SECTION 08 42 00

STEEL ENTRANCE DOOR SYSTEMS

Display hidden notes to specifier. (Don't know how? [Click Here](https://www.arcat.com/sd/display_hidden_notes.shtml))

*Copyright 2019 - 2024 ARCAT, Inc. - All rights reserved*

\*\* NOTE TO SPECIFIER \*\* Taylor Entrance Systems, Inc.; entrance doors, sidelights, steel doors.
This section is based on the products of Taylor Entrance Systems, Inc., which is located at:631 N. First St.West Branch, MI 48661 Toll Free Tel: 800-248-3600Fax: 800-252-5468Email: [request info (quotes@taylordoor.com)](https://arcat.com/rfi?action=email&company=Taylor%252BEntrance%252BSystems%252C%252BInc.&message=RE%253A%2520Spec%2520Question%2520(08420tay)%253A%2520&coid=50999&spec=08420tay&rep=&fax=800-252-5468)
Web: <https://taylordoor.com>
 [ [Click Here](https://arcat.com/company/taylor-entrance-systems-inc-50999) ] for additional information.
Over the past sixty-five years, Taylor Entrance Systems has grown into a nationally recognized leader in the building materials industry. Combining leading-edge product innovation, manufacturing excellence and exceptional customer service, Taylor Entrance Systems now serves the residential and light commercial markets, both new construction and renovation.
At Taylor Entrance Systems, we've established a management philosophy in which teamwork plays an important role. People working together to manufacture quality entrance systems, and customers working closely with professionals to meet the demands of homeowners.

1. GENERAL
	1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Steel entrance door systems:
			1. Textured stainable steel. (Norwood)
			2. Wood-look steel. (Trugrain)
			3. Smooth steel. (Cambridge)
			4. Wood-edge steel. (Edgewood)
			5. Fitted door system. (QuikFit)
	1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 04 20 00 - Unit Masonry.
		2. Section 06 10 00 - Rough Carpentry.
		3. Section 07 90 00 - Joint Protection.
		4. Section 08 70 00 - Hardware.
		5. Section 08 83 13 - Mirrored Glass Glazing.
		6. Section 09 21 16.33 - Gypsum Board Area Separation Wall Assemblies.
		7. Section 09 90 00 - Painting and Coating.
	1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. ASTM International (ASTM):
			1. ASTM A366 - Standard Specification for Commercial Steel (CS) Sheet, Carbon (0.15 Maximum Percent) Cold-Rolled.
			2. ASTM A653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvanized) by the Hot-Dip Process.
			3. ASTM A924 - Standard Specification for General Requirements for Steel, Metallic-Coated by the Hot-Dip Process.
			4. ASTM D610 - Standard Test Method for Evaluating Degree of Rusting on Painted Steel Surfaces.
			5. ASTM D714 - Standard Test Method for Evaluating Degree of Blistering of Paints.
			6. ASTM D1622 - Standard Test Method for Apparent Density of Rigid Cellular Plastics.
			7. ASTM D1654 - Standard Test Method of Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments.
		2. American National Standards Institute (ANSI):
			1. ANSI/DHI A115.IG - Installation Guide for Doors and Hardware.
			2. ANSI/SDI Standard A224.1 - Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Door and Frames.
		3. National Fire Protection Association (NFPA):
			1. NFPA 80 - Fire Doors and Windows.
			2. NFPA 252 - Fire Tests of Door Assemblies.
		4. Window and Door Manufacturers Association (WDMA): N.A.F.S. 101/I.S.2/A440.
		5. Warnock Hersey, Inc. (WHI):
			1. WHI Directory of Listed Products.
			2. WHI Directory of Positive Pressure Rated Door assemblies and components.
			3. SpecDirect web based listing of fire rated components and systems.
	1. SUBMITTALS
		1. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
		2. Product Data:
			1. Manufacturer's data sheets on each product to be used.
			2. Preparation instructions and recommendations.
			3. Storage and handling requirements and recommendations.
			4. Typical installation methods.
		3. Shop Drawings: Submit shop drawings showing relationship with adjacent construction, layout, profiles and product components, including anchorage, and accessories.
			1. Indicate door type, frame, steel, core, material thickness, reinforcements, anchorages, exposed fasteners locations, openings (glazed, paneled or louvered) and hardware arrangement.
			2. Include schedule identifying each unit, with door marks or numbers referencing numbering in schedules or drawings.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable to product type.

* + 1. Verification Samples: Two representative units of each finish, texture and color.
		2. Quality Assurance Submittals: Submit the following:
			1. Product certificates signed by manufacturer certifying that materials comply with specified performance characteristics and criteria and physical requirements.
			2. Manufacturer's instructions for installation.
		3. Closeout Submittals: Submit the following:
			1. Operation and Maintenance Data: Operation and maintenance data for installed products in accordance with Division 1 Closeout Submittals. Include methods for maintaining installed products and precautions against cleaning materials and methods detrimental to finishes and performance.
			2. Warranty: Warranty documents specified herein. Submit in accordance with Section 01 30 00 - Administrative Requirements.
	1. QUALITY ASSURANCE
		1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum five years documented experience.
		2. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
		3. Regulatory Requirements for Labeled Door and Frame Construction: Where noted or required, provide Warnock Hersey Inc. (WHI) labels (Intertek Services) with appropriate fire resistance ratings for class of opening indicated. Construction details and hardware applications authorized by testing or certification laboratories shall take precedence over project details or specifications.

\*\* NOTE TO SPECIFIER \*\* Include mock-up if the project size or quality warrant the expense. The following is one example of how a mock-up on might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Construct a mock-up with actual materials in sufficient time for Architect's review and to not delay construction progress. Locate mock-up as acceptable to Architect and provide temporary foundations and support.
			1. Intent of mock-up is to demonstrate quality of workmanship and visual appearance.
			2. If mock-up is not acceptable, rebuild mock-up until satisfactory results are achieved.
			3. Do not proceed with remaining work until workmanship is approved by Architect.
			4. Retain mock-up during construction as a standard for comparison with completed work.
			5. Maintenance: Maintain mock-up during construction for workmanship
			6. comparison; remove and legally dispose of mock-up if it is no longer required.
			7. Do not alter or remove mock-up until work is completed or removal is authorized.

\*\* NOTE TO SPECIFIER \*\* Delete one of the two following subparagraphs.

* + - 1. At Substantial Completion, approved mockups may become part of completed Work.
			2. Demolish mockups and remove from site.
	1. PRE-INSTALLATION CONFERENCE
		1. Convene a conference approximately two weeks before scheduled commencement of the Work of this Section.
			1. Attendees shall include Architect, Contractor and trades involved.
			2. Agenda shall include verification of project requirements, substrate conditions, manufacturer's installation instructions, manufacturer's warranty requirements, schedule, responsibilities, critical path items and approvals.
		2. Coordinate field measurements and fabrication schedule with construction progress to avoid construction delays.
	2. DELIVERY, STORAGE, AND HANDLING
		1. Ordering: Comply with manufacturer's ordering instructions and lead-time requirements to avoid construction delays.
		2. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
			1. Handle and store products according to manufacturer's recommendations published in technical materials.
			2. Leave product wrapped or otherwise protected and under clean, dry storage conditions until required.
		3. Storage and Protection: Store materials protected from exposure to harmful weather conditions, at temperature and humidity conditions recommended by manufacturer.
			1. Door Storage:
				1. Doors shall be protected at corners to prevent damage or marring of finish.
				2. Doors shall be stored in an upright position under cover on building site on wood sills or on floors in a manner that will prevent rust and damage.
				3. Avoid creating a humidity chamber by using a plastic or canvas shelter and not venting the area covered.
			2. Frame Storage:
				1. Frames shall be stored in an upright position under cover on building site on wood sills or floors in a manner that will prevent rust and damage.
				2. Avoid creating a humidity chamber by using a plastic or canvas shelter and not venting the area covered.
	3. PROJECT CONDITIONS
		1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
	4. WARRANTY
		1. Manufacturer's Warranty: Submit manufacturer's standard limited warranty stating assemblies will be free from defects in materials and workmanship from the date of manufacture for the time periods indicated below:

\*\* NOTE TO SPECIFIER \*\* For Cambridge Collection doors there are two warranty options: Limited lifetime warranty is standard for 22 gauge doors and 10 year warranty for 24 gauge doors. 2 year warranty is standard for Edgewood Collection doors and entrance systems: Limited lifetime warranty is standard for Norwood Collection door slabs and entire entrance systems. 10 year warranty is standard for Trugrain Collection doors and entrance systems. 1 year warranty available for QuikFit doors and entrance systems. Delete warranty options not required.

* + - 1. Door Slabs: 1 year.
			2. Door Slabs: 2 years.
			3. Door Slabs: 10 years.
			4. Door Slabs: Limited lifetime warranty.
			5. Door Frame: Limited lifetime warranty.
			6. Entrance Systems: 1 year.
			7. Entrance Systems: 2 years.
			8. Entrance Systems: 10 years.
			9. Entrance Systems: Limited lifetime warranty.
1. PRODUCTS
	1. MANUFACTURERS
		1. Acceptable Manufacturer: Taylor Entrance Systems, Inc., which is located at:631 N. First St.West Branch, MI 48661 Toll Free Tel: 800-248-3600Fax: 800-252-5468Email: [request info (quotes@taylordoor.com)](https://arcat.com/rfi?action=email&company=Taylor%252BEntrance%252BSystems%252C%252BInc.&message=RE%253A%2520Spec%2520Question%2520(08420tay)%253A%2520&coid=50999&spec=08420tay&rep=&fax=800-252-5468);Web: <https://taylordoor.com>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
		2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
	1. PERFORMANCE REQUIREMENTS
		1. Superior insulation values, even in sub-zero temperature ranges.
			1. Apparent U-Value of Opaque Doors: 0.17 Btu per sq ft per hour per degrees F (0.29 W per m per degrees K). For doors 1-3/4 inches (45 mm) thick; 24 gauge construction.
				1. Ratings do not apply to panels but to operable door frame assemblies.
				2. Test reports per NFRC 102 available to design professionals upon request.
		2. Fire Protection: Tested performance.
			1. Doors up to 8 ft (2438 mm) in height: 90 minutes.
		3. Security Rating: Grade 40.
		4. Hurricane Impact Code Compliance: Pass.
		5. Weldless Door Construction: No welds to provide blemishes or destruction of rust inhibiting galvanic coating.
		6. Composite Lock Block: Eliminates typical wave in lock area while enhancing structural performance.

\*\* NOTE TO SPECIFIER \*\* Adjustable hinge plate is optional. Delete if not required.

* + 1. Adjustable Hinge Plate: Insures door alignment for optimal performance.
		2. Slide on Bottom Sweeps: For easy replacement and maximum water and air infiltration resistance.

\*\* NOTE TO SPECIFIER \*\* Delete Article if not required.

* 1. TEXTURED STAINABLE STEEL ENTRANCE DOOR SYSTEMS
		1. Basis of Design: Norwood Collection as manufactured by Taylor Entrance Systems.
			1. Code Compliance: Grade 40 security rating.
			2. Steel Face Sheet Thickness: 22 gauge.
			3. Door Panel Texture: Embossed wood grain.
			4. Stile and Rail Texture: Embossed wood grain.

\*\* NOTE TO SPECIFIER \*\* Delete stain kits options not required.

* + - 1. Stain Kits: Oak.
			2. Stain Kits: Walnut.
			3. Stain Kits: None.
			4. Stain Kits: As scheduled on Drawings.

\*\* NOTE TO SPECIFIER \*\* Delete door panel style options not required.

* + - 1. Door Panel Style: Flush.
			2. Door Panel Style: 1-Panel HD.
			3. Door Panel Style: 2-Panel HD.
			4. Door Panel Style: 2-Panel HD Archtop.
			5. Door Panel Style: 2-Panel HD Archtop Plank.
			6. Door Panel Style: 2-Panel HD Cottage.
			7. Door Panel Style: 3-Panel HD Craftsman.
			8. Door Panel Style: 3-Panel HD Craftsman with Dentil Shelf.
			9. Door Panel Style: 3-Panel.
			10. Door Panel Style: Crossbuck.
			11. Door Panel Style: 4-Panel Blank Top.
			12. Door Panel Style: True 4-Panel.
			13. Door Panel Style: 6-Panel.
			14. Door Panel Style: 8-Panel.
			15. Door Panel Style: 9-Panel.
			16. Door Panel Style: Bottom 2-Panel Blank Top.
			17. Door Panel Styles: As scheduled on Drawings.
			18. Door Panel Styles: As selected by Architect from manufacturer's range of Standard Definition (STD) door panel styles.
			19. Door Panel Styles: As selected by Architect from manufacturer's range of High Definition (HD) definition door panel styles.
			20. Door Panel Styles: As scheduled on Drawings.
			21. Finish: Door surfaces exposed to view; factory beige color stainable primer.

\*\* NOTE TO SPECIFIER \*\* Delete hinge plates options not required.

* + - 1. Hinge Plates: Provide doors with standard, fixed hinge plate system.
			2. Hinge Plates: Provide doors with optional, adjustable hinge plate system.
			3. Hinge Plates: As selected by Architect.
			4. Hinge Plates: As scheduled on Drawings.
			5. Lock Area Reinforcement: 4 x 10 inches (102 x 254 mm) composite lock block.
			6. Face Bore Diameter: 2-1/8 inches (54 mm).

\*\* NOTE TO SPECIFIER \*\* Delete face bore backset options not required.

* + - 1. Face Bore Backset: 2-3/4 inches (70 mm).
			2. Face Bore Backset: 2-3/8 inches (60 mm).
			3. Face Bore Backset: As selected by Architect.
			4. Face Bore Backset: As scheduled on Drawings.
			5. Core: Polyurethane filled, low VOC, 2.00 lbs per cu ft (32 kg per cu m) density.
			6. Perimeter: Continuously reinforced unitized steel edge construction.

\*\* NOTE TO SPECIFIER \*\* Delete cutouts option not required.

* + - 1. Cutouts: None.
			2. Cutouts: As scheduled on Drawings.

\*\* NOTE TO SPECIFIER \*\* Delete bottom sweeps option not required.

* + - 1. Bottom Sweeps: Dual durometer composite.
			2. Bottom Sweeps: Screw-on bottom sweep.
			3. Bottom Sweeps: As selected by Architect.
			4. Bottom Sweeps: As scheduled on Drawings.

\*\* NOTE TO SPECIFIER \*\* Delete factory hinge preparation options if not required

* + - 1. Factory Hinge Preparation: 4 x 4 inches (102 x 102 mm); surface mounted residential weight hinges containing a non-template hole pattern.
			2. Factory Hinge Preparation: 4-1/2 x 4-1/2 inches (108 x 108 mm); commercial weight hinges.
			3. Factory Hinge Preparation: Hole patterns as selected by Architect.
			4. Factory Hinge Preparation: Hole patterns as scheduled on Drawings.

\*\* NOTE TO SPECIFIER \*\* Delete sidelights paragraph if not required.

* + 1. Sidelights:
			1. Sidelight Panel Texture: Embossed wood grain.
			2. Stile and Rail Texture: Embossed wood grain.

\*\* NOTE TO SPECIFIER \*\* Delete sidelight panel style options not required for project.

* + - 1. Sidelight Panel Style: Flush.
			2. Sidelight Panel Style: 1 Panel 9 x 13 inches (228 x 330 mm).
			3. Sidelight Panel Style: 1 Panel.
			4. Sidelight Panel Style: 2 Panel.
			5. Sidelight Panel Style: 3 Panel.
			6. Sidelight Panel Styles: As selected by Architect from manufacturer's range of door panel styles.
			7. Sidelight Panel Styles: As scheduled on Drawings.
			8. Steel Face Sheet Thickness: 22 gauge.
			9. Finish: Sidelight surfaces exposed to view; factory beige color stainable primer.
			10. Core: Polyurethane filled, low VOC, 2.00 lbs per cu ft (32 kg per cu m) density.
			11. Perimeter: Continuously reinforced with unitized steel edge construction.

\*\* NOTE TO SPECIFIER \*\* Delete option for cutouts not required.

* + - 1. Cutouts: None.
			2. Cutouts: As scheduled on Drawings.

\*\* NOTE TO SPECIFIER \*\* Delete if fire rating not required.

* + 1. Labeled Doors and Frames: Adjustable throat frames, sidelights, transoms, borrowed lights; Warnock Hersey Inc. (Intertek Services) labels with appropriate fire resistance ratings for class of opening indicated on Drawings.
		2. Hardware Preparation: Location of hardware including but not limited to locks, hinges, latches, push/pull plates and bars, exit devices, handle sets, closer reinforcing, roller latches and arm pulls. Conform to Steel Door Institute recommendations and details in manufacturer's literature.
			1. Doors: Mortised, reinforced, drilled and tapped to receive mortise hardware.
				1. Door Height up to 84 inches (2134 mm): Prepare for 3 hinges.
				2. Door Height from 84 inches (2134 mm) to 96 inches (2438 mm): Prepare for 4 hinges.
			2. Surface Applied Hardware: Field Drill and tap for mounting.
			3. Locks: Require flat faces.
		3. Frames: Rabbeted profile with stop kerfed at base to receive foam weatherstripping.
			1. Frame Type: Adjustable throat frames.
			2. Frame Fabrication: 18 gauge steel.
		4. Frame Member Galvanizing: Per ASTM A40, hot dipped galvanized materials with 0.4 oz. coating conforming to ASTM A924 and ASTM A653.
		5. Exposed Surfaces of Prime Painted Frames: Cleansed, treated with and given 1 baked-on shop coat of VOC compliant primer.

\*\* NOTE TO SPECIFIER \*\* Delete louvers paragraph if required.

* + 1. Louvers: Insert type with vision-proof inverted Y baffles at locations indicated on Drawings.
			1. Louver Construction: Welded steel.
			2. Louver Blades and Frames: 18 gauge.

\*\* NOTE TO SPECIFIER \*\* Delete glazing paragraph if not applicable.

* + 1. Glazing: Formed steel kits of screw-in type, to permit selection of secure side in field.
			1. Glazing Arrangements: Accommodate 1/4 inch (6.4 mm) thick glass.
			2. Glass Lite Doors: Formed steel, screw-in type.
			3. Muntin Bars for Multi-Lite Glazing: Field applied type.
			4. Framing: Injection molded composite materials where fire ratings are not required.
			5. For High Wind Design Pressures: Units complying with protocols or tests protocols certified by the National Accreditation Management Institute include but are not limited to TAS 201, TAS 202, TAS 203, ASTM E330, ASTM E1886, and ASTM E1996.

\*\* NOTE TO SPECIFIER \*\* Delete Article if not required.

* 1. WOOD-LOOK STEEL ENTRANCE DOOR SYSTEMS
		1. Basis of Design: Trugrain Collection as manufactured by Taylor Entrance Systems.

\*\* NOTE TO SPECIFIER \*\* Delete option for matching door jambs if not required.

* + - 1. Matching Door Jambs: Vinyl coated jambs matching door finish.
			2. Steel Face Sheet: 22 gauge, hot dipped galvanized.

\*\* NOTE TO SPECIFIER \*\* Delete door panel style options not required.

* + - 1. Door Panel Style: Flush
			2. Door Panel Style: 1 Panel Shaker
			3. Door Panel Style: 2 Panel HD.
			4. Door Panel Style : 3 Panel Craftsman
			5. Door Panel Style: 6 Panel HD.
			6. Door Panel Styles: As scheduled on Drawings.
			7. Door Panel Styles: As selected by Architect from manufacturer's range.

\*\* NOTE TO SPECIFIER \*\* Delete factory applied polyester coating options not required

* + - 1. Factory Applied Polyester Coating: Ludington (Cherry).
			2. Factory Applied Polyester Coating: Holland (Oak).
			3. Factory Applied Polyester Coating: Rockport (Gray Oak)
			4. Factory Applied Polyester Coating: Brimley (Walnut).
			5. Factory Applied Polyester Coating: As selected by Architect from manufacturer's range.
			6. Factory Applied Polyester Coating: As scheduled and indicated on Drawings.

\*\* NOTE TO SPECIFIER \*\* Delete hinge plates options not required.

* + - 1. Hinge Plates: Doors with standard, fixed hinge plate system.
			2. Hinge Plates: Doors with adjustable hinge plate system.
			3. Hinge Plates: As selected by Architect.
			4. Hinge Plates: As scheduled on Drawings.
			5. Lock Area Reinforcement: 4 x 10 inches (102 x 254 mm) composite lock block.
			6. Face Bore Diameter: 2-1/8 inches (54 mm).

\*\* NOTE TO SPECIFIER \*\* Delete face bore backset options not required.

* + - 1. Face Bore Backset: 2-3/4 inches (70 mm).
			2. Face Bore Backset: 2-3/8 inches (60 mm).
			3. Face Bore Backset: As selected by Architect.
			4. Face Bore Backset: As scheduled on Drawings.

\*\* NOTE TO SPECIFIER \*\* Delete if sidelights not required.

* + 1. Smooth Steel Sidelights: Trugrain Collection as manufactured by Taylor Entrance Systems.
			1. Thickness: 1.75 inches (44 mm).
			2. Core: Polyurethane filled.
			3. Perimeter: Continuously reinforced with full surround medium density fiberboard stiles and rails.

\*\* NOTE TO SPECIFIER \*\* Delete factory applied polyester coating options not required

* + - 1. Factory Applied Polyester Coating: Ludington (Cherry)
			2. Factory Applied Polyester Coating: Holland (Oak).
			3. Factory Applied Polyester Coating: Rockport (Gray Oak)
			4. Factory Applied Polyester Coating: Brimley (Walnut).
			5. Factory Applied Polyester Coating: As selected by Architect from manufacturer's range.
			6. Factory Applied Polyester Coating: As scheduled on Drawings.

\*\* NOTE TO SPECIFIER \*\* Delete if fire rated doors and frames are not required.

* + 1. Labeled Doors and Frames: Adjustable throat frames, sidelights, transoms, borrowed lights; Warnock Hersey Inc. (Intertek Services) labels with appropriate fire resistance ratings for class of opening indicated on Drawings.
		2. Hardware Preparation: Location of hardware including but not limited to locks, hinges, latches, push/pull plates and bars, exit devices, handle sets, closer reinforcing, roller latches and arm pulls. Conform to Steel Door Institute recommendations and details in manufacturer's literature.
			1. Doors: Mortised, reinforced, drilled and tapped to receive mortise hardware.
				1. Door Height up to 84 inches (2134 mm): Prepare for 3 hinges.
				2. Door Height from 84 inches (2134mm) to 96 inches (2438 mm): Prepare for 4 hinges.
			2. Surface Applied Hardware: Field Drill and tap for mounting.
			3. Locks: Require flat faces.
		3. Frames: Rabbeted profile with stop kerfed at base to receive foam weatherstripping.
			1. Frame Type: Adjustable throat frames.
			2. Frame Fabrication: 18 gauge steel.
		4. Frame Member Galvanizing: Per ASTM A40, hot dipped galvanized materials with 0.4 oz. coating conforming to ASTM A924 and ASTM A653.
		5. Exposed Surfaces of Prime Painted Frames: Cleansed, treated with and given 1 baked-on shop coat of VOC compliant primer.

\*\* NOTE TO SPECIFIER \*\* Delete ,lovers paragraph if not required.

* + 1. Louvers: Insert type with vision-proof inverted Y baffles at locations indicated on Drawings.
			1. Louver Construction: Welded steel.
			2. Louver Blades and Frames: 18 gauge.

\*\* NOTE TO SPECIFIER \*\* Delete glazing paragraph if not applicable.

* + 1. Glazing: Formed steel kits of screw-in type, to permit selection of secure side in field.
			1. Glazing Arrangements: Accommodate 1/4 inch (6.4 mm) thick glass.
			2. Glass Lite Doors: Formed steel, screw-in type.
			3. Muntin Bars for Multi-Lite Glazing: Field applied type.
			4. Framing: Injection molded composite materials where fire ratings are not required.
			5. For High Wind Design Pressures: Units complying with protocols or tests protocols certified by the National Accreditation Management Institute include but are not limited to TAS 201, TAS 202, TAS 203, ASTM E330, ASTM E1886, and ASTM E1996.

\*\* NOTE TO SPECIFIER \*\* Delete Article if not required.

* 1. SMOOTH STEEL ENTRANCE DOOR SYSTEMS
		1. Basis of Design: Cambridge Collection as manufactured by Taylor Entrance Systems.
			1. Compliance: Grade 40 security rating.
			2. Door Panel Texture: Smooth.
			3. Door Panel Thickness: 1-3/4 inches (44 mm).

\*\* NOTE TO SPECIFIER \*\* Delete door panel style options not required.

* + - 1. Door Panel Style: Flush.
			2. Door Panel Style: 1-Panel Flat Shaker.
			3. Door Panel Style: 2-Panel Flat Shaker.
			4. Door Panel Style: 3/4 2-Panel.
			5. Door Panel Style: 3-Panel Contemporary.
			6. Door Panel Style: 4-Panel Shaker.
			7. Door Panel Style: 5-Panel.
			8. Door Panel Style: Flush 5-Groove.
			9. Door Panel Style: Flush 4-Groove.
			10. Door Panel Style: Flush 4-Groove Contemporary.
			11. Door Panel Style: 3-Panel Shaker.
			12. Door Panel Style: 1-Panel HD.
			13. Door Panel Style: 2-Panel HD.
			14. Door Panel Style: 2-Panel HD Arch Top.
			15. Door Panel Style: 2-Panel HD Arch Top Plank.
			16. Door Panel Style: 2-Panel.
			17. Door Panel Style: Crossbuck.
			18. Door Panel Style: 3-Panel HD.
			19. Door Panel Style: 2-Panel HD Cottage Style.
			20. Door Panel Style: 3-Panel HD Craftsman.
			21. Door Panel Style: 4-Panel HD Blank Top.
			22. Door Panel Style: True 4-Panel.
			23. Door Panel Style: 6-Panel.
			24. Door Panel Style: 6-Panel HD.
			25. Door Panel Style: 8-Panel.
			26. Door Panel Style: 9-Panel.
			27. Door Panel Styles: As selected by Architect from manufacturer's range of Standard Definition (STD) door panel styles.
			28. Door Panel Styles: As selected by Architect from manufacturer's range of High Definition (HD) definition door panel styles.
			29. Door Panel Styles: As scheduled and indicated on Drawings.

\*\* NOTE TO SPECIFIER \*\* Limited lifetime warranty is standard for 22 gauge and 10 year warranty for 24 gauge doors. Delete steel face sheet thickness options not required.

* + - 1. Steel Face Sheet Thickness: 24 gauge, galvanized tension leveled steel.
			2. Steel Face Sheet Thickness: 22 gauge, galvanized tension leveled steel.
			3. Steel Face Sheet Thickness: As selected by Architect.
			4. Steel Face Sheet Thickness: As scheduled and indicated on Drawings.
			5. Finish: Door surfaces exposed to view; factory primed.

\*\* NOTE TO SPECIFIER \*\* Delete hinge plates options not required.

* + - 1. Hinge Plates: Doors with standard, fixed hinge plate system.
			2. Hinge Plates: Doors with adjustable hinge plate system.
			3. Hinge Plates: As selected by Architect.
			4. Hinge Plates: As scheduled on Drawings.
			5. Lock Area Reinforcement: 4 x 10 inches (102 x 254 mm) composite lock block.
			6. Core: Polyurethane filled, low VOC, 2.00 lbs per cu ft (32 kg per cu m) density.
			7. Perimeter: Continuously reinforced unitized steel edge construction.

\*\* NOTE TO SPECIFIER \*\* Delete cutouts option not required.

* + - 1. Cutouts: None.
			2. Cutouts: As scheduled on Drawings.

\*\* NOTE TO SPECIFIER \*\* Delete bottom sweeps options not required.

* + - 1. Bottom Sweeps: Dual durometer composite.
			2. Bottom Sweeps: Screw-on bottom sweep.
			3. Bottom Sweeps: As selected by Architect.
			4. Bottom Sweeps: As scheduled on Drawings.

\*\* NOTE TO SPECIFIER \*\* Delete factory hinge preparation options if not required

* + - 1. Factory Hinge Preparation: 4 x 4 inches (102 x 102 mm); surface mounted residential weight hinges containing a nontemplate hole pattern.
			2. Factory Hinge Preparation: 4-1/2 x 4-1/2 inches (108 x 108 mm); commercial weight hinges.
			3. Factory Hinge Preparation: Hole patterns as selected by Architect.
			4. Factory Hinge Preparation: Hole patterns as scheduled on Drawings.

\*\* NOTE TO SPECIFIER \*\* Delete sidelights paragraph if not required.

* + 1. Sidelights:
			1. Compliance: Grade 40 security rating.
			2. Sidelight Panel Thickness: Nominal 1-3/4 inches.
			3. Sidelight Panel Texture: Smooth.

\*\* NOTE TO SPECIFIER \*\* Delete sidelight panel style options not required for project.

* + - 1. Sidelight Panel Style: Flush.
			2. Sidelight Panel Style: 1 Panel 9 x 13 inches (228 x 330 mm).
			3. Sidelight Panel Style: 1 Panel HD 9 x 13 inches (228 x 330 mm).
			4. Sidelight Panel Style: 1 Panel.
			5. Sidelight Panel Style: 1 Panel HD.
			6. Sidelight Panel Style: 2 Panel.
			7. Sidelight Panel Style: 2 Panel HD.
			8. Sidelight Panel Style: 3 Panel.
			9. Sidelight Panel Style: 3 Panel HD.
			10. Sidelight Panel Styles: As selected by Architect from manufacturer's range of Standard Definition (STD) door panel styles.
			11. Sidelight Panel Styles: As selected by Architect from manufacturer's range of High Definition (HD) definition door panel styles.
			12. Sidelight Panel Styles: As scheduled on Drawings.

\*\* NOTE TO SPECIFIER \*\* Delete steel face sheet thickness options not required.

* + - 1. Steel Face Sheet Thickness: 24 gauge, galvanized tension leveled steel.
			2. Steel Face Sheet Thickness: As selected by Architect.
			3. Steel Face Sheet Thickness: As scheduled on Drawings.
			4. Finish: Sidelight surfaces exposed to view; factory primed.
			5. Core: Polyurethane filled, low VOC, 2.00 lbs per cu ft (32 kg per cu m) density.
			6. Perimeter: Continuously reinforced with unitized steel edge construction.

\*\* NOTE TO SPECIFIER \*\* Delete option for cutouts not required.

* + - 1. Cutouts: None.
			2. Cutouts: As scheduled and indicated on Drawings.

\*\* NOTE TO SPECIFIER \*\* Delete if fire rating not required.

* + 1. Labeled Doors and Frames: Adjustable throat frames, sidelights, transoms, borrowed lights; Warnock Hersey Inc. (Intertek Services) labels with appropriate fire resistance ratings for class of opening indicated on Drawings.
		2. Hardware Preparation: Location of hardware including but not limited to locks, hinges, latches, push/pull plates and bars, exit devices, handle sets, closer reinforcing, roller latches and arm pulls. Conform to Steel Door Institute recommendations and details in manufacturer's literature
			1. Doors: Mortised, reinforced, drilled and tapped to receive mortise hardware.
				1. Door Height up to 84 inches (2134 mm): Prepare for 3 hinges.
				2. Door Height from 84 inches (2134 mm) to 96 inches (2438 mm): Prepare for 4 hinges.
			2. Surface Applied Hardware: Field Drill and tap for mounting.
			3. Locks: Require flat faces.
		3. Frames: Rabbeted profile with stop kerfed at base to receive foam weatherstripping.
			1. Frame Type: Adjustable throat frames.
			2. Frame Fabrication: 18 gauge steel.
		4. Frame Member Galvanizing: Per ASTM A40, hot dipped galvanized materials with 0.4 oz. coating conforming to ASTM A924 and ASTM A653.
		5. Exposed Surfaces of Prime Painted Frames: Cleansed, treated with and given 1 baked-on shop coat of VOC compliant primer.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable.

* + 1. Louvers: Insert type with vision-proof inverted Y baffles at locations indicated on Drawings.
			1. Louver Construction: Welded steel.
			2. Louver Blades and Frames: 18 gauge.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable.

* + 1. Glazing: Formed steel kits of screw-in type, to permit selection of secure side in field.
			1. Glazing Arrangements: Accommodate 1/4 inch (6.4 mm) thick glass.
			2. Glass Lite Doors: Formed steel, screw-in type.
			3. Muntin Bars for Multi-Lite Glazing: Field applied type.
			4. Framing: Injection molded composite materials where fire ratings are not required.
			5. For High Wind Design Pressures: Units complying with protocols or tests protocols certified by the National Accreditation Management Institute include but are not limited to TAS 201, TAS 202, TAS 203, ASTM E330, ASTM E1886, and ASTM E1996.

\*\* NOTE TO SPECIFIER \*\* Delete Article if not required.

* 1. WOOD-EDGE STEEL ENTRANCE DOOR SYSTEMS
		1. Basis of Design: Edgewood Collection as manufactured by Taylor Entrance Systems.
			1. Compliance: Fire rated 20 minutes.
			2. Steel Face Sheet: 25 gauge, hot dipped galvanized.
			3. Stiles and Rails: 1-1/4 inch (32 mm) solid wood.
			4. Bottom Rails: Composite casting.
			5. Door Panel Texture: Smooth.
			6. Door Height: 80 inches (2032 mm).
			7. Door Width: 48 inches (1219 mm).

\*\* NOTE TO SPECIFIER \*\* Delete door panel styles options not required for project.

* + - 1. Door Panel Style: Flush.
			2. Door Panel Style: 2-Panel HD.
			3. Door Panel Style: 3-Panel HD.
			4. Door Panel Style: 4-Panel HD Blank Top.
			5. Door Panel Style: 4-Panel STD Blank Top.
			6. Door Panel Style: True 4-Panel.
			7. Door Panel Style: 6-Panel STD.
			8. Door Panel Style: 6-Panel HD.
			9. Door Panel Style: 8-Panel.
			10. Door Panel Style: 9-Panel.
			11. Door Panel Styles: As selected by Architect from manufacturer's range of Standard Definition (STD) door panel styles.
			12. Door Panel Styles: As selected by Architect from manufacturer's range of High Definition (HD) definition door panel styles.
			13. Door Panel Styles: As scheduled and indicated on Drawings.
			14. Finish: Door surfaces exposed to view; factory primed. Color: White.
			15. Lock Area Reinforcement: Solid 11 inch (279 mm) wood lock block with 1 inch (25 mm) diameter edge bore.
			16. Face Bore Diameter: 2-1/8 inches (54 mm).

\*\* NOTE TO SPECIFIER \*\* Delete face bore backset options not required.

* + - 1. Face Bore Backset: 2-3/4 inches (70 mm).
			2. Face Bore Backset: 2-3/8 inches (60 mm).
			3. Face Bore Backset: As selected by Architect.
			4. Face Bore Backset: As scheduled on Drawings.
			5. Core: Polyurethane filled, low VOC, 2.00 lbs per cu ft (32 kg per cu m) density.

\*\* NOTE TO SPECIFIER \*\* Delete option for cutouts not required.

* + - 1. Cutouts: None.
			2. Cutouts: As scheduled and indicated on Drawings.

\*\* NOTE TO SPECIFIER \*\* Delete bottom sweeps options not required.

* + - 1. Bottom Sweeps: Dual durometer composite.
			2. Bottom Sweeps: Screw-on bottom sweep.
			3. Bottom Sweeps: As selected by Architect.
			4. Bottom Sweeps: As scheduled on Drawings.

\*\* NOTE TO SPECIFIER \*\* Delete factory hinge preparation options if not required

* + - 1. Factory Hinge Preparation: 4 x 3/32 inches (102 x 2.4 mm) mortised hinge pocket.
			2. Factory Hinge Preparation: None.
			3. Factory Hinge Preparation: Custom mounting as selected by Architect.
			4. Factory Hinge Preparation: Custom mounting as scheduled on Drawings.

\*\* NOTE TO SPECIFIER \*\* Delete if fire rating not required.

* + 1. Labeled Doors and Frames: Adjustable throat frames, sidelights, transoms, borrowed lights; Warnock Hersey Inc. (Intertek Services) labels with appropriate fire resistance ratings for class of opening indicated on Drawings.
		2. Hardware Preparation: Location of hardware including but not limited to locks, hinges, latches, push/pull plates and bars, exit devices, handle sets, closer reinforcing, roller latches and arm pulls. Conform to Steel Door Institute recommendations and details in manufacturer's literature
			1. Doors: Mortised, reinforced, drilled and tapped to receive mortise hardware.
				1. Door Height up to 84 inches (2134 mm): Prepare for 3 hinges.
			2. Surface Applied Hardware: Field Drill and tap for mounting.
			3. Locks: Require flat faces.
		3. Frames: Rabbeted profile with stop kerfed at base to receive foam weatherstripping.
			1. Frame Type: Adjustable throat frames.
			2. Frame Fabrication: 18 gauge steel.
		4. Frame Member Galvanizing: Per ASTM A40, hot dipped galvanized materials with 0.4 oz. coating conforming to ASTM A924 and ASTM A653.
		5. Exposed Surfaces of Prime Painted Frames: Cleansed, treated with and given 1 baked-on shop coat of VOC compliant primer.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable.

* + 1. Louvers: Insert type with vision-proof inverted Y baffles at locations indicated on Drawings.
			1. Louver Construction: Welded steel.
			2. Louver Blades and Frames: 18 gauge.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable.

* + 1. Glazing: Formed steel kits of screw-in type, to permit selection of secure side in field.
			1. Glazing Arrangements: Accommodate 1/4 inch (6.4 mm) thick glass.
			2. Glass Lite Doors: Formed steel, screw-in type.
			3. Muntin Bars for Multi-Lite Glazing: Field applied type.
			4. Framing: Injection molded composite materials where fire ratings are not required.
			5. For High Wind Design Pressures: Units complying with protocols or tests protocols certified by the National Accreditation Management Institute include but are not limited to TAS 201, TAS 202, TAS 203, ASTM E330, ASTM E1886, and ASTM E1996.

\*\* NOTE TO SPECIFIER \*\* Delete Article if not required.

* 1. FITTED STEEL ENTRANCE DOOR SYSTEMS
		1. Basis of Design: QuikFit as manufactured by Taylor Entrance Systems.
			1. Frame Type: Fitted frame, adjustable, two piece, 18 gauge steel. Interlocking base and closure for 1 inch (25 mm) throat adjustability.

\*\* NOTE TO SPECIFIER \*\* Delete fire rating if not required.

* + - 1. Fire Rating: 90 minutes.

\*\* NOTE TO SPECIFIER \*\* Limited lifetime warranty is standard for 22 gauge and 10 year warranty for 24 gauge doors. Delete steel face sheet thickness not required.

* + - 1. Steel Face Sheet Thickness: 24 gauge, galvanized tension leveled steel.
			2. Steel Face Sheet Thickness: 22 gauge, galvanized tension leveled steel.
			3. Steel Face Sheet Thickness: As selected by Architect.
			4. Steel Face Sheet Thickness: As scheduled on Drawings.
			5. Door Panel Texture: Smooth.

\*\* NOTE TO SPECIFIER \*\* Delete door height options not required.

* + - 1. Door Height: 80 inches (2032 mm).
			2. Door Height: 84 inches (2137 mm).
			3. Door Height: 96 inches (2438 mm).
			4. Door Height: As selected by Architect.
			5. Door Height: As scheduled on Drawings.

\*\* NOTE TO SPECIFIER \*\* Delete casing options not required.

* + - 1. Casing: Steel, 22 gauge, Standard rectilinear profile.
			2. Casing: Steel, 22 gauge, Colonial profile.
			3. Casing: Wood.
			4. Casing: Composite casting.
			5. Casing: As selected by Architect.
			6. Casing: As scheduled on Drawings.

\*\* NOTE TO SPECIFIER \*\* Delete if fire rating not required.

* + 1. Labeled Doors and Frames: For adjustable throat frames, sidelights, transoms, borrowed lights; Warnock Hersey Inc. (Intertek Services) labels with appropriate fire resistance ratings for class of opening indicated on Drawings.
		2. Hardware Preparation: Location of hardware including but not limited to locks, hinges, latches, push/pull plates and bars, exit devices, handle sets, closer reinforcing, roller latches and arm pulls. Conform to Steel Door Institute recommendations and details inmanufacturer's literature
			1. Doors: Mortised, reinforced, drilled and tapped to receive mortise hardware.
				1. Door Height up to 84 inches (2134 mm): Prepare for 3 hinges.
				2. Door Height from 84 inches (2134 mm) to 96 inches (2438 mm): Prepare for 4 hinges.
			2. Surface Applied Hardware: Field Drill and tap for mounting.
			3. Locks: Require flat faces.
		3. Frame Member Galvanizing: Per ASTM A40 hot dipped galvanized materials with 0.4 oz. coating conforming to ASTM A924 and ASTM A653.
		4. Exposed Surfaces of Prime Painted Frames: Cleansed, treated with and given 1 baked-on shop coat of VOC compliant primer.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable.

* + 1. Louvers: Insert type with vision-proof inverted Y baffles in locations indicated on Drawings.
			1. Louver Construction: Welded steel.
			2. Louver Blades and Frames: 18 gauge.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable.

* + 1. Glazing: Formed steel kits of screw-in type, to permit selection of secure side in field.
			1. Glazing Arrangements: Accommodate 1/4 inch (6.4 mm) thick glass.
			2. Glass Lite Doors: Formed steel, screw-in type.
			3. Muntin Bars for Multi-Lite Glazing: Field applied type.
			4. Framing: Injection molded composite materials where fire ratings are not required.
			5. For High Wind Design Pressures: Units complying with protocols or tests protocols certified by the National Accreditation Management Institute include but are not limited to TAS 201, TAS 202, TAS 203, ASTM E330, ASTM E1886, and ASTM E1996.
1. EXECUTION
	1. EXAMINATION
		1. Do not begin installation until substrates have been properly constructed and prepared.
		2. Verify substrate conditions, previously installed under other sections, are acceptable for product installation in accordance with manufacturer's instructions
		3. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.
	2. PREPARATION
		1. Clean surfaces thoroughly prior to installation.
		2. Prepare surfaces using methods recommended by manufacturer for achieving the best result for substrate under the project conditions.

\*\* NOTE TO SPECIFIER \*\* Delete paragraph below if no field painting is required.

* + 1. Field Painting Preparation:
			1. Before application of finish coat, surfaces must be dry and free of dirt, oil and dust.
			2. Finish Coat: Applied over a film that is intact. Field prime scratches or bare edges with a rust inhibiting paint before top coating.
				1. Comply with instructions provided by paint manufacturer.
	1. INSTALLATION
		1. Install in accordance with manufacturer's instructions, approved submittals, and in proper relationship with adjacent construction.

\*\* NOTE TO SPECIFIER \*\* Refer to SDI publication, Installation Guide for Commercial Steel Doors and Frames and DHI's publication Installation Guide for detailed recommendations.

* + 1. General:
			1. Set plumb, square, aligned, and without twist at correct elevation.
			2. Steel Frames: Install plumb, straight and true, rigidly secured in place, and properly braced.
			3. Comply with ANSI/DHI A115-IG installation guide.

\*\* NOTE TO SPECIFIER \*\* Delete if fire rated doors and frames are not required.

* + - 1. Comply with NFPA 80 installation standards.
		1. Frame Installation Tolerances:
			1. Plumbness Tolerance: Measured through a line from intersecting corner of vertical members and the head to the floor. 0 to 0.063 inches (1.6 mm).
			2. Squareness Tolerance: Measured through a line 90 degrees from one jamb at upper corner of product, to opposite jamb. 0 to 0.063 inches (1.6 mm).
			3. Alignment Tolerance: Measured on jambs, through a horizontal line parallel to plane of wall. 0 to 0.063 inches (1.6 mm).
			4. Twist Tolerance: Measured at face corners of jambs, on parallel lines perpendicular to plane of wall. 0 to 0.063 inches (1.6 mm).
		2. Secure anchorages and connections to adjacent construction.
		3. Install hardware in accordance with manufacturers' template and instructions.
		4. Install glazing materials and door silencers.
		5. Finish exposed field welds to present a smooth uniform surface. Touch up with a rust inhibitive primer.
		6. Touch up exposed surfaces scratched or marred during shipment, installation or handling with a rust inhibitive primer.

\*\* NOTE TO SPECIFIER \*\* Finish coat recommendations: Taylor's primer has been formulated to give the product maximum protection. It is important that compatible materials be used in the final or finished coat of paint. The painting contractor should test a small section of the door or frame if there is any doubt as to the composition of the finish coat. Certain finish coat materials are not recommended. Consult manufacturer.

* + 1. Field Painting: Work of Section 09 90 00 - Painting and Coating.

J.Repainting: If necessary to field coat a factory finished door or frame, sand the door or frame for better adhesion and prime any bare metal.

* + - 1. Test to confirm the primer and finish coat are compatible.
	1. TESTING AND ADJUSTING
		1. Adjust hinge sets, locksets and other hardware as recommended by manufacturer.
		2. Lubricate using a manufacturer recommended lubricant compatible with door and frame coatings.
	2. CLEANING AND PROTECTION
		1. Clean installed products in accordance with manufacturer's recommendations prior to Substantial Completion.
		2. Remove temporary coverings and protection of adjacent work areas. Remove construction debris from project site and legally dispose of debris.
		3. Touch-up, repair or replace damaged products before Substantial Completion.
		4. Protection: Protect installed product and finish surfaces from damage during construction.

END OF SECTION