(**Specifier Note**: The purpose of this guide specification is to assist the Specifier in correctly specifying bullet resisting transaction windows and their installation.

The Specifier needs to edit this guide specification to fit the needs of each specific project. References have been made within the text of the specification to MasterFormat section numbers and titles. The Specifier needs to coordinate these numbers and titles with sections included for the specific project.

Throughout the guide specification, there are Specifier Notes to assist in the editing of the file. Brackets have been used to indicate when a selection is required. Contact an Insulgard representative for further assistance with appropriate product selections)

**SECTION 08 56 53 – SECURITY WINDOWS**

**Insulgard AVT Bullet Resisting Transaction Windows**

1. GENERAL
	* + 1. SECTION INCLUDES
				1. **[Interior] [Exterior]** Bullet ResistingTransaction Windows
			2. ACTION SUBMITTALS
				1. Refer to Section [**01 33 00 Submittal Procedures**] [**Insert section number and title**].
				2. Product Data: For each type of window
				3. Shop Drawings: Include plans, elevations, sections, details, anchorage to other work.
				4. Samples: For each exposed finish.
			3. INFORMATION SUBMITTALS
				1. Product Test Reports: Indicating compliance with requirements
				2. Warranty: Sample of finish warranty
			4. CLOSEOUT SUBMITTALS
				1. Refer to Section [**01 78 00 Closeout Submittals**] [**Insert section number and title**].
				2. Cleaning Instructions
			5. DELIVERY, STORAGE AND HANDLING
				1. Refer to Section [**01 60 00 Product Requirements**] [**Insert section number and title**].
				2. Protect windows in accordance with AAMA CW-10 "Care and Handling of Architectural Aluminum from Shop to Site" until Substantial Completion.
			6. WARRANTY

(**Specifier Note**: The 5 year finish warranty applies to the Class I anodic finishes and the 10 year applies to the 70% PVDF coating finish.)

* + - * 1. Finish Warranty: Manufacturer’s warranty against deterioration of factory finishes for the period of **[5] [10]** years from the date of Substantial Completion.
1. PRODUCTS

(**Specifier Note**: Product information is proprietary to Insulgard Security Products. If additional products are required for competitive procurement, contact Insulgard, Inc. for assistance in listing competitive products that may be available.)

* + - 1. MANUFACTURED UNIT
				1. Basis of Design: AVT Bullet Resisting Transaction Window by Insulgard Security Products; Phone 800.624.6315; website [www.insulgard.com](http://www.insulgard.com)

Subject to compliance with requirements, manufacturers of products of equivalent design may be acceptable if approved in accordance with [**Section 01 25 00 Substitution Procedures**] [**Insert section number and title**].

* + - * 1. Description

Factory fabricated window frame constructed from either 6105-T5 or 6005-T5 extruded aluminum for voice transition rails (jambs) and head.

(**Specifier Note**: Plastic laminate clad base is the most common but both regular and extra deep base are available each of the options.)

[**Extra Deep**] Base: [**plastic laminate clad particleboard**] [**stainless steel**] [**solid surface**]

Deal Tray: Recessed stainless steel [**with bullet-trap**]

(**Specifier Note**: AVT transaction windows are available in custom sizes up to 60 inches by 96 inches.)

Dimensions: [**29 inches by 40 inches**] [**30 inches by 48 inches**] [**48 inches by 42 inches**] [**60 inches by 42 inches**] **[ insert custom sizes ]**

* + - 1. PERFORMANCE CRITERIA
				1. Ballistic Resistant: Level [**1**] [**2**] [**3**] in accordance with UL 752 – Testing for Ballistic Resistance for the complete assembly including framing, glazing, deal tray and base.
			2. FABRICATION
				1. Miter or cope corners the full depth of framing; assemble and dress smooth.

Fabricate framing from manufacturer’s standard extruded aluminum in thicknesses required for security windows to comply with indicated ballistic resistance requirement.

* + - * 1. Tolerances: All joints and connections shall be tight, providing hairline joints and true alignment of adjacent members
				2. Factory glaze security windows

Glazing Stops: Finish stops to match security window framing

Secure-Side (interior) Glazing Stops: integral to framing

Non-secure side (exterior) Glazing Stops: Removable, coordinated with glazing indicated.

* + - 1. ALUMINUM FINISH
				1. Factory-applied finish:

(**Specifier Note**: SELECT the project specific finish from the following. Baked Enamel may also be available but may require minimum quantities.)

[**Clear Anodic Finish**]: Architectural Class I, clear coating AA-M10C22A41 Mechanical Finish Chemical Finish: etched, medium matte; 0.70 mils minimum complying with AAMA 611 "Voluntary Specification for Anodized Architectural Aluminum"

[**Color Anodic Finish**]: Architectural Class I, color coating AA-M10C22A42/A44 Mechanical Finish Chemical Finish: etched, medium matte; 0.70 mils minimum complying with AAMA 611 "Voluntary Specification for Anodized Architectural Aluminum".

Color: Dark Bronze.

[**PVDF-Based Coating**]: Fluoropolymer finish containing minimum 70 percent PVDF resins, in accordance with AAMA 2605 “Voluntary Specification, Performance Requirements and Test Procedures for Superior Performance Organic Coatings on Aluminum Extrusions and Panels”

Coats: [**two**] [**three**] coat system,

Color: [**Insert color**] [**custom**] [**to be selected from manufacturer's full color range**].

* + - 1. GLAZING

(**Specifier Note**: SELECT glazing based on threat level and architect’s preferences. Armor-Gard products offer glass to the attack side.)

* + - * 1. Level 1: **[1-1/4 inch acrylic] [3/4 inch MP750 Lexgard] [BALULN21 Armor-Gard]**
				2. Level 2: **[1-3/8 inch acrylic] [1 inch MP1000 Lexgard] [BALULN23 Armor-Gard]**
				3. Level 3: **[1-1/4 inch acrylic] [1-1/4 inch SP1250 Lexgard] [BALULN25 Armor-Gard]**
			1. ACCESSORIES
				1. Fasteners: Manufacturer recommended security fasteners. Utilize fastener that require two types of tools to operate fasteners.
				2. Sealants: As indicated in Section 07 92 00 Joint Sealants.
				3. Bituminous Paint: Cold-applied, asphalt-mastic paint complying with SSPC-Paint 12 requirements except containing no asbestos; formulated for 30-mil thickness per coat.
				4. [Operable voice control Flaps: On exterior installations of security windows flaps allow voice/ air flow to be shut off during times of non-use.]
1. EXECUTION
	* + 1. PREPARATION
				1. Verify field dimensions of opening prior to fabrication of transaction window.
				2. Coordinate structural requirements to ensure proper attachment and support.
			2. INSTALLATION
				1. Install transaction windows in accordance with manufacturer's recommendations and approved shop drawings.
				2. Where dissimilar metals will be in contact, protect against galvanic action by painting contact surfaces with primer or by apply sealant or tape recommended in writing by window manufacturer. When aluminum will contact concrete or masonry, protect against corrosion by painting contact surfaces with bituminous paint.
				3. Provide required support and securely fasten and set windows plumb, square, and level without twist or bow.
			3. CLEANING
				1. Clean security window surfaces after installation, avoiding damage to finishes. Remove excess glazing and sealant compound and dirt.
			4. PROTECTION
				1. Protect transaction windows damage during construction operations. If damage occurs, remove and replace as required to provide windows in their original, undamaged condition.

END OF SECTION