**NOTES TO SPECIFIER:**

**Review and remove any text in RED before sending.**

**Edit options are typically flagged in the following manner:**

**EDIT – choices need decision or detailed review**

**NOTE – note to specifier regarding selection**

**OPTION – note when there may be an option for the article and/or paragraph**

**[font in brackets] = edit options for consideration**

SECTION 087113

UNDER GLASS SLIDING DOOR SYSTEMS

1. GENERAL
	* + 1. SUMMARY
				1. Provide under glass sliding door systems.
				2. Related Sections: Coordinate with the following as applicable:

Section 087100 - Door Hardware for door hardware not specified in this Section.

Section 087111 – Exposed Track and Hardware Sliding Door Systems.

Section 087112 – Catch’N’Close Sliding Door Hardware.

Section 087114 – Pocket Door Hardware.

* + - 1. SUBMITTALS
				1. Product Data: Submit manufacturer's literature including product characteristics and accessories.
				2. Shop Drawings: Submit details of construction and mounting.

Provide templates for hardware preparation of doors and frames to be performed in factory.

* + - * 1. Door Hardware Schedule: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule." Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
				2. Verification Samples: Submit samples of materials selected for use to verify color and finish.
				3. Closeout Submittals:

Operation and Maintenance Data.

Provide any specialized tools required for Owner’s adjustments.

* + - 1. QUALITY ASSURANCE
				1. Manufacturer: Minimum of 5 years experience manufacturing similar products.
				2. Installer: Minimum of 2 years experience installing similar products.
				3. Field Measurements: To the greatest extent practical, take field measurements prior to fabrication.
			2. DELIVERY, STORAGE AND HANDLING
				1. Deliver materials and products in unopened factory labeled packages. Store and handle in strict compliance with manufacturer's instructions and recommendations.
1. PRODUCTS
	* + 1. MANUFACTURER
				1. Basis-of-Design, Canada Contact: K.N. CROWDER MFG. INC., 1220 Burloak Drive, Burlington, Ontario L7L 6B3. Telephone (905) 315-9788. Toll Free 1-866-999-1KNC (1562). Fax (905) 315-8090. Toll Free Fax 1-800-567-0123.
				2. Basis-of-Design, USA Contact: K.N. CROWDER INC., 210 Eighth Street South Lewiston, New York 14092. Telephone (716) 754-8247. Toll Free 1-866-999-1KNC (1562). Toll Free Fax 1-800-567-0123.
			2. PERFORMANCE REQUIREMENTS
				1. Standards Compliance:

ANSI/ BHMA A156.14 – Sliding and Folding Door Hardware.

ANSI/ DHI A115.IG – Installation Guide for Doors and Hardware.

American with Disabilities Act (ADA) 2010 Standards for Accessible Design.

ANSI A117.1 Accessibility Guidelines for Building and Facilities.

All state and local accessibility standards.

* + - * 1. Operating hardware shall be fully exposed and usable from both sides at all times.
				2. Doors shall comply with maximum opening force of 5 lbf applied parallel to door at latch.
			1. UNDER GLASS SLIDING DOOR SYSTEMS
				1. Glass Door Hanger: CGH Glass Hanger by K.N. Crowder Inc. with the following characteristics:

Features: Top mount door system, bolt through glass mounting, nylon wheels with precision ground ball bearings, bottom guide system

Material: Extruded aluminum, 6063 Alloy

Hanger: **Choose 1 option: [Individual hangers, 4-1/4 inch (108.0 mm) x 3-5/16 inch (84.3 mm) each, 2 required] [Continuous Hanger body 3-5/16 inch (84.3 mm) high, equal to same width as door]**

Track: **Choose 1 option: [C-104: 1-3/4 inch (44.5 mm) x 1-5/8 inch (41.3 mm) extruded top mount track] [C-108: 2-3/8 inch (60.3 mm) x 3-5/8 inch (93.2 mm) extruded side mount track]**

Finish: **Choose 1 finish: [Standard C-104 Mill Finish] [Optional/Standard C-108: Clear Anodized] [Optional: Black Anodized]**

Optional Fascia: C-110: 3-3/16 inch (81.0 mm) x 6-25/32 inch (172.2 mm) extruded fascia for use with C-108 Track only

Finish: **Choose 1 finish: [Standard Clear Anodized] [Optional: Black Anodized]**

Optional End Cap, C-111: **NOTE: For use with C-108 track & C-110 fascia only. [One end] [Two ends] [Not required]**

Finish: **Choose 1 finish: [Standard Clear Anodized] [Optional: Black Anodized]**

Glass Thickness: **Choose 1 option: [3/8 inch (10 mm)] [1/2 inch (12 mm)]**

Load Capacity: up to 300 lbs. (136 kg)

Guide: **Choose 1 option: [CGGS Stationary Glass Guide]
[CGGHD Bottom glass door guide with C-913 roller guide, two per door required to be used with C-914 guide channel 1 inch (25.4 mm) x 29/32 inch (22.9 mm), recessed into floor] [CGG Bottom glass door guide with C-200 guide, two per door required to be used with C-201 guide channel 3/4 inch (19.1 mm) x 5/8 inch (15.9 mm), recessed into floor] [For use with Continuous Hanger option: CGC-914 continuous glass guide channel with C-914 guide channel c/w C-913 roller guide OR C-913-2 double roller floor guide] [For use with Continuous Hanger option: CGC-201 continuous glass guide channel with C-201 guide channel c/w C-200 floor guide] [For use with Continuous Hanger option: CGGHD-C continuous glass guide with C-913 roller guides to be used with C-914 guide channel 1 inch (25.4 mm) x 29/32 inch (22.9 mm), recessed into floor] [For use with Continuous Hanger option: CGG-C continuous glass guide with C-200 nylon guides to be used with C-201 guide channel 3/4 inch (19.1 mm) x 5/8 inch (15.9 mm), recessed into floor]**

1. EXECUTION
	* + 1. EXAMINATION
				1. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.
			2. PREPARATION
				1. Steel Doors and Frames: Comply with ANSI/ BHMA A156-115.
				2. Wood Doors: Comply with ANSI/ BHMA A156-115W.
			3. INSTALLATION
				1. Install products in strict accordance with manufacturer’s instructions, approved submittals and in proper relationship with adjacent construction.
				2. Mounting Heights: Mount door hardware units at heights indicated in the following applicable publications, unless specifically indicated or required to comply with governing regulations:

Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."

Custom Steel Doors and Frames: DHI's "Recommended Locations for Builders' Hardware for Custom Steel Doors and Frames."

Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."

* + - * 1. Test for proper operation and adjust until satisfactory results are obtained. Replace units which do not operate properly.
			1. CLEANING
				1. Clean surfaces to remove soiling, stains, dust, and dirt using materials acceptable to manufacturer.

END OF SECTION