless an equivalent can be proposed in the bid proposal:

- a) Bullet Resistant Fixed Window – UL 752 Level 1 (Various Sizes)
- b) Bullet Resistant mullion for Bullet Resistant Fixed window – UL 752 Level 1 (Various Sizes)
- c) Bullet Resistant Fixed Window – UL 752 Level 8 (Various Sizes)
- d) Bullet Resistant mullion for item Bullet Resistant Fixed Windows – UL 752 Level 8 (Various Sizes)
- e) Bullet Resistant speak through Window – UL 752 Level 1 (Various Sizes)
- f) Bullet Resistant mullion for Bullet Resistant speak through Window – UL 752 Level 1 (Various Sizes)
- g) Bullet Resistant speak through Window – UL 752 Level 8 (Various Sizes)
- h) Bullet Resistant mullion for Bullet Resistant speak though Window – UL 752 Level 8 (Various Sizes)

5.2 Physical Requirements

- 5.2.1 Individual window assemblies must be products of one supplier or source. Except as otherwise designated, assemblies must be constructed with products meeting the standards listed in sections 7.0 and 8.0.
- 5.2.2 Window profiles must be constructed as described in the Offeror's Shop Drawings.
- 5.2.3 The standard material for the Window Assemblies must be 12ga steel. Frames may require additional materials depending on the Bullet Resistant or Force Entry levels required.
- 5.2.4 Security window assemblies must be completely assembled units ready for installation when shipped.

5.3 Protection Standards

- 5.3.1 The Bullet Resistant Window Assembly must be in accordance with the required UL 752 Ballistic levels of protection.
- 5.3.2 The Window Assembly must be in accordance with the SD-STD-01.01 Force Entry levels
- 5.3.3 The Forced Entry Window Assembly must be in accordance with the EN 1627/30 Force Entry levels.

5.4 Fabrication, Pre-treatment, Preparation, and Finish

- 5.4.1 Window Assembly fabrication must be in accordance with approved Offeror Shop Drawings, and previously tested and approved Window Assemblies
- 5.4.2 Window frames must be factory assembled and require no welding in the field.
- 5.4.3 All exposed steel welds must be ground smooth.
- 5.4.4 Window Glazing must be pre-tested to fit frame before shipment by Offeror.
- 5.4.5 Window Assemblies must include two sets of anchor bolts a minimum of 3/8" diameter and 6" long. Offeror must provide a twenty percent surplus of the bolts required. One set must be designed for installation into a concrete structure, while the second set must be designed for installation into a metal reinforcing frame. Frames must contain predrilled holes for anchors at 10" on-center maximum. The cap plugs used in the frame must match the frame finish.
- 5.4.6 Fastenings, including screws, nuts, bolts, washers, rivets and other anchors, must be of suitable type and size to serve their intended function. All fastenings used in conjunction with the finish hardware must match the finish of the adjacent surface.
- 5.4.7 Glazing must be easily replaceable without removing the frame from its permanent location. All Glazing must have a minimum of 11/8" engagement in the frame.
- 5.4.8 Door window Glazing exposed to the elements must be caulked so as to be weather-proofed, using an aluminum silicon sealant manufactured by Rock River (Fastenal SKU – 0233651) or equivalent.

5.4.9 Window Pass-Thru Trays: below are the required dimensions for the window pass-thru tray. . If alternative dimensions are offered, they must be demonstrated on shop drawings as part of the offer.

5.4.9.1 The standard Pass-Thru tray is 17" D x 19" W with 1 ½" H, with a clearance of 1 ¼" for passing objects through the tray.

5.4.9.2 **The Window Pass-Thru Trays are to be constructed of stainless steel, 304 #4 finish or approved alternative.** The overlapping lip on the tray at the counter must be a minimum of 1" and must be finished on all exposed edges.

5.5 Labelling and Identifying Devices

5.5.1 The Offeror must label each glazed panel to identify the "Attack Side", in red, as the surface to be exposed to the potential threat. The size of the label is to be 10"x10" and take the form of a sticker that while robustly attached, once removed will not leave any surface residue.

5.5.2 An electronic mock-up of the label must be provided to the GAC technical authority at time of bid.

5.5.3 Labelling must be done on the bottom ledge of the "secure side" of the window and must be visible.

5.5.4 The label must be metal, easily legible and form a permanent identification for the life of the window.

5.5.5 The label must include the following information:

5.5.5.1 Offeror's name and address.

5.5.5.2 Date of manufacturer.

5.5.5.3 Offeror's and Glazing manufacturer's product number and serial number.

5.5.5.4 Purchase document number and Mark number.

5.5.5.5 Fire rating.

5.5.5.6 Bullet Resistant and Forced Entry rating.

6.0 GLAZING

6.1 General Requirements

6.1.1 The work described in the following sub-sections and subsequent specifications consist of manufacturing requirements for the Bullet Resistant Glazing items listed below:

a) Bullet Resistant Glazing – UL 752 Level 1

b) Bullet Resistant Glazing – UL 752 Level 8

6.1.2 Glazing must not have any exposed polycarbonate surfaces.

6.1.3 The applications of Glazing include the following: doors and windows.

6.1.4 All Glazing must be protected until window installation is complete.

(End of page)

6.2 Material Requirements

- 6.2.1 Bullet Resistant Glazing must provide the required UL 752 levels of protection as specified on each individual purchase document to the Offeror from GAC.
- 6.2.2 Force Entry Glazing must provide the required EN 356 levels of protection as specified on each individual purchase document to the Offeror from GAC.
- 6.2.3 All Bullet Resistant Glazing must consist of a polycarbonate core; minimum 3/4". The use of monolithic glass is not permitted.
- 6.2.4 All Forced Entry Glazing must consist of a polycarbonate core; minimum 1/4". The use of monolithic glass is not permitted.
- 6.2.5 Glazing materials must have corners broken and polished to a minimum of ¼ inch prior to laminating and must have all edges ground to a radius of 1/16 of an inch minimum and must be polished with 120 grit paper. No chips or defects must be present along the edges of the glass.
- 6.2.6 The Offeror must provide the following Glazing materials with the Glazing at the time of purchase:
 - 6.2.6.1 Setting Blocks: Neoprene rate at 7090 durometer hardness.
 - 6.2.6.2 Spacers: Neoprene rated at 4050 durometer hardness.
 - 6.2.6.3 Cleaners and Primers: Type recommended by gasket manufacturer.

6.3 Standards and Performance

- 6.3.1 Watertight and airtight installation of each piece of Glazing is required
- 6.3.2 Exterior facing windows must be filled with argon gas.
- 6.3.3 Each installation of the Glazing into the Door or Window Assemblies must be capable of withstanding normal temperature fluctuations, wind loading and impact loading without failure of any kind including but not limited to loss or breakage of Glazing, the failure of gaskets to remain watertight and airtight, deterioration of Glazing materials and other defects in the work.
- 6.3.4 Glazing must be protected from edge damage at all times during operation, handling and installation into Door and Window Assemblies.
- 6.3.5 The Offeror is responsible for the correct Glazing size for each opening. The Glazing channel dimensions must be as shown on the Shop Drawings and provide a minimum bite of ¾" on the Glazing, minimum edge clearance and reasonable tolerances.
- 6.3.6 The Offeror must comply with the recommendations from the Glazing manufacturer, the manufacturer of gaskets and the manufacturers of other materials used in Glazing, except where more stringent requirements are shown or specified.
- 6.3.7 The Offeror must inspect each piece of Glazing immediately before installation, and not use any which have observable edge damage or face imperfections.

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7.0 METAL REQUIREMENTS

7.1 Miscellaneous Metal Requirements

- 7.1.1 The Work described in this section consists of manufacturing requirements for all metal fabrications related to plates, bars, tubes, trim, framing, supports and all other miscellaneous metal products used in the fabrication of Door Assemblies, Window Assemblies, and Glazing.
- 7.1.2 All ferrous metal must be primed with a shop primer and finished to match window or door assemblies.
- 7.1.3 Metals must be in compliance with the AISC.
- 7.1.4 Metal rust inhibiting and paint adhesion must be in compliance with TT-C-490F.
- 7.1.5 For fabrication of miscellaneous metalwork exposed to view, the Offeror must use only materials which are smooth and free of surface blemishes.
- 7.1.6 All Metal listed in section 7.1.1 must conform to the following standards:
 - 7.1.6.1 For Steel Plates, Shapes and Bars: G40.20-13/G40.21-13(R2018) and American Society for Testing and Materials (ASTM) A36 / A36M - 19.
 - 7.1.6.2 For Steel Bar Grating: ASTM A1011 / A1011M - 18a or ASTM A36 / A36M - 19.
 - 7.1.6.3 For Structural Steel Sheet: Hot rolled, ASTM A1011 / A1011M - 18a, or cold rolled ASTM A1008 / A1008M - 18, Class 1; of grade required for design loading.
 - 7.1.6.4 N/A
 - 7.1.6.5 For Brackets, Flanges and Anchors: Cast or formed metal of the same type material and finish as adjacent metal, unless otherwise indicated.

7.2 Pre-treatment, Preparation for Finish and Finish for All Ferrous Metals:

- 7.2.1 All ferrous metal surfaces must be thoroughly cleaned of oil and other impurities. They must also be treated for painting in accordance with TT-C-490F.
- 7.2.2 Primers must be compatible with and must be applied as recommended by finish coat manufacturers. The prime coat must level out to a one mm thickness plus/minus .25 mm.
- 7.2.3 The colour of a Window Assembly or Door Assembly inclusive of all miscellaneous metals will be identified on each individual purchase document. The finish must be a powder coat with textured finish. It must be a chemical, acid and solvent resistant coating containing an ultraviolet colour chart. The four standard colours listed below for coating doors and windows must be provided at no additional cost to GAC:
 - 7.2.3.1 Gray: RAL 9007 Grey Aluminum
 - 7.2.3.2 White: RAL9003 Signal White
 - 7.2.3.3 Charcoal Gray: RAL 9004 Signal Black
 - 7.2.3.4 Aluminum: RAL 9006 White Aluminum

7.2.4 The Offeror must conduct a yearly Finish Tests. The results of the finish tests must be kept on file for a minimum of one year and be provided upon request of GAC.

The test consists of the following:

7.2.4.1 The finish must be applied to a 4" x 6" 20-gauge sheet bent 180 degrees around a 1/8" diameter rod. A successful test will demonstrate no cracking, flaking, or loss of adhesion to the coating applied to the panel.

7.2.4.2 A similar sample must withstand a normal, firm hand stroke of 2H lead hardness pencil held at a 45-degree angle to the plane of the sample and pushed across the film surface without evidence of marring when viewed from any oblique angle in a strong light.

8.0 GENERAL STANDARDS AND QUALITY

8.1 Standards Documents Related to the Production of Materials

8.1.1 The manufacturing of all materials must adhere to the following standards:

8.1.1.1 Federal Standard Quality Control System Requirements 368A, International Organization for Standardization (ISO) 9000:2015, and Mil I 45208A dated December 10, 1979.

8.1.1.2 "Quality Management Systems – Fundamentals and Vocabulary" American Society for Quality (ASQ) Q9000, 2005.

8.1.1.3 "Specification of General Requirements for a Quality Program." ANSI Z39.51-1971/ASQCC1, 1968.

8.1.2 The steel plate must meet the levels specified International Standard for Bullet-Resisting Equipment (UL 752).

8.2 Welding Standards

8.2.1 Welding must be completed by certified welders and in compliance with the American Welding Society AWS D17.1/D17.1M, D49001024SF001, Canadian Standards Association (CSA) W 59 1984.

8.2.2 All welding must be in accordance with CSA W591984. Offerors must be Certified International Association Welding (IAW) CSA W47.1 Div.2.1.

8.2.3 All surfaces must be cleaned and prepared as well as all steel must be primed in accordance with CSA S16-09 and CSA S1653 1981.

8.2.4 All welds on units must be of continuous weld construction in accordance with CSA W58-2018.

8.3 General Assurance Requirements

8.3.1 The Offeror must provide General Submittals, in accordance with Federal Standard 368A.

8.3.2 The Offeror must submit a certified written report, in duplicate, of "Notification of Inspection and Shipment" directly to the Technical Authority via e-mail as such reports are created.

8.3.3 Lot Reports: All Lots of ferrous and Glazing Armor must be tested by the manufacturer in accordance with "UL 752". A Lot is defined as all different heat lots for ferrous materials and extrusion lots for polycarbonate. Each test must be referenced by lot number, line item numbers, purchase document number and serial numbers for each item.

Lot reports must be attached to the invoice of the relevant purchasing document.

8.3.4 Documentation:

All documentation to support products must be provided in both official languages (English and French).

8.3.5 The Offeror must retain all test results and Shop Drawings related to the resulting Contractual Vehicle and all Purchasing Documents for a minimum of one year (English only).

8.4 Quality Assurance Reports

8.4.1 The requirements described in this section as it related to reports, inspections and the information required on these documents apply to the following reports:

- 8.4.1.1 Inspection Reports:
- 8.4.1.2 Final Inspection Report;
- 8.4.1.3 Steel Plate Report
- 8.4.1.4 Glazing Report;
- 8.4.1.5 Preparation and Painting Report;
- 8.4.1.6 Certification of Calibration;
- 8.4.1.7 Dimensional Conformity.

8.4.2 Written reports of each inspection, test or similar service reference in section 8.5.1 must be sent to the technical authority two weeks before shipment and include the following:

- 8.4.2.1 Name of Offeror and Inspector.
- 8.4.2.2 Address of Manufacturing Facility (Point of Production)
- 8.4.2.3 Dates and locations of samples, tests or inspections.
- 8.4.2.4 Job No.
- 8.4.2.5 Part/Mark No.
- 8.4.2.6 Inspection/Test Data
 - 8.4.2.6.1 Requirement listing: A list of each requirement being tested for the purpose of fulfilling a purchase document.
 - 8.4.2.6.2 Findings: This section must include the observations, measurements taken, gauge readings, deviations from the norm, and all other relevant data of note. This should be formatted as a written recording of the actions taken as

opposed to a checklist version of an inspection. The purpose of this is to identify problems or trends that may be developing.

- 8.4.2.6.3 Test Results and Interpretations.
- 8.4.2.6.4 Instructions for Acceptance Criteria.
- 8.4.2.6.5 Recommendations on retesting, if applicable.

8.5 Shop Drawings

8.5.1 Shop Drawings are a combination of documents and images providing a proposed description of an identified requirement. The purpose of Shop Drawings will be to provide GAC with an overview of the proposed solution for the requirement once completed. Shop Drawings will be submitted by the Offeror to GAC at time of bid close, and will be subject to approval by the Technical Authority. The Offeror must submit Shop Drawings of the following:

- 8.5.1.1 A Forced Entry Door Assembly
- 8.5.1.2 A Bullet Resistant Door Assembly
- 8.5.1.3 A Bullet Resistant Window Assembly
- 8.5.1.4 A Bullet Resistant speak through Window Assembly

8.5.2 Any Shop Drawing submitted by the Offeror must consist of :

- 8.5.2.1 Depictions of sections of members showing construction, sizes and thickness of components together with connections, fastenings and means of separating dissimilar metals.
- 8.5.2.2 Depictions of connections to adjacent construction, finishes and related components that are related to the Offeror's assembly.

9.0 SHIPPING, PACKAGING AND HANDLING

9.1 General Shipping, Packaging and Handling

- 9.1.1 All products are to be supplied to GAC inclusive of shipping, packaging and in accordance to delivery specifications.
- 9.1.2 Before crating begins a final inspection may be requested by the Technical Authority to reconfirm and assure that the product meets the quality criteria established in the Quality Control Program
- 9.1.3 Latch bolts and deadbolts for all locksets, exit devices, and other locks must be secured in a fashion that will not allow for their activation during shipment.
- 9.1.4 Each Door Assembly and Window Assembly frame crate must include the following:

- 9.1.4.1 Offeror's up to date, detailed in English and French installation instructions,
- 9.1.4.2 Applicable amount for each attachment point of 3/8" x 6" Zinc-Plated anchor bolts and drill bit for masonry walls,

9.1.4.3 Applicable amount for each attachment point of 3/8" x 6" Zinc-Plated bolts, drill bit and tap for steel channel, and

9.1.4.4 A minimum of 20 composite shim plates.

9.1.5 The following must be printed in bold bright orange or red letters on the top and sides of each door and window frame crate: "HARDWARE/INSTRUCTIONS INSIDE"

9.1.6 A "Final Inspection Sheet" must be completed and affixed to the interior of the crate or onto the product itself and include:

9.1.6.1 date crated

9.1.6.2 crate properly labelled

9.1.6.3 Latch bolts and/or deadbolts for all locksets, exit devices, and other locks are secured

9.1.6.4 Installation Instructions in crate

9.1.6.5 Quantity of anchor bolts included

9.1.6.6 Quantity of shims included

9.1.6.7 extra accessories in crate (i.e. caulking)

9.1.7 The containers must be constructed of 2" thick perimeter wood framing. The lumber used must be of Grade 2, seasoned Spruce, Pine, or Fir, group designation to conform to CSA 0141, and must be sound and free of imperfections or defects. The width of this lumber must be determined by the contents to be crated. The framing must be covered with 1/2" Fir plywood of Construction grade sheeting with water-resistant glue manufactured in accordance with the provisions of CSA 0121, CSA 0151, and CSA 0153. The sheeting must be affixed to the frame with galvanized nails or screws.

9.1.8 The interior of all containers must be lined with a polyethylene sheet with a minimum thickness of .004 inch. Cushioning must also be provided to prevent the surfaces of the ballistic material from being marred by the contact with the interior wood members. The cushioning required should consist of 4" x 8" x 2lb density polyethylene foam the full perimeter of the crate and one strip 4" x 8" in the center of the crate must be provided to prevent damage to the glass and surfaces. Protective film must be provided on all window and door surfaces, to last until the window or door is commissioned.

9.1.9 All nails must be galvanized to CSA B111 1974, of appropriate length and size. Caulking compound must also be applied to all butt joints and where individual plywood panels are attached. Door, window and window/counter-frames must be bolted to the wood perimeter frame or alternatively locked in place by wood members.

9.1.10 Steel corner protectors and/or steel gussets of adequate gauge must be applied at the four outer corners of the wood cases. Steel tension straps, not less than 0.75" width by .035" thick must be applied tightly and securely to the girth with

two straps across each major container face for a total of four straps per container minimum.

- 9.1.11 Loose items must include complete up to date detailed instructions and must be clearly identified for location within the structure.
- 9.1.12 Items must be secured into appropriate crates so as to prevent any damage to other pieces in the crate during shipping.
- 9.1.13 All hardware must be installed and tested for proper operation on the door/frame before crating. Any hardware that's required to be removed for crating must be tagged and packaged separately in the corresponding crate with proper identification along with all appropriate installation instructions for local contractor to install on-site.
- 9.1.14 All items on a resulting purchase document valued under CAD \$250,000.00 must be received at the Delivery location within 60 days.
- 9.1.15 **Materials** must be in compliance with **ISPM 15** packing requirements.

9.2 Shipping, packaging, and handling requirement specific to Glazing

- 9.2.1 In each instance, the Glazing must be packaged and crated separately from any other parts or components of the total assembly.
- 9.2.2 The perimeter of Glazing for windows and counters must be enclosed by a 4 x 3.5 x 1-inch thick polyethylene foam channel with a density of 6 pounds per cubic foot.
- 9.2.3 Crated Glazing must be covered by a 8 x 11.25 x 4-inch thick polyethylene foam channel with a density of 2 pounds per cubic foot.
- 9.2.4 All foam channels must be continuously heat bonded along their length and at all butt joints.
- 9.2.5 Security Glazing must be completely protected against scratches or marring during crating, transportation and installation.

9.3. Shipping, packaging, and handling requirements specific to Door Assemblies

- 9.3.1 The Offeror must package the Door Assembly into a crate as securely as possible in accordance with the following:
 - 9.3.1.1 Offeror must set units plumb, level and true to line, without warp or rack; shim as required.
 - 9.3.1.2 All door and frame surfaces must be covered with a removable plastic protection film.
 - 9.3.1.3 Frames must be solidly anchored to the crate to prevent distortion or misalignment.
 - 9.3.1.4 The Offeror must include any hardware or accessories package packed separately (including touchup primer or paint as applicable) accompanied by complete, easily understood, up to date detailed installation instructions.

9.3.1.5 Offeror must include silicon caulking and any other accessory items required to fully install items so that a delivered crate contains all necessary items to install

9.4. Shipping, packaging, and handling requirements specific to Window Assemblies

- 9.4.1. The Offeror must package the complete assembly into a crate as securely as possible in accordance with the following:
- 9.4.2. Units must be Set plumb, level and true to line, without warp or rack. Shims are to be added as required.
- 9.4.3. Frames must be Anchored solidly to crate to prevent distortion or misalignment.
- 9.4.4. Touch up paint, silicone caulking and accessories must be included and packaged separately.
- 9.4.5. Glazing must be packaged in a separate crate.
- 9.4.6. All window assemblies' surfaces must be covered with a removable plastic protection film.

10. SUPPORT PROVIDED BY GLOBAL AFFAIRS CANADA

- 10.1. GAC will supply all lock hardware. Lock hardware must be installed by the Offeror, based on the GAC hardware schedule for each order. The GAC lock hardware schedule will be provided with the purchasing document.
- 10.2. GAC will provide all installation documentation for the required approved lock hardware.

11. OFFEROR'S QUALIFICATIONS

11.1. Experience

- 11.1.1. The Offeror must demonstrate that they have provided door and window products with equivalent standards to those herein by providing Project Summaries. The Offeror must demonstrate that they have executed 3 contracts each valued at a minimum of CAD \$250,000.00 within the past 10 years from bid closing.
- 11.1.2. The Offeror must provide documentation that they have been duly incorporated and conducting business in the commercial door and window industry for at least five years.

11.2. Certifications

Offerors must be Certified International Association Welding (IAW) CSA W47.1 Div.2.1

Annex "B" – Basis of Payment

				Unit Price (\$)				
Item	Description	SOW Reference	Unit of measure	Year 1 (A)	Year 2 (B)	Year 3 (C)	Option 1 (D)	Option 2 (E)
Doors								
1.	Bullet Resistant Door – UL 752 Level 1 Multi Lite	Annex A, Section 4.1	Each					
2.	Bullet Resistant Door – UL 752 Level 1 Half Lite	Annex A, Section 4.1	Each					
3.	Bullet Resistant Door – UL 752 Level 1 Narrow Lite	Annex A, Section 4.1	Each					
4.	Bullet Resistant Door – UL 752 Level 1 Flush	Annex A, Section 4.1	Each					
5.	Bullet Resistant Door – UL 752 Level 8 Multi Lite	Annex A, Section 4.1	Each					
6.	Bullet Resistant Door – UL 752 Level 8 Half Lite	Annex A, Section 4.1	Each					
7.	Bullet Resistant Door – UL 752 Level 8 Narrow Lite	Annex A, Section 4.1	Each					
8.	Bullet Resistant Door – UL 752 Level 8 Flush Lite	Annex A, Section 4.1	Each					
9.	Steel Door 16ga – Non-Rated (Flush)	Annex A, Section 4.1	Each					
10.	Forced Entry Door – EN 1627/30 RC2 (Half Lite) – EN356 P4A (Force Entry Glazing Standard)	Annex A, Section 4.1	Each					

				Unit Price (\$)				
Item	Description	SOW Reference	Unit of measure	Year 1 (A)	Year 2 (B)	Year 3 (C)	Option 1 (D)	Option 2 (E)
11.	Forced Entry Door – EN 1627/30 RC2 (Narrow Lite) – EN356 P4A (Force Entry Glazing Standard)	Annex A, Section 4.1	Each					
12.	Forced Entry Door – EN 1627/30 RC2 (Flush) – EN356 P4A (Force Entry Glazing Standard)	Annex A, Section 4.1	Each					
13.	Forced Entry Door – EN 1627/30 RC3 (Half Lite) – EN356 P5A (Force Entry Glazing Standard)	Annex A, Section 4.1	Each					
14.	Forced Entry Door – EN 1627/30 RC3 (Narrow Lite) – (Force Entry Glazing Standard)	Annex A, Section 4.1	Each					
15.	Forced Entry Door – EN 1627/30 RC3 (Flush) – EN356 P5A (Force Entry Glazing Standard)	Annex A, Section 4.1	Each					
16.	Covered stainless-steel pass-through trays	Annex A, Section 4.1	Each					
17.	STC 52 Rating (addition to door)	Annex A, Section 4.1	per sq./ft					
Windows								
18.	Bullet Resistant fixed window – UL 752 Level 1 (Various Sizes)	Annex A, Section 5.1	per sq./ft.					
19.	Bullet Resistant mullion for Bullet Resistant Fixed window – UL 752 Level 1 (Various Sizes)	Annex A, Section 5.1	per sq./ft.					

Item	Description	SOW Reference	Unit of measure	Unit Price (\$)				
				Year 1 (A)	Year 2 (B)	Year 3 (C)	Option 1 (D)	Option 2 (E)
20.	Bullet Resistant fixed window – UL 752 Level 8 (Various Sizes)	Annex A, Section 5.1	per sq./ft.					
21.	Bullet Resistant mullion for item Bullet Resistant Fixed Windows – UL 752 Level 8 (Various Sizes)	Annex A, Section 5.1	per sq./ft.					
22.	Bullet Resistant speak through window – UL 752 Level 1 (Various Sizes)	Annex A, Section 5.1	per sq./ft.					
23.	Bullet Resistant mullion for Bullet Resistant speak through Window – UL 752 Level 1 (Various Sizes)	Annex A, Section 5.1	per sq./ft.					
24.	Bullet Resistant speak through window – UL 752 Level 8 (Various Sizes)	Annex A, Section 5.1	per sq./ft.					
25.	Bullet Resistant mullion for Bullet Resistant speak through Window – UL 752 Level 8 (Various Sizes)	Annex A, Section 5.1	per sq./ft.					
Glazing								
26.	Bullet Resistant glazing– UL 752 Level 1	Annex A, Section 6.1	per sq./ft Minimum 5 sq./ft per call-up					
27.	Bullet Resistant glazing– UL 752 Level 8	Annex A, Section 6.1	per sq./ft Minimum 5 sq./ft per call-up					

Annex "D" – Evaluation Criteria

Mandatory Criteria	Description	Offer Page # Reference	Supporting Documentation Requested
4.2	Physical and Mechanical Requirements of Door Assemblies		
4.2.1	Individual Door Assemblies must be products of a single supplier or source. Unless otherwise designated, Door Assemblies must be fabricated only from products meeting the requirements referenced in sections 7.0. and 8.0.		Written Attestation
4.2.2	All doors must be standard size 36" x 84" x 1.75" .		Shop Drawing or Brochure
4.2.3	All door types must be available as Flush, Half lite, Narrow Lite and Multi-Lite.		Shop Drawing or Brochure
4.2.4	For all electrically operated doors, a four-wire terminal block must be installed in the header of the door frame approximately 6 " from the opening edge of the door. This terminal block must be concealed but fully accessible and must be protected by a 1" x 4" screw mounted terminal cover on the protected side (interior) of the door frame.		
4.2.5	A 1/2" conduit must be installed in the frame from the terminal block to the electric device being installed using 18-gauge stranded wire. It is the Offeror's responsibility to ensure that the conduit is installed in the proper location.		Shop Drawing
4.2.6	4.2.6 The steel butt frames must be welded and have a jamb depth dimension between 4" and 4.75" for both Force Entry doors and Bullet Resistant Doors.		Shop Drawing or Brochure
4.2.8	All doors must utilize "Z" ribbing stiffeners. Full-length vertical stiffeners must be a maximum of 6" apart. On any opaque door, ladder formation must be used.		Shop Drawing or Brochure

Mandatory Criteria	Description	Offer Page # Reference	Supporting Documentation Requested
4.3	Material Requirements		
4.3.1	The standard material for the Bullet Resistant, Forced Entry and Non-Rated doors is described below but may require additional materials depending on the Bullet Resistant or Force Entry levels required. All materials used must be compatible with and in conjunction with all Material Requirements in sections 7.0 and 8.0.		Written Attestation
4.3.2	All doors must be provided with a minimum of 3 resilient silencers on the lock side		Shop Drawing or Brochure
4.3.3	All doors must contain IKO Enerfoil, 1 ½" thick.		Shop Drawing or Brochure
4.3.4	All Bullet Resistant doors must have a maximum thickness of 1.75". The base units must have a minimum skin of 14-gauge steel with armoured plating. The door frames must be built with a minimum of 12-gauge steel.		Shop Drawing or Brochure
4.3.5	All Forced Entry and non-rated steel doors must have a maximum thickness of 1.75". The base units must have a minimum skin of 16-gauge steel. The door frames must be built with a minimum of 16 gauge steel.		Shop Drawing or Brochure
4.3.6	All door window stops must be welded to form a monolithic frame.		Shop Drawing or Brochure
4.4	4.4 Protection Standards		
4.4.1	The full Bullet Resistant Door Assemblies must be in accordance with the UL 752 Ballistic level of Bullet Resistant protection.		Certification
4.4.2	The full Door Assembly must be in accordance with the SD-STD-01.01 Force Entry levels.		Certification
4.4.3	The full Forced Entry Door Assemblies must be in accordance with the European Committee for Standardization (CEN) EN 1627/30 Force Entry levels as identified.		Certification

Mandatory Criteria	Description	Offer Page # Reference	Supporting Documentation Requested
4.5	Fabrication, Pre-treatment, Preparation, and Finish		
4.5.7	Door Assemblies must be balanced so that, when measured with a door pressure gauge, the force exerted to pull open an armoured door does not exceed 10 lbs. (4.5kgs) and not exceed 7 lbs. (3.6 kgs) for non-armoured doors.		Brochure or Written Attestation
4.5.10	Door Assembly fabrication must be in accordance with the proposed and approved referenced Offeror Shop Drawings in section 8.6, and the proposed and approved Door Assemblies.		Written Attestation
4.6	Identification and Labelling		
4.6.1	Door Assembly Labelling must be applied on the jamb side edge of the door and must be completely concealed when the door is in the closed position.		Shop Drawing
4.7	Hardware and Installation		
4.7.3	For all Bullet Resistant Door Assemblies: The Offeror must provide and install four "blow out pins" and a Roton #780 LL.		Shop Drawings
4.7.4	For all other Door Assemblies: The Offeror must provide and install three McKinney Ball Bearing NRP Hinges size 4.5" x 4" TA2714 26D or equivalent		Shop Drawings
4.7.5	The Offeror must mount hardware units at heights indicated in the manufacturer's installation instructions.		Shop Drawings
5.2	Physical Requirements		
5.2.1	Individual window assemblies must be products of one supplier or source. Except as otherwise designated, assemblies must be constructed with products meeting the standards listed in sections 7.0 and 8.0.		Written Attestation
5.2.3	The standard material for the Window Assemblies must be 12ga steel. Frames may require additional materials depending on the Bullet Resistant or Force Entry levels required.		Shop Drawing or Brochure

Mandatory Criteria	Description	Offer Page # Reference	Supporting Documentation Requested
5.3	Protection Standards		
5.3.1	The full Bullet Resistant Window Assembly must be in accordance with the required UL 752 Ballistic levels of protection.		Certification or Certified Witness Test
5.3.2	The full Window Assembly must be in accordance with the SD-STD-01.01 Force Entry levels		Certification or Certified Witness Test
5.3.3	The full Forced Entry Window Assembly must be in accordance with the EN 1627/30 Force Entry levels.		Certification or Certified Witness Test
5.4	Fabrication, Pre-treatment, Preparation, and Finish		
5.4.9	Window Pass-Thru Trays: below are the proposed dimensions for the window pass-thru tray. Alternative dimensions as demonstrated on shop drawings provided by the Offeror are subject to the approval of the technical authority at bid closing.		Shop Drawing or Brochure
	5.4.9.1 The Pass-Thru tray should be 17" D x 19" W with 1 ½" H, with a clearance of 1 ¼" for passing objects through the tray.		
	5.4.9.2 The Window Pass-Thru Trays are to be constructed of stainless steel, 304 #4 finish or approved alternative. The overlapping lip on the tray at the counter must be a minimum of 1" and must be finished on all exposed edges.		
5.5	Labelling and Identifying Devices		
5.5.2	An electronic mock-up of the label must be provided to the GAC technical authority at time of bid.		Sample or Shop Drawing
5.5.3	Labelling must be done on the bottom ledge of the window and must be visible.		Shop Drawing

Mandatory Criteria	Description	Offer Page # Reference	Supporting Documentation Requested
6.2	Material Requirements		
6.2.1	Bullet Resistant Glazing must provide the required UL 752 levels of protection as specified on each individual purchase document to the Offeror from GAC.		Certification
6.2.2	Force Entry Glazing must provide the required EN 356 levels of protection as specified on each individual purchase document to the Offeror from GAC.		Certification
6.2.3	All Bullet Resistant Glazing must consist of a polycarbonate core; minimum 3/4". The use of monolithic glass is not permitted.		
6.2.4	All Forced Entry Glazing must consist of a polycarbonate core; minimum 1/4". The use of monolithic glass is not permitted.		Brochure or Shop Drawing
6.2.6	The Offeror must provide the following Glazing materials with the Glazing at the time of purchase: 6.2.6.1 Setting Blocks: Neoprene rate at 7090 durometer hardness. 6.2.6.2 Spacers: Neoprene rated at 4050 durometer hardness. 6.2.6.3 Cleaners and Primers: Type recommended by gasket manufacturer.		Brochure or Shop Drawing

Mandatory Criteria	Description	Offer Page # Reference	Supporting Documentation Requested
6.3	Standards and Performance		
6.3.2	Exterior facing windows must be filled with argon gas.		Brochure or Shop Drawing
6.3.3	Each installation of the Glazing into the Door or Window Assemblies must be capable of withstanding normal temperature fluctuations, wind loading and impact loading without failure of any kind including but not limited to loss or breakage of Glazing, the failure of gaskets to remain watertight and airtight, deterioration of Glazing materials and other defects in the work.		
6.3.5	The Offeror is responsible for the correct Glazing size for each opening. The Glazing channel dimensions must be as shown on the Shop Drawings and provide a minimum bite of ¾" on the Glazing, minimum edge clearance and reasonable tolerances.		Brochure or Shop Drawing
7.1	Miscellaneous Metal Requirements		
7.1.2	All ferrous metal must be primed with a shop primer and finished with a finish coat.		Brochure or Shop Drawing
7.1.3	Metals must be in compliance with the AISC.		Brochure or Shop Drawing
7.1.4	Metal rust inhibiting and paint adhesion must be in compliance with TT-C-490F.		Brochure or Shop Drawing
7.1.6	<p>All Metal listed in section 7.1.1 must conform to the following standards:</p> <p>7.1.6.1 For Steel Plates, Shapes and Bars: G40.20-13/G40.21-13(R2018) and American Society for Testing and Materials (ASTM) A36 / A36M - 19.</p> <p>7.1.6.2 For Steel Bar Grating: ASTM A1011 / A1011M - 18a or ASTM A36 / A36M - 19.</p> <p>7.1.6.3 For Structural Steel Sheet: Hot rolled, ASTM A1011 / A1011M - 18a, or cold rolled ASTM A1008 / A1008M - 18, Class 1; of grade required for design loading.</p> <p>7.1.6.4 N/A.</p> <p>7.1.6.5 For Brackets, Flanges and Anchors: Cast or formed metal of the same type material and finish as adjacent metal, unless otherwise indicated.</p>		Brochure or Shop Drawing

Mandatory Criteria	Description	Offer Page # Reference	Supporting Documentation Requested
7.2	Pre-treatment, Preparation for Finish and Finish for All Ferrous Metals:		
7.2.1	All ferrous metal surfaces must be thoroughly cleaned of oil and other impurities. They must also be treated for painting in accordance with TT-C-490F.		Brochure or Shop Drawing
7.2.2	Primers must be compatible with and must be applied as recommended by finish coat manufacturers. The prime coat must level out to a one mm thickness plus/minus .25 mm.		Shop Drawings
7.2.3	The colour of a Window Assembly or Door Assembly inclusive of all miscellaneous metals will be identified on each individual purchase document. The finish must be a powder coat. It must be a chemical, acid and solvent resistant coating containing an ultraviolet colour chart. The four standard colours listed below for coating doors and windows must be provided at no additional cost to GAC: 7.2.3.1 Gray: RAL 9007 Grey Aluminium 7.2.3.2 White: RAL9003 Signal White 7.2.3.3 Charcoal Gray: RAL 9004 Signal Black 7.2.3.4 Aluminium: RAL 9006 White Aluminium		Written Attestation
8.1	Standards Documents Related to the Production of Materials The manufacturing of all materials must adhere to the following standards:		
8.1.1	8.1.1.1 Federal Standard Quality Control System Requirements 368A, International Organization for Standardization (ISO) 9000:2015, and Mil I 45208A dated December 10, 1979. 8.1.1.2 "Quality Management Systems – Fundamentals and Vocabulary" American Society for Quality (ASQ) Q9000, 2005.		Written Attestation
8.1.2.	8.1.1.3 "Specification of General Requirements for a Quality Program." ANSI Z1.81971/ASQCC1, 1968. The steel plate must meet the levels specified International Standard for Bullet-Resisting Equipment UL 752.		Certification

Mandatory Criteria	Description	Offer Page # Reference	Supporting Documentation Requested
8.2	Welding Standards		
8.2.1	Welding must be completed by certified welders and in compliance with the American Welding Society AWS D17.1/D17.1M, D49001024SF001, Canadian Standards Association (CSA) W 59 1984.		Certification or Written Attestation
8.2.2	All welding must be in accordance with CSA W591984. Offerors must be Certified International Association Welding (IAW) CSA W47.1 Div.2.1.		Certification
8.3	General Assurance Requirements		
8.3.3.	Lot Reports: All Lots of ferrous and Glazing Armor must be tested by the manufacturer in accordance with "UL 752". A Lot is defined as all different heat lots for ferrous materials and extrusion lots for polycarbonate. Each test must be referenced by lot number, line item numbers, purchase document number and serial numbers for each item.		written report
8.3.5	The Offeror must retain all test results and Shop Drawings related to the resulting Contractual Vehicle and all Purchasing Documents for a minimum of one year (English only).		Written Attestation
8.5	Shop Drawings		
8.5.1	Shop Drawings are a combination of documents and images providing a proposed description of an identified requirement. The purpose of Shop Drawings will be to provide GAC with an overview of the proposed solution for the requirement once completed. Shop Drawings will be submitted by the Offeror to GAC at time of bid close, and will be subject to approval by the Technical Authority. The Offeror must submit Shop Drawings of the following:8.5.1.1 A Forced Entry Door Assembly8.5.1.2 A Bullet Resistant Door Assembly8.5.1.3 A Bullet Resistant Window Assembly8.5.1.4 A Bullet Resistant speak through Window Assembly		Shop Drawings
8.5.2	Any Shop Drawing submitted by the Offeror must consist of: 8.5.2.1 Depictions of sections of members showing construction, sizes and thickness of components together with connections, fastenings and means of separating dissimilar metals. 8.5.2.2 Depictions of connections to adjacent construction, finishes and related components that are related to the Offeror's assembly.		

Mandatory Criteria	Description	Offer Page # Reference	Supporting Documentation Requested
9.1	General Shipping, Packaging and Handling		
9.1.14	All items on a resulting purchase document valued under CAD \$250,000.00 must be received at the Delivery location within 60 days.		Written Attestation
11.1	Experience		
11.1.1	The Offeror must demonstrate that they have provided door and window products with similar standards to those herein by providing Project Summaries. The Offeror must demonstrate that they have executed 3 contracts each valued at a minimum of CAD \$250,000.00 within the past 10 years from bid closing.		Project Summaries
11.1.2	The Offeror must demonstrate that they have been duly incorporated and conducting business in the commercial door and window industry for at least five years.		Incorporation date or Proposal
11.2	Certifications		
11.2.1	Offerors must be Certified International Association Welding (IAW) CSA W47.1 Div.2.1		Certification