**CARVART | SOEMA COLLECTION**

**glassBOX**

**COMPARTMENTS AND CUBICLES**

**SECTION 10 21 00**

**TOILET COMPARTMENTS**

**SECTION 10 21 13.17**

**GLASS TOILET COMPARTMENTS**

*NOTE TO SPECIFIER: Related section paragraphs and subgraphs are included here for reference but are frequently deleted from project specifications. Delete applications not required.*

Edit subparagraphs as required to coordinate with construction documents and components specified.

**PART 1 – GENERAL**

* 1. SUMMARY
1. Section Includes:
	* + 1. CARVART Commercial Bathroom Partitions:
				1. Toilet Enclosures
2. Related Requirements:
	* + 1. Division 03 Section "Cast in Place Concrete" for compartment anchorage to concrete substrates.
			2. Division 04 Section "Unit Masonry" for compartment anchorage to masonry substrates.
			3. Division 05 Section "Metals" for structural metal cubicle hardware
			4. Division 08 Section "Openings" if a cubicle door is used as a doorway.
			5. Division 09 Section "Finishes" coordination with finished floor and wall materials.
			6. Division 10 Section “Interior Specialties”
				1. 10 21 00 Compartments and Cubicles

10 21 13.17 Glass Toilet Compartments

* 1. REFERENCES
1. ASTM International (American Society for Testing and Materials):
	1. ASTM B 221 - Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
	2. ANSI Z97.1 Standard for Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test.
	3. ASTM C1036 Specification for Flat Glass.
	4. ASTM C1048-04 Specification for Heat-Treated Flat Glass Kind HS, Kind FT Coated and Uncoated Glass.
	5. ASTM C1036 Specification for Architectural Flat Glass.
	6. ASTM E1300 - Practice for Determining Minimum Load Resistance of Glass in Buildings.
2. GANA (Glass Association of North America)
	1. Glazing Manual
	2. Glass Design Guide
	3. Glass Maintenance Recommendations
3. ICC
	1. ICC/ANSI A117.1 - Accessible and Usable Buildings and Facilities, as applicable to toilet compartments designated as accessible.
4. United States Department of Justice:
	1. ADA - Americans with Disabilities Act, Excerpt from 28 CFR Part 36 - ADA Standards for Accessible Design.
	2. ACTION SUBMITTALS
5. Product Data: Manufacturer's data sheets for each type of product indicated. Include fabrication details, description of materials and finishes.
	1. Product Test Reports: When requested by Architect, submit documentation by qualified independent testing agency indicating compliance of products with requirements.
6. Shop Drawings: Include overall product dimensions, floor plan, elevations, sections, details, and attachments to other work. Include choice of options with details.
7. Samples
	1. Samples for Selection: CARVART’s full range of colors and finishes for initial selection
		1. Select Glass Panel Finish:
		2. Select Hardware Finish:
8. Samples for Verification: Provide physical sample of CARVART’s material in selected color and finish
	* 1. Size: 4” [275 mm] by 4” [275 mm] minimum, in color & finish specified.
	1. INFORMATIONAL SUBMITTALS
9. Warranty: Sample of special warranty
	1. CLOSEOUT SUBMITTALS
10. Maintenance and cleaning instructions
	1. QUALITY ASSURANCE
11. Manufacturer Qualifications: Approved manufacturer listed in this section, with minimum 10 years experience in the manufacture of toilet compartments.
	1. Selected Manufacturer: CARVART | SOEMA
12. Manufacturers seeking approval must submit the following in accordance with Instructions to Bidders and Division 01 requirements:
	1. Design and Aesthetic Compliance: Product design features that mimic basis of design aesthetic.
	2. Product data, including test data from qualified independent testing agency indicating compliance with requirements.
	3. Samples of each component of product specified.
	4. List of successful installations of similar products available for evaluation by Architect.
13. Installers Qualifications:
	1. Experienced Installer regularly engaged in installation of toilet compartments for minimum three years.
	2. CARVART | SOEMA installation instructions supplied with materials on site.
	3. Installer with experience handling glass assemblies.
14. Source Limitations: Obtain toilet compartment, screens, and accessories from single manufacturer.
15. Accessibility Requirements: Comply with requirements of ICC/ANSI 117.1, and with requirements of authorities having jurisdiction.
	1. DELIVERY, STORAGE, AND HANDLING
16. DELIVERY
	1. Deliver Materials to site in manufacturer’s original, unopened containers and packaging.
	2. Do not deliver toilet compartments to site until building is enclosed and HVAC systems are in operation.
17. STORAGE
	1. Store materials in a clean, dry area indoors in accordance with manufacturer’s instructions.
	2. Store in an upright condition
18. HANDLING
	1. Protect materials and finish from damage during handling and installation.
	2. Handle glass materials with appropriate specialized equipment and protection.
	3. WARRANTY
19. STANDARD PERIOD
	1. Special Manufacturer’s Warranty: Provide manufacturer's standard form in which manufacturer agrees to repair or replace products that fail in materials or workmanship during the following period after substantial completion:
	2. glassBOX: 2 years.

**PART 2 – PRODUCTS**

* 1. MANUFACTURERS
		1. Basis-of-Design Manufacturer: Subject to compliance with requirements, provide products of CARVART, New York, NY 10018
		2. Contact Information:
			1. (212)-675-0030
			2. Email info@carvart.com
			3. Website: www.carvart.com
		3. Substitutions:
			1. Not permitted.
			2. Requests for substitutions will be considered in accordance with provisions of Section 01600.
	2. DESIGN
		1. Product and Manufacturer: glassBOX, CARVART® | SOEMA® Collection
		2. Basis of Design:
			1. Flush surface fronts with back fastened legs and headrail for a floating, even flat face.
			2. Cubicle system is floor mounted and does not require fasteners to or connection to ceiling.
			3. Tempered, laminated digital print or back painted colored glass fitted to double anodized aluminum supporting structural components.
			4. A double-anodized aluminum stabilizing bar connects to supporting structural components to panels.
			5. Standard heights (Finished floor to top of stabilizing bar):
				1. 82-13/16” [2104 mm]
				2. 88-11/16” [2252mm]
				3. 94-11/16” [2405mm]
		3. Mounting:
			1. All fasteners used to fasten CARVART system to surrounding substrates and finish materials are to be supplied and coordinated and installed by owner/client/GC and structural consultants.
			2. CARVART to furnish glassBOX materials only.
	3. MATERIALS
		1. Components:
			1. Door Panel
				1. Material: Glass
			2. Fixed Front Panel
				1. Material: Glass
			3. Divider
				1. Material: Glass
			4. Stabilizing Bar
	4. Material: Double Anodized Aluminum
	5. GLASS TOILET COMPARTMENTS
		1. Toilet Compartment Type:
			1. glassBOX a Partial Height, Flush Front, Glass Toilet Compartment.
	6. CONSTRUCTION
		1. Door Panel
			1. Hydraulic Closer
				1. Mounting: Fasten to Full Height Vertical Mounting Profile, then connect to stabilizing bar
				2. Closing Speed Adjustability
				3. Latching Speed Adjustability
			2. Full Height Vertical Mounting Profile
				1. Mounting: Fasten to Door Panel
			3. Floor Mounted Door Pivot
				1. Mounting: Fasten to Full Height Vertical Mounting Profile, then mount to floor
				2. Height Adjustability: 5/16” [8mm]
				3. Base Plate Adjustability: +/- 3/16” [5mm]
			4. Wall Door Jamb Profiles
				1. Full height vertical jamb profiles
				2. Mounting: Fasten onto wall
				3. In-Swing or Out-Swing
		2. Fixed Pilaster Panel
			1. Back Fastened Top Support
				1. Mounting: Fasten to Fixed Pilaster Panel, then connect to Stabilizing Bar.
			2. Back Fastened Support Leg (3”)
				1. Floor to bottom of panel clearance: 3-1/18”
				2. Mounting: Fasten to Fixed Pilaster Panel, then mount to floor
				3. Height Adjustability: 3/8” [10mm]
			3. Back Fastened Support Leg (9”)
				1. Floor to bottom of panel clearance: 9”
				2. Mounting: Fasten to Fixed Pilaster Panel, then mount to floor
				3. Height Adjustability: 3/8” [10mm]
			4. Back Fastened Support Leg (12”)
				1. Floor to bottom of panel clearance: 12”
				2. Mounting: Fasten to Fixed Pilaster Panel, then mount to floor
				3. Height Adjustability: 3/8” [10mm]
			5. Door Jamb Profiles
				1. Full height vertical jamb profiles
				2. Mounting: Insert into end of Fixed Front Panel and glue.
				3. In-Swing
				4. Out-Swing
		3. Divider Panel
			1. Top Clamp Support
				1. Mounting: Fasten to Divider Panel, then connect to Stabilizing Bar
			2. Wall Clamp Support
				1. Mounting: Fasten to wall, then insert and connect Divider Panel
				2. Wall to edge of divider panel clearance: 1/4” [7mm]
			3. Clamp Support Leg (3”)
				1. Floor to bottom of panel clearance: 3-1/18”
				2. Mounting: Fasten to Divider, then mount to floor
				3. Height Adjustability: 3/8” [10mm]
			4. Clamp Support Leg (9”)
				1. Floor to bottom of panel clearance: 9-1/16”
				2. Mounting: Fasten to Divider, then mount to floor
				3. Height Adjustability: 3/8” [10mm]
			5. Clamp Support Leg (12”)
				1. Floor to bottom of panel clearance: 12”
				2. Mounting: Fasten to Divider, then mount to floor
				3. Height Adjustability: 3/8” [10mm]
			6. Door Jamb Profiles
				1. Full height vertical jamb profiles
				2. Mounting: Insert into end of Divider Panel and glue.
				3. In-Swing Right Hand
				4. In-Swing Left Hand
				5. Out-Swing Right Hand
				6. Out-Swing Left Hand
		4. Stabilizing Bar
			1. Mounting: Connect to glassBOX components and fasten to wall with wall mount.
			2. Components:
				1. Wall Mount
				2. T-Connection (if applicable)
				3. Swing Limit Stopper (if applicable)
	7. GLASS TYPE
		1. Back Painted Glass:
			1. 2 Piece Low Iron Tempered Glass, Back Painted and Laminated
			2. Select Color:
				1. Standard: CARVART CG02 Back Painted
				2. Select Any RAL Color: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
			3. Select Finish for Interior and Exterior of Cubicles:
				1. O – Opaque, smooth finish
				2. O1 – Opaque Etch, matte finish
			4. Build code from above options and specify below for both sides of the panel:
				1. Specification Code Example: CG02-V-C052-O
				2. Exterior: CG02-V-\_\_\_-\_\_\_
				3. Interior: CG02-V-\_\_\_-\_\_\_
		2. Digital Print Glass:
			1. 2 Piece Low Iron Tempered Glass, Digital Print on Glass and Laminated
			2. Specify Digital Pattern:
				1. Provide print ready graphic file

Specify File Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* + - * 1. Provide elevation to indicate location and alignment of requirements.
				2. Consult with CARVART for graphic creation resources.
			1. Select Finish for Interior and Exterior of Cubicles:
				1. O – Opaque, smooth finish
				2. O1 – Opaque Etch, matte finish
			2. Build code from above options and specify below for both sides of the panel:
				1. Specification Code Example: CG02-V-(FILE NAME)-O
				2. Exterior: CG02-V-(FILE NAME)-\_\_\_
				3. Interior: CG02-V-(FILE NAME)-\_\_\_
1. NOTE TO SPECIFIER: If divider panels are to be alternate material, please specify in additional 2.4A and 2.4B sections. For further alternate specification and design details, consult with CARVART.
	1. HARDWARE
		1. Select Door Pull:
			1. Round Pull
			2. Rectangular Pull
			3. ADA Rectangular Pull
			4. Ladder Pull
		2. Select Door Latch:
			1. ADA Lever Latch
		3. Material: Aluminum
		4. Treatment: Double Anodized
		5. Standard Finishes: Satin Anodized Aluminum
		6. Additional Finishes: Titanium, Black, Brilliant
2. NOTE TO SPECIFIER: For additional hardware finishes refer to CARVART Material Guide.
	1. FABRICATION
		1. Overhead-Braced Units: Provide CARVART’s standard corrosion-resistant supports, leveling mechanism, floor and wall anchors to suit floor and wall conditions.
		2. Urinal-Screen Posts: Provide CARVART’s standard corrosion-resistant supports, leveling mechanism, floor and wall anchors to suit floor and wall conditions.
		3. Door Size and Swings:
			1. Typical 36” [914mm] wide cubicle results in approximately 34-13/16” [884mm] wide door panel with 30-3/8” [772mm] clear opening, using standard lever latch.
			2. Pre-Sized System Clearances for Accessibility Requirements Available (Consult local engineer for structural codes and requirements.)
				1. Wheelchair Accessible Toilet Compartments
				2. Ambulatory Accessible Toilet Compartments
				3. Accessibility compliant hardware & accessories available.

**PART 3 – EXECUTION**

* 1. GENERAL
		1. Cutting, fitting, forming, drilling, and grinding of metal before assembly
		2. All cut edges free of burrs
		3. Welding system is not acceptable
		4. Maintain continuity of line and accurate relation of even planes and angles.
		5. Secure attachments and support at mechanical joints with hairline fit at contact surfaces.
		6. All fabrication and installation to be completed in accordance with manufacturer’s process work instructions.
		7. Quality control to be performed before, during, and after installation.
	2. EXAMINATION
1. Examine work area to verify that measurements, substrates, supports, and environmental conditions are in accordance with manufacturer’s requirements to allow installation. (Examine work areas to receive panels.)
2. If conditions would adversely affect installation or subsequent use, notify architect and do not proceed with installation until unsatisfactory conditions are corrected
3. Proceed with installation once conditions meet manufacturers’ requirements.
	1. PREPERATION
4. Ensure openings to receive panels are plumb, level, square and in tolerance.
	1. INSTALLATION
5. Install panels in accordance with manufacturer’s instructions.
6. Install panels plumb, level, square, true to line, and without warp or rack.
7. Install toilet partitions and screens in interiors with operating temperature and humidity-controlled HVAC systems.
8. Shield partitions and screens from direct sunlight.
9. Anchor panels securely in place.
10. Glass panels are manufactured to size based on field dimensions and shop drawings.
11. Requires trained and competent Division 10 or carpenter industry professionals with glass handling experience.
12. Installation instructions, assistance, and training available at time of order.
13. Final anchoring means and methods are client directed or based on installers assessment.
14. Mounting fasteners and anchors to be supplied by others.
15. System Weights
	1. Cubicle system is floor mounted.
	2. Weight per linear foot available upon request and on a per project basis.
	3. Linear per foot weights based on final glass type and system design.
16. Contact the CARVART Project Management Team for installation training or review.
17. Contact the CARVART Sales Team for design assistance on non-standard configurations.
	1. ADJUSTING
		1. Hardware Adjustment: Adjust and lubricate hardware according to hardware manufacturer's written instructions for proper operation.
		2. Return and set doors to closed position.
	2. CLEANING
		1. Remove packaging and construction debris and legally dispose of off-site.
		2. Clean cubicle surfaces with materials and cleansers in accordance with manufacturer's recommendations.

**END OF SECTION**