Shield Casework March 2021

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Product Guide Specification

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-Part Format, including *MasterFormat, SectionFormat,* and *PageFormat,* as described in *The CSI Construction Specifications Practice Guide.*

This section must be carefully reviewed and edited by the Architect to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the Drawings. Delete all “Specifier Notes” after editing this section.

Section numbers and titles are from *MasterFormat 2012 Update.*

1. 10 25 13

PATIENT ROOM HEADWALL, HEADBOARD, OR BED LOCATOR

Specifier Notes: This section covers Shield Casework® headwall products. Consult Shield Casework for assistance in editing this section for the specific application.

Custom sizes and designs of headwalls. Consult Shield Casework for more information (info@shieldcaeswork.com)

* 1. GENERAL
		1. SECTION INCLUDES
			1. SHIELD’s patient room headwall consists of a modular panel unit that is attached to the wall and/or the structural ceiling. Each headwall consists of a modular substructure and solid surface and other panel systems connected to the substructure. These headwalls are [pre-plumbed, and piped] [include backboxes and outlets but all piping is onsite by local trades].
			2. Single Source Responsibility: components and materials specified in this product are provided by Shield Casework or similar.
			3. Shield Casework’s Patient Room Headwall is the [proprietary design solution][basis of design]. If other products are used to satisfy this section, all items shall meet the required specifications below and be approved by the Architect prior to bid.
			4. UL listed and labeled where required.
			5. Meets or exceeds local codes.
		2. RELATED REQUIREMENTS

Specifier Notes: Edit the following list of related sections as necessary. Limit the list to sections with specific information that the reader might expect to find in this section, but is specified elsewhere.

* + - 1. Section 12 56 70 – Healthcare Furniture.
			2. Section 22 60 00 – Gas and Vacuum Systems for Laboratory and Healthcare Facilities.
			3. Section 26 00 00 – Electrical.
			4. Section 27 52 00 – Healthcare Communications and Monitoring Systems.
		1. REFERENCE STANDARDS

Specifier Notes: List standards referenced in this section, complete with designations and titles. Delete standards not included in the edited section. Including a standard in this list does not require compliance with that standard.

* + - 1. ANSI A208.2 Grade 155 – Medium Density Fiberboard for Interior Use.
			2. ASTM D 256 – Standard Test Methods for Determining the Izod Pendulum Impact Resistance of Plastics.
			3. ASTM D 570 – Standard Test Method for Water Absorption of Plastics.
			4. ASTM D 638 – Standard Test Method for Tensile Properties of Plastics.
			5. ASTM D 785 – Standard Test Method for Rockwell Hardness of Plastics and Electrical Insulating Materials.
			6. ASTM D 790 – Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
			7. ASTM D 2583 – Standard Test Method for Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor.
			8. ANSI/UL 723 (ASTM E84, NFPA 255) – Flame Spread Index Surface Burning Characteristics of Building Materials (solid surface on headwall only).
			9. ASTM G21 – Determining Resistance of Synthetic Polymeric Materials Fungi (solid surface on headwall only).
			10. ASTM G22 – Determining Resistance of Plastics to Bacteria 0 (solid surface on headwall only).
			11. ANSI A208.2 Grade 155 – Medium Density Fiberboard manufactured with a formaldehyde-free adhesive system which meets physical properties of above-mentioned specification.
			12. GREENGUARD Environmental Institute (GEI): GREENGUARD certified low emitting products.
			13. NFPA 70 – National Electrical Code.
			14. NFPA 99 – Healthcare Facilities.
		1. PREINSTALLATION MEETINGS

Specifier Notes: Edit preinstallation meetings as necessary. Delete if not required.

* + - 1. Convene preinstallation meeting 2 weeks before start of installation of solid surface patient room headwall.
			2. Require attendance of parties directly affecting work of this section, including Contractor, Architect, installer, and manufacturer’s representative.
			3. Review materials, examination, installation, adjusting, cleaning, protection, and coordination with other work.
		1. SUBMITTALS

Specifier Notes: Edit submittal requirements as necessary. Delete submittals not required.

* + - 1. Comply with Section 01 33 00 – Submittal Procedures.
			2. Product Data: Submit manufacturer’s product data, including installation instructions.
			3. Shop Drawings: Submit manufacturer’s shop drawings, including plans, elevations, sections, and details, indicating dimensions, tolerances, materials, components, fabrication, edge treatment, corners, seam locations, fasteners, hardware, finish, options, outlets, and accessories.
				1. Show locations and sizes of cutouts and holes for all electrical, medical gas or plumbing, lighting, and other items to be installed in the headwall.
			4. Samples: Submit manufacturer’s samples of solid surface material in each color and finish specified.
				1. Size: Minimum 2 inches by 2 inches.
			5. Manufacturer’s Certification: Submit manufacturer’s certification that materials comply with specified requirements and are suitable for intended application.
			6. Manufacturer’s Project References: Submit manufacturer’s list of successfully completed solid surface patient room headwall projects, including project name and location, name of architect, and type and quantity of headwalls furnished.
			7. Installer’s Project References: Submit installer’s list of successfully completed patient room headwall projects, including project name and location, name of architect, and type and quantity of headwalls installed.
			8. Care and Maintenance Instructions: Submit manufacturer’s care and maintenance instructions, including cleaning and repairing instructions.
			9. Warranty Documentation: Submit manufacturer’s LIFETIME warranty.
		1. QUALITY ASSURANCE
			1. Headwall Construction: headwall construction shall include the following features: 100% solid surface or hybrid construction according to product specification, a combination of adjustable/removable/fixed paneling, modular construction, all parts repairable and replaceable, embedded metal insert connection in all solid surface connections.
			2. Manufacturer’s Qualifications: Manufacturer has regularly engaged, for past 5 years, in manufacturing of solid surface headwalls of similar type to that specified. Manufacturer also has more than 100 headwall units installed in a clinical setting for more than 5 years.
			3. Installer's Qualifications:
				1. Installer regularly engaged, for past 5 years, in installation of patient room headwalls.
				2. Employ persons trained for installation of patient room headwalls.
				3. Installer has installed more than 100 headwall units in clinical settings and those headwalls have been installed for more than 5 years.
		2. DELIVERY, STORAGE, AND HANDLING
			1. Delivery Requirements: Deliver materials to site in manufacturer’s original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
			2. Do not deliver headwalls until spaces to receive them are clean, dry, temperature and humidity controlled, and ready for their installation. Ship to jobsite only after roughing-in, painting and other finishing work has been completed, installation areas are ready to accept work.
			3. Field Measurements: Verify field measurements as indicated on Shop Drawings. Where measurements are not possible, provide control dimensions and templates.
				1. Coordinate installation and location of blocking and supports as requested.
				2. Verify openings, clearances, storage requirements and other dimensions relevant to the installation and final application.
			4. Storage and Handling Requirements:
				1. Store and handle materials in accordance with manufacturer’s instructions.
				2. Keep materials in manufacturer’s original, unopened containers and packaging until installation.
				3. Store materials in clean, dry, temperature and humidity controlled indoor areas.
				4. Store materials on flat, level surface, raised above floor, with adequate support to prevent sagging.
				5. Store materials out of direct sunlight.
				6. Keep materials from freezing.
				7. Protect materials during storage, handling, and installation from dirt, stains, cracks, scratches, and other damage.
		3. WARRANTY
			1. Warranty Period:
				1. Solid Surface Material: 10 years minimum
				2. Laminate, Veneer, or other covering: varies by manufacturer
				3. Shield Headwall: Lifetime. See Shield’s warranty terms at [www.shieldcasework.com](http://www.shieldcasework.com).
	1. PRODUCTS
		1. MANUFACTURER
			1. Shield Casework, 1120 Ellerbrook Road, North Kansas City MO 64116. Phone 816.875.3317. Fax 816.875.3307. Website [www.shieldcasework.com](http://www.shieldcasework.com). E-mail info@shieldcasework.com.
		2. MATERIALS
			1. Headwall Solid Surface Material: 100 percent acrylic solid surface.
				1. Certification:

NSF 51 certified for food preparation area.

Greenguard certified for indoor air quality.

Healthcare Product Declaration (HPD)

Environmental Product Declaration (EPD)

* + - * 1. Nonporous.
				2. Seamless.
				3. Microbial, Fungal, and Bacterial resistant.
				4. Homogenous - Solid, uniform, and consistent color throughout material thickness.
				5. Recycled Content: Maximum 41 percent.
			1. Solid Surface Material Physical Properties.
				1. 1/2 inch or 1/4 inch varies by product.
				2. Rockwell Hardness, ASTM D 785: 90.
				3. Barcol Hardness, ASTM D 2583: 65.
				4. Tensile Strength, ASTM D 638: 6,000 psi.
				5. Tensile Modulus, ASTM D 638: 600,000psi.
				6. Flexural Strength, ASTM D 790: 10,000 psi.
				7. Flexural Modulus, ASTM D 790: 1.00 x 106 psi.
				8. Izod Impact Strength, ASTM D 256: 0.28 ft-lbs per in.
				9. Compressive Strength, ASTM C365: 16,000 psi.
				10. Water Absorption, ASTM D 570, 1/2-inch sheet: 0.04 percent.
				11. Bacterial Resistance, ASTM G22: 0
				12. Fungal Resistance, ASTM G21: 0
				13. Flammability, NFPA 101, Life Safety Code Classification: Class A
				14. Flame Spread Index, ANSI/UL 723 (ASTM E84, NFPA 255): <25
				15. Smoke Spread Index, ANSI/UL 723 (ASTM E84, NFPA 255): <25
			2. Frame
				1. Extruded aluminum or 18 GA cold rolled steel
				2. Blocking necessary as required
				3. Horizontal rails required and varies per design
				4. Canopy structure attached to structure above

Structural details and connections to building structure, by others

Product structural details by manufacturer

* + - 1. Paneling: Solid surface
			2. Solid Surface Thickness: ½ inch.
			3. Other Paneling or Edge Finish Materials: Varies by project.
			4. Medical Gas Piping
				1. Type L copper pipe, cleaned, capped, and credentialed as required.
				2. [Factory installed for connection to building services as required. Termination points above ceiling or integral to the headwall, final connections made by others.]
			5. Medical Gas / Vacuum Outlets
				1. Locations and quantities varies by design.
				2. Included per specification section 22 62 00 and 22 63 00.
			6. Electrical
				1. Factory installed conduit from back boxes, also factory installed and tested.
				2. Locations, quantities, and finishes vary by design.
				3. Hospital Grade NEMA 5-15R or NEMA 5-20R as required.
				4. Tamper resistant or GFCI outlets as required.
				5. Lighting incorporated per drawings and as specified by section 26 00 00
		1. FABRICATION
			1. Shop fabricate all modular components.
			2. Fabricate seams in solid surface to appear virtually seamless.
		2. FINISHES

Specifier Notes: Specify from manufacturer’s standard colors [www.shieldcasework.com/finishes/](http://www.shieldcasework.com/finishes/)

Contact Shield for availability of all material finishes outside of Shield product finish standards. info@shieldcasework.com

* + - 1. Solid Surface: \_\_\_\_\_\_\_\_\_\_\_\_.
			2. Laminate or Other Panel: \_\_\_\_\_\_\_\_\_\_\_\_\_.
		1. ACCESSORIES
			1. As specified.
		2. SOURCE QUALITY CONTROL
			1. Visual Inspection of Patient Room Headwall: Do not shop fabricate solid surface healthcare headwalls that do not pass visual inspection of solid surface material at supplier’s factory.
				1. Warping: Less than 1/8 inch per 10 feet of material.
				2. Foreign Particles: Less than 0.005 inch.
				3. Color Match: Same lot.
				4. White Spots: Less than 3 visible particles per sheet.
				5. Discoloration: None.
				6. Particle Distribution: Even distribution.
				7. Pit Holes: None.
				8. Uneven Sanding: None.
				9. Hairline Cracks: None.
				10. Concave: None.
	1. EXECUTION
		1. EXAMINATION
			1. Examine areas and substrates to receive Shield Patient Room Headwalls.
			2. Verify surfaces to support headwall are clean, dry, flat, level, plumb, stable, rigid, and capable of supporting the headwall.
			3. Notify Architect of conditions that would adversely affect installation or subsequent use.
			4. Do not begin installation until unacceptable conditions are corrected.
		2. INSTALLATION
			1. Install solid surface patient room headwall in accordance with manufacturer’s instructions at locations indicated on the drawings.
			2. Acclimate solid surface headwall to room temperature before installation.
			3. Install frame plumb, level, and square. THIS IS VITALLY IMPORTANT.
			4. Install solid surface headwall plumb, level, and square.
			5. Anchor solid surface headwall securely in place to supports.
			6. Fit headwall frame accurately into or onto rough opening or finished wall to form flush, tight, hairline joints. Ensure all floor and wall anchoring connections are made according to manufacturer installation instructions. Connect canopy framing with rivets (provided by manufacturer) and ensure any additionally required support connections above the ceiling are made as well.
			7. Install headwall frame without distortion so paneling system fits frame properly and can be accurately aligned. Adjust paneling to provide consistent or flush edge reveals as necessary. Complete installation of hardware and accessory items as indicated.
		3. ADJUSTING
			1. Adjust panels, lighting, and other trim pieces to operate and hang correctly. Ensure reveal tolerances are visually consistent throughout.
			2. Repair minor damages to finish in accordance with manufacturer’s instructions and as approved by Architect.
			3. Remove and replace with new material any damaged components that cannot be successfully repaired, as determined by Architect.
		4. CLEANING
			1. Clean solid surface headwall promptly after installation in accordance with manufacturer’s instructions.
			2. Remove surface scratches in accordance with manufacturer’s instructions.
			3. Do not use cleaning materials or methods that could damage finish.
		5. PROTECTION
			1. Protect installed solid surface headwall from dirt, stains, cracks, scratches, and other damage during construction.
			2. Do not use installed solid surface headwall as work surface or storage during construction.
		6. SCHEDULES

Specifier Notes: Delete the Healthcare Headwall Schedule if not required for the project or if the schedule is on the Drawings. Coordinate the schedule with the information in Part 2 – Products.

* + - 1. Patient Room Headwall Schedule:

END OF SECTION